JOINT POSITION PAPER

REVISION OF THE WASTE FROM ELECTRICAL AND ELECTRONIC EQUIPMENT DIRECTIVE

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Joint Position Paper: Revision of the Waste from Electrical and Electronic Equipment (WEEE) Directive

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Signatories

The **European Environmental Bureau (EEB)** is Europe's largest network of environmental citizens' organisations, standing for environmental justice, sustainable development and participatory democracy. It represents over 185 members in over 40 countries.

For more information, please visit: www.eeb.org

RREUSE is Europe's largest network of social enterprises active in the circular economy, with a focus on reuse, repair, and recycling.

For more information, please visit: www.rreuse.org

The **Right to Repair Europe** coalition represents over 190 organisations from 30 European countries. It includes environmental NGOs and repair actors such as community repair groups, social economy actors, spare parts distributors, self-repairers, repair and refurbishing businesses, and any citizen who would like to advocate for their right to repair.

For more information, please visit: www.repair.eu

ECOS - Environmental Coalition on Standards is an international NGO with a network of members and experts advocating for environmentally friendly technical standards, policies, and laws. We ensure the environmental voice is heard when they are developed and drive change by providing expertise to policymakers and industry players, leading to the implementation of strong environmental principles.

For more information, please visit: www.ecostandard.org

Zero Waste Europe (ZWE) is the European network of communities, local leaders, experts, and change agents working towards a better use of resources and the elimination of waste in our society. Zero Waste Europe connects and supports a vibrant network of 41 local and national NGOs from all around Europe sharing common values and objectives and working together for a zero waste future.

For more information, please visit: www.zerowasteeurope.eu

Environmental Action Germany (Deutsche Umwelthilfe – DUH) is a recognized German environmental and consumer protection organization, which has been campaigning for resource conservation and consumer interests since 1975. DUH is politically independent, non-profit and it campaigns on a national and European level.

For more information, please visit: www.duh.de/englisch

Founded in 1899, **NABU (The Nature and Biodiversity Conservation Union)** is Germany's oldest and largest environmental association. With more than 980,000 members and supporters and 70,000 active volunteers, NABU works tirelessly to protect species, habitats and climate, at home and worldwide.

For more information, please visit: www.en.nabu.de

Ecoteca is a Romanian environmental NGO, active since 2010, specialised in waste management, circular economy and climate impact. Working at the intersection of policy, practice and public engagement, Ecoteca supports better waste prevention and resource management through legislative analysis, stakeholder dialogue, data assessment, capacity building and environmental education.

For more information, please visit: www.ecoteca.ro

ZERO – Associação Sistema Terrestre Sustentável is a Portuguese non-governmental environmental organisation, recognized as being of public interest and operating nationwide. Established in late 2015, works to make sustainability the cornerstone of public policy, both nationally and in the EU, through dialogue with policy-makers and businesses, collaboration with like-minded organisations, and social pressure. It mobilises society through communication, capacity-building and awareness-raising.

For more information, please visit: www.zero.ong

Fair Resource Foundation (FRF) is an environmental organisation with roots in the Netherlands that works on sustainable transition in the Netherlands, Belgium and at the European level. FRF is committed to a new relationship with resources. A relationship that respects the carrying capacity of the earth. Driven by the passion for waste prevention, smart policy, circular systems and reuse, they strive for a new system. They achieve this through policy advocacy, systems analysis, stimulating debate, building coalitions and research.

For more information, please visit: www.fairresourcefoundation.org/en/

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Summary of key demands

- **Fundamentally revise the WEEE Directive into a new WEEE Regulation** while preserving the current environmental legal basis
- **New waste prevention targets** integrated into a holistic framework for measuring waste prevention and complemented by concrete measures to achieve these targets
- **Separate targets for (preparation for) reuse and recycling**, alongside concrete measures to facilitate reuse, including collection systems that enable reuse, mandatory sorting prioritising reuse, and priority access to devices
- **Ensure that all EEE are subject to a broad set of horizontal ecodesign requirements** no later than six years after the entry into force of the revised Directive, whether through delegated acts under the ESPR or, as a fallback, directly under the revised WEEE Directive if the ESPR does not establish adequate requirements
- **Introduce material-specific recycled content targets from post-consumer WEEE**, based on reliable and robust accounting methodologies and complemented by demand-side measures to strengthen the market for secondary materials
- **Ensure comprehensive environmental information**, clear product information at the point of sale, and sufficient resources for enforcement
- **Revise the methodology for calculating the WEEE collection rate** by maintaining the Placed-on-the-Market basis combined with differentiated product lifetimes, while closing data gaps through harmonised national systems requiring all actors handling WEEE to register and report quantities
- **Introduce measures to improve collection rates**, including, among others, unconditional take-back obligations for sellers, deposit return systems based on financial incentives, and making measures under Recommendation (EU) 2023/2585 mandatory
- **Tackle illegal shipments** through uniform and binding functional test requirements, sufficient enforcement resources, and strong incentives to collect WEEE through official channels
- **Establish a comprehensive set of measures across the entire product lifecycle to improve the recovery of CRMs** from WEEE, including product design facilitating CRM removal and recycling; material-specific recycled content obligations; improved information on WEEE flows and CRM content through DPPs, enhanced waste statistics, and labelling of CRM-rich components; mandatory treatment requirements aimed at effective CRM recovery, including dismantling and separate collection of CRM-rich components; and material-specific end-of-life recycling targets for CRMs
- **Overhaul and harmonise producer responsibility** for electronics to harness its potential for waste prevention through a clear allocation of responsibilities and inclusive governance; extend the current focus on covering waste management costs to also include waste prevention measures; establish a new structure and modulation of EPR contributions; recognise the impacts of used electronics in third countries; and introduce measures to end free-riding via online platforms
- **Revise standards for WEEE treatment, collection, logistics, and preparation for reuse**, and integrate them into the revised WEEE Directive, particularly regarding the effective protection of WEEE against damage during collection, transport, and storage
- **Introduce new WEEE collection categories** for photovoltaic panels and expand the scope of the WEEE Directive in light of technical developments

Introduction

Current levels of production, use, and disposal of Electrical and Electronic Equipment (EEE) have severe environmental impacts and depletes scarce resources. Eurostat's latest data once again confirm the worrying trend: more electronics are entering the EU market, and more e-waste is generated as a result. In 2023, more than 14.4 million tonnes of EEE were sold in the EU – an increase of over 89 percent since 2012.

At the same time, Waste from Electrical and Electronic Equipment (WEEE) represents a rich source of raw materials, including critical raw materials (CRMs). However, its potential remains largely untapped in terms of strengthening resource security and reducing Europe's dependence on imports.

The initial Directive on WEEE was a pioneering step towards the environmentally sound management of e-waste and represented an important move towards a more circular approach to electronics. However, since the Directive entered into force in 2012, challenges in managing EEE remain unresolved - or are even worsening. These include the short lifespan of electronic products, poor repairability, low levels of reuse, complex and material-intensive design, illegal exports, toxicity, improper disposal practices, among others.

It is clear, the current WEEE Directive is no longer fit for purpose - as has also been assessed by the evaluation study published mid-2025. Among other shortfalls, it concludes that the Directive:

- Was ineffective in facilitating waste prevention, reuse and preparation for reuse
- Fails to facilitate the collection of WEEE at its end of life
- Did not tackle the long persisting problem of illegal exports of used EEE/WEEE
- Has not led to more high-quality recycling and the effective recovery of valuable materials including critical materials
- Caused a fragmented implementation of EPR schemes across the EU and gaps in the enforcement of EPR obligations, particularly concerning online sellers
- Led to inconsistent implementation of treatment standards and hence quality of treatment across Member States
- Has a limited scope that does not adequately address new technologies, such as renewable energies and digital technologies

It is therefore urgently necessary to fundamentally revise the WEEE Directive into a new **WEEE Regulation** that facilitates the harmonisation of rules across the EU, while maintaining flexibility for Member States to go beyond the Regulation's level of ambition by **preserving the current environmental legal basis**.

In the following, we outline key aspects that must be considered in the ongoing revision process.

Reaching circularity through the right targets

Waste prevention is essential to reduce resource consumption and thereby dependencies while contributing to a circular economy within planetary boundaries. The WEEE Directive reaffirms the principle of the waste hierarchy and identifies waste prevention as one of its key objectives. In this regard, Recital 6 states:

> *"The purpose of this Directive is to contribute to sustainable production and consumption by, as a first priority, the prevention of WEEE and, in addition, by the re-use, recycling and other forms of recovery […]".*

However, the evaluation report clearly states that waste prevention efforts have not been successful. The Directive does not provide sufficient incentives to promote preparation for reuse, and Article 4 of the Directive offers only limited direct or indirect incentives for sustainable product design.

The revised WEEE Directive must therefore include targets that establish a clear mandate and direction for Member States as well as both public and private actors to act in accordance with the higher tiers of the waste hierarchy, providing political certainty and strategic planning stability. The monitoring of these targets should be the foundation of evidence-based policymaking, providing transparency and accountability.

The fact that several Member States are currently not meeting various EU targets – for municipal waste recycling, WEEE, and packaging, among others – does not imply that targets are ineffective. Existing targets are often sectoral and fragmented, lacking comprehensive support through concrete measures, demand-side policies, and economic incentives (including EPR). Moreover, it is uncertain what the current situation would be had such targets not been introduced in the first place; it is likely that progress would have been even slower. Therefore, the simplistic argument that "targets don't work" must be rejected.

Waste prevention

Environmental groups have long been advocating for anchoring waste prevention into EU waste legislation through introducing overarching waste prevention targets in the Waste Framework Directive (WFD), including on the generation of Municipal Solid Waste (MSW) as well as on municipal residual waste. Such overall waste prevention targets must be disaggregated into EU-wide sector-specific targets for key waste streams to create a holistic policy framework for waste prevention. Following the examples of food waste and packaging, as addressed in the recent revisions of the WFD and the Packaging and Packaging Waste Regulation (PPWR), the revision of the WEEE Directive is a key opportunity to achieve this.

It is therefore crucial to include waste prevention targets in the Impact Assessment and as a key element in the legislative proposal. The supporting studies must explore how these could best be structured to accurately reflect waste prevention efforts. For example, targets could be based on the quantities of WEEE generated or EEE placed on the market for different categories, taking into account the average lifetimes of different products and excluding certain categories, such as green energy technologies including PV panels and heat pumps. Targets should be considered

for different categories of EEE/WEEE and set at Member State level, expressed both per capita and as percentage change over time.

Targets must be integrated into a broader set of complementary measures (e.g. enforcement on PRO level in the context of EPR schemes – see EPR section) and indicators to assess prevention in a comprehensive way, including (preparation for) reuse rates and targets, average lifetimes of EEE categories, and the presence of WEEE in residual waste (e.g. through regular residual waste analyses). This information is also crucial for any future evaluation of the revised Directive and the achievement of its objectives, particularly considering the severe data gaps identified in the evaluation report. They can also be accounted for in the national waste prevention programmes set under the WFD.

Prevention targets should not only be included as a policy option in the Impact Assessment, but waste prevention must also serve as an assessment criterion. Each policy measure proposed should be evaluated based on their contribution to waste prevention – one of the core objectives of the circular economy. This would allow stakeholders to understand early on how the policy measures introduced through the revision contribute to achieving the target, helping to address scepticism toward them.

For targets to be successful, they must be embedded in an effective mix of policy measures facilitating waste prevention along the entire lifecycle of products. The debate is not "targets or measures" – it is clear that both are necessary.

Examples for effective waste prevention measures in the context of electronics - *further elaborations are included in the respective sections:*

- Banning the destruction of unsold EEE and facilitating their resale through officially recognised social enterprises
- Effectively restricting disposable EEE (vapes, toothbrushes, birthday cards, etc.)
- Making repair easier and more affordable, e.g., through expanding the scope of EPR to waste prevention and earmarking a certain share of EPR contributions to repair, reuse and preparation for reuse related activities
- Priority access for accredited (preparation-for) reuse operators to collected devices - particularly social economy actors - to carry out waste prevention and management activities
- An obligation for waste handlers and PROs to identify and divert reusable items, with "reuse-first" clauses in contractual agreements
- Mandatory standards for the separate collection and transport that ensure that reusable products are collected in ways that preserves their reusability (weatherproof storage, etc.)
- Awareness-raising campaigns
- Improved consumer information on the environmental impacts of EEE
- Ecodesign requirements focused on longevity

(Preparation for) reuse

The WEEE Directive evaluation report demonstrates that incentives to prioritise reuse over recycling are insufficient without separate reuse targets. The current practice of combining targets for preparing for reuse and recycling undermines the waste hierarchy because within EPR schemes, recycling is often prioritised as it is typically cheaper than reuse. As a result, the lack of distinction between preparation for reuse and recycling targets diverts funding away from waste prevention and reuse-oriented activities - even though these provide the greatest environmental and social benefits.

To correct this imbalance, it is essential to introduce **separate, quantitative and binding targets for reuse and preparation for reuse** in addition to waste prevention, collection and recycling targets. Targets must be set within the context of EPR schemes at the producer/PRO level, cover only formal reuse activities and increase over time. In that way, they will prevent premature recycling and reinforce the waste hierarchy.

A number of Member States, regions, and cities across Europe have already introduced reuse targets within their own jurisdictions, including for municipal waste, WEEE, furniture and mattresses, textiles, construction materials, and other consumer goods. In the area of EEE/WEEE, the Belgian regions of Brussels, Wallonia, and Flanders implemented targets. France and Spain introduced national targets for reuse and preparation for reuse. These experiences can provide valuable insights for the revision of the WEEE Directive.[1]

In addition to introducing dedicated reuse targets, several supporting measures are essential to enable effective reuse of electronics in practice:

- Revision of Article 6(2) of the WEEE Directive on separate collection and transport must make it absolutely clear that **reusable products should be collected in ways that preserve their reusability**. This includes, for example, mandatory storage in weatherproof facilities and avoiding dropping or rough handling. The assessment of reusability should take place as early as possible, before items are mixed with recyclable fractions. Therefore, it is recommended that consumers separate functional goods already during collection to facilitate reuse.
- To significantly increase reuse rates, **it must become mandatory for all WEEE streams to undergo sorting that prioritises reuse before any other form of treatment**. Waste handlers and PROs should be obligated to identify and divert reusable items, with "reuse-first" clauses integrated into contractual agreements and must, at a minimum, demonstrate contractual cooperation with a certified actor involved in preparation for reuse activities.
- **Priority access to collected devices** should be granted to accredited preparation-for-reuse operators - particularly social economy actors - to carry out waste prevention and

[1] For more details on how the targets were implemented, see RREUSE report "Targets for Reuse & Preparing for Reuse in the European Union" (2025)

management activities. The need for such access has already been recognised in the European Commission's 2015 study on recovery and reuse targets, which highlighted the importance of enabling preparing-for-reuse organisations to obtain suitable WEEE for treatment.

Ecodesign

The European Commission intends to maintain the focus of the WEEE Directive as waste legislation, unlike the new regulations for packaging, batteries, and vehicles, which address both the design and waste stages. According to the Commission, design requirements are to be covered exclusively by the Ecodesign for Sustainable Products Regulation (ESPR). While we understand the rationale for distinguishing between product and waste legislation, in practice this approach risks delaying the introduction of essential design-related measures and restricting them to a narrow scope of products – especially in light of past delays in ecodesign and energy labelling procedures.

The limited progress on horizontal repair requirements and the narrow scope of electronics currently put forward in the JRC draft Preparatory study for the setting of horizontal ecodesign requirements on repairability further illustrates the risks associated with this approach. Unless there are significant changes from the draft preparatory study and in future processes to develop horizontal requirements, we do not expect a broad range of electronic products to be subject to horizontal material efficiency-related ecodesign requirements under ESPR in the near future.[2]

Failing to address horizontal design aspects in the revision of the WEEE Directive will inevitably prevent it from fully delivering on its objectives related to waste prevention, preparation for reuse, and recycling. Removability and replaceability of components, toxic-free design and recycled-content targets are essential to enable preparation for reuse and to create markets for high-quality secondary materials (see also the following sections). Thereby, they are a crucial precondition for the investments needed in modern recycling and reuse infrastructure.

Excluding design aspects from the WEEE revision overlooks the fact that requirements on preparation for reuse, recycling efficiency and targets must go hand in hand with measures that facilitate these processes and create functioning markets for secondary materials and components. The measures addressing different life-cycle stages must therefore be harmonised. For example, if specific end-of-life recycling rates – particularly material-specific targets – are mandated, as suggested by the evaluation report, the European Court of Auditors, and others, corresponding measures must be put in place to ensure sufficient demand for the resulting secondary materials, such as recycled-content obligations.

Similar considerations informed the development of the new Regulation on Circularity Requirements for Vehicle Design and on Management of End-of-Life Vehicles, where material-specific recycling targets and recycled-content obligations for plastics were introduced. Similarly, quality requirements for the main steel fraction from post-shredder treatment and a feasibility study assessing the introduction of recycled-content targets for steel were included. In both cases, with the aim of striking a balance between supply and demand side measures.

[2] See also the Right to Repair Europe feedback on the draft preparatory study, which introduces a range of exclusion criteria for product groups to which horizontal repairability requirements will apply.

Against this background, relying on a potential alignment of future ESPR measures, procedures, and timelines with specific measures in a revised WEEE Directive is insufficient. We therefore urge the Commission to **ensure, through the revision of the WEEE Directive, that all EEE be subject to a broad set of horizontal design requirements**. These must be established at the latest six years after entering into force of the revised Directive, be it under ESPR delegated acts, or as a fallback clause directly in the revised WEEE Directive, in case ESPR does not establish adequate requirements.

However, requirements must be in effect at the latest in time to ensure alignment with new measures to be proposed in the revised Directive. This particularly includes provisions (e.g. targets) on preparation for reuse, recycling efficiencies and targets, as well as ecomodulation under a newly EU-wide harmonised Extended Producer Responsibility (EPR) system that will refer to these ecodesign requirements and their measurement methodologies (see, e.g., requirements for EPR and ecomodulation for textiles under the revised Waste Framework Directive).[3]

More specifically, we also want to remind that product design requirements must ensure that EEE is designed for longevity, repairability, and upgradeability. Spare parts – particularly batteries, displays, lamps, and other wear components – should be easily removable and replaceable (including by end-users), and made available at a reasonable price and within a reasonable delivery time.

Moreover, the standardisation of components to enable parts pairing is important. This should be implemented in a manner that does not undermine innovation or product performance. For example, by focusing on interfaces and access points – such as screw types, opening tools, and connector positions – rather than requiring complete uniformity of components, as has been implemented for USB-C charging ports for EEE. This would facilitate parts pairing and interoperability without limiting manufacturers' capacity for innovation.

Software obsolescence, as highlighted by recent examples such as the discontinuation of support for Windows 10, further underlines the need for mandatory requirements ensuring software updates and support for the entire service life of a product (for example, at least 15 years for computers). Where such long-term support cannot be guaranteed, source code should be made publicly available to enable continued use and maintenance.

Finally, improved product design for non-destructive disassembly is essential to facilitate the recovery of components and materials – particularly critical raw materials – thereby supporting both the green and digital transitions of the EU.

[3] Also see EEB study "ICT: A top horizontal priority in sustainable product policy" (2023) for a detailed discussion of horizontal ecodesign requirements for EEE and the EEB's recent position on Ecodesign and Energy Labelling requirements for space and water heaters (2026) for concrete examples of material efficiency related design requirements.

Recycled content targets

WEEE could be a rich source of raw materials for the EU's resource autonomy and industrial resilience, including precious metals and CRMs. At the same time, environmental impacts and social conflicts associated with their extraction – primarily in the Global South – could be avoided if primary production were replaced to some extent by the use of secondary materials. However, this potential remains largely untapped. High Eurostat recycling rates calculated based on the mass, mask significant losses in recycling processes and downcycling, and overlook materials that are present in EEE in smaller quantities but have high environmental or strategic relevance. Particularly, the recycling of CRMs and some precious metals, as well as other materials such as glass and plastics from WEEE, remains low.

In order to promote the recycling infrastructure and create incentives for collection and high-quality recycling, **material specific recycled content targets from post-consumer WEEE** should be established. Targets should particularly be assessed for those materials for which (high-quality) recycling remains low and continues to be less economically viable, such as plastics, various CRMs and precious metals. Quotas could also be considered for steel, copper and aluminium. It should further be mandatory to disclose the recycled content included in EEE per material to enable informed purchasing decisions, further strengthen demand, and enable monitoring of progress.

Recycled content obligations need to be supported by **reliable and trustworthy accounting methodologies**, which do not rely on credit mass balance or book and claim. Segregation or controlled blending ensure the highest level of traceability. If they cannot be applied and mixing with virgin content is needed, only a proportional mass balance allocation of the recycled content across outputs should be accepted. It can guarantee actual reduction of virgin content use, as well as a level-playing field between different recycling technologies and accounting methods, while avoiding structural greenwashing in operators' declarations.

While we consider recycled content requirements an important measure to improve the collection and recycling of WEEE, they are not silver bullets. **Demand-side measures must be matched with interventions that strengthen the supply of secondary materials**, such as improved collection systems, enhanced information requirements, mandatory treatment standards, material-specific end-of-life recycling targets, and manual dismantling (particularly for components with high CRM content). These measures are further elaborated in the following sections.

Information requirements, labelling and Digital Product Passport

A Digital Product Passport (DPP) is an important tool to enhance consumer information, product transparency and worker safety. If properly implemented, it can support the environmentally sound management of WEEE, enable high-quality recycling of materials and help address illegal imports and free-riding.[4] It is therefore crucial to achieving the objectives of the revised WEEE Directive.

The revision should ensure that for all EEE within the scope of the revised Directive for which the relevant information is not provided through the European Product Registry for Energy Labelling (EPREL), a **DPP becomes mandatory at the latest six years after entering into force**. This could be achieved under ESPR delegated acts, or as a fallback clause directly in the revised WEEE Directive, in case ESPR does not establish adequate requirements.

In the medium term, all consumer electronics currently covered by the **EPREL should transition to DPPs**, including dishwashers, washing machines, refrigerators, ovens, light sources, smartphones and tablets, electronic displays, air conditioners, and boilers – among others. While EPREL transitions towards DPPs, the **DPP must not replace the EU Energy Label**, which should continue to exist in parallel.

EEE should only be placed on the market if comprehensive environmental information is provided through the relevant means. **For consumers**, this should include information on:

- the producer;
- expected product lifetime or at least the guarantee, together with the modalities of the guarantee, as long as no standardised way to measure product lifetime exists;
- repair instructions, repair index and reference to the European Repair Platform established under the Right-to-Repair Directive;
- information related to the history of repair and refurbishment, incl. date and details of the repair and refurbishment as well as who carried out the repair or refurbishment;
- availability and price of spare parts and repair services;
- environmentally responsible and safe use and disposal guidance;
- energy consumption, carbon footprint, recycled content, as well as information on material composition and potential pollutants; and
- take-back options.

For actors across the value chain, essential technical information on safe dismantling, composition, and manufacturing year to facilitate preparation for reuse, repurposing, remanufacturing, and component recovery must be made available. This must include data on

[4] Also see joint paper "Everything you need to know about the Digital Product Passport" (2026).

the location of CRMs and pollutants and instructions for their safe removal or destruction. The potential to record repair history or resales in the digital product passport should also be leveraged to simplify repairs and ensure proper end-of-life disposal.

Moreover, **clear product information at the point of sale** (stationary and online) is important. This could be facilitated through an ESPR or extended energy label and should displaying key indicators of repairability, durability, and environmental performance to guide consumer choice (see extended energy label for smartphones and tablets, Regulation [EU] 2023/1669).

In the absence of a legal framework to **substantiate voluntary environmental claims**, the revision should also ensure that any explicit claims on EEE are substantiated with scientific evidence and verified independently *ex ante*. In the context of the WEEE Directive, this is particularly important for claims related to the end-of-life management of WEEE, such as "recyclable" or "repairable".

As for other regulatory measures, ensuring **sufficient resources for enforcement** on Member State level is crucial to ensure information is displayed correctly (see, e.g., recent cease-and-desist order issued against Samsung based on research conducted by EEB member organisation Environmental Action Germany, DUH).

Collection

The latest evaluation study and Eurostat data once again show that almost all Member States continue to fail to meet their collection targets. The collection rate across the EU remains at 37,5%. While it is acknowledged that the calculation methodology requires review, this is by no means the only reason for poor collection performance - and it must not serve as an excuse to avoid fundamentally strengthening collection systems, let alone to justify lowering targets.

There is a clear and urgent need to make WEEE return systems more consumer-friendly, to improve consumer awareness and education, to introduce new financial incentives for achieving higher collection volumes, and to strengthen EPR systems with a clear allocation of responsibility for producers to meet collection targets.

Calculation methodology and filling data gaps

The calculation methodology should be improved to better capture the different lifetimes of different categories of EEE while maintaining – or exceeding – the current level of ambition. To ensure high ambition, collection rates must continue to be primarily calculated based on **Placed on the Market (POM) data combined with differentiated product lifetimes** to better account for long lived EEE such as PV panels. Quantities in unofficial channels may be defined as a supplementary indicator, but not as a replacement for a POM based method. The POM-based approach remains the most transparent, verifiable, and harmonised basis to ensure comparability, prevent loopholes, and uphold the EU's collection objectives.

While differentiated lifetimes across product categories can help better reflect market dynamics, **they must not lead to lower collection targets**. This is particularly important given that the methodology is likely to underestimate the actual quantities of EEE POM due to free-riding producers (i.e. unregistered sellers), particularly in online trade.

Moreover, data gaps regarding reuse, repair, the whereabouts of WEEE, and recycling processes remain a key challenge for managing WEEE flows effectively. The evaluation report also highlights this challenge. The lack of reliable data is a recurring justification for inaction by policymakers and other stakeholders. This is why we support **unified national systems that require all actors handling WEEE to register and report quantities of WEEE**.

Convenient collection systems and consumer incentives

Effective collection requires clear take-back obligations and systems, including setting up unconditional takeback obligations for sellers, introducing or strengthening deposit return systems based on financial incentives, and rendering measures from Recommendation (EU) 2023/2585 mandatory.

A key measure for establishing a dense and convenient collection network entails the obligation for all sellers (including online sellers and marketplaces) of EEE to accept WEEE regardless of where the product was purchased. Therefore, **harmonised EU-wide rules on retailer take-back obligations** should at a minimum include unconditional and free take-back of all similar electrical appliances when purchasing a new one (1:1), as well as unlimited and unconditional take-back of small electrical appliances (0:1) at all retailers that regularly sell such products. This

could be complimented with **mandatory minimum requirements for collection infrastructure**, e.g., specifying a minimum collection density.

To tackle current severe fire issues caused by improperly disposed EEE containing lithium-ion batteries and to achieve a reliable return of EEE containing particularly high levels of pollutants and critical materials, **deposit return systems** should be established for certain EEE (e.g. those containing lithium-ion batteries). The significant potential of deposit refund systems for smartphones, tablets and other small EEE is also highlighted by Recommendation (EU) 2023/2585. Deposits should be based on financial incentives, set at a level that does not influence the purchasing decisions and be complemented by repair schemes (e.g., bonuses, extended warranties). Applying the same type of incentive (monetary, with possible variations in the amount between Member States) across the EU is less confusing for consumers and more effective than alternative rewards that may only appeal to specific groups.

A convenient collection system will also necessitate **free of charge door-to-door collection** for specific categories of EEE. It is the most convenient take-back solution for consumers and is therefore likely to help increase the collection rate, e.g. for particularly large appliances, with high environmental relevance or recycling potential of critical materials.

While the lack of **consumer awareness** about take-back options is indeed a challenge for WEEE collection, it is in the context of EPR systems the responsibility of producers to create awareness. It is therefore important that producers are obligated to join Producer Responsibility Organisations (PROs), which must ensure comprehensive and nationwide networks for WEEE return, fulfil individual collection targets and ensure effective and continuous activities to enhance consumer awareness.

There is also evidence that **mandatory collection targets** for producers/PROs may lead to a significant increase in collection volumes, as they create a concrete incentive to establish effective collection structures.[5] To avoid creating perverse incentives that divert EEE from reuse, it is essential that average lifetimes for different product categories are taken into account when calculating collection rates. As reuse increases the average lifetime of products, it reduces the corresponding collection obligation. Such targets should therefore also be complemented by measures to promote reuse, ensuring that reuse activities are not discouraged by collection requirements.

In the course of the necessary energy and heating transition, it is also becoming increasingly necessary to impose **WEEE collection obligations on actors in the plumbing, heating, and air conditioning sector**. These companies are increasingly installing control electronics, heat pumps, PV systems, hot water storage tanks, electric radiators, ventilation systems, etc. in buildings and currently have few obligations in many Member States regarding the collection of waste equipment.

[5] See, e.g., a recent study in the German context: Ökoinstitut e.V., & cyclos. (2025). *Weiterentwicklung der Produktverantwortung im ElektroG*.

Lastly, **Recommendations (EU) 2023/2585** for small WEEE include various measures that have been assessed positively to improve collection. However, for these to unfold their potential, they must be made mandatory as so far, they have not been picked up Member States.

Summary of measures considered to be important for improved WEEE collection

- Robust EPR systems with clear distribution of responsibility – incl. for achievement of collection targets – and the obligation for producers to join PROs
- Financial penalties for producers that fail to meet WEEE collection targets
- Revised collection targets considering lifetimes of different product categories and higher ambition level
- A requirement for all actors handling WEEE to register and report quantities through a unified national system
- Attractive and convenient take-back offers including door-to-door collections financed through the EPR system
- Additional minimum requirements for collection infrastructure, e.g., based on EU COM recommendations for small WEEE, specifying collection infrastructure standards (e.g., maximum distance to collection point/ collection density), imposing additional criteria for WEEE collectors (e.g., as outlined in EN 50625)
- Europe-wide harmonised rules for return obligations of retailers, e.g. unconditional and free take-back of a similar electrical appliance when purchasing a new one (1:1) as well as unlimited and unconditional take-back of small electrical appliances (0:1) at all retailers who regularly sell electrical appliances
- Greater involvement of online retail and online platforms, who should finance and provide take-back return points for consumers at a high density within Member States
- Strengthen obligations for online marketplaces to ensure all manufacturers are registered with PROs, i.e. actively prevent freeriding
- Material-specific, closed loop recycled content targets to provide further incentives for producers to collect WEEE
- Deposit-return systems for WEEE with high environmental impact and/or content of CRMs (e.g. those containing Lithium-ion batteries)
- Better educational work paid by the producers (higher budgets for respective campaigns) together with uniform labelling of all collection points and clear communication that all other collection points/doorstep collections are illegal
- A system that rewards high collection volumes (e.g. compensation payments for PROs who exceed collection targets)
- Concrete and harmonised criteria for the distinction between EEE and WEEE to address illegal exports
- Strengthening enforcement at multiple levels, e.g., that return obligations by producers at retailers are met and actively communicated; border controls to address illegal exports, controls at scrap dealers, etc.
- Banning collection of WEEE together with metal scrap

Tackling illegal shipments and strengthening enforcement

The first review of the WEEE Directive already sought to address the problem of illegal exports, primarily by introducing "minimum requirements for shipments" (Annex VI), which set out criteria for proving that a product is used EEE and not waste (WEEE). However, the evaluation report showed that this measure has been completely unsuccessful and that illegal exports have even increased.

Ensuring sufficient **resources for enforcement** in both exporting and importing countries, including for inspections, is a key measure to address this problem. In addition, **uniform and binding functional test requirements** for exporters and importers to distinguish between EEE (including reusable EEE) and WEEE – which are currently not included in Article 23 or Annex VI – are urgently needed. This would strengthen compliance with the obligations under the Waste Shipment Regulation and the Basel Convention by preventing the export of hazardous WEEE, thereby protecting human health and the environment.

In this context, particular attention should also be given by Members States and the Commission to enforce measures regarding illegal collection, transport, treatment and shipment of waste (including WEEE) under the **new Environmental Crime Directive**[6], which is already in force and should be correctly transposed by Member States by May 2026.

The lack of significant enforcement actions against non-compliant Member States and producers that fail to reach collection targets is another substantial reason for persistently low WEEE collection rates. Making **collection targets mandatory for producers and PROs and establishing a mechanism that rewards high collection volumes**, would automatically reduce the amount of WEEE diverted into informal routes.

Moreover, we propose establishing **minimum requirements for enforcement** by national authorities within the legislation, similar to the provisions set out in Article 46 (Commission proposal) of the proposed Regulation on Circularity Requirements for Vehicle Design and on Management of End-of-Life Vehicles[7], which mandates regular inspections of at least a certain percentage of the concerned facilities. In the context of WEEE, this could apply, e.g., to scrap dealers or containers. The scope of such inspections should be clearly defined, and it should be required that a representative of the competent authority is physically present on-site during inspections.

[6] Article 3 (2) (f) and (g), Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC

[7] COM(2023) 451 final: Proposal for a Regulation of the European Parliament and of the Council on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC

Critical Raw Materials

To improve the recovery of CRMs from WEEE and contribute towards the targets for strategic raw materials set out in the Critical Raw Materials Act (CRMA)[8], a comprehensive set of measures is needed across the entire lifecycle of EEE. Product design must facilitate the removal and recycling of CRMs; reliable information on WEEE flows and CRM content must be readily available; separate collection must be ensured; and treatment requirements must be geared towards effective CRM recovery.

Ecodesign is a fundamental precondition for CRM recovery. EEE that is not designed for recycling increases recovery costs for recyclers and may even make the recycling of certain materials impossible. Additionally, **material specific recycled content obligations** can create the necessary market demand to encourage recyclers to invest in appropriate infrastructure (see also sections on ecodesign and recycled content).

A lack of reliable data on WEEE flows and component composition (including CRMs) is a critical barrier highlighted in the WEEE evaluation report. Robust data collection and reporting are essential for both effective policy making and CRM recovery along the recycling chain and should not be weakened in the name of "simplification". If producers do not provide data, the costs of testing or detection fall on recyclers, raising secondary material prices. Better information could be provided through tools such as the **DPP, improving waste statistics as well as labelling of CRM rich components**. Requirements in the CRMA Art 28 for the labelling of permanent magnets are insufficient because relevant WEEE types typically containing permanent magnets are not covered.

As identified in the evaluation of the WEEE Directive, insufficient separate collection of WEEE continues to be a serious problem. Approximately 46% of WEEE generated is not collected separately. Of this, 14% collected as mixed metal scrap is unlikely to undergo appropriate treatment, including CRM recovery. Similarly, the remaining 32% of WEEE that is unaccounted for - due to unknown whereabouts, illegal exports, mixed waste, or exports for reuse - is effectively lost for CRM recovery. Strengthening collection systems in general, and the **separate collection of CRM-rich WEEE** in particular, could therefore make a significant contribution to improving CRM recovery.

Currently, **dismantling, sorting, and recycling infrastructures** are not designed with CRM recovery in mind, as neither regulatory requirements nor economic incentives support it. Yet parts of the existing infrastructure could be readily adapted - for example, pre-treatment facilities and dismantling processes could be used to extract CRM-rich components. These investments require funding from manufacturers through EPR contributions, as they cannot currently be financed through revenues from the sale of recovered materials.

[8] i.e., by 2030 EU recycling capacity, including for all intermediate recycling steps, is capable of producing at least 25% of the Union's annual consumption of strategic raw materials and is capable of recycling significantly increasing amounts of each strategic raw material from waste.

The separate collection of WEEE containing significant shares of CRMs, as well as the dismantling of CRM-containing components, are essential preconditions for effective recycling. Without these measures, many CRMs and other materials (such as silicon metal, indium, gallium, germanium, magnesium, tantalum, and rare earth elements) are lost in shredding residues or diluted into other recycled fractions. **Mandatory treatment standards** requiring the removal of equipment components containing CRMs are therefore crucial. These measures were also identified in the CEWASTE project, co-funded by EU Horizon 2020 research and innovation program.

Lastly, the current generic **end-of-life recycling (and preparation for reuse) targets**, which focus primarily on mass recovery, do not provide sufficient incentives for the recovery of CRMs. Introducing binding recycling targets for individual CRMs – as also suggested in the recent European Court of Auditors' report on critical raw materials for the energy transition – could create stronger incentives and provide greater investment certainty for the recycling industry. This would be particularly effective if complemented by material specific content obligations for CRMs recycled from WEEE into new EEE.

Extended Producer Responsibility

Against the background of insufficient ecodesign and waste prevention practices, poor collection results, and low recycling rates of critical raw materials, combined with the current patchwork of EPR systems across Member States, there is an urgent need for an overhaul and harmonisation of producer responsibility for electronics. Particularly given the poor progress on waste prevention, reuse, and repair, it is essential to harness the potential of EPR in this regard by:

- **Financing the redesign of collection, sorting and treatment systems to promote repair and reuse**, but also supporting schemes that reduce the number of products discarded in the first place, such as repair bonus schemes.
- **Incentivising repairability, durability and reusability** of products beyond legal requirements (e.g. through ecomodulation).
- **Facilitating waste prevention and circular consumer behaviour** and disincentivising unsustainable consumer behaviour. More concretely, EPR can support the repair of goods and make refurbished goods more attractive than new ones or oblige producers to provide information for raising consumer awareness, e.g. on durability or repairability of a product.
- **Contributing to incorporating environmental costs into products costs** and thereby implementing the "polluter pays principle".[9]

In the following, we outline key aspects that need to be considered in the reform and harmonisation of EPR under the revision of the WEEE Directive: a clear allocation of responsibilities and inclusive governance; extending the current focus on covering waste management costs to also include waste prevention measures; the structure and modulation of EPR contributions; recognition of the impacts of used electronics in third countries; and the effective tackling of free riding via online platforms.

Key resources on Extended Producer Responsibility

- RREUSE's policy recommendations on Extended Producer Responsibility schemes (2025)
- Zero Waste Europe policy briefs: "Designing EPR to Foster the EU's Competitiveness and Strategic Autonomy" (2025) and "Extended Producer Responsibility for waste reduction" (2026)
- Study commissioned by Environmental Action Germany (DUH) and conducted by Ökoinstitut e.V. and cyclos: "Weiterentwicklung der Produktverantwortung im ElektroG" (2025)
- Right to Repair discussion paper "Reforming Extended Producer Responsibility to Promote Repair" (2024)

[9] For more details, see the joint discussion paper "Reforming Extended Producer Responsibility to Promote Repair" (2024)

Clear responsibilities and governance

Experience from Member States show that collection systems with unclear responsibilities and weak incentives perform poorly. In such systems, actors lack motivation to collect large quantities of WEEE since producers face higher treatment costs as volumes increase, retailers incur costs for collection without benefit, and consumers are not incentivised to return discarded products.[10]

All producers should therefore be obliged to join a **collective PRO** and pay EPR contributions based on the quantities they place on the market. Mandatory collective schemes facilitate enforcement and are the precondition to enable other important measures such as ecomodulation.

Each PRO must, in turn, be required to meet **binding environmental targets**, including for prevention, (preparation for) reuse, recycling, and collection. Various examples (e.g. Germany) show that obligations at the Member State level are often ineffective and that a more direct allocation of responsibility is necessary. Positive examples include packaging EPR in Belgium, where the household packaging PRO, Fost Plus, is responsible for meeting waste reduction and reuse targets and is required to invest 2% of its budget in action programmes aimed at avoiding and reducing packaging.[11]

Where multiple national PROs operate, competition to attract producers can undermine the financial coverage of EPR schemes. This dynamic risks creating a "race to the bottom", lowering EPR contributions and weakening incentives for more sustainable products. Therefore, in those Member States where there are more than two PROs on the market, a **coordination system** must be in place to safeguard the integrity and effectiveness of the EPR system and ensure that all PROs meet minimum standards, including full cost coverage.

The system should also **reward performance beyond mandatory targets**, for example, through compensation payments between PROs if environmental goals are exceeded alongside sufficient consumer incentives such as deposit-return systems for WEEE with high environmental impact or significant CRM content.

To ensure fair and effective implementation, **EPR governance must also become more inclusive**. Currently, many schemes exclude vital players in the reuse chain. Incorporating social enterprises, civil society, municipalities, and other relevant stakeholders into the implementation process, governance and decision-making structures can help curb monopolistic practices and lead to better environmental and social outcomes. For their participation to be meaningful, these actors must also be granted decision-making authority, including veto power, to ensure that their perspectives are fully integrated into EPR policy and implementation.

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[10] See a detailed analysis of the German WEEE EPR scheme in: Ökoinstitut e.V., cyclos. "Weiterentwicklung der Produktverantwortung im ElektroG" (2025)

[11] See, e.g., Zero Waste Europe's policy brief "Extended Producer Responsibility for waste reduction" (2026) for further good practices.

Cost coverage

To improve the performance of EPR systems in achieving environmental objectives, there is an urgent need to better align their funding with the waste hierarchy. As, currently, the upper levels of the waste hierarchy – prevention, reuse, and preparation for reuse – receive significantly less funding, if any, from EPR schemes.

On the one hand, the **full costs of waste management operations must be covered** by EPR contributions, including all measures necessary to reach objectives and targets. In this context, it must also be ensured that the principle of "necessary costs", which limits EPR contributions to the minimum required to meet objectives, does not undermine more circular strategies such as preparation for reuse. This is particularly relevant for social enterprises, which often provide local jobs, including for individuals facing barriers to entering the labour market. The pursuit of cost-effectiveness should not hinder such operations that deliver both environmental and social benefits.

On the other hand, the **cost coverage of current EPR schemes must be expanded** and harmonised to include components beyond the collection and treatment of WEEE, to support activities higher up the waste hierarchy. In this context, at least the following aspects should be considered:

- Dedicated financial support for waste prevention strategies such as reuse, repair, refurbishment, repurposing, and remanufacturing ensuring these are not deprioritised in favour of downstream treatment, either through legally earmarking a minimum percentage of the PRO budget or through the introduction of a separate waste prevention contribution to meet the waste reduction target (see next section).[12]
- Use EPR funds to finance direct consumer incentives such as repair bonuses, making professional repair services more accessible and affordable – to support achieving waste reduction targets (see textbox below).
- Allocate funding to qualification programmes and skills development for repair professionals, strengthening capacity in the repair and social economy sectors.
- Support pilot projects for the reuse of components and the recovery of spare parts from discarded products.
- Fund a digital infrastructure (data exchange, registers) that facilitates reuse and repair.
- Invest in information and awareness campaigns to encourage repair and reuse among consumers.

[12] For example, Recupel, Belgium's PRO for WEEE, supports reuse by providing payments to second-hand shops, thrift stores, and reuse centres that resell collected electrical appliances as part of the measures to achieve WEEE reuse targets in the Belgian regions of Flanders and Brussels. Another positive example is the Belgian system for household packaging, which requires the PRO, Fost Plus, to dedicate 2% of its budget to waste prevention measures.

- Finance the improvement of WEEE collection facilities to meet the needs of reuse and preparation-for-reuse operators, e.g., by adequately equipping recycling centres to be able to assess products for potential reuse or repair.

The inclusion of these new aspects will require the development of a **standardised methodology to identify all cost components and sources**, reflecting operational differences between reuse and recycling.

Considering the important role of the social economy in electronics repair and reuse, and the significant environmental and social value these activities deliver, **a share of EPR contributions should be earmarked for reuse operations carried out by social enterprises**. Lessons in this regard can be drawn from the French Social Reuse Fund.

EPR-financed repair funds as a tool to promote repair and waste prevention

Repair funds are effective instruments to promote repair and waste prevention. They provide financial incentives that encourage consumers to repair defective or damaged products instead of discarding them and purchasing new ones. Typically, such schemes offer financial support for certified repair services in the form of subsidies, discounts, or vouchers.

Repair funding programmes are gaining popularity across Europe and have delivered positive results. Several national and subnational schemes exist, for example in France, Germany, and Austria. Evidence shows that these programmes effectively raise awareness among consumers about repair options and enable them to choose repair. In France, more than 165,000 repairs were carried out under the repair bonus programme in its first year. In Austria, over 840,000 vouchers were issued between April 2022 and January 2024. A study on the Thuringian repair bonus found that 33,288 repairs between 2021 and 2024 potentially avoided 2,971 tonnes of CO_2 equivalent emissions and 390 tonnes of electronic waste.

However, most existing schemes are currently financed through public budgets at the municipal or regional level. As a result, they depend on the availability of public funding and are vulnerable to budget cuts or shifting political priorities. At the same time, predictable and stable funding is crucial for repair businesses to respond to increased demand generated by such programmes. In this context, **EPR revenues can provide a stable, long-term funding source for repair incentives**, as demonstrated by the French *Bonus Réparation*.

Since December 2022, French consumers have been able to benefit from a repair fund financed through EPR contributions. Initially covering electrical and electronic appliances, the system was extended to clothing and shoes in November 2023. It now also includes furniture, sports and leisure equipment, DIY and gardening tools, and certain toys. Consumers receive an immediate discount when repairs are carried out by certified repair businesses (labelled *QualiRépar* for electronics and *Bonus réparation* for textiles and shoes). Repair businesses are subsequently reimbursed by the responsible PROs. The scheme is fully financed through EPR contributions paid by manufacturers for products placed on the French market.

Against this background, the revision of the WEEE Directive should ensure the establishment of EPR-financed repair funds for all electronics within its scope.

EPR contributions and ecomodulation

The revision of the WEEE Directive must ensure that EPR contributions are paid by producers and modulated based on harmonised criteria across all Member States. This can best be achieved by **requiring all producers to join collective PROs**.

Expanding cost coverage, as described above, will then also require further development of the **structure of EPR contributions**. A harmonised approach to calculating contributions should ensure fair compensation across actors and be based on relative rather than absolute terms, to account for national differences such as purchasing power and waste management costs. It must also ensure that sufficient funding is allocated to activities supporting reuse and waste prevention.

One way to achieve this would be through a **two-tier structure of EPR contributions**. A core waste management contribution would cover the costs related to obligations for separate collection and treatment, including the achievement of targets for collection, recycling, and preparation for reuse. A second contribution dedicated to waste prevention would finance measures to support waste prevention and reuse (see activities outlined in the previous section), as well as related targets to be established in the revision process (see sections on waste prevention and reuse targets). [13]

A key challenge for implementing such a system is the current lack of data on waste prevention, repair, and (preparing for) reuse, as highlighted in the evaluation study. To address this challenge, it could be considered to phase in differentiated contributions only after a transition period. During this period, funding for waste prevention could be ensured by **requiring PROs to earmark a fixed share of their budget for waste prevention** measures (for example 10%). This would provide an immediate and pragmatic way to secure funding for the upper levels of the waste hierarchy until a robust database to support a separate waste prevention EPR contribution is established.

The calculation method for EPR contributions must also be complemented by **ecomodulation** to provide incentives for ecodesign and to facilitate circular strategies ranging from reuse and repair to high-quality recycling. So far, ecomodulation has been considered ineffective, as EPR contributions for WEEE are too low relative to product prices to influence product design decisions.[14] It is therefore crucial to ensure that EPR contributions are significant. Implementing full cost coverage and expanding EPR to cover activities beyond collection and treatment as described in the previous section would increase overall EPR contributions and contribute to stronger incentives.

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[13] See also Zero Waste Europe's policy brief "Extended Producer Responsibility for waste reduction" (2026) elaborating the idea of two separate EPR contributions: one contribution to cover the costs of waste management and one dedicated to waste reduction measures as well as RREUSE position paper "REUSE's policy recommendations on Extended Producer Responsibility schemes" describing a similar system of differentiated contributions.

[14] See, e.g., the study commissioned by the Rethink Plastic Alliance and conducted by the Ecologic Institute "Extended Producer Responsibility and Ecomodulation of Fees" (2021)

For ecomodulation to be effective**, transparent and ambitious criteria** that go beyond legal compliance must be defined. This requires robust methodologies (e.g. repairability indices) that still need to be developed. Given that current ESPR processes that could provide such methodologies are slow and do not cover all electronics, the revised WEEE Directive should establish a clear timeline for their development, whether under the ESPR framework or under the revised WEEE Directive itself. Criteria should be harmonised at EU level.

Ecomodulation criteria should support a **bonus–malus system aligned with the waste hierarchy**, prioritising reuse and waste prevention. The system should address both product environmental performance and producer practices. For example, criteria such as durability, reparability, recyclability, use of recycled content, or ecolabels (e.g. the EU Ecolabel) should reduce contributions (bonus), while penalties (malus) should apply for harmful substances or other environmentally harmful design choices. Minimum and maximum bonus–malus values should be defined and regularly updated to ensure meaningful financial impacts and avoid symbolic adjustments.

Finally, a **volume-based criterion** could be introduced, whereby contributions per kg progressively increase with the number of products placed on the market by a producer each year. This would help address wasteful production and consumption patterns, following the example of the revised Waste Framework Directive and new provisions on EPR systems for textiles.

EPR free-riding and online platforms

In 2018, so-called "free-riders" - sellers who avoid paying EPR contributions - were estimated to account for at least 5% to 10% of the online market for EEE in the EU. This corresponds to between 460,000 and 920,000 tonnes of products placed on the market each year that are not covered by EPR schemes. Given the rapid growth of cross-border e-commerce and online marketplaces in recent years, the same percentage could correspond to even much higher quantities of products placed on the market without EPR coverage today. As a result, environmental programmes designed to manage WEEE lose tens, if not hundreds, of millions of Euros annually. In addition, these products often evade conformity requirements regarding pollutants, ecodesign, labelling or safety.

To tackle the issue of free-riding and ensure that all producers fulfil their extended responsibilities online platforms **should be recognised as economic operators under product and environmental law**, including the revised WEEE Directive, and be subject to proactive due diligence obligations. They **must be required to verify that a liable actor exists in the destination Member State and assume fallback liability** where no other liable actor exists.

Moreover, online platforms shall be obliged to **check the EPR compliance of their distributors** and verify the completeness, conformity, and plausibility of product and distributor information prior to sale to ensure that all EPR obligations are fulfilled. This approach is already partly reflected in countries such as Germany, France, and Spain. Online platforms should also be held liable – including financially – for fulfilling all EPR-related obligations, including the payment of

EPR contributions and any imposed fines where no other responsible operator is present or reachable in the EU.

Furthermore, online platforms are to **perform EPR obligations in each Member State on behalf of manufacturers and distributors if such manufacturers and distributors do not provide full proof of compliance** with these obligations. A similar approach exists in the United Kingdom, where overseas sellers supplying EEE directly to UK users must ensure compliance with producer responsibility obligations, including, where applicable, by appointing a UK-based authorised representative. Recent amendments to the UK WEEE Regulations also treat online marketplace operators as producers for EEE sold by non-UK suppliers through their platforms, thereby making them directly responsible for fulfilling the corresponding obligations.

A further measure to enhance transparency and accountability is to **ensure that producer registers are publicly accessible**. Registries should also be connected or interoperable, and reporting requirements harmonised across the EU.

In a recent Joint Statement 64 environmental and consumer protection NGOs, industry, retail and wholesale organisations, are calling on EU policymakers to urgently address such persistent regulatory loopholes in relation to online trade via online marketplaces.

Global responsibility

It is essential to address the costs associated with EEE/WEEE exported to third countries outside the EU – a frequent destination for used devices and illegally exported WEEE as identified by the evaluation study: In 2020, an estimated 0.5 million tonnes of WEEE were illegally exported from the EU, alongside 0.6 million tonnes of used EEE exported for reuse. A further 1.5 million tonnes of WEEE were unaccounted for, much of it likely exported as well.

The evidence that European electronic waste is causing serious environmental damage and health impacts on local communities in many countries in the Global South is overwhelming.[15] **It is therefore crucial that parts of EPR contributions paid by producers in EU countries are made available to finance collection and treatment in receiving countries**, as well as to remediate environmental and social damage resulting from the unsound treatment of WEEE.

This issue is not limited to electronics; it also affects other product groups such as vehicles and textiles, yet it is currently ignored in all EPR systems. In practice, EU producers delegate waste management responsibilities for exported products to receiving countries while retaining the contributions intended to finance proper treatment. This places an unfair burden on the waste management systems of these countries, which are often less equipped to handle complex waste streams such as electronics.

[15] See, among others, reporting by *Der Spiegel* and the documentary *Welcome to Sodom* on the impacts of WEEE in Ghana, as well as the documentary *DANDORA – A Fast Tech Story* on one of the world's largest electronic waste dumpsites in Kenya and the report by the World Health Organisation (WHO) "*Children and digital dumpsites: e-waste exposure and child health*".

This failure is estimated to cost African economies between EUR 340–380 million per year in lost EPR contributions, based on the volume of used electronics traded. For vehicles, losses are estimated at EUR 295–409 million annually.

Special attention should also be given to the **role of informal waste pickers in receiving countries**. A defined share of EPR revenues should be redistributed through verified PROs or trusted NGOs to provide fair collection payments, protective equipment, and training, as well as to support pathways to formalisation, for example through cooperatives and social protection. All such efforts must ensure transparency, gender equality, and the elimination of child labour.

Harmonising EPR requirements for B2C and B2B products

The regulatory separation between B2C and B2B equipment contributes to collection gaps, enforcement deficits and economic incentives for regulatory arbitrage, particularly in relation to dual-use products. In particular given the upcoming necessary investments in circular economy infrastructure to promote reuse and the recovery of critical raw materials, manufacturers of B2B equipment should be subject to EPR to the same extent as manufacturers of B2C equipment.

Article 5 and Article 12 of the WEEE establish mandatory producer financing and take-back obligations for B2C equipment, whereas Article 13 allows contractual arrangements for B2B equipment. This regulatory asymmetry reduces transparency, weakens enforceability and contributes to collection gaps. There should therefore be **mandatory and free-of-charge take-back obligations for B2B WEEE equivalent to B2C requirements**, including full producer financing responsibility. In addition, **harmonised and binding EU-wide reporting requirements** for B2B flows should be introduced to ensure transparency and comparability across Member States.

Dual-use products – equipment technically suitable for both household and professional use – create systematic incentives for misclassification. Declaring such products as B2B allows producers to apply less stringent financing and reporting obligations, thereby undermining the effectiveness and integrity of EPR under Articles 12–14 of the WEEE Directive. There should therefore be **harmonised EU-wide criteria for classifying dual-use products.** Where household use is technically possible, B2C obligations should apply by default. Market surveillance and enforcement mechanisms should be strengthened to prevent strategic misclassification and resulting environmental damages.

Modern rules for WEEE treatment, collection, logistics, and preparation for reuse

Requirements for treatment, collection, logistics, and preparation for reuse of WEEE in Europe were developed in 2002 and are outdated as well as inconsistently implemented across EU Member States. We therefore propose to **integrate provisions from CENELEC standards (EN 50625 and 50614 series) into the revised WEEE Directive** in such a way that their coherence and improvements are considered (see earlier Joint Position). This would lead to significant environmental benefits, particularly for the treatment of Temperature Exchange Equipment (TEE): 6.3 $MtCO_2eq$ may be saved annually, as a study on WEEE standards commissioned by DG Environment quantified. Integration into the revised WEEE Directive would also ensure that the relevant provisions are freely accessible and available in all the official languages of the EU.

While the level of ambition of the CENELEC standards must be preserved in all environmental, health and social aspects, further improvements should be considered. This is particularly important concerning **more effective protection of WEEE against damage during collection, transport, and storage**, especially to safeguard reusability. Modernising these rules will also contribute to the better dismantling of EEE, logistics practices, recovery of CRM-containing components and CRMs as also proposed in the CEWASTE normative requirements.

To **ensure effective removal of pollutants from products containing volatile fluorocarbons (VFC)**, these products must meet particularly high recycling requirements. The current WEEE Directive stipulates that all refrigerants and propellants – irrespective of their Global Warming Potential (GWP) - must be removed from TEE (point 1 of Annex VII). Since sorting these devices is fraught with uncertainty and inspections are difficult, it is absolutely necessary to keep this requirement. Otherwise, there is the risk that TEE with refrigerants or propellants with a GWP of 10,000 CO_2 equivalent or more may be openly shredded, resulting in their release and high greenhouse gas leaks.

Boilers and water heaters including VFCs present particular challenges. They are often not classified as EEE and are therefore frequently treated in open shredders. EEB members assume that this is the case for almost all boilers and water heaters in Germany, and the situation is likely similar in other countries. In Germany alone sub-optimal treatment of boilers and water heaters is estimated to cause emissions of 2.7 $MtCO_2eq$ per year. Therefore, **all boilers and water heaters should be included within the scope of the revised WEEE Directive.** This would also help ensure greater coherence within the EU internal market through a consistent approach to the application of the EEE marking symbol across EU Member States.

More generally, special attention should also be given to (other) PFAS present in WEEE and **specific requirements be developed for PFAS-containing components** of EEE. This is particularly important, as long-term derogations from any potential future restriction are to be expected.

New WEEE categories and scope

We welcome the planned introduction of new collection categories and the extension of the scope of the WEEE Directive in light of technical developments, the emergence of new products with IT functionalities, and environmental considerations in the design of categories.

We particularly see the need for a new category for **photovoltaic panels**. A new category could also be considered for **small WEEE including lithium-ion batteries** given the risk they pose to recycling infrastructure. Boilers and water heaters should be included in the **TEE category** that already exists to ensure their safe treatment in specialised facilities. More generally, all products that may contain VFCs in propellants should fall under the TEE category for this purpose.

Further categories (and extension of scope) could also be considered for wind turbines, data servers, large industrial cables and seabed cables, large-scale stationary industrial tools and non-mobile road machinery.

As elaborated in the section on ecodesign, it is important that all products classified as EEE and subject to the requirements of the revised WEEE Directive are also covered by **horizontal ecodesign requirements**. This must include any new products added to the scope of the Directive. We therefore urge the Commission to ensure, through the revision of the WEEE Directive or the implementation of the ESPR, that all EEE are subject to a broad set of horizontal design requirements – at the latest, 6 years after entering into force of the revised Directive.