The role of waste pickers in reuse economies in Italy

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INTERNATIONAL ALLIANCE OF WASTE PICKERS

RETE ONU
OPERATORI NAZIONALI USATO

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Summary

Waste pickers in Italy primarily recover items from waste bins, municipal centers, or house removals. Although some of them still work in collecting and selling scrap metal, in the last decades their core business has shifted from the collection of recyclable materials to the collection of used items to be sold in flea markets. However, high licensing fees and a lack of legal recognition have forced many of these vendors into informal markets. The shift from the recycling to the reuse business generated from a multiplicity of economic and legal factors, including the introduction of formal selective collections and EPR systems. In general, Italian waste governance policies are designed to consider the interests and ways of working of all stakeholders except waste pickers, who are gradually excluded over time by policy changes and the resulting market dynamics.

Italy's regulatory framework does not adequately categorize second-hand sellers, complicating VAT applications and legal compliance, and recent legislative efforts aimed at regularizing waste pickers have stalled. Rete ONU (Rete Nazionale degli Operatori dell'Usato — Italian National Network of Reuse Operators), an affiliate of the International Alliance of Waste Pickers (IAWP), advocates for improved policies, including an EPR system favoring second-hand markets. A key objective is the recognition of waste picker contributions to reuse, alongside official recognition in EU environmental policies.

The inclusion of Italy's waste pickers in an economic framework focused on recovery and reuse would entail working closely with municipal administrations and, critically, involving waste pickers, both in reuse centers and in policy development.

The European Environmental Agency (EEA) reported that in Italy circa 232,000 tons of goods were reused in 2021 thanks to third-party micro-enterprises (EEA, 2024). However, the data did not include the tons recovered by waste pickers who sell in formal and informal flea markets. Rete ONU subsequently established a technical working group to develop a methodology to estimate the impact of these waste pickers and the number of tons they collect and reintroduce into consumer cycles.

The methodology was applied to collect data in flea markets in Turin, Rome and Palermo. Rete Onu and the University of St. Andrew collaborated on this fieldwork-based research, aimed at quantifying the contribution of the secondhand street sellers in Italy, many of whom are waste pickers, to the reuse economy.

Between 60,000 and 70,000 waste pickers are active in Italy. The present study has shown that they sell in secondhand markets between 197,400 and 230,300 tons of goods annually. The population considered doesn't include antiques and vintage street sellers, and the data is articulated in more depth in the following sections.

The results of this research will support the official recognition of waste pickers' work by the legislators and consequently, waste pickers in Italy will strengthen their voice, through Rete ONU, in policy matters relevant to them.

Waste pickers, reuse and circularity

Waste pickers consistently engage in frugal innovation around the reuse of objects (Carenzo, 2020) and have extensive knowledge of the waste and pollution issues in their communities, as well as an understanding of how reuse systems could be part of the solution. However, an analysis of reuse and recycling within the Circular Economy (CE) framework highlights the risk of this economic model becoming a continuation of modern linear production systems, fostering marginalization of waste pickers (Scheinberg et al., 2016; Barford & Ahmad, 2021). Indeed, CE while in the process of formation, tended to take the perspective of big and established actors, leaving less room for small entrepreneurs (Appelgren and Bohlin, 2020) as some groups of waste pickers are organized. While the principles of the CE prioritize keeping materials in circulation in their highest value state, in practice many promoters of CE invest primarily in recycling over reuse systems (O'Hare, 2024; O'Hare and Rams, 2024). When there are investments in reuse, they are generally limited to pilot schemes. Recycling is indeed often considered more fit for resource-efficient and fast consumption loops and consequently for an economy of scale (Alexander and Reno, 2012), while reuse involves (re)definitions of waste, value, resistance, and care, and channels community-led economies (Isenhour and Barry, 2020).

Processes of including waste pickers in CE need to take into consideration that this stakeholder preceded CE's conceptual framework (Barford & Ahmad, 2021) and is at the heart of it (Bari et al., 2012; Suthar et al. 2016). The recovery of materials for reuse to be sold in formal and semiformal street markets, is an important part of waste picker livelihoods, especially because recycling is often formalized to such an extent that it is difficult for informal actors to access recyclable materials as the basis for subsistence and decent work, particularly in the Global North (Scheinberg et al., 2016). Including waste pickers in circular, formal, and reuse-based economies allows them to be recognized as important stakeholders in this type of economy, while at the same time acknowledging their positive environmental and economic impact in the communities where they live and work.

Waste pickers in Italy

Italy, like other medium- and high-income countries in Europe, no longer has a market for recyclable waste accessible to waste pickers, except for the more valuable fractions of metal waste. This is due to the evolution of the waste sector, with the development of separate waste collection systems, the increase in authorization and traceability requirements for intermediaries, the introduction of Extended Producer Responsibility (EPR) schemes for packaging, and the centralization of the waste management systems. However, since the 1960s, following the Italian economic "boom", which led households to consume and discard more usable goods than in the past, waste pickers have identified another valuable material stream. They started to collect reusable items deposited inside or just outside roadside general waste bins, municipal collection centers, or handed to them by residents who needed to clear out their house but found the municipal bulky waste collection service inconvenient. In this way, waste pickers replaced the rag-and-bone men and women of the past.

Present day Italian waste pickers come from various low-income backgrounds; many are of Italian origin while others are migrants from Eastern Europe (both EU and non-EU) and North and Central Africa. Many are Roma people, who unlike others tend to work in larger groups (teams of at least four family members) and engage in systematic bin picking. They primarily sell in flea markets and other second-hand street markets, which are either organized and authorized by non-profit associations or private entities that obtain concessions for public municipal spaces, or they sell in less legally formalized spaces, such as improvised roadside markets.

In these markets, conflict between the formal and informal sectors often arises over the allocation of space and fair treatment for second-hand goods operators, leading to tension between municipalities and informal operators. This leads waste pickers to face growing delegitimization. Above all, when working in authorized markets, they are often forced to register as "hobbyist" non-professional sellers who lack basic work rights but must pay the fees for the day of market. When they are fully regular, the costs linked to formalization are typically over 3,000 euros annually in taxes and other fees while average revenues rarely exceed 10,000 euros per year (ODR, 2021; ODR, 2024; Luppi and Giuliani, 2022; Scheinberg et al., 2016) discouraging the formalization of these reuse operators. Issues of urban cleanliness also play a role, as well as additional complexities of competition between lower and more formalized upper levels of the second-hand value chain, and between Roma and non-Roma second-hand operators (Scheinberg et al. 2016).

In Italy, Roma have identified alternative paths outside linear market consumerism. They often live in interstitial and marginal spaces where they can attract less attention, ease conflictual relations with non-Roma. They tend to occupy that niche of formal supply and demand that is unregulated, recovering and selling discarded materials because they can take advantage of both the malfunctioning waste management system of Italian cities and of residual spaces represented by the waste bins. Consequently, their engagement—and that of other waste pickers—in the informal economy is not a matter of choice but rather a direct consequence of the lack of material and institutional infrastructure, as well as a regulatory framework, to support the second-hand and reuse market as a whole (Carabellese, 2013; Rosa and Cirelli, 2018).

Indeed, in Italy, municipalities tend to consider only “Centri di Riuso” or “Centri per il Riutilizzo” (Reuse Centers) as part of their environmental/waste management policies, ignoring the formal and informal enterprises dedicated to reuse activity. Reuse Centers originated about 20 years ago in some municipalities in northern and central Italy as a workaround to reuse and reintroduce into circulation reusable durable goods disposed of as waste in municipal collection centers. They are often managed by non-profit organizations, in collaboration with local authorities or public sanitation companies, and benefit from incentives and funding related to environmental policy. According to Article 181 of Legislative Decree 152/06, reusable goods not classified as “waste” can be intercepted in municipal waste collection centers, and the same applies to waste to be ‘prepared for reuse’. The former typically belong to 'Reuse centers', but nevertheless the centers are left without a clear legal definition, making it harder to differentiate them from other second-hand activities. Public funds and other benefits given to these centers, together with the informality of labor (often classified as volunteer-based) contribute to generate a clear market conflict with other reuse operators.[1]

However, integrating the experience of these centers into official “preparation for reuse” systems —systems that ensure control, traceability, and economic sustainability—can help to avoid the creation of parallel, poorly regulated channels characterized by unfair competition directed at both formalized and informal reuse operators, including waste pickers. Specifically, the cherry-picking practice operated by these centers threatens the economic sustainability of “preparation for reuse” plants and increases tariff costs for citizens related to local public policies concerning reuse (ODR, 2024).

Currently, a coherent definitional and legislative framework for second-hand operators, including waste pickers, is lacking. A review of the existent regulatory system is the object of the next section.

Reuse governance

Since 2003, Italy’s reuse operators have been the focus of extensive research, activism, lobbying, and interventions by the Osservatorio del Riutilizzo (Observatory of Reuse — ODR; formerly named, Occhio del Riciclone’s economic and social research center).[2] This began with consultations involving hundreds of informal reuse operators active in Rome, and followed its activity making economic studies with a group of economists, and environmental specialists.

[1] https://www.leotron.com/centri-di-riuso

[2] Osservatorio del Riutilizzo (the Observatory of Reuse — ODR) is an economic and social research center born in 2003 from the grassroot initiative of the waste pickers of Rome. In 2010 this entity organized the Italian waste pickers to make a national network, which in 2011 was formalized as the association Rete ONU. Until 2021 the name of ODR was Centro di Ricerca Economica e Sociale Occhio del Riciclone. Since 2003, this research center has published many studies and articles and one book in 2009 titled *La Seconda Vita delle Cose* (Edizioni Ambiente).

ODR also coordinated the development of Rete ONU, the largest association in Europe for informal economy workers in the reuse sector. Rete ONU includes vulnerable collectors and sellers ("waste pickers"), organizers of historic and flea markets, fairs and street markets, social cooperatives, and second-hand shops. One of their key proposals is for the government to establish national EPR systems that are more favorable to second-hand goods, replacing the current approach of micro-negotiations with various municipal systems (Scheinberg et al. 2016).

Rete ONU's research has led to the identification of several issues surrounding the regularization of those more marginalized actors operating in the reuse economy. A first important problem to underline is around classification. Currently, the street sellers of second-hand goods, who are mainly waste pickers, are not classified under an ATECOFIN[3] code that specifically defines their second-hand/reuse activities, generating many critical issues.

Since 2008, the ATECO classification has been used for communications and declarations to the Italian Revenue Agency. Therefore, the lack of a code specific to street vendors selling second-hand goods means that they pay a high VAT rate on what they sell, making their trade not convenient. Furthermore, VAT can only be easily charged on the profit margin of goods that are bought and retailed (this includes second-hand items) and not on those goods collected and recovered free of charge by waste pickers.

In 1931 waste pickers operating in flea markets were regularized by articles 121 and 124 of the TULPS (*Testo Unico delle Leggi di Pubblica Sicurezza*—translated as the "Consolidated Public Safety Law") However, for street sellers, full informality began in 2000 following the repeal of the definitions in Articles 121 and 124 of the TULPS and the implementation of ministerial decrees of Law 114/98 on commerce, known as "Bersani trade law". Eliminating the defining articles, the Bersani Law pushed street sellers into the informal economy. Meanwhile, their supply activities were gradually pushed into a legally ambiguous or outright illegal status due to the evolving waste legislation framework.

In the past two legislatures (XVII and XVIII), several bills were introduced in Parliament to reorganize the second-hand sector, including measures to re-regularize waste pickers. These proposals were supported by a broad range of political forces, drawing inspiration from the issues posed by Rete ONU. In the last legislature, the parliamentary process began but was halted before the final discussion.

Since the adoption of Directive 2008/98/EC, reuse has gained increasing importance in European environmental laws and policies, as well as in national regulations across EU Member States. This directive (implemented in Italian environmental law 152/06 through Legislative Decree 205/10) defines:

- "reuse" as "any operation by which products or components that are not waste are used again for the same purpose for which they were conceived."
- preparing for reuse as "checking, cleaning, or repairing recovery operations by which products or components of products that have become waste are prepared so that they can be reused without further pre-processing."

This directive requires EU Member States to implement measures that encourage reuse, monitor and analyze the effectiveness of these measures, and quantify the volumes of reuse using a standard European methodology. The results must be submitted annually to the European Commission in a format established by the Commission itself. These measurements and reporting obligations, in accordance with EU Decision 2021/2019, became operational in 2023, using 2021 data as the first reference year.

In 2016, Law 152/06 was amended to allow municipal waste collection centers to accept separately reusable goods and waste intended for reuse, under Article 181. According to studies by ODR, these centers handle at least 600,000

[3] The classification of economic activities ATECO (ATtività ECOnomiche) is a type of classification adopted by the Italian National Institute of Statistics (ISTAT) for national economic statistical surveys. It is the Italian translation of the nomenclature of economic activities (NACE) created by Eurostat, adapted by ISTAT to the specific characteristics of the Italian economic system.

tons of reusable items annually. However, most of these items are neither reused nor prepared for reuse but instead sent for disposal or recycling.

The "preparing for reuse" policies were strengthened with modifications introduced in 2018 through the Circular Economy Package, which was implemented in Italy by Legislative Decree 116/20.

Beyond incorporating EU directives into national regulations, Italy has also attempted to encourage reuse through regulatory and strategic initiatives. One such initiative was the "Valorization for Ecological Purposes of the Second-Hand Market" (Art. 7-sexies, Law 13/2009), which mandated a collaboration between local public entities and authorities to favor local reuse through flea markets. Additionally, the National Prevention Plan of 2013 emphasized that the primary way to increase reuse is by removing regulatory barriers that hinder second-hand operators. The plan specifically referenced Rete ONU's requests for the improvement of the sector, including the regularization of waste pickers, as a key point of reference. However, over the years, these initiatives have not been implemented.

In 2022, the Italian Ministry of the Environment and Energy Security (MASE), through its Circular Economy National Strategy, highlighted the need to establish Reuse Centers, which would be integrated with municipalities and operate in synergy with the second-hand supply chains, thus moving away from the previous model based on voluntary work and distribution of goods free of charge. Also in 2022, the Parliament & Senate Commission "Ecomafie" (tasked to investigate crimes in the waste sector) approved a document of analysis of the "parallel waste streams" phenomenon. This recognized the existence of waste pickers and indicated formalization and regularization of this trade as possible solutions. In Decree No. 119 of July 10, 2023, MASE set out the rules for the authorization and management of preparation for reuse plants.

The emergence of waste pickers' presence in regulation frameworks is only in its infancy and the data presented for the first time in this report can contribute to bringing recognition to this important stakeholder in Italy's reuse economy.

Quantifying the role of waste pickers

The European Environmental Agency (EEA) reported that in Italy 231,714 tons of goods were reused in 2021 thanks to third-party micro-enterprises (EEA, 2024). However, the data didn't include the tons recovered by vendors/waste pickers who sell in formal and informal flea markets.

Rete ONU has since established a technical working group to evaluate and highlight the role of this segment of Italy's second-hand sector and has elaborated a methodology to estimate the number of tons that this group collects and reintroduces into consumer cycles and to quantify the impact of waste pickers and street sellers in the reuse market.

The methodology has been reviewed by the two researchers of the project "The role of bioplastics, social plastics, and just plastics in a circular economy" (Grant Ref: MR/Y003853/1) from the of University of St. Andrews. One of the researchers (also an author of this report) applied the methodology to collect data in three flea markets in Turin, Rome and Palermo.

The result of this research will be enabling Italian and EU legislators to officially recognize the work of waste pickers. Consequently, whenever the Italian Government discusses matters relevant to waste pickers, Rete ONU, and by extension the IAWP, can act as a stakeholder, proposing policies and laws that acknowledge their impact. Additionally, they can advocate for legal instruments within Italian law to regulate their status as workers in the formal economy.

Case Studies

In Italy, street-vendors/waste pickers, who represent the most vulnerable group of reuse operators and rely on selling in street-based second-hand markets as their primary source of employment, are estimated by ODR and Rete ONU to number between 60,000 and 70,000. This range was calculated based on field and desk research done in the last 20 years, with continuous updating and monitoring of the trends, integrating:

- **(a)** field interviews with the operators of the flea markets in 8 regions: 3 in the North, 3 in the Center, 2 in the South of Italy (see **Appendix** for more detail on these estimates).
- **(b)** data provided in 2025 by FiVA-Confcommercio. It was estimated that, in addition to the 192,000 generic street sellers operating in Italian markets (according to the data provided in 2025 by FIVA-Confcommercio), another 10%—about 19,000—reuse street sellers are operating beside local authorized markets dedicated to generic sales.
- **(c)** interviews with organizers of flea markets in Italy provided the number of operators selling low-cost items, from which was calculated the number of operators working on the same day in each province. On average, the number of operators in flea markets is 1 out of 1,000 inhabitants.
- **(d)** deep analysis in Rome and qualitative interviews in Turin, Naples and Palermo showing that in the big cities, street sellers are much more numerous than in the other territories (probably double, due to the significant presence of informal flea markets and isolated street sellers).
- **(e)** Normalizations and updating of the data made from the National Reports on Reuse (2010, 2011, 2012, 2013, 2014, 2018, 2021, 2024), authored by ODR Occhio del Riclone in partnership with Rete ONU and Labelab, and with the patronage of the Environment Ministry (2010, 2011), Utilitalia (2018).

This research only considered the street sellers selling low-cost used items, without including the sellers specialized in antiques, vintage goods, etc. Within this large informal sector, about 4,500 reuse street sellers are members of Rete ONU (ODR 2024, p.103; 110); among them, there are about 4,000 waste pickers, who are internationally defined as follows:

> ***Waste pickers constitute most of the workers in informal and cooperative settings in the waste sector and can be described as people who participate (individually or collectively) in the collection, separation, sorting, transport, and sale of recyclable and reusable materials and products (paper, plastic, metal, glass, and other materials) in an informal or semi-formal capacity, as own-account workers, or in a cooperative or social and solidarity economy setting, and as workers who subsequently achieved formal work arrangements through their organizations. The description includes itinerant waste pickers, current and former waste pickers who have new roles and engagement in their organizations, and those who have been integrated into municipal solid waste management systems and continue to retrieve, sort, and sell recyclables.***[4]

However, in the Italian case the profile of waste pickers is mostly limited to reuse activity and metal scrap collection, and mostly excluded by formal waste management, reuse public policies, and solidarity economy formal settings.

The methodology used to carry out the research considered this population and used a relevant sample of 60 participants. The data gathering was quali-quantitative, relying on a 24-question survey (see Fig. 2 below). The questions were posed directly to participants by the researcher (Matteo Saltalippi), a member of the University of St. Andrews who collected the data firsthand by interpreting the answers of the participants to obtain the necessary quantitative data.

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[4] For the official definition of "waste pickers" see
https://apps1.unep.org/resolutions/uploads/230113_international_alliance_of_waste-pickers.pdf

Every vendor was considered individually as an autonomous microenterprise or sole trader and the structured questionnaire was designed to gather data about the annual costs and revenue of every seller. The data were then cross-referenced with the weight of the objects sold on the participants' stalls at the market.

Fig. 2 Questionnaire used in the field

Survey

1. Operator identification code (e.g. #TO1; #TO2; #RM1; #PA1; etc.)
2. Operating markets:
3. Provinces:
4. Number of days exposed per year:
5. Cost of market gasoline per day:
6. Weeks per year spent on procurement:
7. Cost of procurement gasoline per week:
8. Annual flat rate for vehicle maintenance and depreciation:
9. Average parking cost per day:
10. Expected monthly income from sales to support family and cover costs:
11. Expected monthly income from waste clearance to support family and cover costs:
12. Expected global monthly profit to support family:
13. Kg exposed - **ELECTRICAL APPLIANCES**
14. Economic value exposed - **ELECTRICAL APPLIANCES** (value of weighted items)
15. % profit - **ELECTRICAL APPLIANCES**
16. Kg exposed - **FURNITURE**
17. Economic value exposed - **FURNITURE** (value of weighted items)
18. % profit - **FURNITURE**
19. Kg exposed - **CLOTHING**
20. Economic value exposed - **CLOTHING** (value of weighted items)
21. % profit - **CLOTHING**
22. Kg exposed - **OTHER**
23. Economic value exposed - **OTHER** (value of weighted items)
24. % profit - **OTHER**

The 60 interviews were conducted in the markets of Via Carcano in Turin (40), Albergheria in Palermo (16), the Integrated Market - Via Ardeatina 850 in Rome (3), and the Piazza dei Mirti market in Rome (1). The data gathering lasted respectively 8 weeks in Turin, 1 week in Palermo and 3 days in Rome.

The questionnaire was divided into questions aimed at obtaining a microenterprise analysis (from question 4 to question 12) and questions to estimate the weight of objects divided by categories (questions 13, 16, 19 and 22). The answers to these questions were obtained either by physically weighing, with a scale and a dynamometer, the displayed items or by making an estimate to collect quantitative data on the weight of the objects sold by individual vendors.

The physical measurement/weighing was carried out seller by seller. In some cases, the knowledge acquired about the weight of objects during the first weightings was applied to subsequent measurements. For example, knowing from a previous measurement that a metal pot weighs 1 kg, in later measurements the same type of pot was not weighed again but was considered to weigh 1 kg. Also, after an initial observation and physical measurements, three pieces of clothing were considered to weigh on average 1 kg and by counting items in bulk clothes the weight was calculated/estimated.

The percentage of the profit by category was estimated by the seller and by the surveyor during an observation period conducted by the researcher, for example:

- A seller who only sells clothing and earns solely from that category = 100% clothing revenue.
- A seller who generally sells half clothing and the rest split equally between appliances and miscellaneous items = 50% clothing revenue + 25% appliances revenue + 25% other revenue.

The data show that the largest quantity of objects sold at the markets' stalls (which are both recovered from the waste stream or prevented from going into the bin) belongs to the clothing/textile category, with 43.6% and a total amount of 86,052 kg. This is followed by 51,309 kg of electrical and electronic equipment (including: large household appliances; small household appliances; IT equipment, including monitors; consumer electronics, including televisions; lamps and luminaires; toys; tools; monitoring and control instruments) amounting to 26% of the total. The category with the smallest percentage is furniture, with 6.1% and 12,130 kg. This is because furniture consists of bulky items, which often require large, motorized means of transport to be taken to the market, take up the same space as more items amounting to higher value, and could easily be damaged during the recovery and transport operation, making the items in this category often inconvenient for the seller/waste pickers to trade. During the period of observation, measurement of this category was only possible three times as only three sellers interviewed sold furniture. The objects in the "Other items" category make up 24.3% of the total, or 47,924 kg. These are items made of a great variety of materials and serving a vast array of purposes which don't fit the other three categories (see Fig. 3) as per the example in Photo 1, below

Photo 1 objects belonging to "other items" category excluding the electrical/electronic devices, such as light switchers in the left-hand corner.

The data analysis shows that an individual street seller is able to annually sell 1,434 kg of clothing/textile, 855 kg of electrical and electronic equipment, 799 kg of other items and 202 kg of furniture on average (see Fig. 3 for percentages and Fig. 4 for weight). Given this and based on the population estimate of between **60,000 and 70,000 operators**, **the total amount of goods sold annually by informal waste pickers is between 197,400 and 230,300 tons**. This is comprised of, between 86,040–100,380 tons of clothing/textiles; 51,300–59,850 tons of electrical and electronic equipment; 47,940–55,930 tons of other items, and 12,120–14,140 tons of furniture (see Fig. 5).

The average annual revenue of every seller in the sample is €6,650 and the average number of annual market days per seller is 104, with the lowest being 24 in Turin and the highest being 350 in Palermo. The average cost of stall rental is €19.80 a day, but it should be noted that in Palermo no payment is required.

When considering the value of the items at the stalls, the average total value of clothing is €398.30 and the average value per kilogram is €3.60. The average total value of electrical and electronic equipment is €75.50 and the value per kilogram of €2.90. The objects belonging to the "other items" category have a total average value of €188.50 per stall and value per kilogram of €5.70. The last category is furniture with 4.2 average kilograms per stall, €3 total average value and €0.06 value per kilogram.

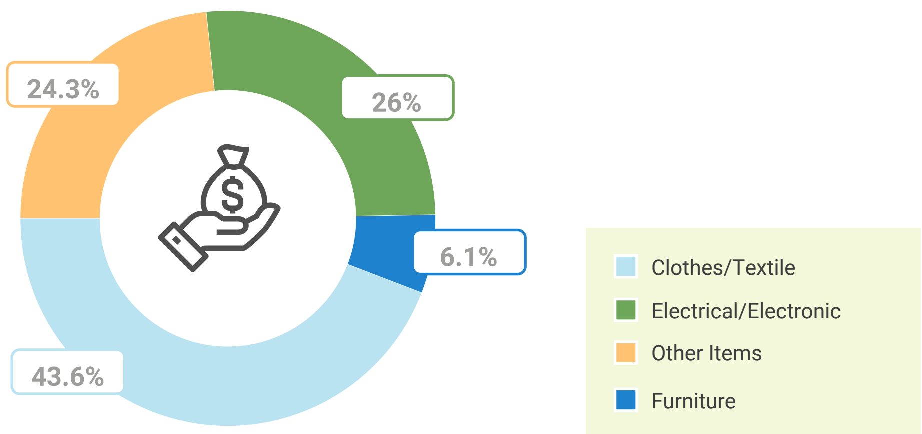

Fig. 3 Percentage of item sold by category.

CATEGORY	TOTAL AMOUNT SOLD	AVERAGE SOLD YEARLY BY SINGLE OPERATOR
CLOTHES & TEXTILES	86,052 kg	1,434 kg
ELECTRICAL & ELECTRONIC EQUIPMENT	51,309 kg	855 kg
FURNITURE	47,924 kg	799 kg
OTHER ITEMS	12,130 kg	202 kg
TOTAL	**197,415 kg**	**3,290 kg**

Fig. 4 Weight of items sold annually by category sample

To analyze growth trends in the observed population from 2022 to 2025, Rete ONU interviewed waste picker leaders in Rome, Turin, and Palermo. In Rome, leaders reported no significant change in the number of operators. In contrast, those in Turin and Palermo noted a substantial increase, 20% and 30%, respectively, in operators working at weekend markets. This rise may partly reflect a shift of operators from other days of the week or from marginal markets. Still, the growing number of simultaneously occupied positions clearly shows that the overall number of operators has increased. Based on 2024 data, Rete ONU estimated a gradual 10% increase in operator numbers between 2022 and 2024. Interviewees also confirmed that the average operator continued to handle the same quantity and quality of materials.

RANGE OF TOTAL AMOUNT SOLD YEARLY BY POPULATION (metric ton)						
CATEGORY	2022		2023		2024	
	MIN	MAX	MIN	MAX	MIN	MAX
CLOTHES & TEXTILES	78,218	91,255	82,129	95,817	**86,040**	**100,380**
ELECTRICAL & ELECTRONIC EQUIPMENT	46,636	54,409	48,968	57,130	**51,300**	**59,850**
FURNITURE	43,582	50,845	45,761	53,388	**47,940**	**55,930**
OTHER ITEMS	11,018	12,855	11,569	13,497	**12,120**	**14,140**
TOTAL	179,455	209,364	188,427	219,832	**197,400**	**230,300**

Fig. 5 Weight of items sold annually by entire population

CO2 eq avoided*			
CATEGORY	Quantity (kg/year)	Emission factor (kgCO2eq/kg)	Avoided emissions (kgCO2eq/year)
CLOTHES/TEXTILE	86,052	11.61	999,063
ELECTRICAL AND ELECTRONIC EQUIPMENT	51,309	4.37	224,219
OTHER ITEMS	47,924	3.88	185,947
FURNITURE	12,130	0.94	11,402
TOTAL	**197,415**		**1,420,631**

Fig. 6 Co2 avoided

* Refer to Table 7 of the "Guidelines for estimating the environmental impact in waste management based on CO_2 equivalent emissions," approved by the EGATO Technical Committee and published by Fondazione Operate, October 2024.

The markets where these data were collected are different in structure, size and socioeconomic setting. These differences derive from their specific history, their role within the local community and the political and economic framework that has enabled them to become established or to be closed. The next section will provide an historical account for each site and will highlight the instrumental role of the local political administration in shaping the fate of these markets.

Turin

In the 1990s, at the historic Balôn market in Porta Palazzo, hundreds of small, unregistered second-hand dealers displayed their used goods on sheets or makeshift stalls every Saturday. Their disorderly setup led to complaints from local shopkeepers but, unlike in other Italian cities, the municipality of Turin decided to support a structured process to bring these “irregular” vendors into the formal market and reorganize the marketplace. The innovation process was led by the association The Gate, which in 1996 through funding from the European Union, began a study that revealed the difficulties faced by informal traders and the reasons behind conflicts. Following this, a phase of consultation and organization among the traders led, in 2002, to the creation of an association called Vivibalôn.

Between 2002 and 2003, Vivibalôn conducted a census of market traders and incorporated them into its structure. In 2004, it acted as a mediator between traders, the local administration, municipal police, and formal shopkeepers to draft a regulation that considered the diverse identities and needs of informal vendors. This regulation was tested and refined until, in 2006, it was formally adopted by the City Council.

Six years earlier, in 2000, the reclassification of commercial categories following the *Bersani Law* had led to the disappearance of traditional professions such as “collectors” and “scrap dealers,” mistakenly seen as relics of a bygone era. When authorizing the presence of small informal second-hand traders in the market, the municipality faced a classification issue. This was resolved by designating these micro-operators as “non-professional operators” and establishing a “non-professional free trade zone”. These operators were required to register with Vivibalôn, which was tasked with organizing the market and given a dedicated space for administrative work.

After 2006, many new, uncategorized informal traders began illegally setting up their sheets beside the authorized market. The situation was resolved in 2010 with a new census and the involvement of these new vendors in an association called Bazar Project. The two associations negotiated with the municipality to allow the Bazar Project traders to operate not on Saturdays, within the historic market, but on Sundays when the area was otherwise unused. Thanks to this system, nearly a thousand informal vendors, most of them waste pickers operating in Turin, were able to earn a legitimate and regulated income.

In 2011, a change in the Turin municipal administration brought new officials into dialogue with Vivibalôn and Bazar Project. The issue of unauthorized vendors persisted, but despite the well-functioning market system, the new administration refused to establish additional market days.

By 2013, the number of unauthorized vendors operating around Bazar Project far exceeded those with permits. The municipality’s response was to shut down the market, which in turn led to a rise in illegality and instability. To make matters worse, the local waste management company AMIAT imposed an excessively high fee for cleaning the area where the market was held and for waste disposal, and when Vivibalôn proposed managing cleaning activities independently at a significantly lower cost, the municipality denied their request (Luppi and Sole, 2015).

Today, after multiple and sometimes difficult rounds of negotiation with the municipality of Turin, Vivibalôn has been relocated to Via Carcano, on the city’s outskirts, where the data was collected. The association has 650 members and manages 400 stalls available for rent. Additionally, about 250 non-members can also rent stalls, provided they present identification and prove residency in the metropolitan area of Turin. The association employs 10 people who oversee waste management and help regulate the market alongside the municipal police, particularly to prevent the sale of new items and ensure that no stolen goods are sold.

Rome

In the city of Rome, the flea markets organized and run by Roma people are the most easily traced back to waste recovering activities. Indeed, most of the used items sold by Roma people in flea markets are informally collected from street bins designated for unsorted waste collection. They often operate as families in which everyone is involved. Often different members of one family specialize in different materials and objects (Carabellese 2013, p.288).

This practice began on a large scale in the late 1990s, initiated by Roma Khorakhané women who had fled the Bosnia-Herzegovina war with their families and collected items to be sold in spontaneous and unauthorized flea markets in the suburbs of Rome.

In 2000, the cooperative Romano Pijats started a process of regularization and reorganization of Roma flea markets which by 2005 had grown to nearly 600 seller units. Including the families of the individual sellers, this represented a working population of almost 3,000 people employed across six authorized flea markets in the Italian capital. To prevent any misunderstandings about the origin of the items, the sale of goods that are typically stolen, such as jewelry, was strictly prohibited.

In the following years, the development and expansion of these markets faced major obstacles, mainly due to the absence of physical spaces in which to operate and the lack of traceability of the used items. In Rome, the police frequently patrolled flea markets, confiscating goods suspected to be the result of criminal activities ranging from dumpster diving, an illegal activity across Italy, to theft. However, most of the used items were not typical of theft activities and in many cases, repression was based on ethnic and xenophobic considerations, with the Roma people singled out for punishment (Luppi, 2008; ODR, 2008). The constant criminalization of Roma is mainly due the ambiguous and contradictory legislative framework that exposes this group to a double discrimination: both because they conduct activities that are not clearly regulated, and because they belong to a social category that already experiences discrimination (Santilli, 2017).

In 2008, all Roma flea markets were shuttered, and several Roma settlements cleared as part of an electoral campaign focused on issues related to illegal migration (Luppi and Sole, 2015; Luppi and Giuliani, 2022). Following this, it became impossible to open new and authorized flea markets on public land in the municipality of Rome due to political factors. The only exception was an authorized flea market opened in 2010 by Occhio del Riciclone in Lungotevere Marconi, which involved about 100 Roma operators. However, it lasted just over one year, as the market saw a growing presence of Roma-organized crime seeking to take control. This led the market to operate in an informal setting, with no obstacles to the sale of stolen goods (Luppi and Giuliani, 2022).

As stated by Occhio del Ricilone, it is not possible to overcome criminal dynamics from below through the work of a dedicated association. To guarantee the rights of waste pickers and street market sellers, it is crucial to establish a clearer normative framework (Luppi and Giuliani, 2022)

In light of this, between 2013 and 2022, Rete ONU promoted five bills to address the situation, and implement traceability and regularization of the collection operation, as well as rules to avoid the presence of the typical stolen items in the flea markets. Three of these bills were discussed in Parliament but never reached the voting stage to become laws.

Over the period 2008-2020 the second-hand trade among Roma people in Rome has expanded, but it remains entirely informal or concentrated on private land owned by Roma entrepreneurs, who charge sellers a fee to use the space. In such a framework, the data was gathered with people working at the Mercato Integrato di Via Ardeatina.

Palermo

In Palermo, the data was collected at the second-hand market in the Ballarò neighborhood. The market's origin dates to the late 1990s. Initially, it was located within the very ancient food market, which can be traced back to around the 10th century. Over time, the second-hand market moved to a nearby area, becoming an extension of the food market. Between 2005 and 2015, the market grew exponentially in an unregulated context, reaching around 1,000 vendors, which generated tensions with residents due to the excessive occupation of public space and the amount of waste, comprising unsold items, often left behind by the vendors at the end of the day. These tensions were usually resolved through police intervention and the temporary clearing of the market.

In 2015, an informal neighborhood association called SOS Ballarò was founded. It brought together various neighborhood associations, people working in socio-cultural and economic initiatives, the local parish, and residents living and operating in Ballarò. The association engaged in direct dialogue with the municipality regarding social and economic issues in the area, outlining the different problems of Ballarò. These included urban planning, housing, cultural offerings, and the integration of migrants (the neighborhood has the highest concentration of foreign migrants in Palermo), as well as the second-hand market that shares the neighborhood's name.

Between 2017 and 2019, issues specifically related to the market were discussed in dedicated meetings. In collaboration with the local administration, the assembly redefined the market as a social safety net, establishing the geographically demarcated "free trade zone". In 2018, representatives of ViviBalôn, part of the Rete ONU network, were invited to discuss their model.

During this period, the first 200 *mercatari* (market vendors) joined the association Sbaratto, which was created through a community initiative together with SOS Ballarò to manage the free trade area in the neighbourhood. In 2019, a public tender was issued, which the association won, and in 2020, an agreement was signed with the municipality. Since then, Sbaratto has worked to regulate the market by providing a set of rules and support for vendors. During the COVID-19 pandemic, the association was instrumental in helping vendors who could no longer sustain themselves due to the forced market closure by distributing food (for more information up to this period see Bartoli, 2019).

A pilot project to manage the market launched in 2021. Funded by the provincial council, it relied on the strong support of the municipal administration. The administration had promised to provide Sbaratto with an office, assist the association in the registration process, and ensure police patrols for the security of vendors. However, this support never materialized, highlighting the gap between political intentions and the actual needs of the market; in the minds of politicians, the market was perceived as much smaller than its real size.

The annual mandate of Sbaratto to manage the market ended in 2022, coinciding with a change in political leadership following a municipal election. This further altered the situation. The administration that had supported the project and the association ended its term, and the newly elected mayor had different objectives and did not continue in the same direction. Today, Sbaratto still exists, but it no longer has the mandate to manage the market, and currently, only the *mercatari* remain nominally within the association.

Albergheria, Palermo.

Recommendations

This report is designed to inform and guide the implementation of policies and laws that recognize the impact of Italian waste pickers as a group of workers/micro-entrepreneurs, and to implement legal instruments within Italian law aimed at regulating their status within the formal economy.

Specifically, we suggest the following measures:

- Pursuant to Article 7-sexies of Law No. 13 of 2009, the Ministry of the Environment and Energy Security should reach with the regions, provinces, and municipalities, within the framework of the Unified Conference referred to in Article 8 of Legislative Decree No. 281 of August 28, 1997, an agreement to regulate, the revival and development of local second-hand markets for ecological purposes. Such agreement should include the representation of waste pickers, with the first steps being the recognition of their valuable role in the reuse chain and the allocation of dedicated commercial spaces that consider the specific nature of their work.
- Local authorities should actively involve waste pickers in Reuse Centers and in all preparation-for-reuse programs, recognizing their experience and the key role they play in all stages of the chain: collection, selection, and final distribution. In this context, the territorial reuse model developed in 2019 by ODR/Occhio del Riciclone and Contarina serves as a reference to follow.
- Establish a national regulatory and fiscal framework consistent with the low incomes and economic constraints of waste pickers. This should include: a) the ability to operate in local markets tax-free, recognizing the contribution of waste pickers both to the environment and to municipal waste management budgets; b) the possibility, for waste pickers carrying out clearances, to deliver unsold or unsellable materials and objects from their collection and sales operations free of charge to municipal waste collection centers, exempting them (given their limited economic means) from the typical costs charged to those disposing of post-industrial waste; c) the extension of contractual provisions included in public procurement tenders with the aim of ensuring job stability and the protection of workers and reserved tenders also to waste pickers working in the reuse and recycling sector; d) the establishment of a specific ATECO code for waste pickers.
- Support waste pickers in achieving higher incomes through targeted programs of business incubation, and an improved quality of life through access to social services, and provision of PPE (Personal Protective Equipment), along with training on health and safety.
- Integrate waste pickers into supply chains coordinated or organized by producers within the framework of Extended Producer Responsibility schemes, ensuring that their role is formally recognized and supported, also through the development of standards and traceability tools that are compatible with their actual operations.

Via Carcano, Torino.

Appendix

Basis for population estimate of reuse vendors/waste pickers in Italy

North of Italy

223 second-hand street sellers, at minimum, were detected in the Udine Province (ODR/NET spa 2010, p.41)

656 second-hand street sellers were detected in the Vicenza Province (Analisi del mercato dell'usato nella provincia di Vicenza, ODR 2011, p.74). Analysis, limited to second-hand clothes street sellers, based on qualitative interviews; the opinion of local experts of the sector indicate 5% of second-hand clothes street sellers out of the total of street sellers in Emilia-Romagna, and 1% of second-hand clothes street sellers out of the total of street sellers in Lombardy (Analisi di mercato abbigliamento usato Lombardia e Nordest, ODR, 2012).

According to Rete ONU in Turin, the associations Vivibalôn and Bazar Project affiliate around 1,000 second-hand street sellers only from the area of Balon market (they were moved to Via Carcano).

Center of Italy

2,524 second-hand street sellers were detected in the Rome Municipality; (Analisi dei flussi stimati di beni avviabili a riuso e del loro mercato potenziale, ODR/ AMA spa 2015, p.36). Later, 2,277 second-hand street sellers were detected in the Rome Municipality (Impatti occupazionali di un riuso sistemico nella città di Roma, ODR 2008, P.36).

Previous ODR studies are quoted, indicating the economic volume of the second-hand street sellers in the area of the small cities of Anguillara and Ciampino, in the Rome Province, detecting 1,000,000 euros of invoices; from this, it is possible to estimate a corresponding 1,000 further operators, beyond the operators working in the city of Rome (Osservatorio del Riutilizzo/Occhio del Riciclone, 2009). Guida al Riuso nella Provincia di Roma, (Osservatorio del Riutilizzo/Occhio del Riciclone, 2009), makes a general landscape of the second-hand street sellers in the Rome Province (https://fr.scribd.com/document/368513220/155-guida-al-riuso-pdf).

A minimum of 221 second-hand street sellers was detected in the territory of Circondario Empolese-Valdelsa, in Tuscany (Il Circondario Empolese Valdelsa e il Riutilizzo su scala, ODR, 2010, p. 67).

A minimum of 130 second-hand street sellers was detected in the Ascoli Piceno Province (PRISCA-ENV11/IT/000277 D D B3.2, Layout project design of the Reuse centre San Benedetto del Tronto, ODR, 2014, p. 12).

South of Italy

According to Rete ONU: the second-hand street sellers affiliated to the association Sbaratto in Palermo-Sicily and working in the area of Ballarò market are around 400; the second-hand street sellers affiliated to the association Bidonville in Naples-Campania, working in the Fiera d'Oltremare area, are around 2,500.

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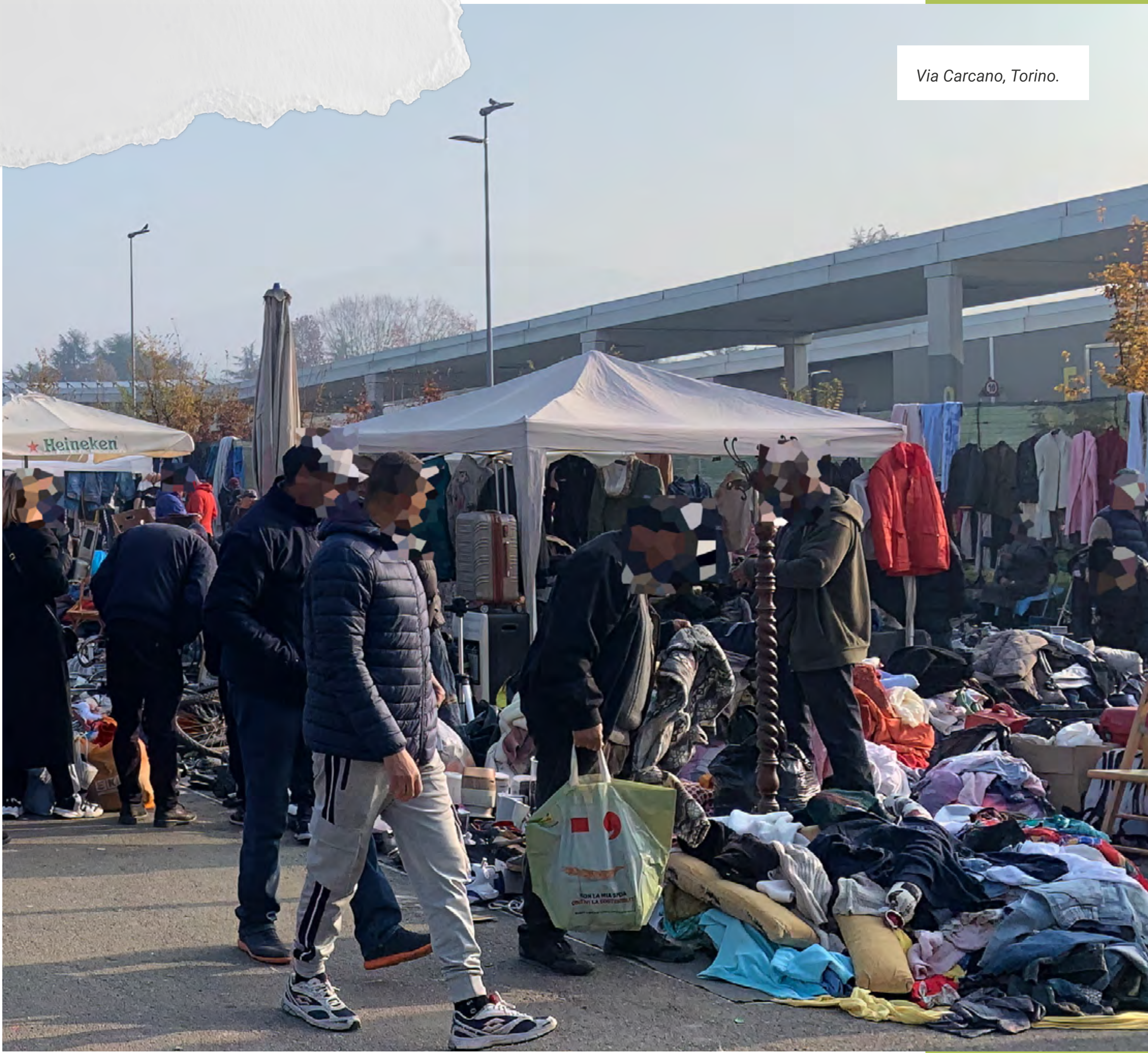
Albergheria, Palermo.



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