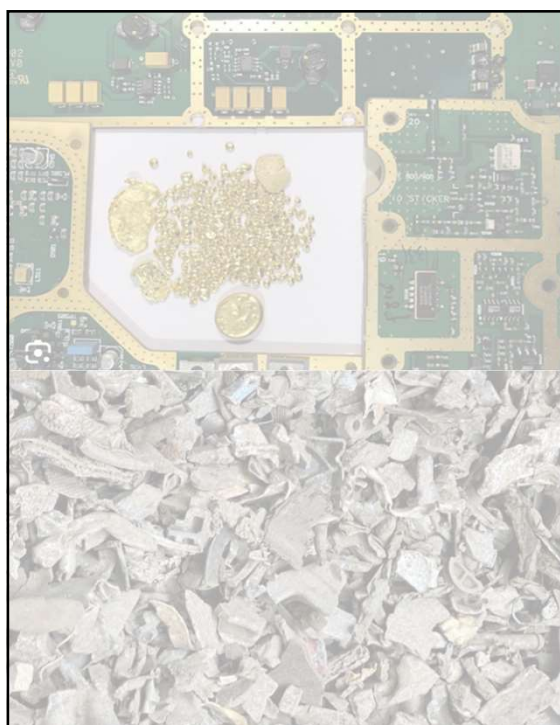




## **Basel E-Waste Amendments: Impact on Global Non- Ferrous Metal Trade**

**Federico Zanotti**  
Trade and Environment Policy Officer



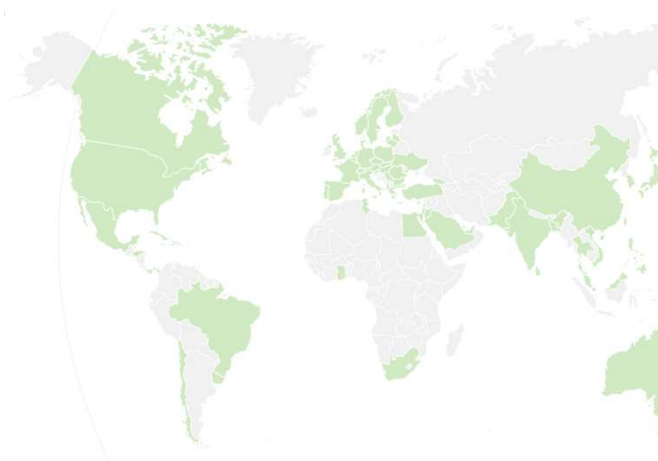
**Introduction to the Bureau of International Recycling**

**Basel e-waste amendments**

**Impact on the trade of recycled non-ferrous metals –  
Case studies**

**BIR Actions**

## The Bureau of International Recycling (BIR)



Established in **1948** as the **global federation of recycling industries**

representing **30,000 companies** through its national member associations

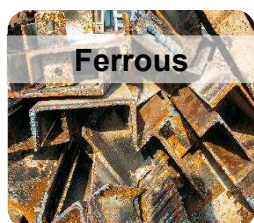
Over **1100 member companies** and **37 national member associations** from **71 countries**

## Main Objectives



- Promote **materials recycling** and recyclability
- Facilitate **free & fair trade** of secondary raw materials
- Protect the **environment**
- Source **information** for members and industry
- Represent the **recycling sector in international fora**

## Eight Material Streams



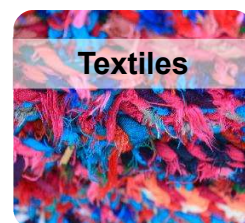
Ferrous



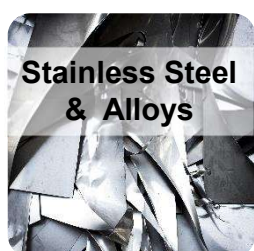
Non-Ferrous  
Metals



Paper



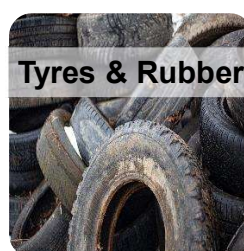
Textiles



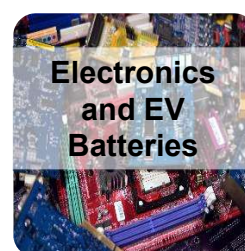
Stainless Steel  
& Alloys



Plastics



Tyres & Rubber



Electronics  
and EV  
Batteries

## Basel e-waste amendments and new trade rules for end-of-life electronics



What the  
Amendments  
Do?

**The Basel Convention** regulates the transboundary movements of hazardous and other waste

The amendments have placed **all end-of-life electronics, whether hazardous or not**, under the Convention's trade control mechanism, the **Prior Informed Consent Procedure (PIC)**, starting from January 2025

**Lengthy shipments** limit access to recyclables and recycled material



Exporting country



Transit country



Importing country

## New classification for end-of-life electronics: code Y49

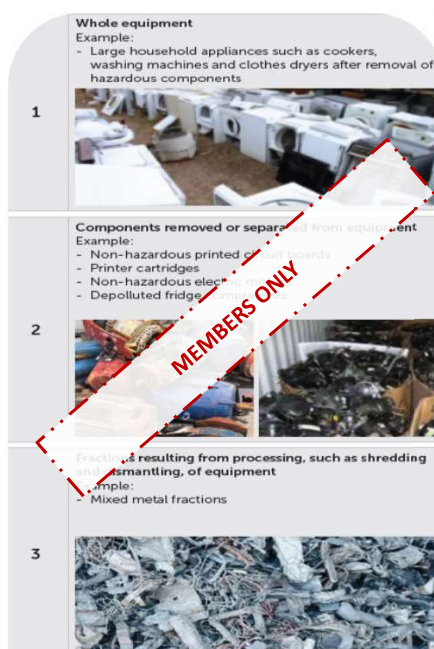


Waste Lists (Basel Convention Annexes)	Subject to the PIC procedure	New classification for end-of-life electronics
Controlled Hazardous Waste (Annex VIII)	YES	A1181
Controlled Non-hazardous Waste (Annex II)	YES	Y49
Exempt/Green Listed Waste (Annex IX)	NO	<del>B1110</del>

## What Materials fall under Y49?



- **Non-hazardous whole equipment** (e.g., washing machines and clothes dryers)
- **Non-hazardous components removed from the equipment** (e.g., electric motors or depolluted fridge compressors)
- **Non-hazardous fractions deriving from the processing of the equipment** (e.g., mixed metals)



## Y49: (First Concern) Overly Broad Classification



**Broad Classification based on the origin of the material**

### Origin Material

*Classification determined by **where materials come from** not their composition or hazard level*

### Overly Inclusive

*Captures all non-hazardous end-of-life electronics, including deriving fractions*

### Valuable Resources Restricted

*Recycled metals like copper, iron and aluminium **risk being** subject to trade control measures*

## Y49: Case study 1 – electric motors from washing machines



**Non-hazardous whole equipment – Washing machine**



**Non-hazardous components – electric motors**



**Non-hazardous fractions** resulting from the processing of electric motors - **copper and iron fractions**



Typically composed of copper and iron – both non-hazardous and highly recyclable

**Motors and derived fractions** now classified as Y49 simply because they are considered “waste arising from e-waste treatment”

PIC notification required, adding extra costs



•Market equilibrium distorted by restricted outlet markets

•Oversupply drives prices down in domestic/regional markets

•Recyclers squeezed with no margins

End of life electronics processing	Material composition	Possible better classification	Y49 current classification
Motors are shredded during recycling	Result is copper and iron fractions	Could be <b>B1010</b> or <b>B1050</b> codes for metal scrap	<b>Restricts trade based on origin, not content</b>

## Y49: (Second Concern) Uncertainty around exemptions



**Y49 Exemption: Materials covered by another existing code in Annex IX remain green listed**

**Examples:** Metal fractions derived from end-of life electronics, **after sufficient shredding and processing**, that can be accurately described by:

- **Code B1010:** metal and metal-alloy waste in metallic, non-dispersible form
- **Code B1050:** Mixed non-ferrous metal, heavy fraction scrap



What is **sufficient shredding/processing**?



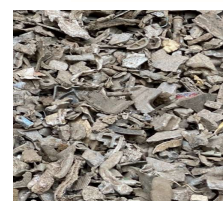
**Lack of criteria for exemptions under Y49**



## Y49: Case study 2 – Zorba Containers



Zorba	Basel Code	Trade regime
Mixed nonferrous metals, primarily aluminium from auto shredding or other machinery	1050 (Annex IX) – mixed non-ferrous metal, heavy fraction scrap	Green Listed Material No notification required



### Impact of Basel E-Waste Amendments on Zorba Containers

- Zorba containers held at ports
- Customs claim **misdeclaration (B1050 instead of Y49)** due to **trace amount of electronics**:
  - Only **0.1%** printed circuit boards
- No possibility of re-exporting
- USD 15.000 demurrage penalties per container



- **Beyond the intended scope of the Basel e-waste amendments**
- **Exempted Material under B1050/B1010**
- **Need for more flexible interpretation and definition of thresholds**

## BIR Actions



- **UN Basel Convention Working Group on e-waste technical guidelines** : New mandate to develop a guidance document to **clarify** what falls under the new **Y49 classification** and what is **exempt**
  - **BIR is actively involved through its industry expertise – establishment of an **ad-hoc technical working group****
- **Engagement with government officials**
- **Production of a Guidance Document to support BIR members**



## BIR Actions



- Conducting two BIR **studies on the global trade flows of:**
  1. Recycled copper, lead and zinc
  2. Recycled aluminum
- Cooperation with **UNITAR** on the **Global E-Waste Monitor 2027**





**Thank you!**

**Federico Zanotti**  
**Trade & Environment Policy**  
**Officer**

Bureau of International Recycling aisbl  
Avenue Franklin Roosevelt 24 | 1050  
Brussel | Belgium  
[fzanotti@bir.org](mailto:fzanotti@bir.org) | [bir@bir.org](mailto:bir@bir.org) | [www.bir.org](http://www.bir.org)

Follow us on



[LinkedIn](#)



[Twitter](#)