

CIRCULAR ECONOMY AND GREEN TRANSITION IN THE TEXTILE INDUSTRY

REPORT SUMMARY



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JUNE, 2025

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LIST OF ABBREVIATIONS

CDF – Community Development Fund

KEPA – Kosovo Environmental Protection Agency

GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit

USAID – United States Agency for International Development

EU – European Union

SAA – Stabilization and Association Agreement

CEFTA – Central European Free Trade Agreement

EPR – Extended Producer Responsibility

MESPI – Ministry of Environment, Spatial Planning and Infrastructure

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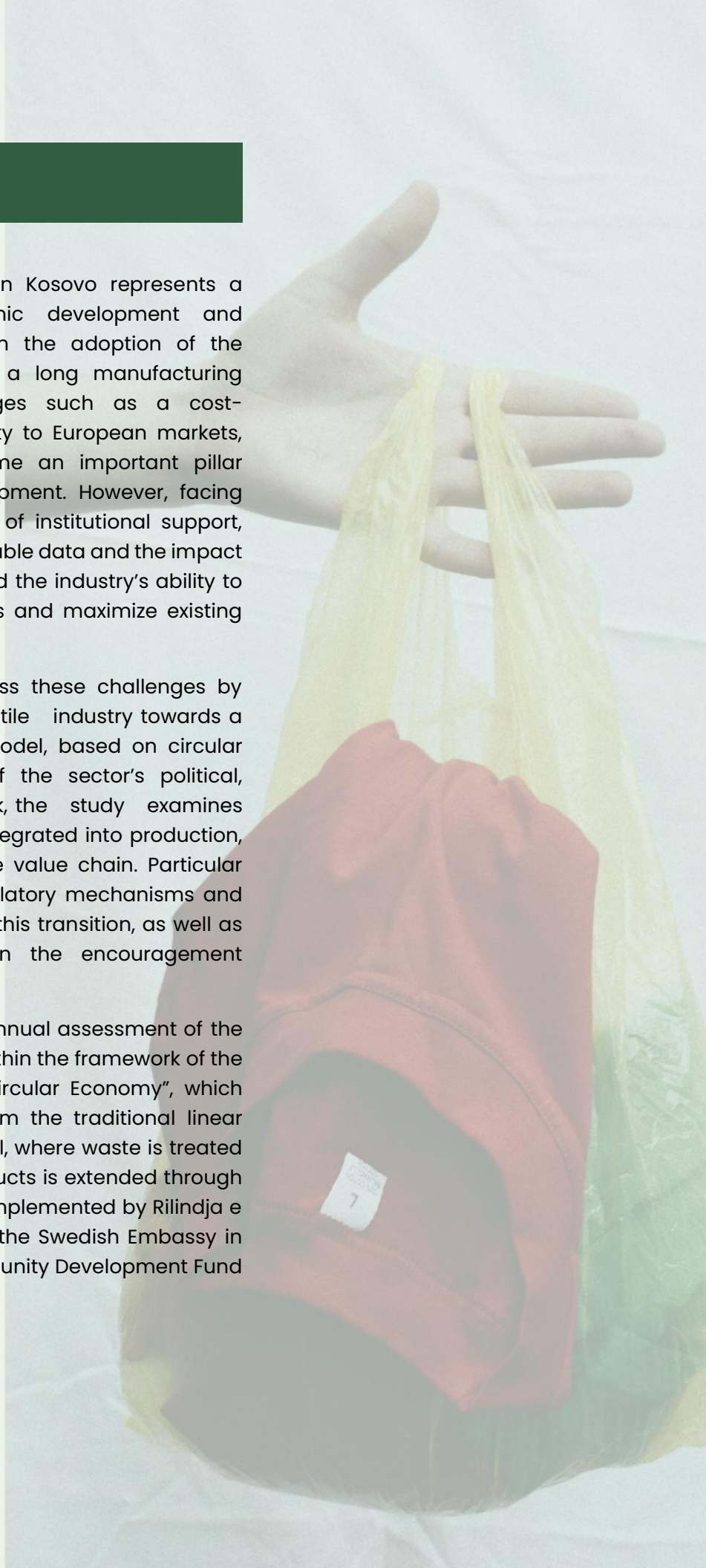
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INTRODUCTION

The textile and clothing industry in Kosovo represents a significant potential for economic development and sustainable transformation through the adoption of the circular economy principles. With a long manufacturing heritage and strategic advantages such as a cost-competitive workforce and proximity to European markets, this sector has the capacity to become an important pillar of long-term and inclusive development. However, facing structural challenges such as lack of institutional support, limited access to finance, lack of reliable data and the impact of the informal economy, has limited the industry's ability to fully embrace sustainable practices and maximize existing advantages.

The aim of the report is to address these challenges by focusing on the transition of the textile industry towards a more sustainable economic model, based on circular economy. Through an analysis of the sector's political, legislative and economic framework, the study examines how circular practices can be integrated into production, waste management and the textile value chain. Particular attention is paid to identifying regulatory mechanisms and government strategies that enable this transition, as well as the role of trade agreements in the encouragement sustainable innovation.

This report was developed for the annual assessment of the textile industry in Kosovo for 2024, within the framework of the project "Returning Values to the Circular Economy", which aims to promote the transition from the traditional linear economic model to a circular model, where waste is treated as a resource where the life of products is extended through reuse and recycling. The project is implemented by Rilindja e Gjelbër with financial support from the Swedish Embassy in Pristina and managed by the Community Development Fund (CDF).



METHODOLOGY

The methodological approach to carry out the annual assessment of the textile industry and textile waste management practices in Kosovo during 2024 has been combined, including:

Review of strategic, legislative dhe additional literature.

Survey with 400 citizens over the age of 18 in all municipalities of Kosovo.

Interviews with 100 businesses from the textile sector, from different parts of Kosovo

Interviews with five (5) key policymakers.

The research methods were primarily quantitative, using a representative sample to ensure reliable results. The following results are based on the data collected through these methods, providing a broad overview of the textile sector and the behaviors of citizens and businesses in Kosovo.

RESULTS OF THE STUDY

POLICY ANALYSIS

In Kosovo, there are several policies and agreements that affect waste management and the circular economy:

- **Kosovo Industrial Policy 2030** - In line with the National Development Strategy, it aims to promote economic growth, employment and environmental sustainability.
- **Stabilization and Association Agreement with the EU** - Kosovo has an obligation to bring into line legislation with EU standards, including environmental aspects and those related to the circulation of materials and management of wastes.
- **Law on Management of Wastes (No. 04/L-060 and relevant amendments)** - Does not specifically include textile waste, leaving this category outside an integrated framework for recycling and reuse.
- **Administrative Instructions for Management of Wastes** - Define the responsibilities of waste holders, but with nothing specific for textile waste.

Regarding current government strategies and initiatives:

- **Integrated Strategy in Management of Wastes 2021–2030** - Includes clear objectives for the development of the circular economy.
- **Roadmap of Kosovo's Circular Economy (2023)** - Identifies strategic sectors and lays the foundations for a more sustainable economy.
- **EU4Green and SERCEC projects** - Aims to support sustainable practices and the recycling sector in Kosovo.

Kosovo is active in:

Stabilization and Association Agreement (SAA) with the European Union

CEFTA – Action plan for circular economy.

Sofia Agreement for the Western Balkans.

Kosovo is not active in:

Action plan for circular economy of EU.

Sustainable and Circular Textile Strategy.

Framework Directive for Wastes (WFD)

Revision of the Directive for Wastes (2023)

Shipment Regulation for Waste (2021)

Proposal for the harmonization of EPR regulations for textiles (2023)

Furthermore, data from the study *“Kosovo’s clothing industry works together to explore new markets”* by USAID shows that **none of the surveyed businesses reported plans for investments in the application of technology for the management of wastes**, highlighting the lack of initiative and the need for policies that encourages the technological development of this sector.

PROFILE OF TEXTILE INDUSTRY

The textile industry in Kosovo consists of 4,519 active companies, of which 99.2 percent are micro-enterprises (less than 10 employees). Small enterprises account for 0.7 percent, while medium-sized enterprises only 0.2 percent.

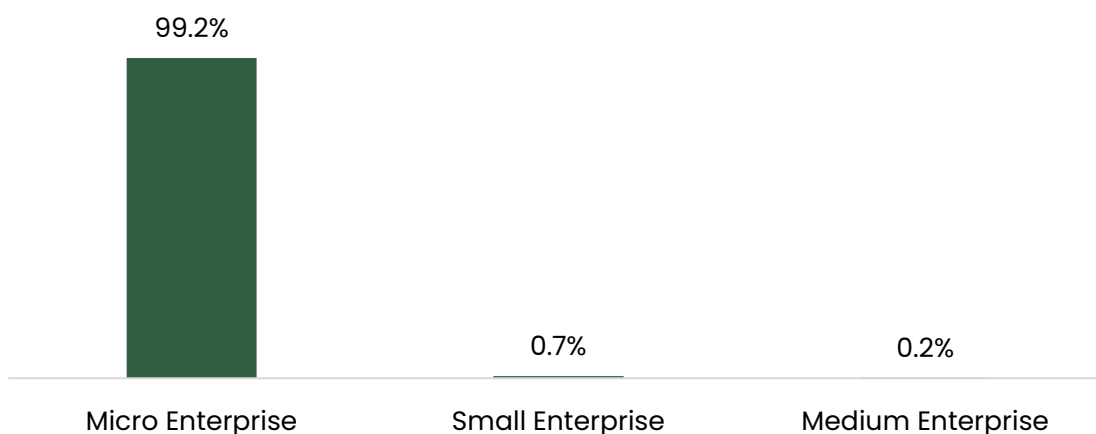


Figure 1. Categorization of businesses

The textile industry in Kosovo is dominated by trade, which represents 77.3 percent of businesses. Only 19.5 percent of them are engaged in manufacturing, reflecting limited production capacities and dependence on ready made products. Meanwhile, 3.2 percent of businesses are involved in cleaning services, which occupy a small part of the sector. This structure highlights the need for more investment in manufacturing to increase value added domestically.

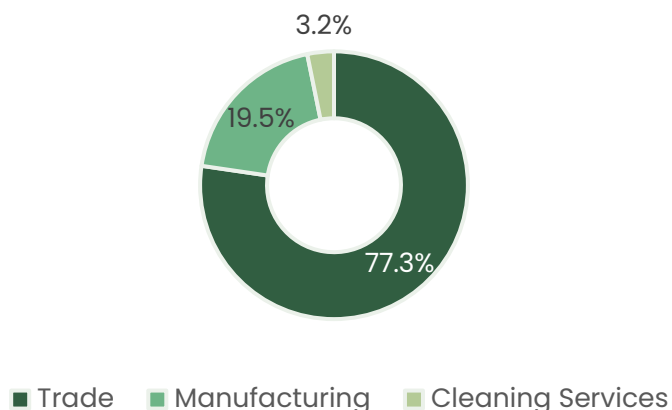


Figure 2. Types of business activities

In terms of employment, this sector includes a total of 7,181 registered workers, and the municipalities with the largest number of employees are Prishtina (28.8%), Gjakova (11.6%) and Prizren (9.8%).

In addition to the workforce and its distribution, another key aspect for the industry is the trade balance of textile products, which presents a large disproportion in favor of imports. Imports of textile products are dominated by clothing, with an amount of over 19 million kilograms, whilst their export only reaches around 1.1 million kilograms. The accessories category represents over 1.4 million kilograms of imports, with a minimum export of 21 thousand kilograms. Home textiles occupy a smaller share with imports of around 3.7 million kilograms and very limited exports. These data show a very uneven trade balance in favor of imports.

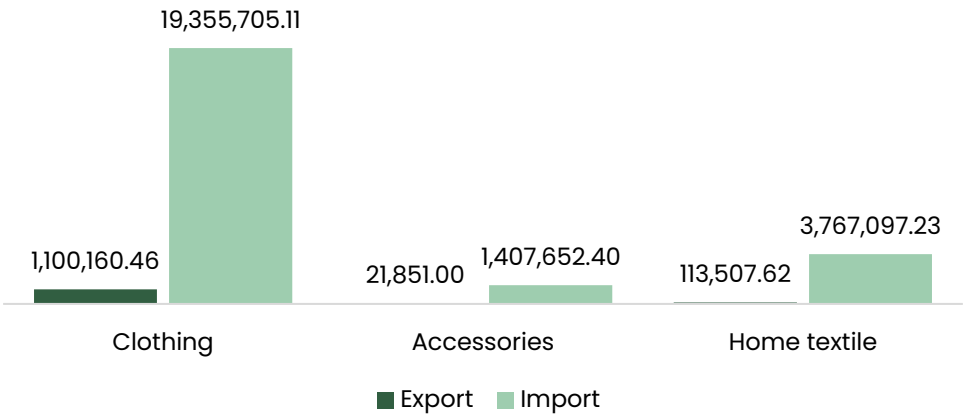


Figure 3. Export and import of textile products by main categories for 2024

Data shows that Kosovo imported around 24.5 million kilograms of textiles in 2024 and exported only around 1.2 million kg, resulting in **a surplus of more than 23.2 million kg of textiles remaining within the country.**

The majority of this negative balance comes from clothing, which accounts for approximately 77 percent of the total amount remaining in Kosovo. This large flow of textiles entering and not leaving the country is a direct indicator of the potential amount of textile waste, especially when combined with the lack of proper recycling and reusing systems.

If analyzed further, about 25 thousand kilograms of used clothing were exported during 2024, while over 1.3 million kilograms were imported. This profound disproportion makes it clear that used clothing is not included in a complete circular cycle, but rather ends up as waste, contributing to pollution and unnecessary consumption of landfill space.

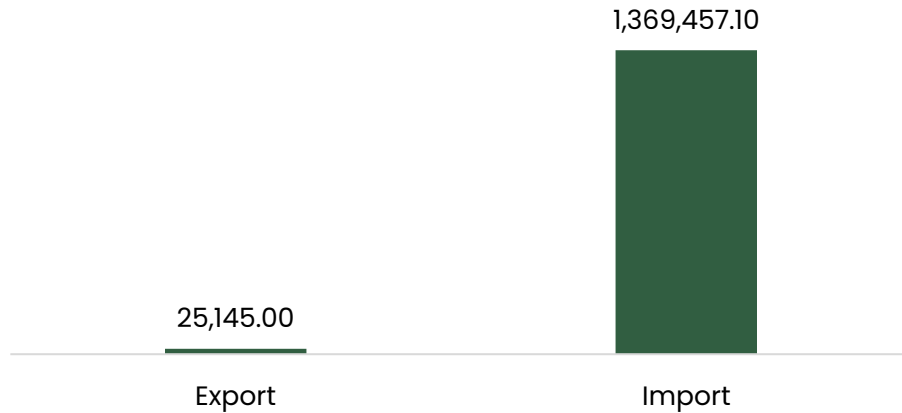


Figure 4. Export and import of used clothing for 2024

This structure of the sector and the deepening trade balance directly affect how citizens are supplied with textile products, as will be examined in the following section.

SUPPLY WITH PRODUCTS OF TEXTILE

An important aspect of this study was the way in which citizens are supplied with textile products. Citizens have a **clear tendency towards purchasing new products**, whilst the use of reused and recycled products remains very low for all categories.

In **96 percent of the cases** citizens buy **new clothing**, similar for home textiles (96.4% of cases), meanwhile for **accessories** this percentage is **93.8 percent**, indicating a strong preference for new products in all categories. The use of reused and recycled clothing is marginal, below **1 percent in all categories**.

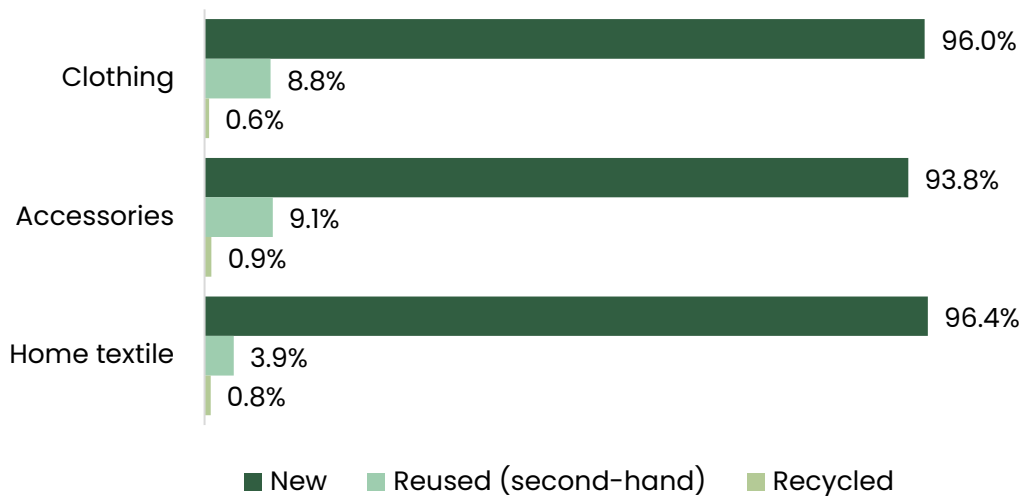


Figure 5. What type of the following textile products - clothing do you buy? (Multiple questions)

Respondents who do not buy reused textile products have given their reasons regarding this issue. The main reasons are mainly related to hygiene and the idea of using something previously has been used by someone else. Specifically, 44 percent of cases show concerns about cleanliness and hygiene, whilst 43.6 percent of cases do not like the idea of using a previous product used by someone else. Also, 30 percent of respondents stated that these products do not match their tastes, 25.3 percent of cases have difficulty finding suitable products, and 23.7 percent of cases doubt their quality.



Figure 6. What are the reasons you don't buy reused products? (Multiple questions)

Meanwhile, it is equally important to understand what materials the new products circulating on the market are made of and their environmental impact. Regarding the materials used by businesses for manufactured products, in 63.3 percent of cases companies use cotton. In about 48.3 percent of cases they use polyester and in 38.3 percent of cases they use synthetic materials such as nylon, elastane, etc. The high use of cotton has a positive impact on the environment since it is a natural and biodegradable material. Whilst polyester and synthetic materials such as nylon and elastane are non-biodegradable and contribute significantly to environmental pollution, especially as plastic waste that does not degrade easily.

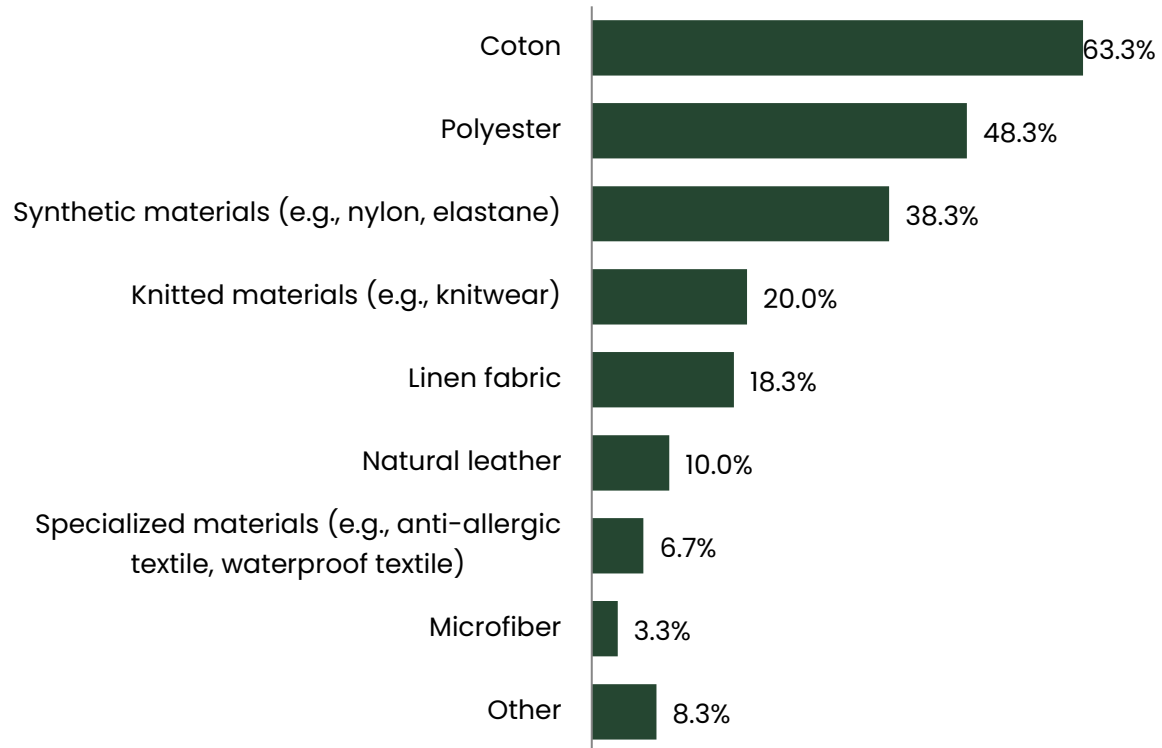


Figure 7. What is the raw material you use for the manufacture products? (Multiple questions)

Similarly, the materials most requested by customers and with the highest sales are cotton (61% of the cases), polyester (46% of the cases) and synthetic materials (28% of the cases). The high demand for non-biodegradable materials such as polyester and synthetic fibers, given that 20 percent of citizens throw their clothing directly as waste; contribute to a significant increase in the amount of textile waste that remains in the environment.

MENAGEMENT OF TEXTILE WASTE

Management of textile waste by citizens and businesses in Kosovo relies mainly on traditional practices. Citizens donate unusable textiles to family members (62.8% for clothing and 47.5% for home textiles), donate them to families in need, or throw them away as waste (19.9% and 27.7% respectively).

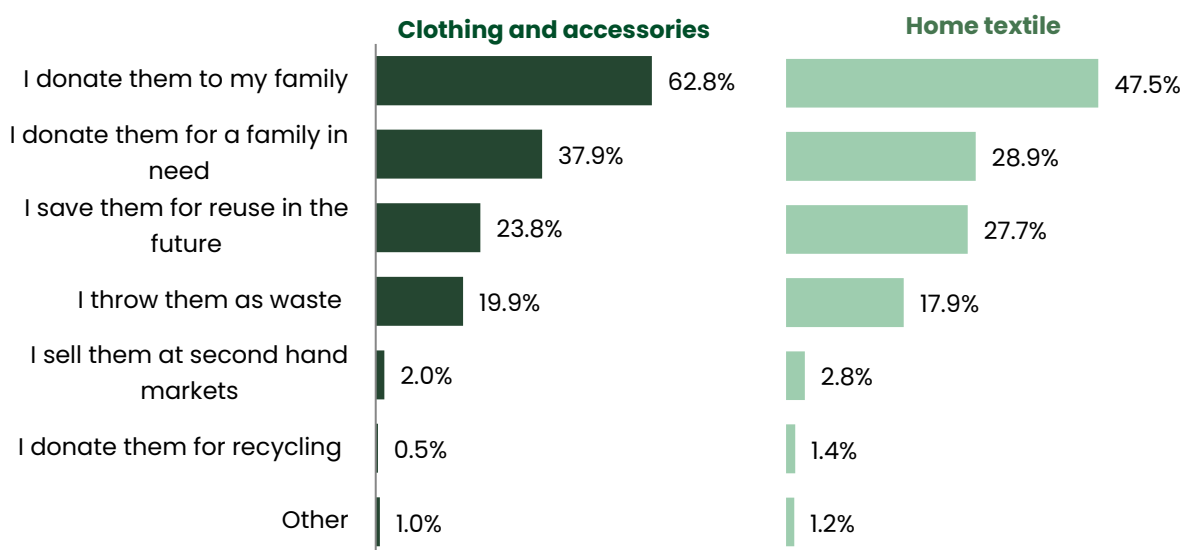


Figure 8. How do you manage clothing and accessories/home textile products that you no longer use? (Multiple questions)

Regarding the amount of clothing thrown away in a year, the majority of respondents (44.7%) stated that they throw away a very small amount of such waste, approximately 1-5 kg of clothing per year. A smaller proportion (21.8%) state that they throw away 11-15 kg, whilst 18.1 percent report that they throw away 6-10 kg. Only 6.8 percent say that they throw away 15-30 kg, and a small percentage (8.6%) are not sure about the amount. In total, these citizens reported that, in a year, they throw away about 1,137 kg of clothing as waste.

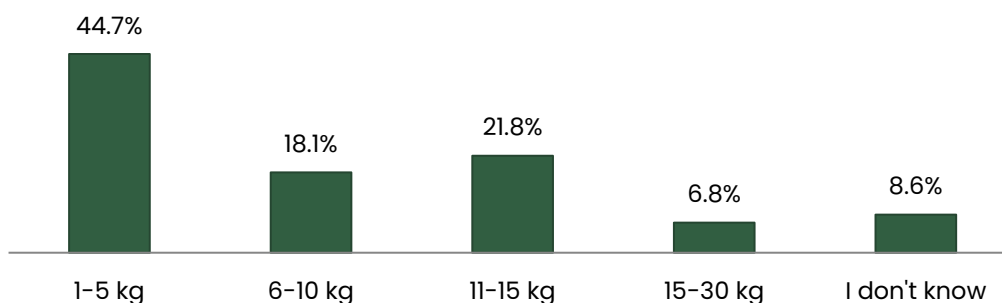


Figure 9. Approximately how many kilograms of clothing do you throw away in a year?

Based on these data, a calculation was performed to estimate the amount of textile waste generated by citizens. Of the respondents, 19.9% declared that they throw away clothing, reporting a total of 1137 kg per year. This corresponds to an average of approximately 16.01 kg per person in a year within this group. Applying this average to the population representing this behavior, **it is estimated that citizens in Kosovo generate approximately 5,132.56 tons of textile waste per year from clothing**

This average is in the line with the level reported by the European Environment Agency in the report *"Managing Textile Waste in Europe's Circular Economy"* of 2024, where the average annual textile waste in Europe is around 16 kg per person. However, it is important to note that this is an **approximate assessment** and not an official figure, due to the lack of real and structured data at the national level.

Except citizens, businesses also play an important role in generating textile waste. The way companies manage their waste is key to assessing the environmental impact and the potential for reuse and recycling. In the following are analyzed current practices and areas for improvement in this direction.

In most cases (61%) companies manage waste materials from the production process by collecting them from municipal landfills. In 37 percent of cases they use these remaining materials, whilst in only 10 percent of cases they stated that they cooperate with initiatives for material reuse and in 6 percent of cases they recycle them. At about 18 percent of cases they mentioned other practices such as extermination, donation, its use for the production of accessories, etc.

The result shows that textile waste management by companies remains mostly passive, as most companies rely on municipal landfills, which often end up in deposit without recycling or effective reuse, having a negative impact on the environment.

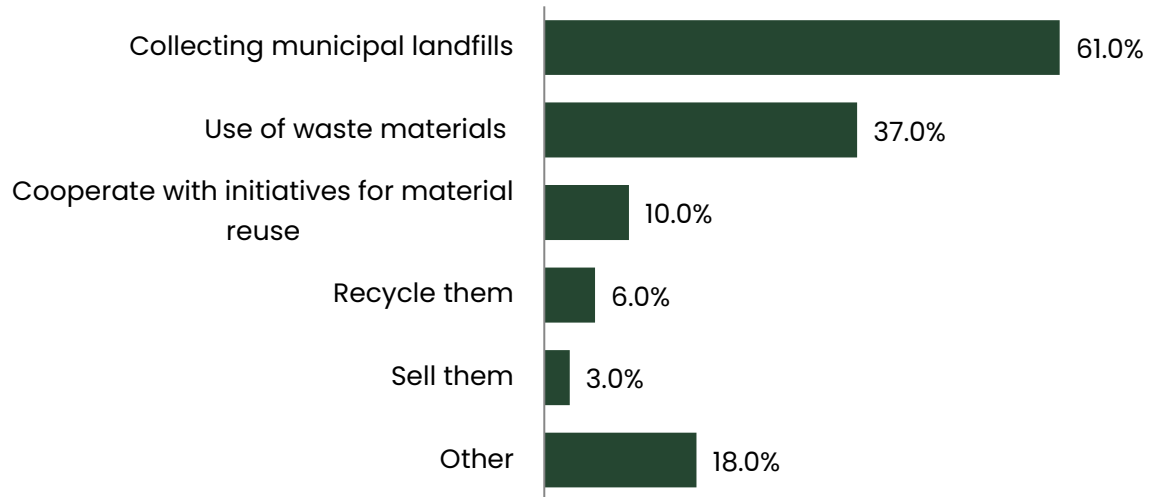


Figure 10. How does your company manage material waste in the production process? (Multiple questions)

In most cases, companies generate textile waste such as scraps, cutting waste and similar leftovers (73%). This is closely related to the fact that the most commonly used materials by companies are cotton, polyester, and other synthetic fibers. Textile wastes resulting from the cutting and production process primarily are consisted of these materials, out of synthetic fibers like polyester and elastane being particularly problematic for the environment.

Waste from raw material packaging and paper or cardboard are less common in cases (20% and 19%, respectively), whilst the least frequent are waste from packaging of final products (8%) and plastic (5%).

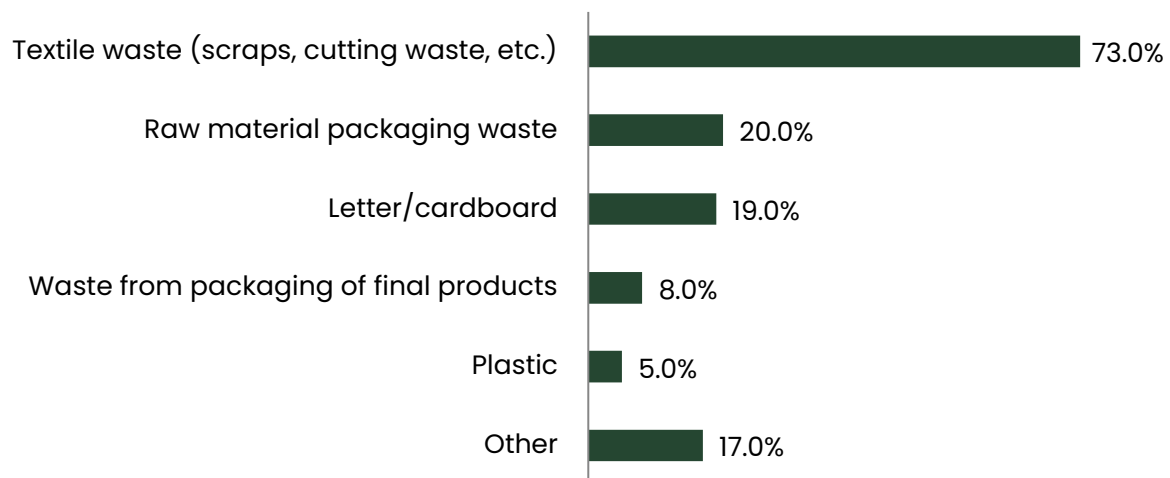


Figure 11. What are the main types of waste you generate during the work process?

About 56 percent of companies stated that they do not know how many tons of textile waste their company generates per year, as they do not make any measurements in this aspect. Whilst the other companies (44%) that provided information reported a total of about 22.8 tons of textile waste during one year.

From these data for the textile business sector, the total generation of textile waste has been approximately calculated. Taking the declared averages for the relevant sectors (trade, manufacturing and other categories) with the current distribution of active businesses in Kosovo, and scaling it up, over 61% of them declares that they produce waste, **it is estimated that businesses generate around 13,832.84 tons of textile waste per year.**

This calculation represents an **indicative assessment**, given the lack of systematic and official data on the management of textile waste in the private sector in Kosovo.

These in-depth data for citizens and businesses serves as a base for assessing knowledge and awareness of the environmental impact of this sector.

KNOWLEDGE AND AWARENESS

With increasing awareness of the environmental impact of the textile industry, this section examines how and to what extent citizens engage in the reuse and recycling of textile products. The results help to understand the level of awareness and the main barriers affecting these practices.

According to the results, more than half of the respondents (53.9%) stated that they have knowledge about the environmental impact of the production and destruction of textile products, however, a significant portion (46.1%) lack this information, which also affects the low number of respondents who practice the reusing and recycling of textile products.

The lack of reuse and recycling practices indicates a gap between awareness and action. Without concrete mechanisms that

make this practice easy and motivated, textile ends up as waste and lose their potential value within a sustainable economic cycle.

The lack of information in the media is the main factor influencing the lack of public awareness on this issue, with 66.2 percent of respondents citing this as the main reason. Another important factor is the lack of awareness campaigns, which was mentioned in 32.4 percent of cases. Furthermore, in 23.7 percent of the cases, respondents admit that they haven't had any interest in this topic, whilst in 9.7 percent of the cases they don't consider the impact of textiles on the environment as a significant problem. These results indicate the need for more information and awareness on this issue through the media and relevant institutions.

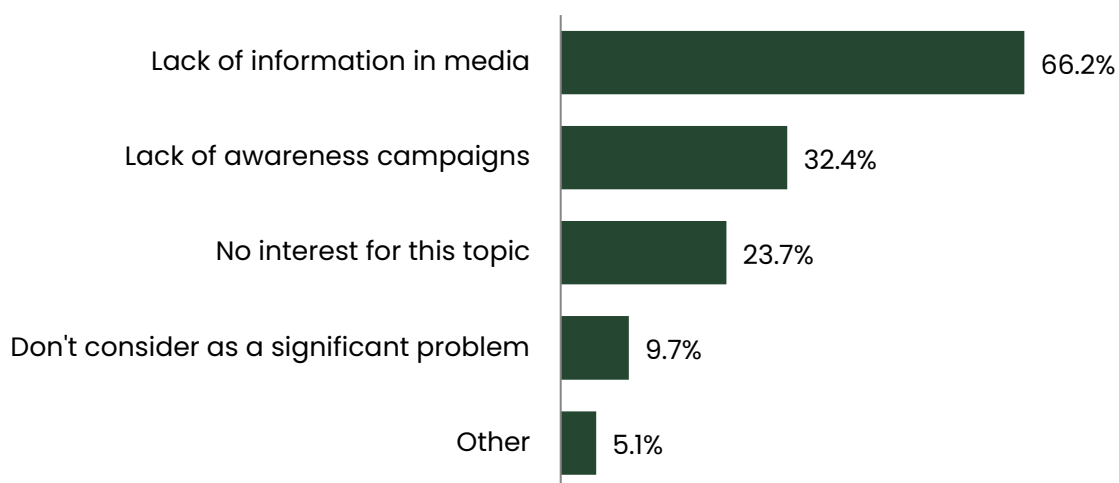


Figure 12. What do you think is the main reason for your lack of information on this issue? (Multiple questions)

IMPLEMENTING CIRCULAR ECONOMY

The implementation of circular economy principles in the textile industry in Kosovo is still in its early stages and appears fragmented, with a lack of well-structured approaches and dedicated policies for this sector. According to the Kosovo Environmental Protection Agency (KEPA), progress began in 2021 with the approval of the First Integrated Strategy for the Management of Wastes (2021–2030), which includes the development of the circular economy as one of the main objectives.

In terms of knowledge, only 56 percent of citizens are familiar with the concept of the circular economy, indicating the need for increased public awareness.

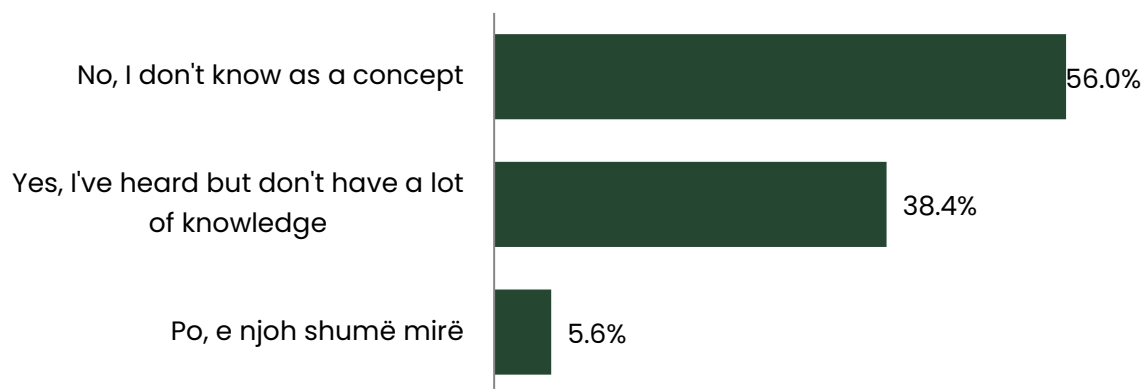


Figure 13. How much do you know about the concept of circular economy?

Even among businesses, awareness remains low: 82 percent of businesses have not heard of the concept of the circular economy, whilst only 18 percent declares that they are familiar with it. **In comparison to this, citizens have a higher level of knowledge**, showing a clear difference between public and business awareness.

CLIMATE CHANGE AND CARBON TRACE

Alongside the concept of the circular economy, the issue of climate impact has received increasing attention from businesses. The environmental impact of business activities has become a significant concern. Data shows that around 70 percent of businesses are willing to invest in improving their practices to reduce environmental impact and lower their carbon trace.

INTEREST AND CHALLENGES IN RECYCLING AND REUSE

Key component in meeting sustainability objectives is active engagement in recycling and reuse practices. Business engagement in the initiatives of post-production waste recycling and reuse remains limited. Only 4 percent of businesses are currently engaged in recycling activities. The main reasons for non-involvement are mainly related to lack of information, with 53.3 percent of them stating that they have no information about any recycling initiatives. Meanwhile, 18.3 percent are not interested, and 13.3 percent consider themselves small businesses that do not generate much waste.

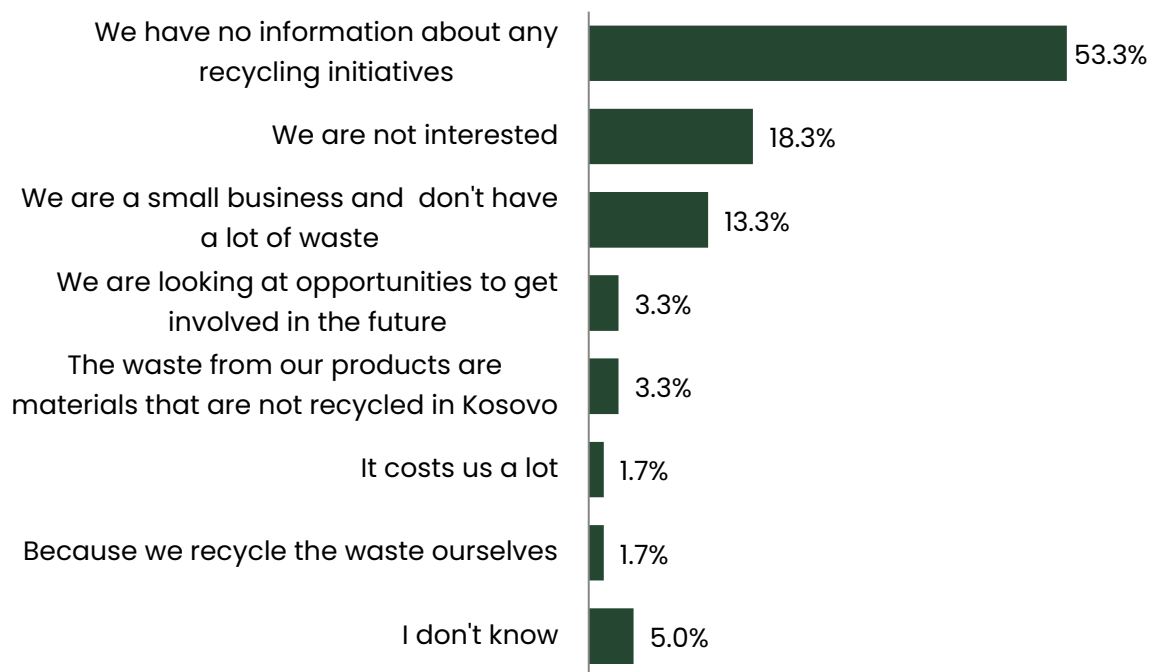


Figure 14. If not, why aren't you involved?

The data shows that only 2 percent of companies currently cooperate with recycling companies for the management of textile waste. Despite the current low level of cooperation with recycling companies, textile companies show a high potential interest for cooperation in the future. Precisely, 67 percent of the companies are interested or very interested in cooperating with recycling companies that specialize in the management of clothing waste.

This indicates that there is a willingness and readiness to engage in sustainable practices, if provided with the right opportunities and relevant information. However, 17 percent of companies do not express interest, and 16 percent are unsure, suggesting that barriers such as lack of knowledge, costs or lack of a clear market offer continue to be present.

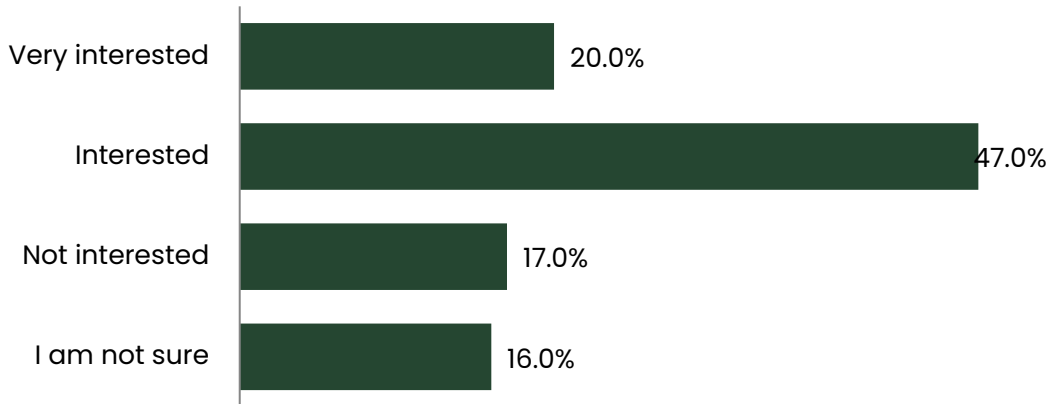


Figure 15. Would your company be interested in partnering with a recycling company that specializes in management of clothing waste?

The high interest of companies in cooperating with recycling companies, reflected in the previous question, faces some clear obstacles that limit concrete action. According to the data, the main obstacle is the lack of information about available recycling services, which is mentioned by 77 percent of companies. This shows that many companies simply do not know where to lead on or what options exist. Except this, 17 percent of companies consider the costs to be unaffordable, while 8 percent cite logistical challenges as an obstacle to cooperation.

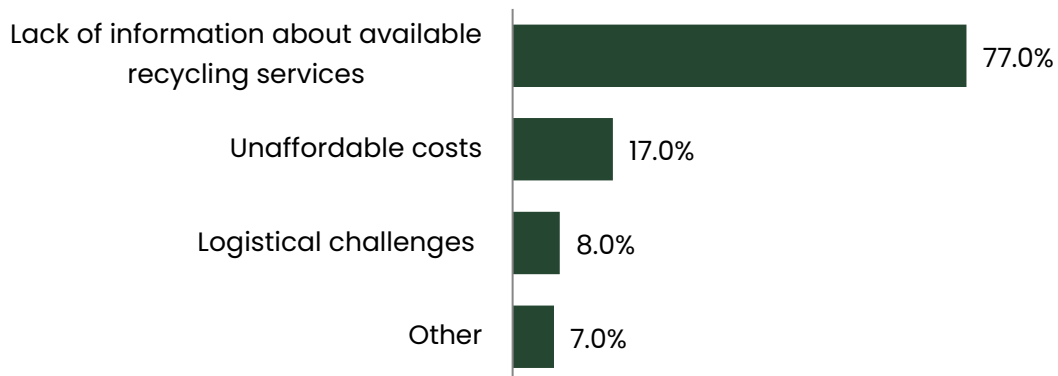


Figure 16. Please specify the main obstacles your company has regarding cooperation with a recycling company

CONCLUSIONS AND RECOMMENDATIONS

The textile industry in Kosovo constitutes an important component of the local economy due to its employment capacity and potential for development. However, the results of this study clearly highlight the major challenges in terms of waste management, environmental impact and the application of principles of circular economy.

Based on data collected from citizen surveys, interviews with business representatives and discussions with relevant policymakers, several important conclusions have been drawn that indicate the challenges and potential for sustainable development of the textile industry in Kosovo.

Based on data collected through surveys with citizens and businesses, **it is estimated that approximately 18,965 tons of textile waste are generated in Kosovo per year.** This is an approximate estimation, due to the lack of official statistics for this category, but it helps to understand the scale of the problem. In addition, in 2024, Kosovo imported over 24.5 million kg of textiles and exported only 1.2 million kg, creating a surplus of over 23 million kg of textiles remaining in the country. These data highlight the **urgent need for structured policies and effective systems for the management of textile waste.**

Regarding the results of the survey with citizen, they show a low level of awareness and practices for textile reuse and recycling. Most consumers purchase textile products as new, and throwing away clothing and household textiles as waste is a common practice. Only a small number of citizen's reuse or recycle these products. The main reasons for this include lack of information, distrust in the quality of reused products, and lack of recycling infrastructure. However, the majority of citizens have expressed willingness to change their behavior if more information and access to reuse and recycling services are provided.

On the other hand, the textile sector in Kosovo has a considerable importance for the economy, as it represents an important part of the industrial activity in the country, generating high financial income and having the potential for increasing exports to regional and European markets. However, the industry faces a number of challenges that obstruct its sustainable development and integration into the circular economy. Results from interviews with businesses show a significant lack of practices for efficient management of textile waste, with the most companies relying on municipal landfills as the only solution. Only a small percentage of them are involved in initiatives for recycling or reusing, and most of them do not measure

the amount of waste they generate. This indicates a lack of an internal waste management system and a lack of connection to the recycling chain.

Businesses generally face the following weaknesses in waste management:

- The absence of internal systems for material reuse or source-level separation.
- A high reliance on municipal landfills and limited collaboration with recycling companies.
- Low awareness of the environmental impact of textile waste.
- Extensive use of non-biodegradable materials such as polyester and elastane.
- Nearly all companies fail to measure the amount of waste they generate annually.

The needs for strengthening their capacities include:

- Awareness and information campaigns on the benefits of the circular economy and the environmental impact of the sector.
- Specialized training on waste management practices.
- Financial and technical support for the implementation of recycling technologies.
- Dedicated policies and guidelines for textile waste management and the application of Extended Producer Responsibility (EPR).
- Establishment of cooperation networks between the private sector and recycling service providers.

Furthermore, from interviews with policymakers, it was noted that there is still no clear and comprehensive policy for the management of textile waste or for promoting the application of circular economy principles in this sector. Although there is willingness for cooperation and support, but the lack of resources and other priorities on the institutional agendas are pushing this issue to the background. Also, there is a lack of financial support, subventions or grant schemes that would encourage companies to invest in recycling technologies or sustainable design.

Overall, the textile industry in Kosovo has considerable potential for development in terms of sustainability, but currently there are serious gaps in waste management, the recycling chain and collective awareness of environmental impact. This gap can only be overcome through an integrated approach that includes business trainings, policy and regulatory interventions, the development of recycling infrastructure and public awareness of the importance of the circular economy.

Below are provided recommendations for each of the participants involved, starting from textile businesses to international donors.

For public institutions:

- Develop a national and local policy for the management of textile waste, harmonized with EU directives, including textiles in the Extended Producer Responsibility scheme - EPR.
- Integrate support into subventions and grant programs for manufacturing enterprises that apply the principles of the circular economy.
- Create direct financial support schemes for initiatives that apply the principles of the circular economy and recycling in the textile sector.
- Establish legal requirements for annual reporting of waste generating by large textile businesses.
- Promote separation at source of waste through dedicated textile collection points according to the European Union directive on textile waste collection.
- Strengthen monitoring of textile imports, with a focus on non-biodegradable materials and their environmental impact.

For educational institutions:

- Start teaching circular economy in pre-university institutions and universities.
- Create schemes to encourage creativity and innovation to find advanced ways of the management of waste in the textile sector.

For textile businesses:

- Start measuring the amount of generated waste and find innovative ways to reuse and recycle leftover materials
- Establish internal mechanisms for separating waste by type and connect them with recycling operators.
- Invest in training on sustainable design and the management of waste.
- Seek opportunities for collaboration with technical schools and NGOs for pilot recycling projects.

For civil society and non-governmental organizations:

- Develop awareness and information campaigns for the public and businesses on the impact of textiles and recycling opportunities.
- Organize exchange fairs and second-hand clothing initiatives.
- Undertake ongoing research and publish practical information on the application of circular economy practices.

For donors:

- Support with grants or loans with facilitated conditions for companies that invest in recycling, up cycling or sustainable production.
- Finance programs for the development of the recycling chain and the construction of infrastructure for waste separation.

For investors:

- Invest in technologies for textile recycling and processing, addressing the current lack of infrastructure for the management of waste in this sector.
- Support the development of new enterprises focusing on sustainable design, repair and up cycling of textile products.
- Create partnerships with local businesses to set up dedicated centers for separation, collection and processing of textile.
- Use existing co-financing schemes from the EU and international donors to reduce the risk and to provide technical and financial support.
- Support the certification and standardization of recycled products in order to enable easier access to international and regional markets.

The combination of these coordinated actions by all participants would enable the building of a textile sector that is not only economically competitive, but would also significantly contribute to reducing the amount of waste, increasing the application of circular economy practices, protecting the environment, and improving social welfare in Kosovo.

