

Invisible but essential: Why Waste Pickers are key actors for efficient reuse of clothing

Author: Pietro Luppi / June 2026



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Executive summary

The used clothing supply chain is international, articulated and carried out by a diverse array of actors. Within this sector, second-hand clothes and textile waste streams are handled partly in parallel and partly in an integrated or intersected way. Microscale activities and vulnerable players, especially waste pickers and street sellers, play a key role in this supply chain. Without their contribution, the current system could neither sustain itself nor reach reuse objectives. However, these micro and vulnerable players are rarely involved in the decision-making related to the upcoming reforms towards a Circular Economy. Their exclusion is partially due to the lack of data and information about their work. This study offers a complete landscape of the supply chain, highlighting the key role of these invisible players and their possible position in new scenarios. It outlines the general landscape of environmental impacts of textiles and of textile waste production and recovery, followed by a detailed description of existing supply chains that clearly locates the operational and fundamental role of vulnerable players. The study then outlines drivers, main features and perspectives of the circular transition, indicating how waste pickers could contribute to the construction of the new scenario. The methodology combines complementary approaches: a systematic review of quantitative data drawn from institutional and industry reports to map global textile waste flows, recovery rates and trade statistics; a supply chain mapping exercise that reconstructs the full post-consumer textile circuit and explicitly includes informal and micro-scale actors; direct field research, with site visits and interviews in key nodes of the international circuit in both the Global South and the Global North; and a regulatory analysis of evolving European Union (EU) policy instruments, including Framework Directive 2008/98/EC as amended by 2025/1892, Ecodesign Regulation 2024/1781 and Extended Producer Responsibility frameworks.

Keywords: WASTE PICKERS, POST-CONSUMER TEXTILE SUPPLY CHAIN, EXTENDED PRODUCER RESPONSIBILITY (EPR), INFORMAL ECONOMY, CIRCULAR ECONOMY TRANSITION

1. The environmental impacts of textiles

The textile industry produces up to **8-10% of global greenhouse gas emissions**, making it one of the most polluting sectors in the world (Niinimäki et al., 2020b). The sector is responsible for 4% of the planet's freshwater consumption (Ellen MacArthur Foundation, 2017), around 20% of industrial water pollution (due to the treatment and dyeing of fibres) and around 35% of microplastics discharged into the oceans (due to the washing of synthetic garments) (Niinimäki et al., 2020a). In addition, the textile industry employs over 15,000 different chemicals during manufacturing (Niinimäki et al., 2020b) of which 165 are hazardous according to the European Union classification (Niinimäki et al., 2020a). Unless the global trend is reversed, these impacts are set to increase.

Global textile production has grown dramatically in recent decades. Between 1996 and 2023, the textile industry doubled the total fibre production, reaching an all-time high of 124 million tonnes (UNCTAD, 2025). Per capita fibre consumption has also nearly doubled, reaching 13.5 kg in 2023 (UNCTAD, 2025). In this trend of exponential growth, which has yet to be reversed, synthetic fibres are becoming increasingly important: in 2023, more than 80 million tonnes were produced, accounting for 67% of total fibre production (UNCTAD, 2025). Polyester alone accounts for 57.2% of the fibres produced, followed by nylon with a 5.3% share, and other petroleum-derived fibres with the remaining 4.9% of the share (Textile Exchange, 2024).

The numbers are unequivocal: synthetic fibres account for over 20% of global production of fossil fuel-derived plastics, which according to United Nations Environment Programme (UNEP) data totals around 400 million tonnes per year (UNEP, 2023). The vast majority of these synthetic fibres are derived from virgin plastic. In 2023, recycled fibres accounted for less than 8% of total fibre production (8.6 million tonnes), and of this amount, over 90% did not come from textile waste but from recycled polyethylene terephthalate (r-PET) obtained from post-consumer plastic bottles (Textile Exchange, 2024).

2. Textile waste production and recovery

Proportional to the increase in the production and distribution of new textiles, **waste production is also increasing**, reaching around 100 million tonnes per year (even 120 million, according to some analysts (Boston Consulting Group, 2025a)); textile waste could exceed 130 million tonnes per year within 10 years (Global Fashion Agenda, 2019; McKinsey & Company & Global Fashion Agenda, 2020; Textile Exchange, 2021). Due to the phenomenon of fast fashion, the turnover of clothing consumption is increasingly rapid, leading to an increase in waste production. The environmental impact of this trend is highly significant, partly because the poor quality of clothing and the prevalence of mixed fibres make fast fashion waste difficult to reuse and recycle (Ellen MacArthur Foundation, 2017). In recent years, global consumption of fast-fashion clothing has grown at an annual rate of 8% (Research and Markets, 2022).

The production of textile waste is not geographically homogeneous: records from the United States Environmental Protection Agency (EPA, 2018)¹ and Eurostat² show that the United States and the European Union, which together account for under 10% of the global population, produce around 30% of the world's textile waste.

¹ EPA reported that in 2018 (last data available) the USA, in the same year, generated 17 millions tons of municipal textile waste (see the previous footnote), that is 50 kg per capita. Probably, due to the trends, the current generation is significantly higher. Furthermore, the data is not including the post-industrial waste. The data are available also at: <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/textiles-material-specific-data>

² The European Environment Agency (EEA) estimated that in the European Union "the total amount of waste textiles generated, including clothing and footwear, home textiles, technical textiles, and post-industrial and pre-consumer waste, is estimated to be 12,6 million tonnes. This includes fractions that are discarded during textile production, at the retail stage and by households and commercial entities as waste". EEA estimation is quoted in the "Whereas" (26) of the DIRECTIVE (EU) 2025/1892 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 10 September 2025 amending Directive 2008/98/EC on waste.

According to the classification proposed by Euratex (2020), textile waste can be divided into three main groups:

- (a) **Industrial**, generated during the manufacturing of the product and its precursors (scraps, waste, and so on).
- (b) **Pre-consumer**, generated during the retail stages (that is, unsold finished goods).
- (c) **Post-consumer**, generated by consumers when they get rid of their used clothing or textile products.

At a global level, there is no reliable data to clearly distinguish the quantitative share of the three groups, but it is possible to reckon that the bigger share is composed of post-consumer waste (JRC, 2021; McKinsey & Company, 2021; Regione Toscana, 2020; Schmutz & Som, 2022)³.

For the purposes of this study, **we will focus on post-consumer waste streams, as well as second-hand textiles that are reused before becoming waste.**

Most of the world's population still does not have access to formal services of separate collection of textile waste, and there are no reliable global estimates of the proportion of textile waste sent for reuse and recycling. Based on countries where formal records are available, which are mainly in the Global North, the Ellen MacArthur Foundation reports an average separate collection rate of 14% with peaks of 50%, compared to the total textile waste produced (Ellen MacArthur Foundation, 2024). The Boston Consulting Group has estimated that in 2024, of the total textile waste produced globally, only 12% was reused and 7% recycled; but only 1% was recycled to make new textile fibres (Boston Consulting Group, 2025a).

3. The existing post-consumer supply chain

The post-consumer textile chain begins with the choice of a citizen/consumer who wants to get rid of a garment or textile product. Depending on their local context, personal needs, and the type of clothing or product, and provided they do not decide to give it to a family member or friend, the citizens/consumers can choose to donate it to a parish or charity, sell it to a store in exchange for money, deliver it to a clearance service, or put it out for waste collection. The latter may be unsegregated, or it may be separated using street containers, municipal collection centres, or temporary storage facilities located at textile retail shops as part of take-back or deposit return schemes. What drives citizens/consumers to prefer one option over another is a complex mix of **functional motivations** (proximity, convenience, and characteristics of the collection method in terms of least effort or financial compensation) and **non-functional motivations** (moral satisfaction from a charitable donation, desire to avoid waste by relying on channels where recovery is guaranteed, certainty that the operator taking charge of the waste or product acts ethically). These motivations have a different weight for each individual and depend on their cultural, ethical, and value background, as well as their socio-economic status (Luppi & Giuliani, 2022).

Although informal recovery practices for local household textile waste are widespread in the Global South, especially as scrap to make rags for auto repair shops, **most reusable textile waste and second-hand clothing is generated in the Global North**, where consumption rates tend to be much higher and the turnover of purchases is faster. In these countries, where waste legislation is overall strict and detailed and waste management is handled in a predominantly formalised and centralised manner, **the legal distinction between waste and second-hand supply chains is very rigid**. Nevertheless, in some national contexts, such as Italy, widespread illegalities have been documented regarding the mixing of waste and non-waste. Every year, there are numerous judicial cases related to illicit trafficking of textile waste, which is improperly destined for second-hand or recycling channels without having

³ In fact, according to a plurality of sources (see the footnotes 18 to 20), post-industrial textile waste is around 10% of the produced fibres, that means little more than 12 million tonnes yearly, that is around, or slightly more, than the total textile waste production. About the pre-consumer waste, the estimation is even more complicated, because most part of distribution channels don't provide official data on that, often this kind of waste is mixed with municipal waste, and most part of unsold items (that are between 20% and 40% of the products put in the market) are re-distributed in alternative channels (see the footnote 21).

received the 'end-of-waste' treatments⁴ required by law; in fact, before completing this treatment, the material cannot be reintroduced into the goods market and is still considered as waste.

In the Global North, in many contexts, it is possible to **entrust used clothing to private second-hand stores in exchange for a small financial compensation**, provided that the items are of sufficient quality to meet the demand of local consumers. These second-hand shops are mainly run by family-owned micro-enterprises, even though bigger chains and franchises are also active in the field⁵. In Italy, the Higher Institute for Environmental Protection and Research (ISPRA), the research centre of the Ministry of the Environment, has estimated that Italian consignment second-hand stores alone sold 14,000 tonnes of used clothing in 2023 (EEA, 2024). Additionally, throughout Europe, there is a growing number of retail stores that do not receive individual items from consumers but purchase **wholesale stocks** from charities, textile waste treatment plants, or other professional wholesalers. This is the case for retail outlets managed by Humana People to People in major European cities, as well as many family-run micro-enterprises⁶.

In the Global North, the segment of stores reselling second-hand clothing is growing rapidly. Exchange between private individuals via **online platforms** (among the most famous are Vinted, Vestiaire Collective, and Depop) is also growing, although doubts have been raised about the validity of the growth figures provided by the platforms themselves, which may be interested in inflating their performance to attract investment. The main platforms, despite suffering millions in losses each year, continue to receive substantial funding from investment funds, suggesting a speculative bubble that will burst sooner or later (Osservatorio del Riutilizzo, 2021; Osservatorio del Riutilizzo, 24; Luppi & Giuliani, 2022).

Citizens/consumers in the Global North can also **deliver used clothing to parishes or charities**, which are donating less and less to low income communities (who are unable to absorb the potential volume of donations and can in any case find used clothing on the market at very low prices) and are increasingly focusing on reselling them at retail (the best quality) or wholesale (everything else) in order to raise money to finance their charitable activities. Sometimes the same charitable organisations or social enterprises that receive clothing donations also provide the local separate collection services for urban textile waste, thus obtaining additional flows of used clothing. The stocks of used clothing received as donations and sold wholesale by charities essentially enter the same second-hand channels, both domestic and, above all, foreign, which absorb the 'end-of-waste' used clothing⁷ produced by the sorting facilities authorised to treat waste. The European network of social enterprises RREUSE has stated that its members currently handle around 281,000 tonnes of used clothing, including both clothing collected as waste (some of which is recycled or disposed of) and clothing received as donations (RREUSE, 2022).

Huge volumes of used clothing and textiles are **collected by waste pickers in informal ways**, such as rummaging through street bins for unsorted waste, intercepting clothing that sometimes accumulates around the separated textile waste bins when they are too full, offering local clearance services (directly from households), or receiving unsold used stock from charities. The clothes and textiles collected in this way are then resold on the street, or in formal and informal markets, or channelled to the end customer through second-hand consignment stores and online platforms.

⁴ According to the criteria established by the European Waste Framework Directive (2008/98/EC), End-of-Waste (EOW) is the legal status by which a material that has undergone a recovery operation ceases to be waste and becomes subject to product legislation, thereby re-entering the market as a substance or object rather than as a regulated waste. Also in other Global North jurisdictions, waste status generally ceases when a material meets specific regulatory criteria or conditions established by law, even if no unified procedure equivalent to the EU EOW framework exists. For simplicity, in this paper we will use the European definition (End-of-waste-EOW).

⁵ There are many notable examples of this commercial formula: among others, the French franchise Troc de l'Île, present in five European countries; the Italian franchises Mercatino srl, Mercatopoli and Baby Bazar; the Cash Converters franchise, which originated in Australia and is also present in New Zealand and six European countries; and the Buffalo Exchange chain in the United States.

⁶ Market perception provided by Rete ONU, the Italian trade association of second-hand operators.

⁷ In waste management, public and private stakeholders use the term 'end-of-waste' not only to define the treatment prescribed by law to extinguish the waste status (see footnote 4), but also, by metonymy, to define the products that result from such treatment. In the textile waste sector, 'end-of-waste' is commonly used to identify second-hand clothes that have been collected as waste and subsequently sorted by an authorised sorting plant ('R3' plants, according to the European code of recovery treatments).

Beyond the purely informal sales, which take place on the street and in unauthorised flea markets, waste pickers, despite their activity being undoubtedly professional, frequently use distribution channels that are theoretically reserved for private citizens. This happens when they place the clothes that they collect in the aforementioned second-hand consignment shops and online platforms, which are formal intermediary services reserved for sales between private individuals, or when they appear as non-professional hobbyists in authorised markets. This last option, which gives them a semi-formal but improper status, is often chosen by them because they do not have the economic margins to support taxes and other charges imposed on professional street vending. In 2024, the University of St Andrews, following field analyses carried out in northern, central, and southern Italy, estimated that Italian waste pickers reuse over 90,000 tonnes of used clothing every year. There are approximately 65,000 Italian waste pickers, collectors, and sellers of textiles and other goods, representing more than 60% of the second-hand workers in Italy. Unfortunately, other Global North countries lack accurate estimates for waste pickers, even though their presence is clearly visible on the streets and in markets (Saltalippi & Luppi, 2025).

In the Global North, **separate collection of urban textile waste is widespread**, organised by municipalities or by emerging Extended Producer Responsibility (EPR) systems for textiles (EPR schemes intervene organisationally in collection, especially through take-back systems involving textile and fashion retail shops). In European Union (EU) Member States, separate textile collection has been mandatory since 1 January 2025⁸; however, it was already widespread in higher-income European countries before that. In addition, in September 2025, an amendment to the Waste Framework Directive (Directive (EU) 2025/1892) came into force, requiring all Member States to implement national EPR schemes by April 2028; in some European countries, textile EPR is already in place, and in others, its introduction is imminent.

According to the European Commission, Member States generate 12.6 million tonnes of textile waste each year; of this volume, 5.2 million tonnes are clothes and footwear; for now, only 1.95 million tonnes of textile waste are collected separately, that is, 15% of the total and 22% of post-consumer clothes and footwear; the rest is landfilled or incinerated (European Commission, 2023). In the United States, according to the 2018 data provided by the EPA, out of 17 million tonnes of urban textile waste produced, approximately 17% is sorted (United States Environmental Protection Agency, 2018).

In the European Union, **urban textile waste** is generally collected by private companies or social enterprises authorised by municipalities to provide the service; these companies must be equipped with vehicles authorised to transport waste. In most cases, **the contracts governing the service do not provide for remuneration by the contracting authority**: collection operators place street containers at their own expense and are content to receive ownership of the waste they collect. They then transport it to warehouses authorised to store waste (authorisation codes R12 and R13⁹) and resell it as it is to **sorting plants** authorised to treat waste (authorisation code R3). The value of the 'original' waste allows these sorting plants to pay the collectors prices that are sufficient to cover all their operating costs and any business profits. In many cases, the economic margin of the collectors is sufficient to pay something to the municipalities or to the urban sanitation companies that work on their behalf; this contribution is often the subject of highest-bid tenders, where the operator offering the highest bid is awarded the collection authorisation (FEAD & EuRIC, 2025).

The **economic value of 'original' urban textile waste** is determined almost exclusively by the reusable fraction, which is separated from the other fractions during the sorting operations at R3 plants. These plants tend to be concentrated in specific industrial districts, which receive textile waste from their own country or other countries; in order to achieve optimal economies of scale, they normally process 2,000–3,000 tonnes per year or more (there are plants that process over 20,000 tonnes per year). Urban textile waste treated in European Union countries amounts to approximately 1.4 million tonnes per year, while another 500,000 tonnes are sent to non-European waste treatment plants (EEA, 2024). This is a **labour-intensive activity**, where the sorting operation required by law

⁸ The obligation for Member States to set up separate collection systems for textiles was introduced by Directive (EU) 2018/851, which amended Article 11 of the Waste Framework Directive (Directive 2008/98/EC) and set 1 January 2025 as the deadline.

⁹ The R-codes refer to recovery operations defined in Annex II of European Union Directive 2008/98/EC. R12 covers exchange of waste for submission to other recovery operations; R13 covers storage of waste pending such operations; R3 covers recycling or reclamation of organic substances.

for environmental purposes (EOW procedure)¹⁰ is often complemented, in the same production lines, by the more accurate sorting that is necessary to meet the demand of specific second-hand channels¹¹. In countries where labour costs are higher, many sorting plants have introduced automation technologies to reduce costs, but there are no machines capable of replacing the human eye when determining the quality and saleability of a used garment. For this reason, the choice is increasingly being made to carry out a basic EOW sorting in the European Union and then ship the whole reusable fraction to facilities dedicated to fine sorting in the free zones¹² of Türkiye and the United Arab Emirates, rather than in Pakistan, Togo, Chile, and other countries in the Global South.

Until the early 2010s, European sorting plants obtained from the 'original' textile waste¹³ at least 60% of reusable items, between 30% and 35% of recyclable materials, and between 5% and 10% of non-recoverable waste to be sent for disposal. Following the explosion of fast fashion, the proportion of reusable material has fallen below 50%, and the proportion to be disposed of has grown (Amsterdam University of Applied Sciences, 2017; BVSE, 2020; EURATEX, 2020; Osservatorio del Riutilizzo, 2021; Re-fashion, 2020). This situation, combined with the increase in the absolute quantities collected and the related operating costs, the growth in disposal costs, the crisis in second-hand prices due to market saturation, and the increase in energy costs, **has broken the economic equilibrium of the European textile recovery sector** in 2025, leading to the bankruptcy of many players, including some important market leaders (EuRIC Textiles, 2024; RREUSE, 2025). To prevent the collapse of collections, formal consultation sessions were set up to manage the crisis, and, in some cases, extraordinary public funds were allocated. Stakeholders believe that the structural solution to this crisis will come with the introduction of EPR schemes, which, among other things, will make producers financially responsible for covering the economic losses of the supply chain (Assorecuperi, 2025).

The **reusable output** of urban textile waste treatment plants is partially resold to national second-hand channels, mainly consisting of street vendors: a segment that significantly overlaps with that of waste pickers, who collect used clothing directly to resell it on the streets and in markets. A considerable part, which is difficult to quantify, of the reusable flow destined from the plants to the local markets is sold without an invoice or is under-invoiced to evade taxes that retailers consider they cannot afford due to the low margins of their business (in fact, generally, full Value Added Tax (VAT) is applied to EOW stocks, which are codified as new products) (Luppi & Giuliani, 2022; Osservatorio del Riutilizzo, 2013).

However, the vast majority of reusable used clothing collected in the Global North is **exported to countries in the Global South**: the Ellen MacArthur Foundation reports that 80% of reusable clothing intercepted by formal collection systems is exported (Ellen MacArthur Foundation, 2024). This cross-border flow, documented by the Observatory of Economic Complexity (OEC, n.d.)¹⁴, is caused by the spontaneous dynamics of supply and demand (Luppi & Giuliani, 2022).

In terms of economic value, **European Union countries account for the largest volume of exports**, reaching nearly United States dollar (USD) 2 billion annually (40% of the market), followed by the United States (over USD 1 billion) and China (USD 736 million). The leading importers are Pakistan (which re-exports large volumes to Global South countries after sorting them), the United Arab Emirates (not for local consumption, but because of its sorting centres from which the clothes are re-exported to Global South countries), Guatemala, Kenya, and Ukraine. The

¹⁰ Article 6 of the European Union Waste Framework Directive (2008/98/EC) sets out the following general criteria for end-of-waste status: (a) the substance or object is to be used for specific purposes; (b) a market or demand exists for such a substance or object; (c) the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products; and (d) the use of the substance or object will not lead to overall adverse environmental or human health impacts. However, the detailed procedures for each fraction of waste are established by the Member States, and they can vary significantly depending on the country.

¹¹ Unlike a simple EOW sorting, which could potentially just separate reusable, recyclable and unrecoverable waste, a sorting operation that complements EOW with commercial classifications can produce dozens of products.

¹² Free trade zones (FTZ), also called 'free zones', are special economic zones where goods may be imported and re-exported under special customs regulations, after having received some kind of value addition. In the case of second-hand clothes, the main role of FTZ is allowing the import exclusively aimed at adding value through sorting operations in countries where second-hand clothes import is banned.

¹³ In the textile waste industry the term 'original' is used to name the untouched and unsorted textile waste, as it is collected at the source.

¹⁴ Reference code: HS4 – 63.09 (worn textiles and clothing). Data available at <https://oec.world/en>

main importing geographical region is Africa, which buys almost USD 1.7 billion annually (90% of which is from sub-Saharan countries) (OEC, n.d.). The European Environment Agency (EEA) reports that between 2000 and 2019, the export of used textiles from the EU-28¹⁵, both 6309 – worn textiles and clothing and 6310 – sorted and unsorted used rags and textile scraps¹⁶, consistently increased from a little over 550,000 tons in 2000 to almost 1.7 million tonnes in 2019, a volume that has remained constant in subsequent years; 11% of this volume is exported to non-EU European countries, 46% to African countries (mainly medium quality destined for reuse, but with a significant share of unsold items), 41% to Asian countries (mainly low quality destined for recycling and reuse, but with no reliable information about the shares of these options and the quantity of waste) (EEA, 2023).

However, in many countries in the Global South, the **importing of used clothing is prohibited** because it is considered harmful to the development of national textile and fashion industries; in other countries, the entry of used clothing is hindered by high tariff barriers or other restrictions. In most countries where a moratorium is in place, however, there is widespread smuggling of used clothing; such clothing is usually triangulated from neighbouring countries where imports are permitted (in Nigeria, it enters from Togo and Benin; in South American countries, it enters from Chile; in North African countries, it enters from Tunisia, and so on). In the case of Mexico, most of the smuggling takes place directly from bulk purchases made in United States solidarity stores located along the border. In the Global South, the ban on the importation of used clothing is an open debate, with street vendors' networks usually pushing for the maintenance of imports, claiming that the used clothing sector guarantees a **high number of jobs**. As early as 1990, Haggblade (1990) pointed out that in Africa, for every USD 10,000 in final price, used clothing channels employed 4.8 full-time workers, while new clothing channels employed only 0.2 workers (Gauthier, 2007; Osservatorio del Riutilizzo, 2013).

In countries that import second-hand clothing, the supply chain is just as complex as in the countries where the clothing originates. When the clothing does not receive further sorting, **the companies that import containers of used clothing resell the bales as they are, without opening them**, to smaller wholesalers or directly to retailers. The bales, which normally weigh between 40 kg and 60 kg and have different values depending on the type of goods, quality, and origin, are normally **opened by retailers** or by intermediate sellers operating in retail markets, allowing retailers to choose individual items. Retail sales can take place in stores located in urban areas or rural centres, or by itinerant sellers offering clothes on the streets, but it is deemed that the largest volume is handled in markets (called *mitumba* in some African countries), which in large cities can host thousands of operators.

Unlike the Global North, where the high cost of artisanal labour compared to the economic value of the products puts strong limits on the repair market expansion, in the Global South, and especially in Africa, repair services flourish, and in the *mitumba* markets it is very common to see small sewing machines used by retailers to fix the clothes that have loose seams or have minor tears. In the Karume market, in Dar es Salaam, Tanzania, retailers declared that they tolerate up to 30% of the content of a used clothes bale to be fixed with small interventions; if the share is more, they risk not having enough money to buy the next bale (Luppi, 2015).

The retail sale of used clothing, as in the distribution channels for new clothing, still has a structural unsold surplus due to the normal dynamics of commercial rotation, to which can be added unsold items caused by quality errors in the upstream sorting phases or, in some cases, by fraud committed by sorters who, in order to save on disposal costs in their countries, slip textile waste that cannot be reused into the bales for export.

There are numerous ways of managing unsold goods. In some markets, retail sellers haphazardly accumulate waste at the edge of markets and burn it when volumes exceed a certain amount. In other cases, there are designated collection points where clothes are collected by the municipal sanitation service and then transported to city landfills. Sellers may also decide to sell part of their unsold stock, either for a fee or at no cost, to other second-hand sellers whose customers appreciate discarded clothing, or to artisans who **upcycle clothes into original creations** (often *mitumba* markets host entire sectors of upcyclers), or, in the case of cotton, to garages or car repair workshops that use used **clothes as rags to clean oil**, or to channels that use textile waste to **stuff sofas and cushions**. The practice of '**cannibalisation**' is also widespread, where buttons, zippers, and other components are removed to be reused in tailoring. All these recovery operations, in turn, generate textile waste.

¹⁵ Conventionally, the term EU-28 is used to indicate the EU 27 Member States plus the United Kingdom, that was a member until 2020.

¹⁶ "6309" and "6310" are the Harmonised System (HS) codes usually attributed by exporters to register goods at customs.

Upcycling phenomena deserve special attention. In the Global North, this activity can reach a professional level only by sustaining high costs of artisanal work, often burdened by the necessity to have a stylist in the production line to evaluate single-piece solutions (because textile discards, and especially post-consumer discards, are never homogeneous). Instead, in Africa, professional upcycling, and the related production costs, can be implemented in such a way that allows vendors to keep the products in a low price range. Therefore, a phenomenon which in the Global North is mainly reduced to high-price niches of the market is, in Africa, massive and popular. Upcycling is often the answer to the 'cultural colonialism' related to the use of second-hand clothes previously chosen by 'white men' (Western consumers) based on their own taste; in fact, with their original ideas, upcyclers adapt clothes, changing their design according to local culture, tastes and trends (Hansen, 2000; Luppi & Patania, 2013).

In many cases (perhaps most cases) and especially in larger markets, the retail seller does not directly manage their unsold goods, but **pays a waste picker to collect them**, and it is then up to the waste picker to assess the best way to make use of them. In other cases, waste pickers intervene directly and independently at market collection points, selecting what they believe can be reused. After selecting the items they are interested in, waste pickers often transport the rest to designated collection points where they pay the transporter who takes the waste to the landfill. In other cases, in order to avoid incurring any costs, waste pickers dump this waste in waterways adjacent to markets or other unauthorised disposal sites.

In most parts of landfills, **waste pickers** carry out a final sorting of textile waste, washing dirty used clothes to make them reusable again, and collecting textiles suitable for other forms of recovery. Frequently, anything that cannot be recovered in any form is burned on site to reduce its volume (Besser, 2012; GIZ, 2024; Luppi, 2024)¹⁷. The total amount of waste from unsold imported used clothing is still unknown. Civil society organisations, institutions, and stakeholders have presented sometimes very divergent estimates (ranging from 40–50% to 2% of the contents of the bales), but in reality there are still no accurate analyses that take into account the real extent of the phenomenon (Besser, 2012; GIZ, 2024).

Today's used clothing supply chains absorb large volumes of items at no direct cost to the communities in the Global North. At the same time, however, it presents **serious critical issues and dysfunctions that cannot be ignored**, both upstream and downstream. In countries where used clothing is collected, a growing number of operators have responded to deteriorating economic conditions by resorting to various types of **illegal practices**, including the use of undeclared labour, under-invoicing of sold fractions, and illegal disposal, which can take place at home or abroad by inserting waste into EOW bales sent to foreign reuse and recycling channels. Their inability to legally reach the breakeven point is due to multiple factors. The most important are: the increase in management costs (aggravated by the economic demands of contracting authorities), the crisis in international prices for used clothing and secondary textile materials, the collapse in quality driven by fast fashion, the exponential increase in disposal costs.

In Europe, the reasons behind this crisis were formally presented by the trade associations to the public institutions, to negotiate public support (EuRIC Textiles, 2024). In the case of Italy, the well-known infiltration of organised crime in the sector prompted the Bicameral 'Ecomafia' Commission, composed of Deputies and Senators, to open a specific investigation into textile waste and used clothing in 2018. The final report of this investigation, approved by the Commission in 2022, confirms the presence of **organised crime** in the sector (Camorra clans), emphasising that the latter tends to create structured links with non-profit organisations which, by virtue of their local roots, are able to obtain favourable treatment in the allocation of textile waste collection services. Systematic illegal disposal due to the circumvention of sorting procedures, which in past years has contributed to the phenomenon of the so-called 'land of fires' (*Terra dei fuochi*)¹⁸, is increasingly shifting to the improper inclusion of waste in EOW bales exported to non-European countries where controls on final disposal are less stringent (Parliamentary Commission of Inquiry, 2022).

The burden of errors or fraud occurring during the sorting phase is normally transferred to the micro-operators who open the bales in the destination markets, that is, the most vulnerable players in the value chain. This situation, in addition to its serious environmental consequences, also has a severe social impact: when the quality of the

¹⁷ Direct observations from field visits conducted by the author in markets and landfill sites across multiple Global South locations also inform this description.

¹⁸ The *Terra dei fuochi* is a documented environmental crisis in the Campania region of southern Italy, where illegal waste dumping and burning — much of it linked to organised crime — has caused serious soil, water, and air contamination since the 1990s, with associated public health impacts including elevated cancer rates.

bales purchased by street vendors is lower than expected, the vendors risk not being able to earn enough money from sales to buy new bales, thus losing their source of livelihood and survival for their families (Luppi, 2015).

As we have seen, the Global North sorting plants also generate a considerable amount of material which, after EOW treatment, is classified as **raw materials to be sent for recycling**. A large part of these secondary materials is sent to India and Pakistan for further sorting by colour and fibre, as well as for the removal of zippers, buttons, fasteners, and other non-textile fractions that are not suitable for recycling. These operations are carried out manually, which is the main reason why the activity is concentrated in these two Asian countries, where labour costs tend to be very low (also due to the documented use of child labour (US DOL, 2024)).

In India, where the import of used clothing is prohibited, it is frequently smuggled into containers of secondary materials. The world's largest textile recycling district is located in Panipat, a city in northeastern India that is home to over 300 secondary fibre yarn production facilities. The yarn obtained is used for low-quality textile production, especially for blankets, carpets, and sheets. Over 90% of the blankets purchased by international humanitarian agencies as relief goods to aid populations affected by natural disasters and wars come from the industries in Panipat. Other uses for yarn obtained from recycling used clothing include low-cost clothing and textile accessories. Numerous sources testify and document that large quantities of imported stock, after being sorted by fibre and colour, are discarded and disposed of in irregular ways (especially by burning, which makes the air in the entire city unbreathable). There are no formal waste collection services in the industrial area. As with African reuse channels, Indian recycling channels are also sometimes fraudulently used to divert waste that would be very expensive to dispose of in the Global North (Parliamentary Commission of Inquiry, 2022).

During the author's field visit to Panipat in 2017, the widespread practice of irregular disposal was observed, mitigated only slightly by the intervention of informal and vulnerable workers, mainly women, who collect zippers and buttons removed from clothes destined for recycling and resell them on the street. The author also observed the activity of systematic sorting and washing of dirty socks, which are not considered reusable in Global North sorting facilities; these socks, like zippers and buttons, are resold on the street by vulnerable operators (Osservatorio del Riutilizzo, 2021). In parallel with Asian textile recycling channels, the Global North is at the forefront of developing technologies to maximise fibre recycling, and there is already a certain market for the use of secondary textile materials in the automotive sector, as well as in geotextiles. But despite increasing investment, the supply chains are not yet mature (McKinsey & Company, 2022).

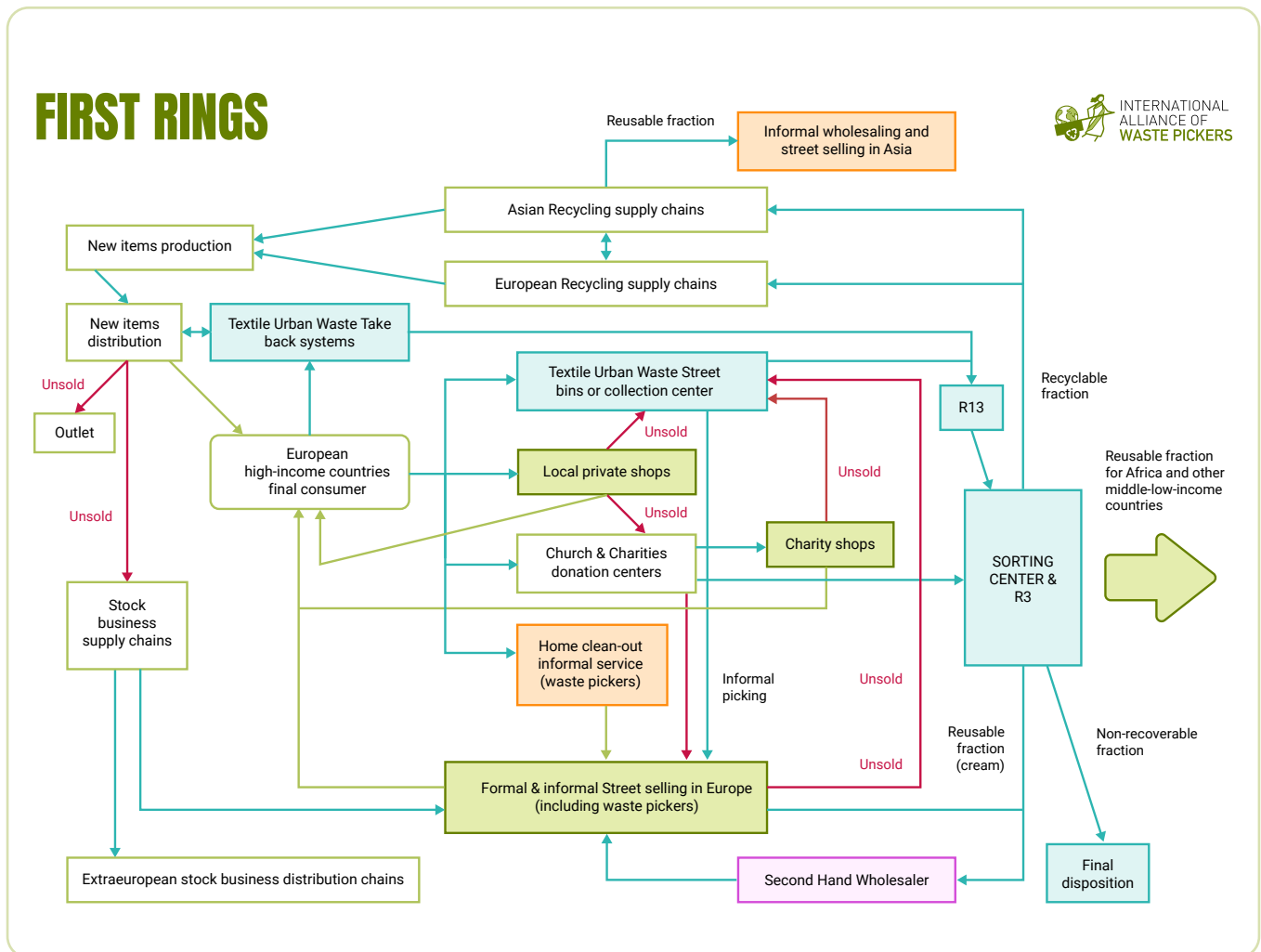
The **environmental balance** between reuse in the Global South and the main available alternative (incineration in the countries that generate the textile waste) is genuinely difficult to assess. Existing Life Cycle Assessment (LCA) studies are numerous but often produce diverging results: estimates of CO₂ savings from reusing one kilogram of clothing range from 3 kg, as proposed in the European Commission's bibliographic review, to 25 kg, as calculated in a 2022 study by the Universitat Politècnica de Catalunya (Intexter). A further layer of complexity is introduced by fibre composition – a factor analysed in the 2023 Norion Consult report commissioned by EuRIC Textiles, which found that the carbon footprint of a second-hand garment is between 37 and 70 times lower than that of a new one, depending on the material. Most critically, the majority of LCA studies assume that every second-hand purchase replaces a new one on a one-to-one basis – an assumption the Norion study challenged by modelling replacement rates ranging from 10% to 80% depending on the consumption context. This variable alone is sufficient to invalidate much of the existing research. Compounding the difficulty is the lack of reliable traceability data on the final destinations of exported used garments, which makes it impossible to account for end-of-life scenarios – including open burning or unregulated landfilling – in receiving countries (Intexter & UPC, 2021; Norion Consulting & EuRIC Textiles, 2023; Oltreilgreen24, 2022).

The unsettling findings of a 2025 study conducted by Molinaro, Orzes and colleagues add a further layer of concern. Analysing the circular economy practices (not only textiles) of approximately 1,600 manufacturing companies worldwide between 2014 and 2021, the research found that reuse and recycling, when measured across the full value chain, can generate a carbon impact high enough to cancel out any environmental gain. The authors attribute this outcome to the inefficiencies and immaturity of downstream supply chains, while noting that the situation could be significantly improved through traceability tools and more efficient supply chains (Molinaro et al., 2025).

Graphic 1 and Graphic 2 attempt to outline a **complete overview of the international supply chain of textile waste and used clothes**, including the informal activities and parallel processes described that normally are not included in the supply chain descriptions: an exclusion that is symptomatic of the invisibility suffered by the more vulnerable players in the sector, who are not able to participate in decision-making at the local, national and international

levels. The graphics highlight the complexity of this supply chain. The possible destinations of textile waste and used clothes are so numerous that we could describe this supply chain as a system of *karst rivers* – waterways that disappear underground and resurface in unexpected places.

Graphic 1 – First rings of textile waste and used clothes supply chain



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4. The circular transformation

The transition to the circular economy, in the textile sector as in other areas, should be interpreted not only as an environmental issue but also, and above all, as an **industrial reform that obeys specific commercial and geo-economic logic**.

On the environmental side, there is a megatrend in many countries, largely in but not restricted to the Global North, that is both commercial and electoral. Consumers/voters, especially those of Generation Z, are increasingly demanding public and industrial policies geared towards the establishment of environmentally and socially sustainable supply chains, and a growing segment is basing its voting and consumption choices on this criterion (Euromonitor, 2025; Papp, 2022; PwC, 2024).

In addition to that, the European Union, in particular, has set up geo-economic policies to pursue strategic autonomy, reducing dependence on non-European materials through increased recycling of its own waste, and combatting low-cost imports from Asia (particularly Chinese ultra-fast-fashion platforms) through eco-design and due diligence policies that function in practice as **non-tariff barriers to imports**¹⁹, and, most recently, by imposing custom duties on low-value import packages (Regulation EU 2026/382). This protectionist policy also includes the textile sector, where European manufacturers are increasingly at risk of succumbing to the massive volume of **fast fashion entering the EU market**, which, driven by very low prices and attractive designs, is conquering ever larger market shares. European textile manufacturers, in synergy with environmental policy, aim to commercially counter imported fast fashion by strengthening as much as possible their competitive advantages in terms of sustainability.

In this context, the reuse of used clothing, which, by virtue of the waste hierarchy imposed by EU legislation, takes priority over recycling and other forms of recovery, is not seen by the EU industry as a threat, but rather as a tool to reduce the market share of fast fashion. In fact, EU-made products tend to be positioned in the mid- to high-price ranges, while second-hand clothing competes directly with fast fashion in the low-price ranges. Among other things, due to circular-economy policies, second-hand clothing could increasingly fall within the sphere of control of EU industry.

The driving force behind the new scenario is **Extended Producer Responsibility (EPR)**, which shifts the financial, or financial and operational, responsibility for waste recovery to producers (companies that place the product on a national market for the first time, which may be manufacturers or importers). Several Textile EPR schemes have already been introduced in a number of countries. France was the first, in 2006, followed more recently by other European countries, as well as California and New York (United States), Australia, Kenya, and others (Ellen MacArthur Foundation, 2024). However, the strongest impact of this policy will occur by April 2028, when all EU Member States, as stipulated by the amendment to **Framework Directive 2008/98/EC** which came into force in September 2025 (Article 22a), will be obliged to implement specific textile EPR schemes.

European manufacturers prefer EPR schemes that are both **financial and operational**, not only to avoid the risk of distributing money indiscriminately to inefficient supply chains, whose economic losses they would have to cover, but also to maintain a certain degree of market control over the secondary textile raw materials they will need to source in order to comply with the **European Ecodesign regulation (Regulation (EU) 2024/1781)**, which imposes a recycled content rate on every new product. Among other things, the Ecodesign Regulation also introduces a digital passport for textile products, which will make it possible to trace them throughout their entire life cycle, including the post-consumer stages (collection, sorting, and recovery of waste).

¹⁹ The European circular strategy is consolidated and politically transversal. Giuliano Maddalena, among many others, in articles published by *Oltreilgreen* magazine, highlighted that in the previous European legislature (Von der Leyen I), this strategy, based on the Green Deal and often named 'the Timmermans doctrine', emphasised especially its ecological aspects (it was during the the "Greta Thunberg boom", a period of heightened public attention around the climate movement); in the new legislature (Von der Leyen II) Europe kept the same strategic view, but chose a political communication that emphasises the necessity to adopt these measures to protect the European economy. "We must not be fooled by the 'stop the clock' measures imposed by the European Commission in a series of important legislative processes, because these pauses and slowdowns certainly do not represent a change of direction, but merely serve to give industry a breathing space by acknowledging the exceptionally uncertain and complex international situation. The worsening of geoeconomic conflicts requires caution in every single measure, but it will not weaken circular policies. On the contrary, it will strengthen them" (Maddalena, 2026).

These key regulations, combined with other cross-sector regulations on due diligence and waste traceability, are under development at the European level, with obvious effects on downstream supply chains outside Europe. In this scenario, it is foreseeable that many of the 'grey areas', where waste pickers and other vulnerable actors in the supply chain currently operate, will be affected by formalisation and traceability policies, and **key links in the value chain that have been largely invisible until now will be required to meet high environmental quality standards**. Therefore, upstream in the supply chain, in the Global North, as well as downstream, in the countries of the Global South that import EOW from sorting plants, there are likely to be **significant impacts on informal collectors and street vendors**. The Global North initiatives to raise Environmental, Social and Governance (ESG) standards are paying special attention to the waste quotas generated by plants that carry out fine sorting for recycling or reuse, and the unsold quotas of second-hand street vendors, which are currently managed predominantly by waste pickers. This special attention is also due to the interest of mass media, which has produced numerous journalistic investigations since 2021, showing the environmental impacts generated by the export of second-hand clothes to uncontrolled distribution chains, from Ghana to the Atacama Desert in Chile (Bartlett, 2022; The OR Foundation, 2022).

On this wave, in March 2024, French Environment Minister Christophe Béchu questioned the entire European system of sorting and exporting textile waste and used clothing, proposing a general ban of this kind of exportation: "Africa must no longer be the dustbin of fast fashion," France's environment ministry said in a statement to Reuters. "We must reduce waste, and manage our own waste" (Reuters, 2024). Béchu called for a common position from the EU Council ahead of COP 2025 on the Basel, Rotterdam, and Stockholm Conventions²⁰. Denmark and Sweden supported the initiative. Subsequently, however, France itself partially revised its position, setting a national reuse target of 15% for 2027, thus admitting that 85% of reusable materials will continue to be destined for foreign markets. A similar target (15% by 2030) has been set by the Netherlands. During the 2025 BRS Conference of the Parties in Geneva, with 180 participating governments, the issue of textile waste exports was raised mainly by Kenya, Nigeria, and Ghana. The three countries proposed the inclusion of textiles among the flows controlled under the Basel Convention and the definition of technical criteria to distinguish between textile waste and used clothing. The final document did not produce any decisions, but a cycle of consultations was initiated with a view to possible future resolutions. According to the participants, the most likely measures include: the introduction of the PIC procedure for the export of textile waste²¹; the extension of the Basel code B3030, which currently does not include used footwear; and the definition of international guidelines for distinguishing between used textiles and waste. Entire recycling and reuse chains could be excluded from the range of European exports of textile EOW if they do not comply with specific standards, whose practical possibility of implementation has not yet been proven. This would generate a significant impact on the global market for used clothing and secondary textile materials, and possible disruption to the popular economies of street vendors and waste pickers.

5. How could waste pickers contribute to the new scenario?

Vulnerable individuals engaged in street vending and waste picking play a key role in the international textile waste and used clothing chain. Thanks to their contribution, large volumes of used clothing are collected and placed on the second-hand markets of the Global North in parallel with the waste cycle (which, after sorting, generates further

²⁰ The Basel, Rotterdam and Stockholm (BRS) Conventions are three multilateral environmental agreements that jointly govern the international trade and management of hazardous chemicals and wastes. The Basel Convention (1989) regulates the transboundary movement of hazardous wastes and their disposal, with the aim of preventing the export of waste from industrialised to developing countries. The Rotterdam Convention (1998), also known as the Prior Informed Consent (PIC) Convention, requires exporting countries to obtain the informed agreement of importing countries before shipping certain hazardous chemicals and pesticides. The Stockholm Convention (2001) targets the elimination or restriction of Persistent Organic Pollutants (POPs), chemicals that persist in the environment, bioaccumulate in living organisms, and pose risks to human health and ecosystems. The three Conventions hold joint Conferences of the Parties (COPs) to coordinate implementation and address overlapping issues.

²¹ The Rotterdam Convention aims to promote shared responsibility and cooperation among Parties involved in international trade in hazardous chemicals, with the goal of protecting human health and the environment from potential harm associated with their use. The basic principle underlying the Convention is that the export of banned or severely restricted chemicals can only occur with the prior informed consent of the importing country. Therefore, the importer must be in possession of all the information needed to take all necessary precautions.

streams of used clothing that are placed on national and international markets). Thanks to them, used clothing exported to countries in the Global South is distributed to retailers, and the waste resulting from this retail sale is managed, albeit imperfectly. For this large population of street vendors and waste pickers, the **emergence of the new circular economy scenario can represent either a threat or an opportunity.**

A **threat**, because the standards and operating methods of circular economy policies in the textile sector could be designed without taking into account their existence or, even worse, their way of working, causing an inevitable Schumpeterian disruption that would increase their level of economic and social marginalisation²². But beyond the social aspects, this prospect would also be **risky from the point of view of environmental results and system efficiency**, because today, in order to equal or exceed the environmental benefits already achieved thanks to their collection, reuse and recovery work, there are no credible solutions based on the outright replacement of the informal micro-enterprises involved in the supply chain. If they are swept away from the sector, the environmental benefits generated by the system would most likely be reduced, and in the case of reuse almost cancelled. In the case of the Global North, where the majority of used clothes is generated, consumers choose the channel through which to deliver their clothes based on a complex set of motivations, and the large segment that considers waste pickers a viable option may find it difficult to adapt to interception proposals set up in a different way. On the other side of the supply chain we find street vending, on which much of the reuse of used clothing in both the Global North and the Global South is based; street vending reaches the end customers through established working methods, based on fine-grained presence and micro-scale, which are unlikely to be replaced by artificial, desk-based solutions. Similarly, there is no evidence that the micro-collection of unsold goods by waste pickers in Global South markets can be effectively and efficiently replaced by radically different operating schemes.

The transition to the new scenario could instead be transformed into an **opportunity** for waste pickers if they manage to negotiate advantageous positions within the framework of the inevitable reconfiguration of balances, powers, burdens, economic resources, standards, and objectives. **The prospect of improvement will not materialise if vulnerable individuals limit themselves to defending their status quo or demanding generic recognition.** In fact, if they just defend the current situation, they enter into direct conflict with the philosophy and objectives of the transition, condemning their advocacy efforts to immediate failure or, at best, gaining a softer and more gradual expulsion from the system. Vulnerable individuals, street vendors, and waste pickers must instead be agents in the new scenario and will improve their condition if they manage to put forward **proposals that incorporate concrete and innovative solutions to the unresolved issues of the circular textile economy**, that is, technical and valuable proposals where they can leverage their widespread presence in supply chain points which are the same supply chain points where it is most difficult to guarantee sustainability standards. For example:

(a) Achieving maximum interception of used clothing through the emergence of reuse supply chains based on micro-collection by waste pickers

We assume that maximum interception of used clothing donated by consumers in the Global North, and, in the future, also in the Global South, is only possible by involving the reuse supply chains based on micro-collection. This micro-collection, if equipped with tools and standards compatible with its own specific operating scheme, can become fully transparent, legal, and monitorable, and stand out for its high environmental and social performance. In the Global North, there is a well-known problem of 'parallel streams' that escape the waste chains controlled and reported under EPR schemes, making it difficult to achieve the environmental objectives set by the legislation (the parallel flows of Waste Electrical and Electronic Equipment (WEEE) are currently in the spotlight, with almost 50% in Europe being managed by chains considered irregular (Iattoni et al., 2025)). From the perspective of the free market in which European EPR schemes are formally registered, the existence of parallel flows, especially when based on waste prevention, should not be considered a problem but an opportunity; an opportunity that, of course, can express its potential if the work of micro-operators is brought to the desired standards. In this context, the scale of reuse model presented in 2021 by Osservatorio del Riutilizzo and Contarina could be inspiring: in that model, waste pickers and other reuse micro-operators are encouraged to adhere to formal schemes and environmental objectives compatible with the regulatory contexts of the Global North, starting from inscription to territorial registers that

²² According to the economist Joseph Schumpeter, capitalism creates constant innovations across all sectors that cyclically disrupt the industry. However, these disruptions typically have strong social impacts, especially on the weaker subjects, such as formal and informal workers, as well as micro and small entrepreneurs. The concept of 'Just Transition', which is debated in the international consultations on circularity, was born precisely from the necessity to avoid or reduce the social impacts related to the circular transformation.

reserve admission to those who accept a specific balance of rights and duties (for example, the urban sanitation companies redirect citizens' requests for the collection of bulky waste in their houses to registered waste pickers; in exchange for this help, waste pickers make environmental reports of their work and deliver the residual part of their collections to municipal collection centres).

(b) Achieve better data on the characteristics of unsold items, through the implementation of quality cycle systems based on the constant feedback of street vendors, both in the Global South and the Global North

Although these sellers are the ones who actually guarantee the re-entry of used clothing into the market, they have so far been excluded from the main consultation forums of the international supply chain. Since they open most of the bales prepared by the sorting plants and have to bear the costs of inadequate quality, they are obviously the first to be interested in ensuring that the sorting work is monitored and that the quality of the bales they purchase is subject to a process of constant improvement. Only thanks to the feedback from individual street vendors will the sorting plants be able to create bales that are truly suitable for the end market.

(c) Emergence and structuring of the management of unsold items, thanks to the active participation of waste pickers

In the presence of schemes that increase the stability and dignity of their work, waste pickers who collect unsold goods from street vendors' points of sale will have a vested interest in tracking the recovery channels to which they deliver recoverable material and ensuring appropriate destinations for residual waste; street vendors will be able to guarantee their participation in this traceability system within the framework of the agreements described in point "b". Under similar schemes for the recognition and improvement of their work, waste pickers operating in landfills will be able to monitor and report on the quantity and quality of the textile waste they receive and maximise its recovery; this can be done in line with the evolution of landfill management standards, involving waste pickers in formalised, systematic sorting operations, possibly integrated with the sorting of other waste fractions.

(d) Advancement in the value chain, skipping intermediaries

With adequate support and assistance programmes, street vendors and waste pickers, working in synergy with each other, can advance in the value chain of used clothing, both in the Global South and the Global North. This can be achieved by providing specific assets: (a) spaces dedicated to the storage of bales from sorting plants, which can be acquired or imported without the need for supply chain intermediaries, integrated with spaces dedicated to the storage of unsold items; (b) machinery capable of preparing for recycling and disposing of non-reusable fractions in an appropriate manner. These facilities could be part of circular and popular economy hubs, which could be largely based on reverse logistics models founded on the active, synergistic, and democratic collaboration between the micro-enterprises involved in the supply chain, gaining a strong competitive advantage in the new scenarios as they will be able to guarantee monitoring and control of the entire flow.

(e) Recovery of textiles in landfills

The modernisation of landfills, which is under development throughout the whole Global South, can include the work of formalised waste pickers, tasked with sorting all materials that are still recoverable. Latin America offers many good examples of this inclusive formula of modernisation. Textile waste that is organic and environmentally critical in landfills, even when not recoverable, could be treated for disposal in more sustainable ways thanks to the help of waste pickers.

Financial and operational sustainability of the involvement of waste pickers in the supply chains could be reached thanks to the resources coming from EPR, granting in exchange full respect of traceability duties and social and environmental standards. This scenario is more effective in a framework of Ultimate Producer Responsibility (UPR), where producers registered in the countries where the second-hand clothes originate take the financial and operational responsibility for the whole international supply chain of post-consumer clothes. A harmonised blend of EPR or UPR funds and Corporate Social Responsibility (CSR) funds, both drawn from producers' budgets, could be an effective way to pursue environmental and social goals simultaneously. The producers, in the framework of EPR, are identified by the Organisation for Economic Co-operation and Development (OECD) as an agent of change in the textile recycling supply chain, using traceability as a basis to know the processes of each link of this supply chain,

accompanying the involved players to improve their social and environmental standards; in this path, the OECD explicitly indicates waste pickers as a key actor to be involved and accompanied (OECD, 2026).

The feasibility of the emergence and inclusion processes described in points a-d will be enhanced by the development of **specific information technology (IT) tools that can be managed with small devices**. The apps made available to these micro-operators should, if possible, be integrated and linked with digital passports and other traceability tools put in place by governments and producer organisations to ensure the sustainability of international textile supply chains.

In each of the areas described, microscale players as street vendors and waste pickers should combine their demand for recognition as rights holders with the development of specific, technically sound proposals, presenting themselves as a solution rather than a problem. The existence of detailed proposals promoted directly by these vulnerable individuals would also **prevent superficial inclusive solutions**, where vulnerable individuals are involved in marginal, and sometimes corrupt, projects that offer concrete benefits only to leaders or unrepresentative organisations.

The effectiveness of this advocacy and positioning approach could **increase exponentially in the presence of operational models that are promoted at the international level**, given that the textile and used clothing waste chains are international and will increasingly be subject to international governance mechanisms. At the same time, these models will need to be adaptable to local needs. In this process, it will be essential to coordinate the advocacy actions carried out by waste pickers and street vendors in the Global South and the Global North, who, as highlighted on 10 September 2025 in Accra, at the African regional meeting of the International Alliance of Waste Pickers, have common problems and interests. By joining forces, vulnerable individuals working in the textile recovery supply chain will be able to have a greater impact on the processes of defining new scenarios, representing a valid interlocutor for governments, legislators, supranational institutions, and producer organisations. In fact, the level of unity that vulnerable individuals manage to express through their trade organisations will be inversely proportional to the 'transaction cost' incurred by decision-makers in the textile supply chains to reach agreements. With a reduced 'transaction cost', it will be much easier to reach advantageous agreements. Conversely, if the demands remain fragmented, or even individual, it will be difficult, if not impossible, to influence decision-making processes.

Conclusion

The textile sector is one of the most polluting in the world, and textile fibres account for over 20% of the plastic in circulation. Waste pickers, as well as street vendors, although largely neglected in formal consultations, play a key role in the reuse and recovery of textile waste and used clothing supply chains. The ecological transition will redefine the functioning of the circular textile economy, with the aim of maximising its environmental results. This will be achieved by adopting Extended Producer Responsibility schemes for textiles and advanced traceability and flow control tools, and by requiring all players involved to adhere to higher social and environmental standards. Waste pickers and street vendors, thanks to the widespread nature of their work, can play a leading role in this new scenario and become providers of solutions in areas of the supply chain that currently present significant challenges. In particular, their role could be decisive in:

- (a) bringing so-called 'parallel flows' back into line with environmental objectives and standards;
- (b) the introduction of a genuine quality cycle that improves the work of sorting plants, maximising reuse and reducing improperly managed waste;
- (c) sustainable, accountable management geared towards maximum recovery or correct disposal of unsold items generated by end sellers of used clothing;
- (d) the introduction of effective traceability systems at points in the supply chain that are currently out of control.

In the area of traceability, in particular, every single street vendor and waste picker, thanks in part to the use of specific information technology (IT) tools, can become a 'sentinel' of what happens to textile waste and used clothing.

The process of including street vendors and waste pickers, which could be decisive for the success of the ecological transition of the textile sector, must begin with the recognition of their role in the supply chain and the involvement of their trade associations in formal consultations at an international, national, and local level.

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About the author:

Pietro Luppi has been a pioneer in the self-organization of waste pickers in Italy since the early 2000s, promoting the creation of independent networks and collective structures. As a leader within the Rete ONU network, and Director of Observatory of Reuse, he contributes to representing thousands of informal second-hand workers before institutions. His work focuses on strengthening organization, policy engagement, and recognition of vulnerable workers within the circular economy.

About the International Alliance of Waste Pickers (IAWP):

TheIAWPisademocraticinternationalunionofmember-based organisations of waste pickers spread across Africa, Asia Pacific, Europe, Latin America & Caribbean and North America, committed to advancing the rights and strengthening the organising of waste pickers. Learn more: <https://wastepickersinternational.com/>





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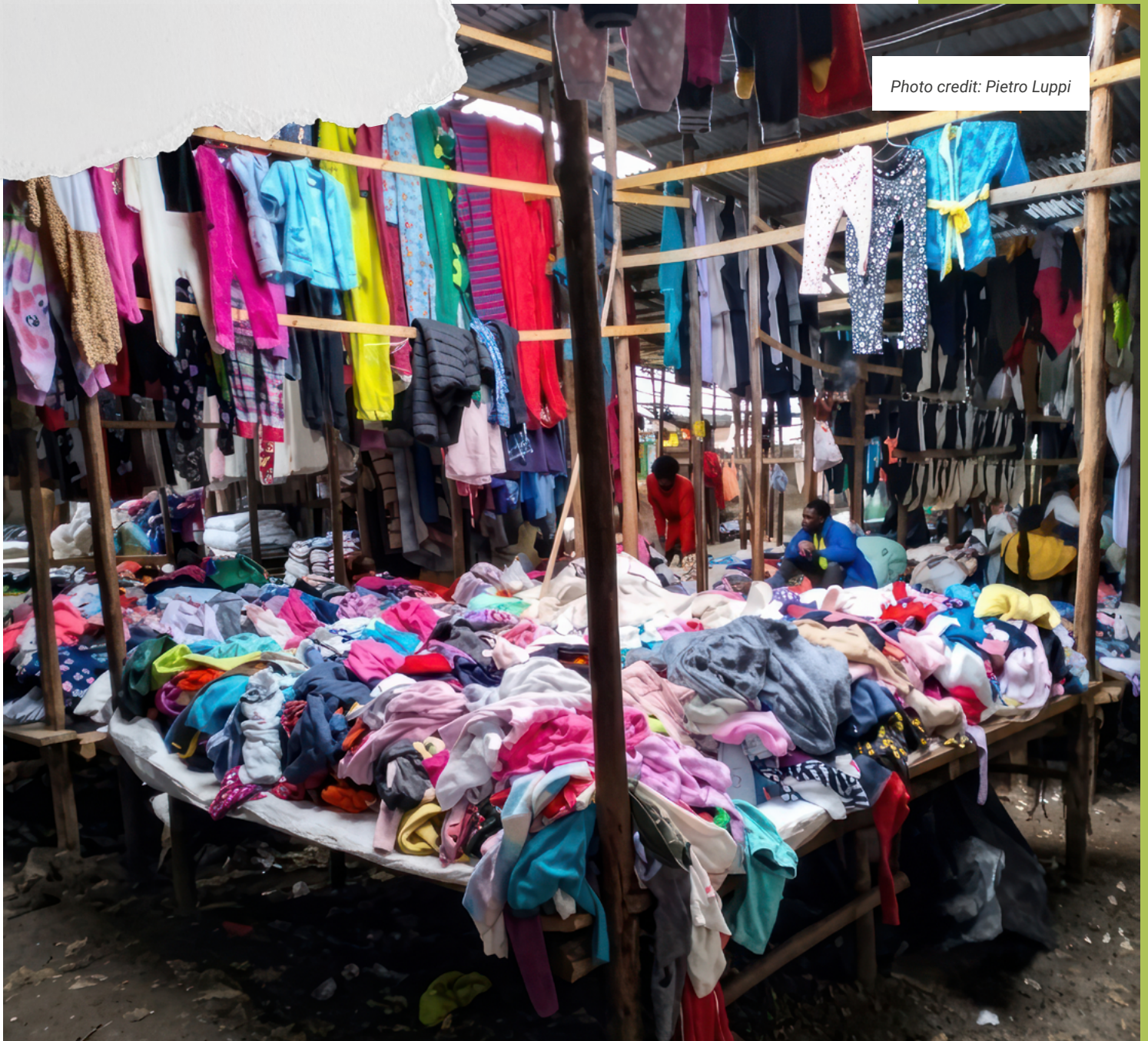


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info@wastepickersinternational.org

www.wastepickersinternational.org