



# Reversing direction in the used clothing crisis:

Global, European  
and Chilean perspectives

Executive Summary

*Non-official document*

This document has been prepared by Maria Teresa Pisani, Officer-in-Charge, Trade Facilitation Section (TFS), Economic Cooperation and Trade Division, UNECE; Luca Brunello and Lorena Palomo, Consultants of the TFS, Ian James Bank, Consultant and Editor of the TFS, Pietro Bruni, Consultant and Graphic Designer of the TFS; Nanno Mulder, Chief of the International Trade Unit (ITU), Division for International Trade and Integration, ECLAC; Javiera Arteaga, Economic Affairs Officer of ITU; and Beatriz O'Brien, Consultant of ITU. This document was prepared within the activities of the UNECE project on "Enhancing transparency and traceability of sustainable value chains in the garment and footwear industry" with financial support from the European Union.

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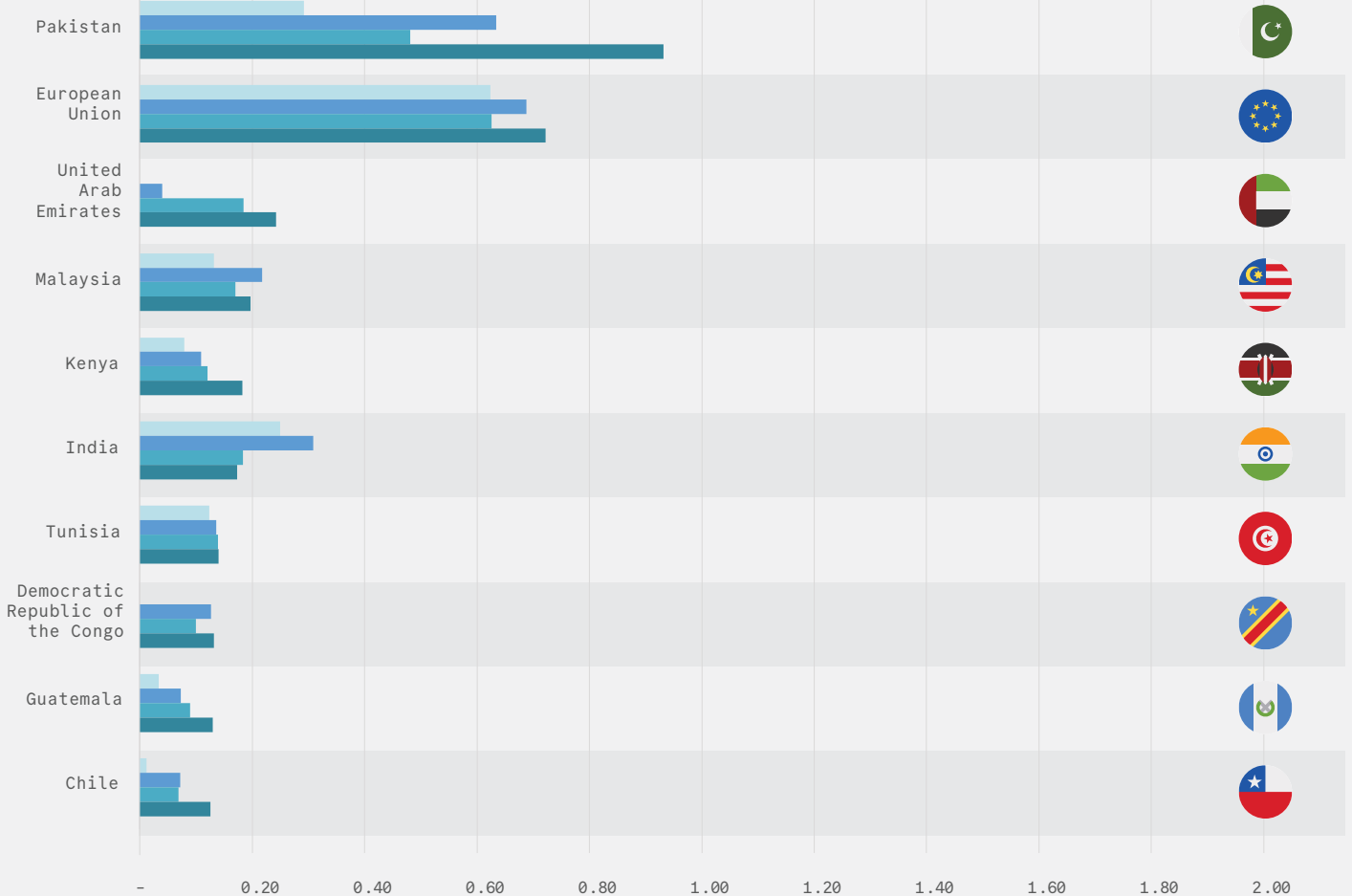
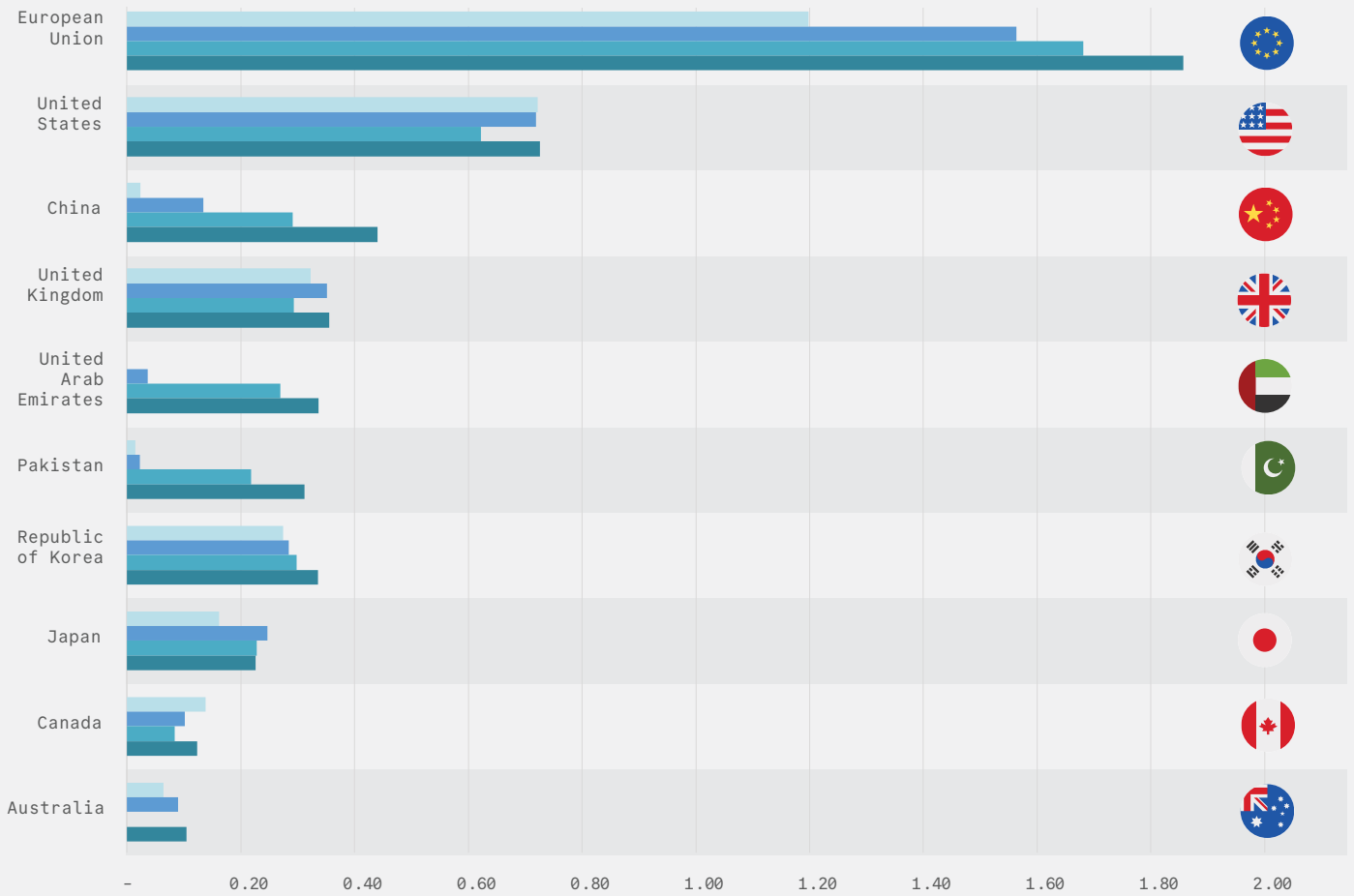
Since 2012, the Alto Hospicio Municipality in the Chilean Atacama Desert has witnessed the fast growth of large illegal dumps of discarded clothing and textile products. Several tens of thousands of tonnes of textile waste cover around 300 hectares, some of which are burned on-site. Most clothes are made of synthetic fibres, and their incineration releases heavy metals, acid gases, particulates, and dioxins, causing harm to the health of people nearby and damaging the local environment.

Such dumps, which are also present in countries including Ghana, Kenya, and Pakistan, are symptoms of the problem of developing countries importing large volumes of low-value textiles, which they struggle to make use of in economically and environmentally beneficial ways. While local circumstances in each importing country are unique, the underlying cause is the export of large volumes of used clothes from developed countries, driven by changes in the global fashion industry in recent decades.

In this context, in 2023, the United Nations Economic Commissions for Europe (ECE) and for Latin America and the Caribbean (ECLAC) conducted a global study on used clothing flows and the business models driving them, with a focus on Europe as an origin and Chile as a destination. The study includes the results of fieldwork undertaken in the second-hand clothing markets of the Tarapacá region of Chile. It aims to formulate policy recommendations that improve the economic, social, and environmental outcomes of the global trade in used clothes.

**Figure 1.** Top ten exporting countries of used clothing

● 2010 ● 2015 ● 2020 ● 2021



**Figure 2.** Top ten importing countries of used clothing

## Main Findings

# International trade in used clothing has boomed, predominantly from the Global North to the Global South, driven by the advent of fast fashion

There has been a rapid increase in the global trade of used clothing. According to UN Comtrade data, globally traded volumes of discarded clothes increased sevenfold over the past four decades, growing 10% annually. In 2021, the European Union (30%), China (16%), and the United States (15%) were the leading exporters, while Asia (28%, predominantly Pakistan), Africa (19%, especially Ghana and Kenya), and Latin America (16%, mainly Chile and Guatemala) were the leading importers (see Figures 1 and 2).

Multiple entities are engaged in the intricate cycle of relocating clothing after it has been worn, as illustrated in Diagram 1. Globally, more than 80% of all purchased clothing items (62% in the EU) are disposed of as general garbage, which is incinerated or landfilled. The remaining used clothing is collected through donation boxes and second-hand shops. Two trends that increase the circulation of used clothing are their sale through e-marketplaces and thrift shops, primarily by young people, and their collection for resale or recycling by retail brands. However, to date, both represent small percentages of used clothing flows. The central role of sorters in both exporting and importing countries can be seen in the diagram. Once sorted, clothes are sold to intermediaries and local merchants who market them to consumers. However, large quantities of low-quality, unsaleable items remain in the bundles purchased by these market players, which find their way to dumps. Recycling rates, especially closed loop (clothing-to-clothing) are low in both exporting and importing countries due to a lack of infrastructure and the difficulty of separating the blended textiles often used in producing modern clothing.

Increased global trade in used clothes is driven fundamentally by shifts in the fashion industry in recent decades that have led to increases in volumes of clothes produced and reductions in their quality, making circularity difficult:

- a. The fast-fashion revolution of the past several decades, characterised by rapid turnover of styles, has led to large increases in the production and disposal of low-quality textiles
- b. This model is facilitated by the advent of low-cost synthetic fibres and by trade liberalisation that allowed the offshoring of production to countries with low-wage labour
- c. Large proportions of clothing are made from difficult-to-separate blended fibres, making opportunities for economic reuse and recycling rare, particularly in developed countries.



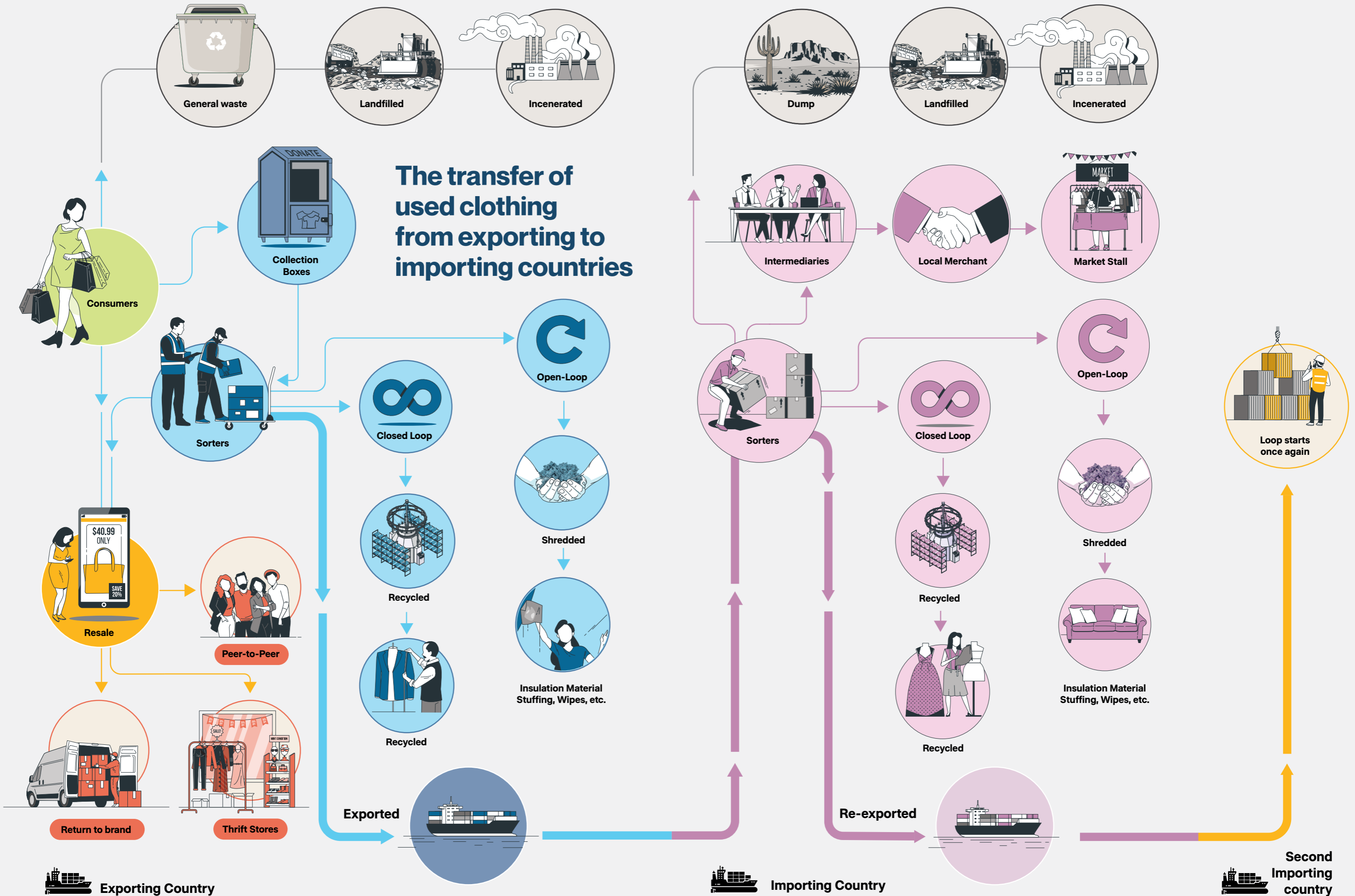


Diagram 1: The transfer of used clothing from exporting to importing countries

# The arrival of used clothes in Chile and their onward journey



Used clothing exports to Chile, mainly in unsorted bales



Entry to the Iquique free trade zone



ZOFRI users sort, grade, re-pack, and commercialise second hand clothing

Iquique Free trade zone  
Extension zone

**73,1%**  
(69,9%)

Volume  
Value

**21,4%**  
(7,7%)

**5,4%**  
(21,88%)

**0,1%**  
(0,6%)

Consumption in the rest of Chile

Re-export

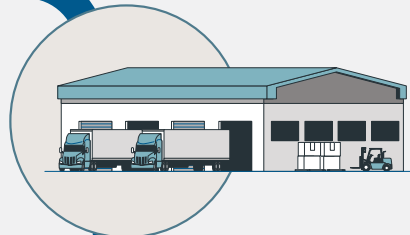
Other special economic zones



Intermediary



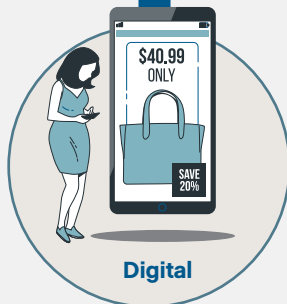
Local Merchants



Wholesale



Traditional



Digital



Selector



Consumers



Dumped



## Importing countries struggle to deal effectively with large inflows of low-quality used clothing the example of Chile

Many of Chile's imported clothes arrive in the Tarapacá region in the north. About 40% enter via the port of Iquique, where, after customs checks, they are moved in large containers to more than 50 companies in the Free Trade Zone of Iquique (ZOFRI). Here, a manual sorting process, performed primarily by women, separates clothes into first, second, and third quality. Subsequently, they are assembled into bundles, of which roughly 5% are re-exported, 20% are sold in the rest of Chile, and 75% are moved to the port's surrounding areas (see Diagram 2).

Many of these imported clothes end up in landfills in the nearby Atacama Desert, as they have no market value. Intermediaries, which seek to buy good quality used clothes from companies at ZOFRI for resale on local markets, can only purchase large quantities of mostly third-quality clothes mixed with a few first- and second-quality items. As most used clothing and textiles are in this third category, most end up being dumped.

An accommodating import regime facilitates the large volumes of imported used clothes. Chile levies zero tariffs, applies no quantity restrictions, and only requires imported shipments to be sanitised (by fumigation). In contrast, most countries in Latin America (including Argentina, Brazil, Colombia, Mexico, and Peru) have introduced clothing import bans to protect their national textile and fashion industries and avoid the threats to human health and the environment posed by clothing dumps.

Trade in second-hand garments provides employment and formal and informal income for national and migrant populations in established stores and open-air markets across the country, though predominantly in the north. Efforts to address the human health and environmental aspects of used clothing imports must consider this socioeconomic context.

**Diagram 2:** Flows of used clothing on their arrival in the port of Iquique, northern Chile





## Exporting countries struggle to deal effectively with used clothing and end up exporting textile waste to developing countries - the example of the EU

In Europe only 15-20% of disposed textiles are collected. Usually, municipalities grant licenses to firms, charities, and to collect used clothes using containers, door-to-door collections and donations. The collected textiles – both reusable and non-reusable – are primarily transported to manual sorting hubs in Germany, the Netherlands, Poland, and the United Kingdom where non-textile products and dirty clothes are removed, often by women, and items suitable for resale in Europe are separated out.

This intra-EU trade indicates a lack of infrastructure to deal with used textiles. Germany, for example, collected 1 million tonnes of used textiles in 2022 but can recycle less than a quarter of that figure, while the UK can sort less than half of the textiles it collects. This reflects a lack of technological progress for separating and recycling blended fibres and the high cost of manual sorting.

About half of the collected textiles are downcycled to be used as, for example, insulation, filling, and single-use industrial wipes. Only 0.1% is recycled into higher value outputs such as new clothing, while the remainder is exported to developing countries. This reflects the fact that, of the 55% of collected clothes that are reusable, only 5 percentage points have a value on second-hand markets in the EU, while 50 percentage points have a value on export markets.

A design-led circular economy approach to clothing is still in its infancy. The EU Circular Economy Action Plan (CEAP) was adopted in 2020, the EU Strategy for Sustainable and Circular Textiles was adopted in 2022, and the EU Ecodesign for Sustainable Products Regulation was adopted in 2023. However, these policies are still to bear fruit in the form of large-scale upstream solutions to the problems of textile waste. There remains too little dialogue between sorters and recyclers, a lack of recycling capacity, and insufficient large-scale digital sorting infrastructure.

## Recommendations

### Make changes to international trade agreements **EU-Chile example**

1. **As part of the 2023 Interim Trade Agreement between the EU and Chile**, which includes a chapter on Trade and Sustainable Development, step up bilateral cooperation on initiatives covering sustainable consumption and production, circular economy, green growth, and pollution reduction. These efforts would be facilitated by making changes to the trade policies of both parties:
  - a. **Develop minimum EU criteria for second-hand clothing exports** to ensure that Chile, and other importing countries, only receive garments that have a market value or that can be recycled. Such criteria, included in digital product passports (DPPs), would incentivise the automatic classification of second-hand textiles and increase the effectiveness of sorting operations.
  - b. **Agree between both parties legal definitions of ‘textile waste’ and ‘second-hand clothing’** and establish quality restrictions on their import from the EU and other exporting countries
2. **Use this agreement as a template for other bilateral trade agreements** between the EU and other countries to which it exports textiles, and between Chile and other countries from which it imports textiles, to help reduce global trade in textile waste.
3. **Set internationally agreed standards to clearly distinguish between second-hand clothing and textile waste, and put in place mechanisms to track their trade flows**, by building on existing UN work in partnership with international and regional players, including the EU.



## Pursue domestic policy action in importing countries

### Chile example

#### *Minimise future imports of waste textiles*

1. **Step-up customs controls:**
  - a. **Adopt administrative measures at the port of Iquique** to ensure digital traceability of flows of used clothing and textile waste from there to ZOFRI and to other parts of Chile, based on international standards (i.e. the UNECE-UN/CEFACT traceability standard)
  - b. **Improve customs procedures at ZOFRI** and mandate their integration into the Foreign Trade Single Window (SICEX).
2. **Establish a Circular Economy Strategy for Textiles** covering the entire process from import, through incorporation into new production processes, to delivery of recycled products and repair services.
3. **Set-up public-private alliances for recycling projects** through tax extension schemes and funds to support entrepreneurship, innovation, and job creation for vulnerable groups, particularly in the Tarapacá region.

#### *Address the negative effects of previous – and any future – imports of waste textiles*

1. **Improve the legal framework for waste management**, including textile recycling, by speeding up the preparation, approval, and enforcement of laws on Extended Producer Responsibility and recycling (Law 20.920).
2. **Implement a Regional Solid Waste Control Plan**, involving inspections of sanitary landfills, clean points, and dumps to increase the enforcement capacity of regional health authorities.
3. **Accelerate the adoption of the Chilean draft law on environmental quality of soils** to provide the mechanisms and resources necessary to restore soil in the Atacama Desert contaminated by textile waste.

## Pursue domestic policy action in exporting countries - EU example

1. **Make circular economy considerations central to the design of clothing**, with mandatory targets for fibre composition that improve the quality, durability, repairability, and recyclability of garments.
2. **Introduce an Extended Producer Responsibility (EPR) system**, which holds the producer responsible for the products they manufacture, improving quality and facilitating repair, reuse, and recycling.

3. **Develop more sorting and recycling plants**, through financial incentives to develop affordable technologies and solutions that support the recycling and separation of blended fibres.
4. **Incentivise and facilitate increased levels of traceability and transparency** in fashion value chains through the expanded use of DPPs, improved labelling, and more significant collection of data on flows of items domestically and internationally.
5. **Run awareness-raising campaigns** to encourage consumers to make more informed choices about their clothes, such as buying fewer items of better quality, renting rather than buying some garment types, and circulating clothes to others after use.

## Conclusions

1. No single solution can reduce the massive volume of used garments, most of which have little economic value, that end up as textile waste around the developing world, including in the Chilean Atacama Desert. A multilevel approach that is well coordinated between exporting and importing countries is needed, and that involves national and subnational authorities alongside affected communities.
2. Implementing this mix of measures requires the engagement of all authorities and stakeholders concerned with local environmental and social issues. Their members are aware of the multidimensionality of the challenges to be addressed and have already implemented solutions on a small scale, as reported by this study.
3. In the end there is a need for systemic solutions that reduce the volume of new clothes put on the market, ensure clothes are designed to be free of toxic chemicals, and encourage longer use phases and multiple cycles of reuse. In short, a circular economy for fashion.
4. The next steps for UN ECE and UN ECLAC off the back of this report are to engage with government partners in the EU and Chile on the issues raised in this report, reach out to stakeholders across the value chain to convene working groups on systemic solutions, and to seek to align legislation in the EU and Chile to enable the increased circularity of textile flows domestically and internationally.
5. An example of outreach to government partners is the partnership between UN ECLAC and the Chilean government on Technical Assistance. Objectives for this programme include: incorporating an international trade dimension into Chile's National Strategy for Circular Economy in Textiles (ENECT); promoting complementarity between Chile's EPR Law and ENECT; and developing public-private cooperation to increase levels of traceability and transparency in fashion industry value chains.



