



Circular economy in Kosovo

Opportunities for reusable packaging systems and women's participation

Published by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

© Freepik

Table of Contents

List of Abbreviations	5
Executive Summary	6
1. Background	8
2. Methodology	9
3. Status-quo of Circular Economy and gender equality in Kosovo	11
3.1 Facts and figures about the problem of (packaging) waste in Kosovo	11
3.2 Status quo of local waste management system	11
3.3 Greenhouse gas emissions and relevance of waste prevention	12
3.4 Facts and figures about gender equality and female economic contributions	13
3.5 Awareness for (plastic) waste pollution and climate change	14
4. Circular Economy and reuse in Kosovo	15
4.1 Legal framework and enabling conditions	17
4.2 Challenges for implementation	18
4.3 Inventory of existing, proven and/or functioning reuse solutions	20
4.3.1 Global good practices	20
4.3.2 Good practices in Kosovo	21
4.4 Awareness for Circular Economy and reuse of private and public sector and general public	22
4.5 Most suitable economic sector for the implementation of reuse solutions	23
5. Gender equality and women’s participation in the Kosovan economy	25
5.1 Legal framework and enabling conditions	25
5.2 Challenges for implementation	26
5.3 Women in the Circular Economy sector	26
5.4 Barriers for female economic participation (in reuse solutions)	29

6. Potentials for reuse systems in Kosovo	30
6.1 Public stakeholders	30
6.2 Private stakeholders	31
6.3 CSOs/NGOs	32
7. Conclusion	34
7.1 Comparison of the results and city prioritization	34
7.2 Country-wide potentials for reuse	35
References	37
Appendix	40
Enabling factors regarding CE/Gender Equality	40
Imprint	42

List of Tables

Table 1. GHG Emissions by sector, including waste.	
Kosovo Environmental Protection Agency (2022)	12
Table 2. Factors for low Female Labor Force Participation.	
A. Gashi et al. (2019)	13
Table 3. Comparison of target cities according to different selection criteria.	
Own presentation	35
Table 4. Enabling factors regarding CE/Gender Equality in Kosovo.	
Own presentation	40

List of Figures

Figure 1. Vicious Circle of women exclusion on the labor market.	
Own presentation	14
Figure 2. The four reuse models.	
Ellen MacArthur Foundation (2019)	16
Figure 3. Ranking types of barriers for implementing Circular Economy.	
European Environment Agency (2022)	18

List of Abbreviations

BMZ	German Federal Ministry for Economic Cooperation and Development
CCL	Circular City Labs – Testing Reusable Packaging Systems in Cities (project implemented by GIZ)
CE	Circular Economy
CSO	Civil Society Organization
DRS	Deposit Refund Scheme
EPR	Extended Producer Responsibility
FLFP	Female Labor Force Participation
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
HORECA	Hotel Restaurant Café
ICK	Innovation Centre Kosovo (ICK)
ICT	Information and communication technology
ITP	Innovation and Training Park
IWMS	Integrated Waste Management Strategy
KAS	Kosovo Agency of Statistics
KEPA	Kosovo Environmental Protection Agency
NGO	Non-Governmental Organization
N-RGB	Non-Refillable Glass Bottles
RGB	Refillable Glass Bottles
VAT	Value Added Tax

Executive Summary

The research study on possibilities for implementing reuse business models in Kosovo's Circular Economy (CE) was conducted through desk research and interviews with stakeholders mainly from three selected cities: Prishtina, Vushtrri, and Prizren. Additional interviews were conducted with nationwide stakeholders due to their relevance to the reuse case. The interviews targeted private businesses, public institutions, and Non-Governmental Organizations (NGOs)/ Civil Society Organizations (CSOs) to gain insights into the level of innovation and potential for reuse options for plastic packaging and the stakeholders' knowledge, perceptions, and behaviors related to CE development in Kosovo.

The study examined the increasing concern over environmental degradation, leading to a growing interest in sustainable practices, particularly in waste management and packaging solutions. Reuse business models were identified as promising strategies to mitigate environmental impacts and create economic value.

The findings highlighted several challenges in waste management in Kosovo, including low recycling rates, inadequate waste collection services, illegal landfills, and weak enforcement of waste management laws.

Regarding gender equality, women's economic participation in Kosovo faces obstacles such as discrimination, limited institutional support, and high credit interest rates, hindering their representation in leadership roles and entrepreneurship.

The comparative analysis of three cities in Kosovo – Prishtina, Prizren, and Vushtrri – reveals valuable insights into their readiness to implement reuse solutions within the packaging sector, with a focus on adaptability and potential.

Among these cities, Prishtina emerges as the most favored option for investigating reuse possibilities within the packaging sector. Several key factors contribute to its suitability. Prishtina's public sector displays openness to sustainable development activities and actively engages in waste management. The city has concrete plans for investing in a reuse center for bulky waste and a recycling center for construction and demolition waste, demonstrating a proactive stance in waste reduction. Bulky waste will be collected, repaired and sold, while construction and demolition waste will be collected, shredded and sold.

Additionally, the private sector in Prishtina is diverse and exhibits significant potential for implementing reuse solutions. Various industries, including plastics, textiles, food, and technology, have already embraced circular practices. Notably, several local Hotel Restaurant and Café (HORECA) businesses in Prishtina have formal contracts with suppliers to return used bottles, exemplifying a commitment to circularity. Prishtina also actively addresses awareness and environmental concerns, conducting awareness campaigns and recognizing the significance of waste pollution issues. Donor organizations and local NGOs play an active role in supporting these efforts. Moreover, the Municipality of Prishtina actively supports gender equality, with women actively participating in CE businesses, supported by initiatives like the Network of Women Associations.

In contrast, Prizren and Vushtrri exhibit less potential for reuse solutions. Prizren has established itself as an early adopter of waste management regulations, with an efficient waste fee collection system and effective waste management strategies. The city promotes sustainable development, engaging contracted companies in waste prevention and recycling across various private sectors. Nevertheless, there are not yet many reuse and awareness initiatives in place.

Vushtrri's Municipality showcases a strong commitment to proactive waste management, achieving comprehensive waste collection coverage and adopting a formal waste management plan. While specific private sector reuse projects are limited, the groundwork exists for future CE endeavors in Vushtrri. More information is needed to identify specific reuse solutions and business models in this city.

In conclusion, Prishtina stands out as the most promising environment for investigating reuse solutions within the packaging sector, with its comprehensive public sector support, thriving private sector engagement, strong awareness initiatives, and emphasis on gender equality. While Prizren and Vushtrri also exhibit some potential, collaborative efforts are essential to address challenges and foster support for circular endeavors throughout Kosovo.

Country-wide the adoption of sustainable practices is gradual, but sectors like the HORECA, the plastic producing and textile sector hold promise.

This baseline study has been conducted by adelphi consult GmbH and Professor Besnik Krasniqi and is financed by the German Federal Ministry for Economic Cooperation and Development (BMZ).

1. Background

The project ‘Circular City Labs – Testing Reusable Packaging Systems in Cities’ (CCL), implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, seeks to reduce greenhouse gas emissions through waste prevention by promoting economically viable reuse systems. In addition, the project aims at strengthening the role of women as entrepreneurs. It will establish circular city labs in up to five cities in Albania, Colombia, Georgia, Kosovo, and South Africa, inviting local businesses, city administrations, academia, and civil society to elaborate functioning reusable packaging systems. The labs will have demonstrable and long-term positive effects on emission savings, the environment, economic development, and social cohesion in the sense of green recovery and just transition. In order to serve as a basis for the CCL project in the final selection of cities where the labs shall be conducted, the study at hand identifies enabling framework conditions, challenges, and sectors suitable for the reuse of packaging in the city/cities of Kosovo.

The analysis includes models of refill and return; however, the final focus of the recommendations is on the latter. Apart from this version at hand, there is a more detailed version intended for internal use only that includes more details on relevant stakeholders and initiatives, as well as further background information.



The report is structured into seven sections. Chapter 1 provides essential context and rationale for the CCL initiative. In Chapter 2, the research methods used are explained to ensure transparency in the research process. Chapter 3 offers important insights into the current status of waste issues, gender equality, and awareness about the topics in Kosovo. Chapter 4 delves into the concept of a circular economy, exploring the legal framework, challenges, and potential sectors for reuse solutions. Chapter 5 focuses on gender equality within the circular economy, highlighting enabling conditions and challenges faced by women entrepreneurs. Chapter 6 identifies key stakeholders and outlines the findings of stakeholder interviews, including the public and private sectors, as well as NGOs and CSOs. Chapter 7 finally discusses the final prioritization of a city for in-depth exploration regarding the implementation of reuse options.

Overall, the study focuses on examining reuse models and their potential application in Kosovo, aiming to shed light on the opportunities and barriers in integrating CE practices within the country. To achieve this, the analysis draws from existing literature and primary research to assess the current state and future possibilities of reuse systems, with a particular focus on the role of women entrepreneurs.

Transitioning to a CE and adopting reuse business models have emerged as critical strategies to address environmental concerns and promote sustainability across economic sectors. Reusable packaging systems offer significant environmental benefits by reducing material consumption, greenhouse gas emissions, and plastic pollution. Studies by Coelho et al. (2020), Delanoiej and Bachus (2020), Rethink Plastic (2021) and Pew Charitable Trusts (2020) have highlighted the positive impact of reusable packaging in sectors such as e-commerce fashion, household care, and take-away food. These studies reveal substantial resource savings, water conservation, and CO₂ emissions reductions achievable through the widespread adoption of reuse models.

Furthermore, the economic implications of reuse business models have been explored by the United Nations Environment Programme (2023a). Reusable packaging can be viewed as a product-service system, offering economic benefits while reducing environmental impacts. The transition to reuse models represents a significant global economic opportunity, estimated to be at least USD 10 billion. Additionally, eliminating unnecessary plastics and promoting reusable products can lead to a 30% reduction in demand for new plastics by 2040.

Despite the advantages, implementing reuse business models also presents challenges. While reusable packaging systems offer numerous benefits to consumers, such as reduced costs, increased variety, and delivery convenience, obstacles related to logistics, hygiene, consumer acceptance, and business model restructuring need to be addressed for successful adoption. The paper aims to explore the potential of reuse business models in Kosovo, contributing to a more sustainable and CE in the region.

2. Methodology

The research on the possibilities for implementing reuse business models has been conducted through desk research and accompanying interviews with Kosovan stakeholders. The primary and secondary data collection has been done in a three-month period, from June until August 2023.

For the study three cities were selected:



Prishtina

Prishtina, as the capital and urban center, presents a promising environment for exploring packaging reuse strategies. The Prishtina Municipality's proactive stance in implementing waste management regulations underscores its commitment to addressing waste-related challenges. While the current regulations prioritize downstream waste management, the municipality also conducts awareness-raising campaigns beyond regulations to encourage people to adopt upstream waste reduction solutions. Additionally, the Municipality of Prishtina has demonstrated pertinent innovation in line with Circular City Labs, encompassing the incorporation of women in business and the embrace of recycling and reusing concepts that could prove effective in that context. The city is home to key national NGOs, think tanks focused on environmental issues, and the circular economy. It also provides various publicly offered business support services, including women's networks. Notably, most of the companies with potential for reuse options in Kosovo are located in Prishtina.



Prizren

Prizren is second largest city in Kosovo with an expansion in terms of number of population and businesses. The municipality's efficient waste fee collection system ensures stable financial support for potential reuse initiatives, indicating a robust foundation for CE endeavors. Moreover, Prizren has demonstrated successful collaboration with both private and public entities, cultivating an environment conducive to the development and implementation of CE and reuse solutions. The Innovation and Training Park in Prizren furthermore offers a good starting point for discovering more innovative solutions towards CE and reuse business models.



Vushtrri

Vushtrri has taken proactive measures in waste management, showcasing on-site waste collection for a significant portion of its population. The city's collaboration with GIZ for detailed CE development underscores its commitment to sustainable practices. Addressing waste management challenges in Vushtrri is closely aligned with circular strategies, and the industries within the city could offer some possibilities to studying the implementation of tailored reuse models.

It's important to consider that Vushtrri has significantly fewer businesses compared to Prizren and especially when compared to Prishtina.

The interviews were conducted mainly in person, with a tailored template designed to accommodate various stakeholder groups, including government, private sector, public entities, and NGOs/CSOs. The aim was to extract comprehensive insights into ongoing initiatives within the reuse sector and to evaluate stakeholders' knowledge, perceptions, and behaviors pertaining to opportunities and challenges related to CE development, particularly in the realm of reuse options. Each stakeholder's responses were categorized into section themes based on their relevance to the **public sector, private sector, awareness, and gender-related aspects**. Additionally, interviews were also extended to companies operating at a national level, even if not physically located within the selected cities, to gather diverse perspectives and insights from a broader spectrum of stakeholders.

A total of 38 companies were contacted, 30 individuals were interviewed, comprising 16 from Prishtina, 2 from Vushtrri, 2 from Prizren, and 10 representing institutions located either nationwide or outside of these three target cities. The decision to conduct interviews beyond the target cities was made to gain a broader perspective, particularly from significant players, and to ensure that no important institutions were overlooked. Additionally, the project team recognized that there were fewer businesses located in Vushtrri and Prizren. Therefore, the search for interviewees was expanded on a national scale to include promising businesses that were not present in the selected cities.

The interviews were held in Albanian, but to avoid any language limitations, certain terminology in English was also included, so to evaluate the real knowledge of individuals about the concept. The interview transcripts were then translated to English to include them in the final study and report.

The aim of the study is to provide an initial overview of the level of innovation and potential for reuse options for packaging, as well as the knowledge, perception and behavior of citizens in relation to the development of the CE in Kosovo.

3. Status-quo of Circular Economy and gender equality in Kosovo

This chapter provides some background information on CE and reuse in Kosovo, examining various aspects such as packaging waste pollution, local waste management system, greenhouse gas (GHG) emissions, gender equality, and awareness of waste pollution and climate change.

3.1 Facts and figures about the problem of (packaging) waste in Kosovo

Findings from the Balkan Green Foundation and Institute for Development Policy (n.d.) state that despite 32% of waste being recyclable and 40% being biodegradable, only 5% of waste is actually recycled in Kosovo. Furthermore, according to them, the country in general lacks CE initiatives and that most of them are concentrated in Prishtina. Krasniqi (2022a) mentions that one of the most crucial challenges is the waste collection: while seven public companies collect waste in Kosovo, not all areas, especially deep rural regions, have access to waste collection services. This has led to the emergence of 1,189 illegal landfills across the country. Among the seven sanitary landfills in Kosovo, almost all have reached their capacity, according to the (European Commission, 2022). Additionally, the European Environment Agency (2021) underlines that In Kosovo, waste management is facing various challenges, including insufficient funding, inadequate infrastructure, informal waste activities, and weak enforcement of waste management laws. Despite progress in increasing waste collection coverage to over 80% of the population since 2019, the target of 100% coverage has not been achieved. In addition, according to Kosovo Environmental Protection Agency (KEPA) (2021) there is an issue with poor data quality concerning the amounts of waste treated. This problem arises from the lack of weighing equipment at non-sanitary landfills, dumpsites. As a result, the quantities of waste delivered to these sites are estimated visually.

3.2 Status quo of local waste management system

According to data from the Kosovo Agency of Statistics (KAS) (Kosovo Agency of Statistics, 2022b) in 2021, the total quantity of municipal waste collected by regional waste companies and private operators in Kosovo amounted to 485 thousand tons. The average municipal waste collected per inhabitant per year in Kosovo was 273 kg, with a daily average of 0.75 kg per inhabitant. In the capital city of Prishtina and its region, the daily waste collection per inhabitant was slightly higher at 0.84 kg, while in other regions of Kosovo, it was 0.71 kg per inhabitant. The region of Prishtina had the largest amount of waste collected, reaching 151 thousand tons per year or 305 kg per inhabitant annually. On the other hand, the region of Ferizaj had the smallest quantity with 37 thousand tons per year or 202 kg per inhabitant annually. Compared to 2020, the total quantity of municipal waste collected in 2021 increased by 6.4%. Specifically, in Prishtina and its region, the increase was 6.3%, and in other regions, it was also 6.3%.

Additionally, the KAS (2022a) detected through the Industrial Waste Survey (IWS) that the total amount of industrial waste generated that year was 2,214,928 tons, which is 3.6% higher than the amount generated in 2020. Analyzing the data by industry sectors, it was found that the largest quantities of waste were generated in Sector D (Electricity, gas, steam, and air conditioning supply) with 1,267,879 tons, followed by Sector B (Mining and Quarrying) with 562,343 tons. Regarding waste processing, the data indicates that the total quantity of processed waste in 2021 was 2,212,927 tons, representing a 3.5% increase compared to the processing of waste in 2020.

When it comes to waste treatment the results of the Waste Treatment Survey of 2021 conducted by the KAS (2022c) indicates that the quantity of recycled waste was 21,307 tons/year; the quantity of sterilized waste (hospital waste) was 960 tons/year; and the total quantity of waste treatment and disposal was 506,044 tons/year. The percentage distribution of waste treatment by waste type and treatment method was as follows: metals (14%), plastic waste (31%), hospital waste (4%), and paper waste and cardboard waste (51%). In 2021, the total amount of waste disposed of in regional sanitary landfills was 483,777 tons/year, representing an 8.6% increase compared to the data from 2020. Among the regions, the largest quantity of waste disposal occurred in the sanitary landfill located in the region of Prishtina.

The European Commission (2022) underlines that Kosovo's waste management progress has been mixed, with positive steps taken in waste collection coverage and certain initiatives. However, many challenges persist, including insufficient cross-institutional cooperation, budget deficiencies, a lack of trained staff, informal waste sector activities, poor financial viability, inadequate infrastructure investment, low public awareness, and weak law enforcement. To achieve effective and sustainable waste management, Kosovo must address these interlinked challenges, implement Extended Producer Responsibility (EPR) mechanisms, and improve waste data reporting.

3.3 Greenhouse gas emissions and relevance of waste prevention

Berisha and Osmanaj (2021) highlight that approximately 70% of the total generated solid waste is disposed of in sanitary landfills, which are main sources of GHG emissions. More specifically they calculated that in Kosovo GHG emissions from the current waste management practices were approximately 537.5 Gg CO₂ eq/yr. Disposal activities contributed to 571.2 Gg CO₂ eq/yr, while recycling resulted in a reduction of 33.7 Gg CO₂ eq/yr. They state that implementing an advanced solid waste management system could result in GHG emission reduction of 409.9 Gg CO₂ eq/yr.

In KEPA's 2021 annual report on the environmental state, an analysis was conducted to contextualize GHG emissions in relation to various sectors. The findings revealed that GHG emissions constituted approximately 4% of the total emissions landscape. Notably, the primary contributor to these emissions was the energy sector, accounting for a significant 88% of the overall emissions, followed by the agriculture, forestry, and land use sector, which contributed 6%.

Table 1. GHG Emissions by sector, including waste.

Category (sector)	Gg CO ₂ eq.	%
Energy	8,989	88
Industrial processes and use of products	214	2
Agriculture, forestry and land use	600	6
Waste	463	4
Total emissions	10,266	100

Source: Kosovo Environmental Protection Agency (2022)

3.4 Facts and figures about gender equality and female economic contributions

R. Gashi and Gashi (2019) examine the challenges faced by female entrepreneurs in Kosovo, highlighting the significance of cultural factors alongside economic barriers. They found out that alarmingly, less than one in five women of working age (17.8%) are active in the labor market, in stark contrast to over half of men (55.4%). Only 13% of businesses in Kosovo are owned by women, and most of these are micro businesses with one to ten employees.

A. Gashi et al. (2019) mention seven factors contributing to the previously mentioned low Female Labor Force Participation (FLFP) rate in Kosovo:

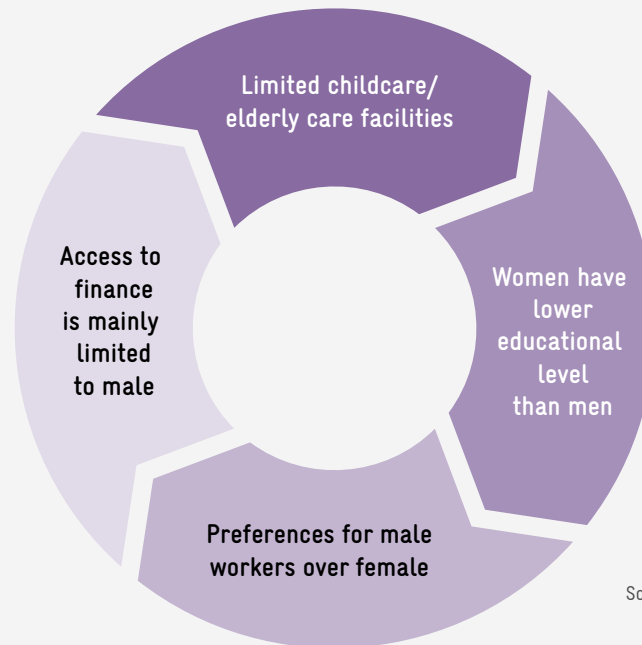
Table 2. Factors for low Female Labor Force Participation.

Factors	Explanation
Demographic factors	The high fertility rate and a very young population contribute to lower participation rates. Women in their 30s tend to temporarily leave the labor market to have children, impacting the overall participation rate.
Educational attainment	Less educated women are less likely to participate in the labor market. The level of education strongly influences female labor force participation.
Household-level factors	Traditional patriarchal households and cultural norms influence women's labor supply decisions. Economic growth and job creation have been limited, and preferences for male workers over females affect the labor market dynamics.
Remittances	Households receiving remittances tend to have lower FLFP rates.
Childcare facilities	The availability of affordable public kindergartens positively influences FLFP, but their scarcity remains an issue.
Added worker effect	Added worker effect: In households with unemployed members, women may enter the labor market to compensate for the lack of income.
Access to employment opportunities	Locational factors and regional employment rates affect women's access to job opportunities.

Source: A. Gashi et al. (2019)

Jusaj and Abazi-Alili (2022) investigate the challenges faced by women entrepreneurs in the Republic of Kosovo. They also underline the challenges, including limited access to finance, inferior education and training, sociocultural boundaries, lack of access to information and communication technology. These difficulties are primarily attributed to the substantial time women spend on unpaid caregiving responsibilities and the enduring social norms prevailing in Western Balkan countries, which perpetuate discrimination against women concerning education, entrepreneurial training, and participation in the labor market (Shkodra et al., 2021).

Figure 1. Vicious Circle of women exclusion on the labor market.



Source: Own presentation.

The Kosovo Women's Network (2021) highlights that women spend up on average 300% more time on unpaid care activities than men. Women are also underrepresented in corporate boards, owning only 20% of active enterprises in 2020, with limited access to finance and entrepreneurial skills being contributing factors. The Kosovo Investment and Enterprise Support Agency (KIESA) subsidies disproportionately benefit men, but a specific grant for women-owned enterprises has been launched to address the impact of COVID-19 on women, providing 25 grants totaling €320,079 in the second round.

3.5 Awareness for (plastic) waste pollution and climate change

Although (packaging) pollution and the effects of climate change are well assessable in Kosovo, showing in climate-related disruptions like floods, fires, and droughts affecting agriculture, water resources and livelihoods many people in Kosovo still do not assign sufficient importance to this topic. Key initiatives primarily involve donor-driven projects, often facilitated by organizations such as GIZ and other donors. For instance, interviews with representatives from Prishtina and Vushtrri municipalities indicate that GIZ supports several awareness-raising campaigns in schools within these two cities.

Furthermore, various donor-driven initiatives aim to support businesses in adopting CE practices. Organisations like GIZ, Riinvest with Green Action Space, and others play essential roles in these endeavors. Some initiatives offer direct support through training and incentives, while others, like Riinvest and the Chamber of Commerce, primarily focus on raising awareness about CE principles.

Especially young people like Fjollë Caka are motivated to bring about a change in the country by calling for changes in how we produce and consume food, generate energy, build infrastructure, and manage resources (United Nations Kosovo, 2021).

More specifically in regards to waste management Helvetas Swiss Intercooperation (2017) identifies three key challenges hindering public awareness of waste management and sustainable waste reduction in Kosovo. Firstly, there is a lack of consideration among individuals regarding the environmental consequences of waste generation, leading to increased waste disposal and pollution. Secondly, many businesses and households evade waste disposal charges, perpetuating a culture of unrestricted waste production. Lastly, the inadequate implementation of waste management practices at local and central levels has resulted in pollution, diseases, and a negative public perception.

4. Circular Economy and reuse in Kosovo

The rising concern over environmental degradation and its impact on socio-economic well-being has prompted a growing interest in sustainable practices, especially in the context of waste reduction and packaging solutions. In response to the urgent need for more sustainable alternatives, reuse business models have gained attention as promising strategies to mitigate environmental impacts and create economic value (WWF, 2020). This study delves into the opportunity of implementing different reuse business models and their potential impact on the environment, gender equality and socio-economic landscape in Kosovo.



© Adobe Stock

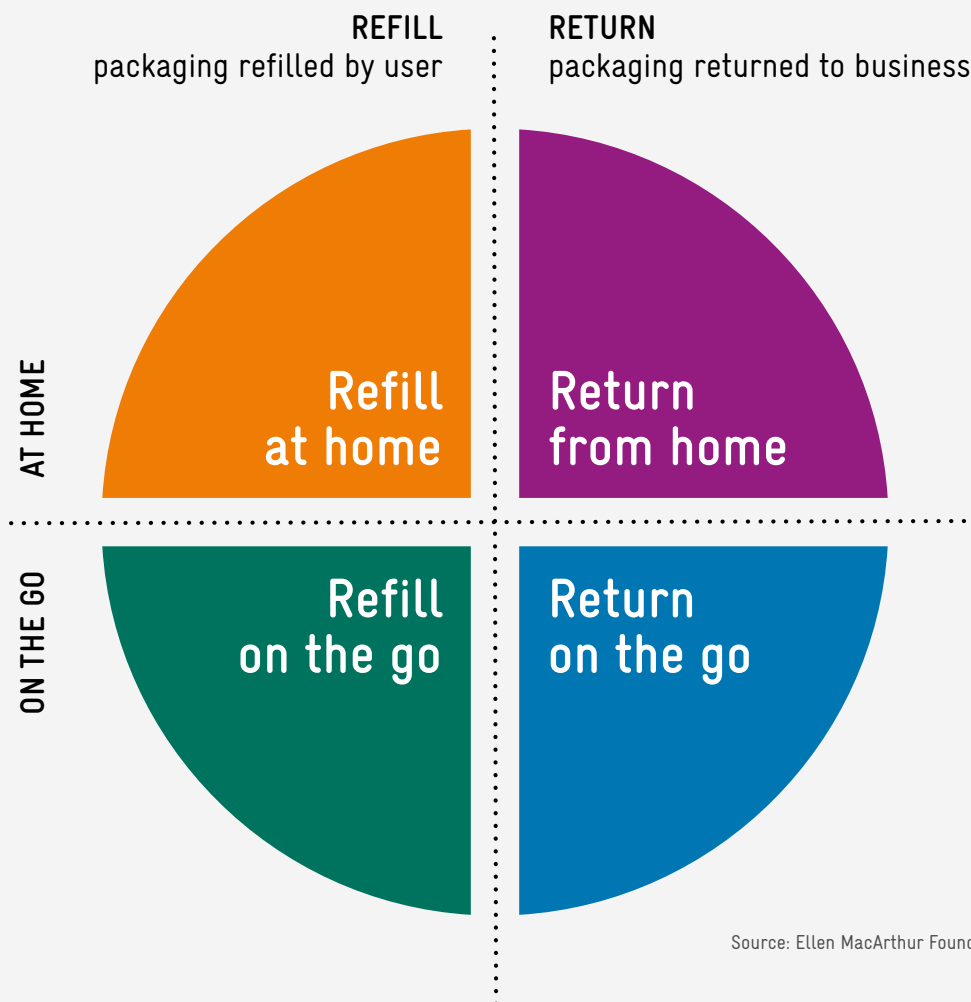
1. Reuse Business Models and Environmental Impact

Coelho et al. (2020) highlight the environmental benefits of adopting reusable packaging systems in different sectors. Reusing products and materials for as long as possible significantly reduces the need for virgin materials, leading to a reduced environmental footprint. The authors emphasize that properly designed and managed refill/reuse systems can yield substantial material savings and environmental benefits. However, the transition to reusable packaging necessitates careful consideration of potential negative impacts, such as unrecyclable materials, increased transport, complex logistics, and food safety concerns. Delanoije and Bachus (2020) also explore the environmental impacts of reusable packaging systems in e-commerce fashion and household care sectors. Their life cycle assessment (LCA) analysis reveals that a reusable packaging system in e-commerce fashion has nearly three times less environmental impact than a Single-Use Packaging system. Similarly, reusable packaging for household care products has nearly twelve times less environmental impact than Single-Use Packaging bottles. This shows that scaling up the adoption of reuse in these sectors can lead to significant resource savings, water conservation, and reductions in CO₂ equivalent emissions. Additionally, the study by Rethink Plastic (2021) further validates the positive environmental impact of reusable containers in the take-away food, e-commerce fashion, and household care sectors. Standardized packaging formats, hygienic washing processes, and deposit systems play crucial roles in enabling reuse in these sectors, leading to substantial resource savings, water conservation, and CO₂ emissions reductions. Rethink Plastic's (2021) report reveals that reusable packaging systems in e-commerce have nearly 12 times less impact than Single-Use Packaging bottles for household care products. Additionally, Pew Charitable Trusts (2020) outlines that the shift to reusable products and the elimination of unnecessary plastics can lead to a 30% reduction in demand for new plastics by 2040. They analyzed three main "Reduce levers" for achieving this reduction: Elimination, Consumer Reuse, and New Delivery Models. Furthermore, the United Nations Environment Programme (2023a) states that at full scale, reuse models can lead to a 20% reduction in total annual plastic leakage to the ocean by 2040.

2. Reuse Business Models and Economic Impact

Coelho et al. (2020) argue that the overall costs of implementing a reusable packaging system may be lower than Single-Use Packaging, depending on various factors like logistics, market volume, return rates, and labor involved. They highlight that reusable packaging can be considered as a product-service system, where the provision of a service to consumers replaces the traditional model of simply selling products. Additionally, the United Nations Environment Programme (2023b) referring to Ellen MacArthur Foundation (2019) emphasizes that shifting to reuse models represents a significant economic opportunity worth at least USD 10 billion globally. The study outlines four key reuse models, including **Refill at Home**, **Refill on the Go**, **Return from Home**, and **Return on the Go**, each offering economic benefits, reduced greenhouse gas emissions, and decreased plastic pollution.

Figure 2. The four reuse models.



3. Opportunities and Barriers for Reuse Business Models in Kosovo

Transitioning to reusable packaging and implementing reuse business models present various opportunities and challenges, such as the restructuring of business models, additional space and hygiene requirements for retailers, and consumer acceptance issues. The study by the Ellen MacArthur Foundation (2019) highlights challenges for each reuse model, such as motivating users to carry and clean their containers, developing reliable deposit and reward schemes, and establishing local reverse logistics. However, the authors assert that overcoming these challenges can lead to significant cost savings, improved user experiences, and brand loyalty.

In general, scaling up the implementation of reuse systems in Kosovo could lead to significant resource savings, water conservation, and economic opportunities. However, successful implementation requires careful evaluation of environmental and economic trade-offs, addressing challenges, and ensuring widespread stakeholder involvement. By studying the Kosovan country context and conducting interviews with relevant stakeholders, this paper aims to shed light on the potential of reuse business models in Kosovo, contributing to a more sustainable and circular economy in the region.

According to the OECD (2021) the CE framework in Kosovo has seen changes, with the Integrated Waste Management Strategy (IWMS) and Action Plan (2020-2022) indirectly addressing the topic through objectives related to awareness, waste prevention innovation, and reuse and recycle systems based on extended producer responsibility schemes. Nevertheless, the recycling rate for municipal waste remains low at around 5%, while municipal waste management faces challenges with collection coverage and non-compliant landfill sites. Limited efforts have been made to implement waste separation at the source, but some pilot projects are underway. Municipal waste management plans have been drafted in most municipalities, but monitoring is lacking. The government has undertaken actions to combat illegal dumping through the Performance Grant–Clean Environment Race project. Financing for waste management infrastructure comes from budget and donor funds, and waste collection services are funded by waste collection fees.

While most waste management mechanisms in Kosovo primarily focus on downstream solutions for waste management, the government has integrated the concepts of reuse and recycling into its 2021-2030 IWMS. The strategy identifies various sectors, including packaging waste, electrical and electronic equipment (WEEE), batteries, and vehicles, and plans to establish facilities for the separation and processing of packaging waste for reuse and recycling throughout the country. Notably, the document highlights a deposit refund scheme for packaging waste as an upstream solution, funded by product producers. It is evident that the terms “recycling” and “reuse” are often closely associated and even intertwined, and there is a need to prioritize reuse options, as per the waste hierarchy, to enhance upstream waste management solutions in the country. Therefore, this study aims to explore the possibilities for reuse options and clearly distinguish them from downstream waste management solutions.

4.1 Legal framework and enabling conditions

Appendix I provides a concise overview of the essential enabling factors within the legal framework concerning waste management, gender equality, and women entrepreneurship in Kosovo. The subsequent chapters will delve into further elaboration on the key enabling factors pertaining to these areas.

The transition to a CE in Kosovo is hindered by significant challenges arising from the absence of comprehensive legislation at both national and local levels. Milenkovic et al. (2016) highlight that the Law on Waste no. 04 / Z-0604 serves as the fundamental legislation governing waste management principles and delineating responsibilities of relevant institutions. Although various other regulations, including the Law on Environmental Protection, Law on Chemicals, and Law on spatial planning, are closely related to waste issues, weak law enforcement at central and local levels poses a critical obstacle. Musliu et al. (2023) further emphasize that waste management practices in Kosovo remain inadequate, with a considerable portion of waste being disposed of in uncontrolled dumpsites or burned in open pits, leading to detrimental impacts on public health and the environment. The Law on Waste (No. 2012/04-L-060) aims to prevent and reduce waste generation, promote the reuse of components, support sustainable development, prevent adverse environmental and health effects, and ensure environmentally acceptable final waste storage methods. Specifically, reuse is addressed in Article 30 by focusing on the importance and potential of

reusing or processing materials into secondary materials and considering incineration or landfilling as the least feasible option for non-hazardous waste.¹ However, illegal dumping of various types of waste continues to occur in various locations, posing a persistent challenge for proper waste management in the country.

ATRC (2020) provides insights into the CE context in Europe and Kosovo, with a particular focus on waste management legislation and plans. In the European context, the European Commission's adoption of the "Circular Economy Action Plan for a Cleaner and More Competitive Europe" in March 2020 aims to accelerate transformative change, building upon CE actions implemented since 2015. In the Kosovar context, the "Stabilization and Association Agreement" between Kosovo and the European Union obliges Kosovo to adopt the entire *acquis* and integrate it into its domestic legislation. However, Kosovo has not fully harmonized its national legislation with the EU *acquis*, particularly in the area of environmental legislation related to waste management, water management, air quality, nature preservation, and the controlled exploitation of natural resources. The "Strategy of the Republic of Kosovo for Waste Management" (SRKWM 2013-2022) sets guidelines and goals for waste management over a ten-year period (2013-2022). Despite these efforts, the CE concept is not explicitly included in Kosovo's current legislation, making it challenging to effectively implement CE practices. The European Environment Agency (2021) outlines that Kosovo's existing policy framework for CE focuses on the "Kosovo Integrated Waste Management Strategy (2021-2030) and Action Plan (2021-2023)" with specific objectives involving raising awareness, stimulating innovations in waste prevention, and establishing reuse and recycling systems based on the extended producer responsibility concept. However, the country's focus on CE is currently limited to recycling and waste management, rather than addressing the entire production and consumption chain. The Ministry of Environment, Spatial Planning, and Infrastructure, along with the Government of Kosovo, holds the primary responsibility for implementing the strategy, with monitoring and evaluation conducted by the Kosovo Environmental Protection Agency. In the local context, the Municipality of Prishtina has formulated regulations that specifically address the concept of the circular economy. In Article 5 on page 4, it explicitly promotes waste minimization through practices such as reuse, reduction, recycling (3R), and composting (Republic of Kosovo, 2023). This underscores the municipality's strong commitment to advancing the principles of circularity.

4.2 Challenges for implementation

According to Maleš (2020) the transition towards a CE encounters significant hurdles, with several challenges standing out. Firstly, the deficiency of comprehensive legislation at both national and local levels hampers the transition from a linear to a circular economic model. Regarding waste management financing, although the Law on Waste in Kosovo has opened the door to private operators, public enterprises continue to dominate in providing waste management services to municipalities. Confronting these challenges becomes imperative to expedite the CE transition and foster sustainable waste management practices in Kosovo. Milenkovic et al. (2016) highlight that financial support from the central budget for the Ministry of Environment, Spatial Planning and Infrastructure remains limited to approximately 2%, with a meager 0.7% directly allocated for environmental protection. Furthermore, entrepreneurs face hurdles in initiating waste management businesses due to protracted procedures for obtaining necessary licenses and certificates. Additionally, Krasniqi (2022b) makes clear that despite the adequacy of legal harmonization with EU legislation, limited institutional capacity remains a challenge for effective waste collection and infrastructure services at the municipal level. In the Kosovo CE Country Profile developed by the European Topic Centre on CE and resource use (2022) different types of barriers for implementing the CE in the Kosovan landscape which are depicted in the graphic below.

Figure 3. Ranking types of barriers for implementing Circular Economy.



Source: European Environment Agency (2022)

¹ While the terms "Recycling" and "Reuse" are distinct, they are often used interchangeably in various strategic documents and regulations in Kosovo.

Furthermore, insights garnered from interviews with various stakeholders have unveiled a set of challenges that serve as formidable barriers within the context of adopting a CE. These challenges play a pivotal role in determining the practicality and effectiveness of implementing reuse practices in Kosovo. The **main implementation challenges of reuse systems** derived from the interviews are listed below:

1. **Awareness and Education Gap:** One prevailing challenge is the lack of awareness and understanding of CE concepts and reuse systems among both businesses and the general population. Addressing this challenge requires comprehensive training and the widespread dissemination of relevant information.
2. **Policy Formulation:** Stakeholders consistently advocate for the development of policies that actively support CE initiatives. Providing financial incentives to encourage individuals and businesses to engage in circular practices is considered crucial for fostering adoption. Establishing relevant legislation and regulatory frameworks is essential to support the adoption of reuse systems. This includes addressing VAT solutions and EPR to promote sustainable practices.
3. **Collaboration and Capacity Building:** Facilitating collaboration between the public and private sectors, along with NGOs is seen as a vital strategy. Capacity-building initiatives are fundamental for nurturing sustainable projects and expanding the scope of reuse solutions.
4. **Contamination Concerns and lack of technical knowledge:** The reutilization of (plastic) packaging presents notable challenges, primarily stemming from concerns about contamination. This is particularly relevant in the food and beverage industries, where preserving product integrity is of utmost importance. When considering the reuse of glass bottles that have previously contained natural products like juice, there is a potential risk of damage to the bottle's lip. Even if new caps are employed, there remains the possibility of oxygen ingress, which can adversely affect the product.
5. **Investment Requirements:** Implementing a reuse system often necessitates substantial investments in infrastructure, such as sterilization facilities and quality control measures, which can be financially challenging. Financial assistance plays a crucial role in expediting the adoption of sustainable practices, overcoming initial investment challenges, and supporting the growth of circular initiatives.
6. **Business Priorities:** Some organizations, especially startups and smaller businesses, prioritize initial growth and market presence over implementing a reuse system. They may consider such systems when more established.
7. **Product Integrity:** For companies dealing with sensitive products, ensuring product integrity is critical. Challenges, such as oxygen contamination in glass bottles, require rigorous quality control measures.

These challenges collectively influence the practicality and effectiveness of implementing reuse practices and CE principles in Kosovo, highlighting the need for a multifaceted approach involving education, policy development, collaboration, and financial support.

4.3 Inventory of existing, proven and/or functioning reuse solutions

4.3.1 Global good practices

Please note that the following examples were randomly selected and serve for illustration purposes. There are more good examples for reuse solutions.



Refill at Home

One of the most notable examples of refill and reuse solutions at home is [SodaStream](#), a home appliance that enables users to create sparkling water in reusable PET or glass bottles. Customers have the option to buy compressed CO₂ in returnable cylinders either in supermarkets or online. In physical stores, customers can exchange their empty cylinders and receive a discount on their next purchase. For online purchases, customers pay a GBP 10 deposit for the delivery of filled gas cylinders and return labels, and they can then return the empties in exchange for the deposit (an example for Return from Home). This system encourages a sustainable and eco-friendly approach to enjoying carbonated beverages at home.



Refill on the Go

There are many examples of “refill on the go” in the household and cosmetics sectors. A particularly innovative example is [Algramó](#), developed in Chile. The company provides dispenser stations for household products in collaboration with supermarkets, convenience stores, and soon, schools, universities, and gas stations. Here, customers can refill cleaning products without having to purchase new plastic packaging. The company’s latest innovation is Alagramo 2.0, which further optimizes the approach by offering smart-powered mobile electric tricycles that can be ordered directly to the users’ doorstep through an app.



Return from Home

An example of “return from home” is the company [Repack](#), which collaborates with e-commerce companies and provides them with returnable packages for shipping their products. The recipients of these packages can then send the package back to Repack, allowing it to be reintroduced into the cycle.



Return on the Go

The most well-known “return on the go” system in Germany is [RECUP](#) which offers shared coffee cups that can be borrowed from participating stores for a deposit of one euro and returned after use for cleaning. RECUP partners pay a membership service fee to support the functioning of the deposit system and gain access to a mobile app. All RECUP partners are obligated to clean and reuse the cups that are returned to them. Currently, RECUP is expanding its system by conducting tests with partners like McDonald’s and Deutsche Bahn. It also extended its coverage of products and is now additionally offering reusable bowls.

4.3.2 Good practices in Kosovo

When it comes to reusing packaging, Kosovo reuses mostly glass bottles, and there are at least three companies that do so. There are also at least two water producers that reuse large 19-liter plastic bottles. These bottles are thick and do not need to be sanitized, only refilled. Other models of plastic reuse can be found in companies that reuse plastic crates.

Few companies are taking significant steps to promote reuse and sustainability in Kosovo. Miros Water, a natural spring water producer in Kosovo, is distinguishing by prioritizing bottle return and refilling. Their investment in specialized washing machines for disinfecting glass bottles is a remarkable step forward, with full-scale operations slated to commence in October 2023.

Coca-Cola HBC Kosovo, a prominent distribution center for Coca-Cola products in Kosovo, is advancing reuse through its bottle return and refilling systems. They offer two types of bottles: refillable glass bottles (RGB) and non-refillable glass bottles (N-RGB). RGBs are primarily utilized by the HORECA sector and can ideally be returned and refilled up to seven times. Coca-Cola HBC Kosovo, which acts as only distributor on behalf of Coca Cola Serbia, is responsible for managing the return system.

Birra Peja is also making commendable efforts to promote a CE. They engage in practical training with universities and collaborate with a recycling company called “Riciklimi” to collect recycled materials. Notably, they recycle beer shards returned from the market and reuse crates and bottles within their business operations. However, challenges remain in the collection and reuse of glass.

Other notable example is BOTANIC SHPK, a women-owned organic company, which is at the forefront of embracing reuse practices. They are currently finalising their refill programs for their certified organic food products, actively encouraging customers to reuse containers and reduce the demand for Single-Use Packaging. Additionally, BOTANIC SHPK is committed to introducing innovative zero-waste packaging solutions, aligning with the broader goal of reducing waste generation and fostering environmentally responsible consumption patterns.



© Freepik | This image serves as a representative image of the described product.

4.4 Awareness for Circular Economy and reuse of private and public sector and general public

Firstly, awareness for CE and reuse in Kosovo was researched by the project team via secondary sources. In this regard, Hapciu in 2019 examines product reuse behavior among citizens in Kosovo and reveals several key findings.

The research suggests that the reuse of products is mostly confined to secondary reuse, specifically the reutilization of purchased bags or bottles on one's own initiative and for practical reasons. This is due to a lack of knowledge, technology, and infrastructure to support more widespread reuse practices. Approximately 42% of citizens engage in reusing paper, glass, plastic, or other products, with only 34% reusing items specifically designed for multiple uses. Conversely, 24% do not reuse products after their initial use. Commonly reused items include water bottles, juice bottles, and jars, often utilized for an extended period. Plastic bags are also frequently reused for carrying purposes and later as garbage bags. Reasons for not reusing products include safety concerns, particularly with plastic bottles, as well as laziness, limited knowledge on how to reuse effectively, and the easy availability of low-cost new products, diminishing the perceived necessity of reusing. The study highlights a lack of awareness on appropriate reuse practices, inadequate infrastructure to support product reuse, and a dearth of incentives to encourage reuse in the daily lives of Kosovo's inhabitants.

The Circular Economy Roadmap for Kosovo, as outlined by the Ministry of Environment, Spatial Planning, and Infrastructure (2020) also highlights a concerning lack of awareness and understanding about the principles of the CE paradigm, affecting both the public and private sectors. This deficiency in knowledge impedes the adoption of new business models and hinders investment in CE initiatives. Several authors, including Krasniqi (2022a), Helvetas Swiss Intercooperation (2017), and Madhi and Trupia (2023) concur with this assertion when analyzing Kosovo's waste management sector. They emphasize that the insufficient knowledge, awareness, and education among the general population, as well as within the private and public sectors, contribute to the current state where waste is not effectively managed in a circular manner.

However, the European Environment Agency (2021) has reported that the budget allocated to public awareness raising and innovation in Kosovo's IWMS 2021 - 2023 is slated to decrease significantly. The budget is set to reduce from EUR 770,750 for the period 2019-2021 to EUR 390,000 for the period 2022-2028, signaling a reduced emphasis on this crucial issue.

Additionally, to secondary research the awareness for CE and reuse options was also assessed in the stakeholder interviews conducted. The interviews among the different target cities revealed the following information:

Stakeholders from different sectors in Kosovo, as revealed in interviews, share a common understanding of waste pollution as a significant challenge requiring urgent and coordinated efforts. They are all dedicated to increasing awareness and promoting creative solutions to tackle this problem. However, there appears to be a lack of comprehensive understanding about the concept of reuse, as many people in Kosovo still believe that previously used, refurbished, or repurposed materials are of lower quality compared to entirely new products.

Among the interviewed stakeholders, the Municipality of Prishtina has embarked on a multifaceted approach to better manage waste. They are actively curbing the spread of illegal landfills, improving waste collection methods, and establishing a compost center. This underscores their commitment to not only addressing waste pollution in a downstream way but also fostering a CE by promoting composting. Simultaneously, the municipality recognizes that meaningful change necessitates widespread public awareness and engagement. This aligns with the overarching theme echoed by other stakeholders – that the key challenge lies in citizens' understanding of environmental protection and waste management practices.

Similarly, the Innovation Centre Kosovo (ICK) envisions a comprehensive approach to waste reduction. They emphasize the importance of proactive measures to minimize waste, especially in startups and within the ICK itself. In line with this vision, the ICK advocates for collaboration between local authorities and their center to formulate innovative waste management strategies. This collaborative effort has the potential to yield innovative solutions that can revolutionize waste management practices, particularly by championing eco-friendly packaging alternatives and promoting the use of reusable materials.

Universities in Kosovo are playing a crucial role in awareness-raising initiatives. For example, the University of Prishtina recognizes the need for comprehensive waste management mechanisms within the city, advocating for policies that incentivize sustainable materials and the reduction of plastic usage. Their emphasis on learning from successful global examples underscores their commitment to adopting best practices.

This commitment resonates with the efforts of CSR Kosovo, an NGO that actively promotes the CE through training initiatives, aiming to disseminate awareness about the concept's transformative potential.

The private sector in Kosovo is actively taking steps to address waste pollution. This includes small startups, large international companies like Coca-Cola and national water providers. They are actively engaging in innovative approaches for reusing materials and are aware of the detrimental effects of waste pollution. Furthermore, they recognize the potential for new business opportunities by adopting CE principles.

The collaborative approach among the stakeholders interviewed in Kosovo is grounded in a mutual understanding of the importance of reducing packaging waste, embracing CE concepts, and adopting sustainable practices. These ideas are gaining traction through various projects and initiatives that aim to raise public awareness and implement practical solutions.

4.5 Most suitable economic sector for the implementation of reuse solutions

In Kosovo, some sectors specifically show promise for exploring reuse possibilities and promoting sustainability. Interviews and statements from various private and public entities have shed light on these potential areas of focus.

The HORECA sector and the packaging sector have been suggested as a candidate for reuse systems, particularly by the private sector interviewees. They state that those industries generate significant waste. Additionally, the textile sector was frequently mentioned, given the existing initiatives and considerable potential for further development in this area.

Food and Agriculture, Electronics and E-waste, as well as Construction and Building materials are also mentioned by the interviewees in terms of reuse opportunities, but nearly no ongoing initiatives in these sectors have been mentioned.

Both Prishtina and Prizren municipalities express potential support for initiatives in various sectors, with Prishtina focusing on plastic product processing and Prizren offering backing for a range of smaller-scale initiatives. Prishtina has also concrete plans to invest in building the reuse center, mostly for bulky waste.

The most suitable economic sectors for the implementation of reuse solutions can vary depending on the specific context and needs of a region or country. However, based on the statements provided and considering broader sustainability goals, several sectors in Kosovo appear suitable for the implementation of reuse solutions:

1. **HORECA:** The sector presents substantial opportunities for reuse solutions, encompassing the reduction of food waste, the reuse of packaging materials, and the promotion of sustainable farming practices. Moreover, this sector holds promise in terms of embracing sustainable and low-carbon footprint packaging, particularly through strategies such as refilling and the utilization of biodegradable alternatives.
2. **Supermarkets:** Supermarkets possess significant leverage due to their extensive visibility and nationwide presence. While they may not fundamentally alter their business models, they could play a role as facilitators or collaborators, providing small businesses with a platform to more readily and economically implement reusable packaging solutions.
3. **Plastic Production and Packaging:** Given the environmental concerns associated with plastic waste, the plastic production and packaging industry will have a main role in supporting the transition towards effective reuse systems. This could be achieved by producing and offering reusable packaging, like cups, crates, etc., as an alternative to common Single-Use Packaging.

Next to these three sectors there are other sectors worth considering, even if their primary focus is not on packaging.

4. **Textile and Fashion Industry:** Although this sector should not be focus of this study, it was mentioned several times during the interviews as potential sector for reuse options. It generates a significant amount of waste and offers numerous opportunities for reuse, recycling, and upcycling of clothing and textiles. Also it is one of the sectors that already functions in terms of reuse on a large scale throughout Kosovo.
5. **Construction and Building Materials:** Reusing construction materials and adopting CE principles in the construction sector can reduce waste and promote sustainable building practices. More specifically, Prishtina has concrete plans foreseen in the communal Waste Management Plan to build a reuse center for construction and building materials.
6. **Electronics and E-waste:** As electronic waste is a growing concern, implementing reuse solutions in the electronics sector can help extend the lifespan of electronic devices and reduce electronic waste. This has been happening for a long time in Kosovo already, but there would be an opportunity to expand and invest in the establishment of repair stations, such as repair cafés in Germany.
7. **Art and Craft Supplies:** This sector may not be as large as others, but it presents opportunities for the reuse and repurposing of art and craft materials.

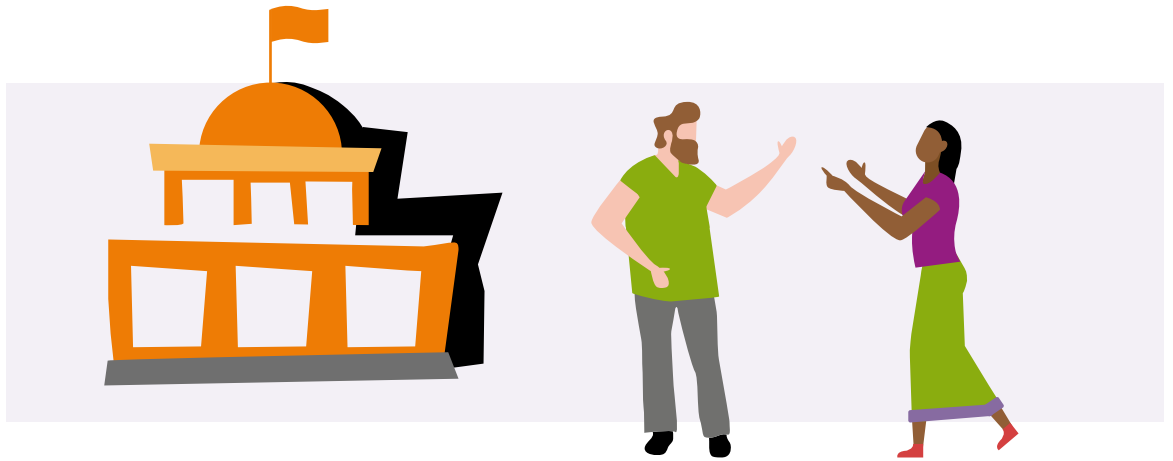
It is important to note that the suitability of these sectors can evolve over time, and the success of reuse solutions depends on various factors, including infrastructure, technology, consumer behavior, and government support. Assessing the specific needs and opportunities within each sector and tailoring reuse strategies accordingly is essential for successful implementation. Additionally, collaboration between the public and private sectors, as well as community engagement, is often crucial in driving reuse initiatives forward.

5. Gender equality and women's participation in the Kosovan economy

5.1 Legal framework and enabling conditions

An overview about the legal framework and enabling conditions regarding gender equality can be assessed in Annex 1. The regulations for women's participation in the Kosovan economy have been influenced by the incorporation of the "EU gender equality acquis" into Kosovo's laws. However, the practical application and implementation of these laws still require improvement to yield tangible results. Kosovo's judiciary faces challenges in enforcing gender equality laws due to limited case law in this area. Several critical issues have been identified by the Kosovo Women's Network (2017) in the legal framework:

1. **Firstly**, provisions related to paternity leave, parental leave, carers' leave, and occupational social security schemes have not been properly transposed into Kosovo law. This has resulted in difficulties for women working on fixed-term contracts, particularly when they become pregnant, as they lack the required employment protection under the "EU gender equality acquis."
2. **Secondly**, although the concept of "positive action" has been formally transposed into Kosovo's legislation to promote gender equality in the labor force and leadership positions, it is not adequately applied in practice.
3. **Moreover**, the legislation in Kosovo does not adequately protect against infringements of EU gender equality law directives, and the enforcement of effective sanctions is insufficient. The Agency for Gender Equality (AGE) also lacks sufficient power and resources for its work.



To address these issues and create a more enabling environment for women's participation in the economy, Kosovo Women's network (2017) recommends specific actions. These include creating an annual "Gender Pay Gap" Index to monitor equal pay implementation, offering training on EU gender equality law for legal actors, and reviewing policies and amendments to align with the Istanbul Convention's requirements for better gender equality implementation within Kosovo's legal framework. Additionally, measures to address the Gender Pension Gap are proposed, such as extending the protection to public social security schemes to prevent discrimination fully and introducing an annual assessment to monitor gender equality in social security schemes. In 2021 Kosovo Women's Network assessed the situation again and found that although the Kosovo Labour Law prohibits all forms of discrimination in employment, including recruitment, training, promotion, and employment conditions, women's participation in the labor force remains low, with only 22% of working-age women actively seeking employment compared to 59% of men.

Apart from traditional laws, like the Labor Law, there exists the “Kosovo Program for Gender Equality 2020-2024”, a comprehensive plan aimed at promoting gender equality in Kosovo. The program strives to place gender equality at the center of transformation processes within all structures, institutions, policies, procedures, practices, and programs. Organized into three strategic pillars, the program addresses key challenges hindering women’s participation in the economy and society (Republic of Kosovo, 2020):

1. **The program’s first pillar**, Economic Empowerment and Social Welfare, aims to create equal opportunities for women in economic development and social welfare. It focuses on enhancing women’s skills for the labor market, addressing gender-based discrimination in employment, providing access to social and family services, supporting women in business through financial assistance, implementing gender equality laws, and integrating gender perspectives into public policies.
2. **The second pillar**, Human Development, Roles and Gender Relations, promotes gender equality through quality education and health, inclusiveness, and utilizing human capacity fully. It includes activities such as raising awareness, providing care services for children and the elderly, supporting women in the workforce, eliminating gender stereotypes in education, building capacities in education, and offering financial support and infrastructure for professional advancement.
3. **The third pillar**, Women’s Rights, Access to Justice and Security, focuses on promoting women’s rights in decision-making, peace, security, and justice. It involves harmonizing the legal framework, appointing specialized judges and prosecutors, improving data on domestic violence, raising social awareness, ensuring access to justice, implementing affirmative measures, empowering women in politics and security, advocating for women in peace negotiations, and organizing debates on women’s representation in reconciliation processes.

Basis for the development of the Kosovo Program for Gender Equality is the Law No. 05/L-020 on Gender Equality, which sets the obligation to annually review the program. The National Development Strategy 2016-2021 and the Government Program 2020-2023 also play a crucial role in advancing and strengthening women’s role and position in society, implementing gender equality policies, and adopting gender-responsive budgeting for inclusive and sustainable development.

5.2 Challenges for implementation

According to Gashi and Gashi Ahmeti (2019) the most pressing challenges for female entrepreneurship in Kosovo are discrimination, prejudice, and a lack of institutional support. Entrepreneurs, among them especially women, face hurdles such as tax rates, a small market, administrative burden, lack of time for specific vocational, managerial and technical training, and family obligations. Additionally, high credit interest rates pose a significant obstacle for women entrepreneurs, as Kosovo has the highest interest rates in the region.

5.3 Women in the Circular Economy sector

Globally, in the context of the CE, women play a crucial role, especially in waste management and sustainability initiatives. Women’s contributions to the informal sector deserve recognition, as they often play an integral role in recycling and upcycling activities. In many regions, women are actively involved in informal waste collection and recycling, playing a vital part in diverting waste from landfills and contributing to resource recovery. Their efforts not only mitigate environmental impacts but also create economic opportunities within their communities. Moreover, women-owned and led businesses are often at the forefront of promoting sustainable practices, circularity, and social benefits within the CE sector.

For instance, a study by Coghlan et al. (2022) which was carried out in Ontario, Canada, highlights the crucial role of women in the CE. Women-owned businesses in the agricultural sector drove engagement between SMEs and food security organizations, addressing food security concerns and promoting sustainable food production. The study identified SDGs 2, 12, and 5 as core components of this nexus, with women-led initiatives driving CE efforts and food waste reduction. Another example of incorporating women successfully into the CE is given by Lekshmi et al. (2020). Their study focuses on using constructed wetlands for wastewater treatment and reuse in rural areas of India. Operated by women entrepreneurs, the “CW4Reuse” technology successfully treats wastewater, empowering women and promoting circularity in water management. The model benefits society, the environment, and women’s empowerment in a sustainable manner.

Having a look into the already-existing opportunities for women in the CE and reuse sector in Kosovo, the following examples were found:

- The “SEREC” project in Kosovo, implemented by the organization “Let’s do it Peja” and supported by the EU Office in Kosovo, aims to promote CE practices and social entrepreneurship (Support4Partnership, n.d.). It addresses the mismanagement of waste and focuses on the principles of Reduce, Reuse, and Recycle. The project collects and reprocesses textile materials and apparel, which are sorted for reuse, redesign, or recycling. The initiative also includes the establishment of a social enterprise called “3R” shop, selling used clothes. The project provides training for students in clothes redesign and offers them opportunities for practice. The project strives to be self-sustaining by generating revenue through CE practices, ensuring financial stability even after its completion. It emphasizes women’s and youth’s empowerment, aiming to support marginalized groups in Peja.

- Financial support: According to the Roadmap for CE in Kosovo (Ministry of Environment, Spatial Planning and Infrastructure, 2020) there were three different funding mechanisms and instruments stated which directly aimed at supporting women entrepreneurs and businesses.
 - The European Bank for Reconstruction and Development (EBRD) is supporting women entrepreneurs and small businesses in Kosovo through its Women in Business program. They are providing a €2 million financing package to the Agency for Finance in Kosovo (AFK), with €2 million specifically designated for women-led businesses. This initiative aims to empower women entrepreneurs by granting them access to financial resources and expertise.
 - As part of the Women in Business program, €1 million has been allocated for loans to women-led businesses, with the goal of promoting women’s entrepreneurship and providing them with the means to invest in their businesses and enhance their skills.
 - Additionally, the EBRD is offering €3 million in funding to Kreditimi Rural i Kosoves (KRK), a microfinance institution in Kosovo, with support from Sweden. This funding includes a €1 million loan for businesses owned or run by women, aligning with the Women in Business program’s objectives. The remaining €2 million will support other small businesses, fostering entrepreneurship and competitiveness by enabling investments in areas like innovation and marketing.

Overall, this initiative seeks to empower women entrepreneurs in Kosovo, stimulate economic growth, and promote inclusive and sustainable development in the region.

- Botanic SHPC, a local certified organic company operating in the food and agriculture sector, serves as an exemplary case of combining women's empowerment with CE practices. The company is entirely women-owned, and its workforce consists entirely of women from rural areas. Botanic SHPC primarily focuses on providing certified organic food products while trying to embrace a circular approach to its operations. The company conducts training sessions in Zero Waste Practices, aligning with the TRUE Program (Total Resource Use and Efficiency), especially in terms of food, and adopting a CE approach in product design. They also have intentions to steer their business towards reuse practices and investigate the implementation of reuse systems for their packaging. To achieve this goal, they have outlined plans to partner with supermarkets that carry their products (organic mushrooms and teas) and introduce a "return from home" system for customers who make online purchases of their products.

Nevertheless, Botanic SHPC faces certain challenges, notably in acquiring the necessary tools and resources to implement various activities and design circular products. According to them, Kosovo lags behind in climate technology and green alternatives, making it difficult to source recycled materials at a low or reasonable cost. However, the country's vibrant service industry, typical of developing nations, facilitates the technical aspect of the circular operation, particularly in terms of reusing or refurbishing technical tools. This dynamic enables the functionalization of the circular business model despite material sourcing challenges.

5.4 Barriers for female economic participation (in reuse solutions)

While Kosovo has various strategies and laws addressing both gender equality/female entrepreneurship and waste management separately, there is a lack of an intertwining component between these two focus areas to effectively drive economic participation of women in the reuse solutions sector. The legislations, strategies, and national plans listed in Appendix 1 pertain to individual plans in Kosovo regarding waste management and gender equality but do not establish connections between them. In the “Relevance for the CE/gender equality” column of Appendix 1, it is theoretically explained how certain gender equality measures in the country could advance women’s participation in the CE context by promoting general entrepreneurship. However, these connections are not clearly emphasized in the original regulatory texts.

The challenge of policy independence and the absence of a logically coherent connection is nothing new and has been similarly observed in other countries and analyzed by Albaladejo et al. in 2022. The authors stress the importance of achieving a fair and inclusive transition toward circularity, highlighting the need for increased participation of women throughout the entire spectrum of the CE, extending beyond activities linked solely to the informal sector characterized by low productivity levels and limited technology use.

Their examination of the relationship between the CE and gender extends beyond traditional productive activities, including domestic and alternative economic contexts. To conduct this analysis, they scrutinized various policy documents, encompassing Chile’s Circular Chile by 2040 Roadmap, Colombia’s National Circular Economy Strategy, Ecuador’s Circular Economy White Paper, Mexico’s National Vision Towards Sustainable Management: Zero Waste, and Uruguay’s National Circular Economy Plan.

Their findings reveal a general disconnection between the productive sector and gender equality within policymaking. Among the documents analyzed, only three explicitly mention gender, and none refer to gender equality policies or strategies necessitating the incorporation of a gender perspective. In essence, documents alluding to the gender dimension appear to do so primarily at a rhetorical level, with no concrete strategies or action plans articulated to achieve greater gender equality and inclusivity.

In response, the authors advocate for gender-responsive policymaking within the CE sphere. This approach involves understanding gender roles, acknowledging the traditional and discriminatory gender division of labor, and recognizing the inequalities ingrained in our current system. The ultimate goal is to actively develop strategies, measures, and tools that can bridge gaps and overcome barriers, thereby ensuring a just transition to a CE that benefits all.

In their 2018 report, the Kosovo Women’s Network not only sheds light on the glaring lack of female participation in strategic development processes related to waste management – exemplified by the stark statistic that out of the 43 experts involved in shaping the Republic of Kosovo’s Waste Management Plan for 2013-2022, only eight were women – but also underscores the prevalent underrepresentation of women in hands-on roles within the waste management sector. They draw attention to the stark gender occupational segregation, where men predominantly occupy operational and technical positions while women are more frequently found in administrative roles.

At the grassroots level, municipalities are increasingly realizing the importance of supporting women in business, particularly in sectors like waste management, where their involvement has historically been limited. Achieving true gender equality requires a dual approach, addressing both strategic and practical aspects. For Kosovo to fully embrace a comprehensive perspective on gender equality, it must intertwine the realms of waste management and women’s entrepreneurship.

In Kosovo, the integration of women’s entrepreneurship and the circular economy presents both challenges and opportunities. Historically, women have had minimal presence or recognition in waste management and circular economy strategies, both in their development and in high-level, revenue-generating waste management roles. However, this situation can be seen as a chance to start anew by combining existing enabling factors and enhancing them to better integrate these two areas.

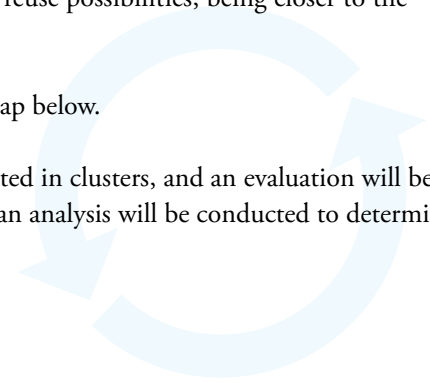
Since both waste management and gender equality must align with EU regulations, improvements are already necessary. This presents an opportunity to directly implement changes that promote hands-on representation in the reuse sector, fostering greater gender diversity and participation.

6. Potentials for reuse systems in Kosovo

The primary research consisted of stakeholder interviews in the three target cities previously identified. First, the three municipalities were interviewed to gain a general understanding of the situation. After that, the focus shifted to interviewing private sector, NGOs, and CSOs as they could provide more detailed insights into reuse possibilities, being closer to the business and implementation of reuse business models.

The main stakeholders were categorized for clarity and shown on the stakeholder map below.

In the following chapters, the individual findings from the interviews will be presented in clusters, and an evaluation will be made to identify the city with the highest potential for reuse options. Additionally, an analysis will be conducted to determine which economic sector is most adaptable for reuse possibilities.



6.1 Public stakeholders

The following sections summarize all interview findings which were revealed from interviews with the public stakeholders, including municipalities of the different target cities as well as governmental institutions. Their opinions and statements are categorized in four different categories which are listed below.

Public Sector Support to Reuse Options

In the quest for sustainable development and urban growth, the public sector stakeholders interviewed in Kosovo have shown varying degrees of openness to the concept of a CE. For example, the Ministry of Environment, Spatial Planning and Infrastructure has embarked on a roadmap, collaborating with international organizations like the UNDP, indicating a willingness to explore and implement circularity principles. Several municipalities, notably Prishtina, have demonstrated proactive steps in waste management and reduction. While a municipal composting center stands as a tangible project in Prishtina, challenges like limited authority and resources persist, hindering the creation of a comprehensive CE framework.

Private Sector Initiatives for Reuse

According to interviewees from the public the private sector's role in promoting reuse solutions in Kosovo remains in its nascent stages. Some sectors, particularly those involved in processing plastic products, exhibit potential for reuse initiatives. However, the lack of specific data and ongoing projects hampers a comprehensive assessment. Financial constraints emerge as a significant barrier for private sector involvement in reuse solutions, reflecting the need for financial support mechanisms. Despite these challenges, especially the Municipality of Prishtina appears to be open in subsidizing businesses that promote CE practices.

Awareness Assessment

Awareness of waste pollution, resource conservation, and CE concepts is a crucial component of Kosovo's journey towards sustainability. There is a consensus among the public stakeholders that enhancing public engagement, especially among older generations, is imperative. While some municipalities like Prishtina have introduced initiatives like "Green Clubs" in schools to foster environmental awareness, challenges in the local waste management system persist. Nevertheless, the necessity to reduce packaging waste and instill CE principles is acknowledged as a means to address these challenges.

Status of Gender Equality

Despite the absence of specific examples of women actively involved in reuse solutions, institutions have established dedicated frameworks for gender equality. The Municipality of Prishtina, for instance, actively supports women in businesses. Similarly, the Municipality of Prizren collaborates with women-led associations and NGOs to promote gender equality. While gender mainstreaming in CE practices is a work in progress and gender regulations still need to be stronger intertwined with national plans on CE, the existing initiatives underscore the commitment to fostering gender equality in Kosovo.

In summary, according to the public sector Kosovo's journey toward embracing CE and reuse initiatives presents a dynamic landscape. While public sector stakeholders exhibit varying levels of commitment and progress, the Municipality of Prishtina stands out as a leader in the adoption of the CE. The private sector is poised for growth in this arena, pending the alleviation of financial challenges. Enhancing awareness and gender equality in CE practices remains pivotal for a more sustainable and inclusive Kosovo.

6.2 Private stakeholders

The following sections summarize all interview findings which were revealed from interviews with the private stakeholders. Their opinions and statements are categorized in four different categories which are listed below.

Public Sector Support to Reuse Options

According to the private stakeholders interviewed the public sector in Kosovo faces challenges in fully embracing sustainable development and CE initiatives. While there is evidence of limited support for waste management through legislative frameworks, there is still significant work required to prioritize and integrate CE principles. They underline that the municipality's waste management system primarily relies on downstream-focused waste management methods, like traditional landfill, and that waste separation and citizen awareness are lacking behind for the specific topic of reuse.

Private Sector Initiatives for Reuse

Private sector initiatives in Kosovo are gradually gaining momentum, with sectors like HORECA presenting potential for reuse solutions. For example, Sirius, a prominent hospitality establishment in Prishtina already has established a return system for carbonated drink. Also, other cafés and restaurants expressed interest in implementing return systems for beverages. Notable among these initiatives are the return and reuse systems in place by Coca Cola HBC Kosovo, Birra Peja, and Miros Water. The first two collect crates and glass bottles for reuse, while Miros Water collect back their 10 liters plastic gallons for water. Other organization moving towards reuse system is BOTANIC SHPK, a women-owned organic company that exemplifies circular practices. They plan to introduce a refill program and Zero Waste Packaging, for organic products such as mushrooms and teas. Despite limited options for sustainable packaging, the private sector is slowly embracing circular principles.

Awareness Assessment

Kosovo grapples with a waste pollution problem linked to limited citizen awareness and the absence of waste separation systems. The scarcity of sustainable packaging alternatives further exacerbates the issue. However, the CE offers a promising solution by emphasizing material cycling, efficient waste management, and reuse systems. These concepts have the potential to benefit both the environment and the economy.

Status of Gender Equality

Kosovo demonstrates a commitment to gender equality, with organizations actively supporting and promoting female entrepreneurship. While specific local legislation or policies are not highlighted, businesses like BOTANIC SHPK serve as examples of women's involvement in the CE sector. Gender equality is seen as an essential aspect of Kosovo's journey towards sustainability.

In conclusion, according to the private sector interviewees Kosovo is in the early stages of embracing CE and reuse practices. Challenges in the public sector's openness to sustainable development and circular initiatives persist, but the presence of innovative private sector initiatives offers hope. The awareness assessment underscores the need for waste management improvements and sustainable packaging alternatives. Gender equality is recognized and supported, with organizations playing a crucial role in promoting female entrepreneurship. The recommendations provided by the interviewees, including prioritizing climate change policies, incentivizing waste separation, and supporting small business initiatives, can further enhance Kosovo's CE and waste management efforts. Prishtina stands out as a progressive city, serving as a potential model for other regions in Kosovo to follow in their pursuit of circularity and sustainability.

6.3 CSOs/NGOs

The following sections summarize all interview findings which were revealed from Interviews with CSOs and NGOs. Their opinions and statements are categorized in four different categories which are listed below.

Public Sector Support to Reuse Options

According to the CSOs and NGOs interviewed Kosovo's public sector exhibits openness to sustainable development, with a particular emphasis on urban development and the CE. Several stakeholders, including the Municipality of Prishtina, are taking steps in this direction, even though a comprehensive legislative framework is yet to be finalized. The introduction of reuse systems and logistics in public institutions is being contemplated, underscoring a commitment to waste management and CE principles.

Private Sector Initiatives for Reuse

While Kosovo's private sector is still in the early stages of adopting reuse solutions, promising opportunities exist in sectors such as Textile and Fashion, Plastic and Packaging, Glass, Food and Agriculture, Electronics, and Construction and Building Materials, as highlighted by interviewees. The private sector has undertaken noteworthy initiatives, including upcycling and innovative projects, contributing to CE practices. Particularly in Prishtina, the Innovation Centre Kosovo (ICK)-led "Circular Coalition," involving the business community, startups, NGOs, donors, experts, innovators, and public institutions, has established a platform to promote circular economy practices, sustainability, upcycling, recycling, and address future challenges through innovative ideas, fostering collaboration between the public and private sectors. Meanwhile, in Prizren, the private sector receives encouragement and support from the Innovation and Training Park (ITP), a prominent center dedicated to nurturing innovation and providing training opportunities in Kosovo's Prizren region. It serves as a hub for startups, entrepreneurs, and individuals looking to develop their skills and drive innovation.

Awareness Assessment

According to the CSOs and NGOs interviewed Kosovo acknowledges waste pollution as a critical issue affecting the environment, public health, and the economy. Initiatives are underway to raise awareness, with stakeholders emphasizing the importance of educating citizens, particularly the youth, on CE concepts and waste management. Challenges in the local waste management system are recognized, highlighting the need for better infrastructure and waste reduction strategies. The reduction of packaging waste is a focal point, with CE principles considered essential in addressing these challenges.

Status of Gender Equality

Kosovo demonstrates its commitment to gender equality through legislative frameworks, including the Law on Gender Equality and representation quotas in politics. Women are actively engaged in the CE sector and reuse solutions, with businesses and institutions like Eco Solution Research, 99 Lule, and Botanic showcasing female entrepreneurship. Although these examples predominantly involve recycling and textiles, there is untapped potential for female-led initiatives in the packaging sector.

In conclusion, according to CSOs and NGOs Kosovo is making strides towards embracing CE and reuse practices. The city of Prishtina stands out as a progressive force, with active initiatives and an open approach to sustainability. While challenges persist, such as the need for comprehensive legal frameworks and improved waste management infrastructure, Kosovo's commitment to raising awareness and promoting gender equality provides a strong foundation for advancing CE principles and reducing waste pollution. The presence of diverse private sector initiatives signals a promising future for circularity and sustainability in the region.

7. Conclusion

7.1 Comparison of the results and city prioritization

The comparative analysis conducted in this study assessed the readiness of three cities in Kosovo – Prishtina, Prizren, and Vushtrri – to implement reuse solutions within the packaging sector, with a focus on their adaptability and potential. Each city exhibits unique characteristics and initiatives that contribute to its suitability for promoting circular practices.

In terms of public sector support, Prishtina stands out for its openness to sustainable development activities, actively engaging in waste management and urban planning with sustainability as a priority. Although in the waste management plan, they specifically mention promotion of 3Rs and CE as a responsibility of the municipality the focus on upstream measures regarding waste management still has to be enforced. Prizren, on the other hand, has established itself as an early adopter of waste management regulations, operating an efficient waste fee collection system. Vushtrri's Municipality showcases a strong commitment to proactive waste management, achieving comprehensive waste collection coverage and adopting a formal waste management plan.

In the private sector, Prishtina's diverse industries, including the HORECA sector, plastics, textiles, and technology, offer substantial potential for implementing reuse solutions. Several local HORECA businesses have already embraced circular practices, contributing to the city's CE ecosystem. Also, Prishtina hosts a wide range of donor organizations and local NGOs conducting studies and activities to support CE. The municipality also features dedicated innovation hubs such as the Innovation Centre Kosovo (ICK), which, along with its self-organized "Circular Coalition," comprising the business community, startups, NGOs, donors, experts, innovators, and public institutions,




establishes a platform to enhance circular economy practices, sustainability, upcycling, recycling, and tackle future challenges through innovative ideas. Prizren has a significant potential to embrace and leverage CE measures and innovations, primarily due to the existence of the Innovation and Training Park (ITP) and its collaborations with UNDP Kosovo, which further strengthen its commitment to promoting CE practices. Vushtrri, while emphasizing private sector engagement less prominently, displays an interest in waste minimization and reuse, although not yet showing significant examples of private sector reuse initiatives.

All three cities actively address environmental concerns and waste pollution. Prishtina conducts awareness campaigns and recognizes the significance of waste pollution issues. Similarly, Prizren acknowledges waste pollution as a pressing problem and conducts awareness activities with various stakeholders. Vushtrri makes notable efforts to combat waste pollution and raise environmental awareness among its residents.

Regarding gender equality, Prishtina's Municipality actively supports gender equality, with women actively participating in CE businesses. Prizren promotes women-led businesses, fostering gender inclusivity in various economic sectors. Vushtrri has dedicated frameworks for gender equality and actively empowers female entrepreneurship through the Forum for Women.

Innovation centers and collaborative initiatives play a pivotal role in one of the cities' CE promotion. Prizren benefits from the presence of the ITP, which collaborates with various stakeholders in order to foster innovations regarding Circular Economy.

Table 3. Comparison of target cities according to different selection criteria.

Criteria	 Prishtina	 Prizren	 Vushtrri
Public Sector Support	Open to sustainable development activities, active in waste management. Also has concrete plans to invest in a reuse center for bulky waste and a center for construction and demolition waste.	Early implementation of waste management regulations, efficient waste fee collection system.	Strong commitment to proactive waste management, formal waste management plan, comprehensive waste collection.
Private Sector Engagement	Various sectors with potential for reuse solutions, existing circular practices.	Several private sector initiatives contributing to CE.	Potential in sectors like plastics, interest in waste minimization and recycling.
Awareness and Environmental Concerns	Active awareness efforts, recognition of waste pollution issues. The active role of donors is a distinguishing argument for Prishtina.	Acknowledges waste pollution and actively conducts awareness activities.	Strong efforts to address waste pollution, awareness initiatives.
Gender Equality	Municipality supports gender equality, involvement of women in businesses. The Network of Women Associations in the city is very high.	Active support for women-led businesses, incorporation of women in reuse sector.	Dedicated framework for gender equality, Forum for Women empowering female entrepreneurship.

Source: Own presentation.

All three cities exhibit potential for implementing reuse solutions within the packaging sector, but Prishtina emerges as the most promising option for further exploration. This preference is attributed to Prishtina's substantial support from the public sector, active engagement of the private sector, effective awareness campaigns, and a growing emphasis on gender equality. Moreover, Prishtina's status as both the capital and the largest city in Kosovo enhances its appeal. It functions as a pivotal center for the country, encompassing economic, financial, political, and commercial activities, thanks to its central location and the concentration of a majority of businesses within its boundaries.

It's worth noting that throughout the study, also initiatives for reuse solutions were evaluated on a national scale. However, it's important to acknowledge that these efforts primarily revolve around the city of Prishtina, where these companies predominantly hold the market share.

7.2 Country-wide potentials for reuse

In addition to exploring the potential for reuse options in the selected cities for the study, the project team also assessed nation-wide entry points, intriguing sectors, and pre-existing projects and businesses related to reuse systems.

The Ministry of Environment, Spatial Planning and Infrastructure demonstrates a growing openness to the concept of the CE, underscored by collaborative efforts with UNDP and a recently developed roadmap. Their approach involves drafting policies in partnership with international organizations like GIZ, with a focus on incentivizing municipalities through performance metrics and funding. Future initiatives aim to reduce landfill reliance, invest in infrastructure, and enhance waste sorting. Nevertheless, limited budgets and staffing pose challenges, affecting cooperation with the central government and the establishment of a CE framework. Legislative steps for the CE are in progress, although private sector involvement faces obstacles related to inadequate support and foreign donations.

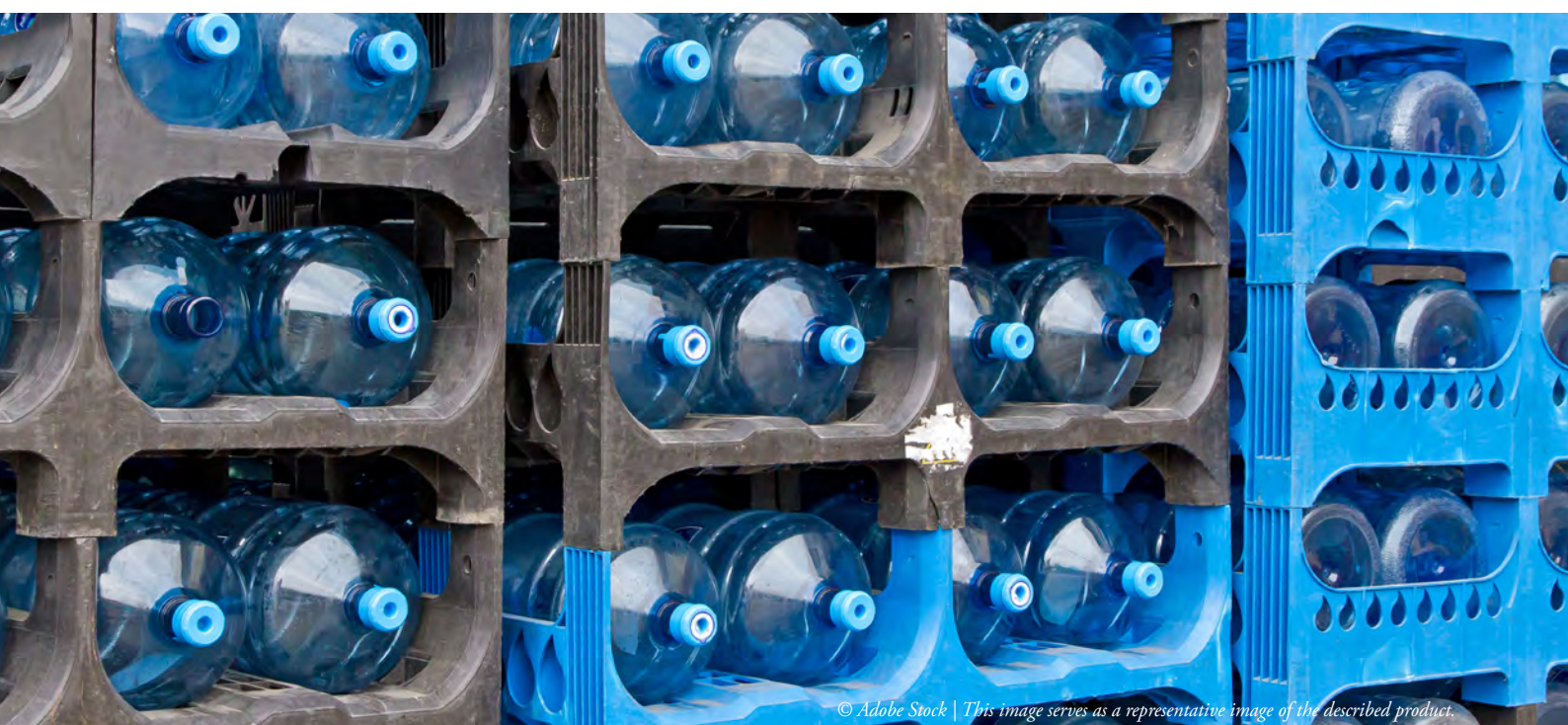
Additionally, the Agency of Waste Management of Kosovo highlights the municipality's waste management and prevention efforts, revealing issues stemming from insufficient coverage, infrastructure constraints, and budget limitations. A notable example of circularity is the “Let’s Do it Peja” NGO, which operates in Prishtina and Peja. Challenges related to municipal capacity, resources, staffing, and budget allocation are acknowledged, emphasizing the need for heightened awareness of waste pollution, the potential of the local waste management system, and CE principles among the general population and the private sector. Gender equality initiatives are mentioned, with a female manager at the “Let’s Do it Peja” NGO serving as an example.

Furthermore business-specific interviews, for example with “Coca Cola”, “Miros”, “Botanica”, “Birra Peja” and “Let’s Do it Peja” showcase the potential within Kosovo’s public and private sectors. In Peja, sustainable development activities, including CE concepts, are gradually being embraced by the city administration. Research into supportive legislative frameworks is ongoing, and the municipality’s waste management strategy emphasizes the local economy. Challenges include insufficient awareness and communication gaps between government entities, waste collection providers, and businesses. In the private sector, industries such as the HORECA sector, packaging, textiles, wood, steel, and paper/cardboard exhibit high potential for reuse solutions according to the interviewees. Projects, such as SEREC, funded by the EU, demonstrate progress in circular textile economies and material repurposing.

“Birra Peja” emphasizes its efforts in promoting a CE, engaging in practical training with universities and collaborating with a recycling company. They reuse crates and bottles but are still facing challenges in glass collection.

In addition to these stakeholders, the project team has initiated discussions with Coca-Cola regarding their plastic bottle reuse program. Furthermore, restaurants and cafés in Prishtina have expressed interest in implementing return systems for carbonated beverages. Additionally, the Water DEA’s reusable 19.5-liter water gallon system has been highlighted as a noteworthy example. Similarly, the success story of Kosovo Glass Recycling serves as another compelling initiative, demonstrating the effective application of a CE business model through the recycling and use of waste glass to create new products like sand, tiles, tables, and various construction materials.

In a general nationwide assessment, Kosovo’s potential for nationwide reuse initiatives is a blend of progress and challenges. Initiatives like “Let’s Do it Peja” demonstrate the gradual adoption of sustainable practices in cities, while various sectors, especially the HORECA and plastic packaging sector, but also textiles, wood, steel, and paper/cardboard, hold promise for reuse solutions. Nonetheless, concerns related to waste pollution, limited infrastructure, and insufficient awareness persist. Gender equality is gaining ground in the business sector, although specific CE examples are scarce.



© Adobe Stock | This image serves as a representative image of the described product.

References

- ATRC. (2020).** *Circular Economy Country Specific Report: Written Contribution for the 2020 Annual Report - Republic of Kosovo.* http://env-net.org/wp-content/uploads/2021/03/Circular-Economy-Status-Report_ATRC_Kosovo.pdf
- Balkan Green Foundation, & Institute for Development Policy. (n.d.).** *Sustainable Development in Kosovo: Baseline Assessment Report.* https://www.balkangreenfoundation.org/uploads/files/2020/December/02/Final_Evidence_Based_Report_EEBO_eng1606913648.pdf
- Berisha, A., & Osmanaj, L. (2021).** *Kosovo Scenario for Mitigation of Greenhouse Gas Emissions from Municipal Waste Management.* *2189-0420*, 8(3), 509–516. https://catalog.lib.kyushu-u.ac.jp/opac_detail_md/?lang=0&amode=MD100000&bibid=4491636
- Coelho, P. M., Corona, B., Klooster, R. ten, & Worrell, E. (2020).** *Sustainability of reusable packaging – Current situation and trends.* *Resources, Conservation & Recycling: X*, 6, 100037. <https://doi.org/10.1016/j.rcrx.2020.100037>
- Coghlan, C., Proulx, P., & Salazar, K. (2022).** *A Food-Circular Economy-Women Nexus: Lessons from Guelph-Wellington.* *Sustainability*, 14(1), 192. <https://doi.org/10.3390/su14010192>
- Delanoeije, J., & Bachus, K. (2020).** *Reuse. The understudied circular economy strategy.*
- Ellen MacArthur Foundation. (2019).** *Reuse - rethinking packaging.* https://emf.thirdlight.com/file/24/_A-BkCs_aXeX02_Am1z_J7vzLt/Reuse%20%E2%80%93%20rethinking%20packaging.pdf
- European Commission. (2022).** *Regulation of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC.* https://eur-lex.europa.eu/resource.html?uri=cellar:de4f236d-7164-11ed-9887-01aa75ed71a1.0001.02/DOC_1&format=PDF
- European Environment Agency. (2021).** *Country Fact Sheet Kosovo 2021 - Municipal waste management.*
- European Environment Agency. (2022).** *Circular Economy Country Profile: Kosovo.* https://www.eionet.europa.eu/etcs/etc-ce/products/etc-ce-products/etc-ce-report-5-2022-country-profiles-on-circular-economy/kosovo-ce-country-profile-2022_for-publication.pdf
- Gashi, A., Rizvanolli, A., & Adnett, N. (2019).** *Bucking the Trend: Female Labor Market Participation in Kosovo.* *Croatian Economic Survey*, 21(2), 85–116. <https://doi.org/10.15179/ces.21.2.3>
- Gashi, R., & Gashi, H. A. (2019).** *Challenges of Female Entrepreneurs in Transition Countries: Case Study of Kosovo.* *Prizren Social Science Journal*, 3(1), 67–77. <https://doi.org/10.32936/pssj.v3i1.87>

- Hapciu, A. (2019).** *Circular Economy in Kosovo*. Unpublished.
https://www.researchgate.net/publication/342814571_Circular_Economy_in_Kosovo
<https://doi.org/10.13140/RG.2.2.12530.12480>
- Jusaj, Y., & Abazi-Alili, H. (2022).** **Women Entrepreneurship Development in Kosovo: Challenges and Opportunities.** *2706-4735*, 8(1), 212–224.
<https://doi.org/10.54820/entrenova-2022-0020>
- Kosovo Agency of Statistics. (2022a).** *Anketa e Mbeturinave Industriale 2021*.
<https://askapi.rks-gov.net/Custom/5fe5faf0-07b2-457b-b68d-c04a2a0b58e1.pdf>
- Kosovo Agency of Statistics. (2022b).** *Anketa e Mbeturinave Komunale 2021*.
<https://askapi.rks-gov.net/Custom/e9a45470-75a6-4031-b667-42f3a67b6cd6.pdf>
- Kosovo Agency of Statistics. (2022c).** *Anketa e Mbeturinave të Trajtuara 2021*.
<https://askapi.rks-gov.net/Custom/10003102-a2f6-4ab5-8d68-49d0e85557b8.pdf>
- Kosovo Environmental Protection Agency. (2021).** *Questionnaire to Western Balkan countries for providing information regarding municipal waste management and waste prevention & follow-up interview Kosovo*.
- Kosovo Women's Network. (2017).** *Kosovo's Progress in Aligning its Laws with the European Union Gender Equality Acquis*.
<https://womensnetwork.org/wp-content/uploads/2018/10/20171108105226438.pdf>
- Kosovo Women's Network. (2018).** *Kosovo Gender Analysis*.
<https://womensnetwork.org/wp-content/uploads/2018/10/womens-network.pdf>
- Kosovo Women's Network. (2021).** *Kosovo Brief Gender Profile: An updated Summary to inform the EU in Kosovo's Country Level Implementation Plan*.
https://womensnetwork.org/wp-content/uploads/2021/10/Brief-Gender-Profile_20.10.2021.pdf
- Krasniqi, B. (2022).** *Analysis of the recycling value chain in Kosovo*.
https://www.researchgate.net/publication/363829980_Analysis_of_the_recycling_value_chain_in_Kosovo
- Lekshmi, B., Sharma, S., Sutar, R. S., Parikh, Y. J., Ranade, D. R., & Asolekar, S. R. (2020).** **Circular Economy Approach to Women Empowerment Through Reusing Treated Rural Wastewater Using Constructed Wetlands.** In *Waste Management as Economic Industry Towards Circular Economy* (pp. 1–10). **Springer, Singapore**.
https://doi.org/10.1007/978-981-15-1620-7_1
- Madhi, G., & Trupia, F. (2023, July 14).** *Kosovo's waste (mis)management: From failures to alternatives*.
<https://rs.boell.org/en/2022/08/03/kosovos-waste-mismanagement-failures-alternatives>
- Maleš, I. (2020).** *Guidelines on Circular Economy for the Countries of the Western Balkans and Turkey*.
https://eeb.org/wp-content/uploads/2021/01/guideline-WBT_INCIEN_final.pdf
- Milenkovic, M., Jakovljevic, J., Curkovic, V., & Mijacic, D. (2016).** *Communal waste management in Kosovo: An opportunity or a threat for economic development?*
http://www.lokalnirazvoj.org/upload/Plan/Documents/2017_06/Communal_waste_management_in_Kosovo.pdf
- Ministry of Environment, Spatial Planning and Infrastructure. (2020).** *Circular Economy Roadmap of Kosovo*.
<https://circulareconomy.europa.eu/platform/sites/default/files/2023-05/Circular%20Economy%20Roadmap%20of%20Kosovo.pdf>

Musliu, M., Bilalli, A., Ibrahim, H., Berisha, N., Grapci-Kotori, L., & Geci, D. (2023). *Analysis of the Quantity and Composition of Waste in the Peja District, Kosovo.* *Journal of Ecological Engineering*, 24(8), 228–235.
<https://doi.org/10.12911/22998993/166391>

OECD. (2021). *Kosovo profile.* In *Competitiveness in South East Europe 2021: A Policy Outlook*, OECD Publishing. Paris.
<https://doi.org/10.1787/573f3543-en>.

Pew Charitable Trusts. (2020). *Breaking the plastic wave: A comprehensive assessment of pathways towards stopping ocean plastic pollution.*
https://www.systemiq.earth/wp-content/uploads/2020/07/BreakingThePlasticWave_SummaryReport.pdf

Republic of Kosovo. (2020). *Kosovo Program for Gender Equality 2020-2024.*
<https://abgi.rks-gov.net/assets/cms/uploads/files/AGE%20Kosovo%20Program%20for%20Gender%20Equality%2020-2024.pdf>

Republic of Kosovo (2023). *Rregullore per menaxhimin e mbeturinave - komuna e prishtines.*
https://www.prishtinaonline.com/uploads/rregullore_per_menaxhimin_e_mbeturinave_-_komuna_e_prishtines.pdf

Rethink Plastic. (2021). *Realising-Reuse: The potential for scaling up reusable packaging and policy recommendations.*
<https://rethinkplasticalliance.eu/wp-content/uploads/2021/07/Realising-Reuse-Final-report-July-2021.pdf>

Shkodra, J., Ymeri, P., & Ibishi, L. (2021). *Role of microfinance institutions for developing women entrepreneurship – the case study of Kosovo.* *Economics & Sociology*, 14(1), 120–129.
<https://doi.org/10.14254/2071-789X.2021/14-1/8>

United Nations Environment Programme. (2023). *Topic Sheet: Reuse Schemes.*
<https://wedocs.unep.org/handle/20.500.11822/42237>

United Nations Environment Programme. (2023). *Turning off the Tap: How the world can end plastic pollution and create a circular economy.* Nairobi.
https://wedocs.unep.org/bitstream/handle/20.500.11822/42277/Plastic_pollution.pdf?sequence=4

United Nations Kosovo. (2021). *One of the World's Hotspots: How a Young Climate Ambassador Fights Climate Change in the Western Balkans.*
<https://kosovoteam.un.org/en/149874-one-world%E2%80%99s-hotspots-how-young-climate-ambassador-fights-climate-change-western-balkans>

WWF. (2020). *WWF Position: The Role of Reuse in a Circular Economy for Plastics.*
https://files.worldwildlife.org/wwfmsprod/files/Publication/file/5ngflz6cpe_WWF_Position_The_Role_of_Reuse_in_a_Circular_Economy_for_Plastics_2022_.pdf?_ga=2.205626011.941243782.1689335836-485013593.1689335836

Appendix

Enabling factors regarding CE/Gender Equality

Table 4. Enabling factors regarding CE/Gender Equality in Kosovo.

Name	Relevance for the CE/gender equality	Details
Waste Management		
Law on Waste (No. 2012/04-L-060)	Aligns with the principles of the CE by regulating waste collection, treatment, processing, and disposal. By emphasizing waste reduction and encouraging the reuse of components, the law contributes to the efficient use of resources and helps move towards a more CE.	Regulates waste management, environmental planning, rights and obligations of licensed waste management entities, waste collection, transport, treatment, processing, storage, and disposal, as well as waste import, export, and transit. It focuses on reducing waste generation, reusing components, and promoting sustainable development by protecting human resources and preventing negative environmental and health impacts.
Integrated Waste Management Strategy (IWMS) 2013 – 2022	Contributes to the CE by setting strategic objectives and targets for waste management, including recycling. By aiming to reduce landfilling and increase waste separation for recycling, the IWMS promotes the principles of the CE, such as minimizing waste and promoting the reuse of materials.	Establishes strategic objectives, specific targets, and indicators, including recycling goals. The previous IWMS covered 2013-2022 with specific targets, such as reducing landfilling from 90% to 60% and increasing recycling from 0% to 50%.
Integrated Waste Management Strategy (IWMS) 2021 – 2030	Continues the strategic framework for waste management and waste reduction by setting clear targets aligned to the CE principles.	Quantified targets for municipal waste management in the IWMS 2021-2030 include increasing the percentage of waste managed in controlled facilities from 40% (2018) to 100% by 2028, increasing MSW collection coverage from 74% (2018) to 100% by 2028, and implementing EPR mechanisms for four product categories/waste streams by 2022.
Plan of Republic of Kosovo for Waste Management (PRKWM 2014-2017).	Aims to strengthen waste management practices, including waste reduction, recycling, and re-use. By focusing on investments and raising awareness, the plan encourages a more sustainable approach to waste management, aligning with the principles of the CE, such as minimizing waste, promoting resource efficiency, and creating re-use and recycle systems.	Focuses on strengthening waste management, making investments, and raising awareness. The plan serves as an operational program for implementing the waste management strategy (2013-2022).
Kosovo's National Development Strategy (NDS) 2016–2021	Does not mention the CE term in specific, but indirectly refers to principles of the CE by including a chapter on sustainable waste management.	Focuses on investing in waste management infrastructure, raising public awareness, and encouraging recycling and wastewater treatment.
New National Development Strategy (NDS) 2021-2031	Refers to CE within its first pillar and foresees concrete measures related to the transition to a CE.	Still being developed, but focus should lie on sustainable economic growth, social cohesion and inclusion, a low-carbon economy and protection of the environment.
Law No. 03/L-040 on Local Self-Government	Relevance for CE lies in its empowerment of local authorities to promote sustainable waste management practices, establish recycling initiatives, and enforce regulations, fostering a transition towards a CE model through decentralized and tailored waste management solutions.	Incentivizes the municipalities to issue sub-legal acts which regulate the functioning of the municipal competent authority and standards for waste management services and empowers local authorities to take responsibility for waste management within their territories.

Name	Relevance for the CE/gender equality	Details
Waste Management		
Law No. 03/L-087 on Publicly Owned Enterprises	By efficiently managing waste as valuable resources, these enterprises contribute to the CE's goals of minimizing waste generation, optimizing resource use, and promoting sustainable economic development.	Provides a legal framework for the establishment and operation of publicly owned enterprises responsible for waste management.
Law No. 02/L-123 on Business Organizations	Provides a regulatory framework that can encourage businesses to adopt circular business models and sustainable practices.	Provides a legal framework for the establishment and operation of businesses in Kosovo, including those involved in waste management and ensures that businesses are accountable for their waste management practices. By enforcing waste-related regulations, the law promotes responsible waste disposal and recycling, discouraging illegal dumping and other harmful waste practices.
Law No.04/L-045 on Public-Private Partnership	Facilitates circular initiatives, leverages private sector innovation, scales up circular solutions, mobilizes investment, strengthens policy implementation, and builds lasting partnerships.	Encourages private investment in waste management infrastructure and services and allows to distribute risks and costs between the public and private sectors, making it feasible to invest in larger-scale and long-term projects.
Law No.03/L-025 on Environmental Protection	Can facilitate the integration of CE principles into waste management practices. It supports resource efficiency, waste reduction, and recycling, encouraging the use of waste as a valuable resource in the production process.	Establishes a comprehensive legal framework for environmental regulations, including waste management. It sets standards and guidelines for waste collection, treatment, recycling, and disposal, ensuring that waste management practices align with environmental protection goals.
Law No. 04/L-174 on Spatial Planning	By allocating suitable zones for waste treatment, recycling centers, and landfill sites, it promotes organized and environmentally sound waste disposal practices, supporting the CE's goals.	Designates areas for various land uses, including waste management facilities.
Gender Equality		
Law No. 05/L-020 on Gender Equality	Gender equality can lead to increased economic opportunities for women in waste management and entrepreneurship. Providing women with equal access to resources, funding, and markets can enhance their economic independence and financial stability and foster the CE.	Provides a legal framework to address gender-based discrimination and promote equal opportunities and rights for women and men in all aspects of life.
Law No. 03/L-182 on Protection from Domestic Violence	Can create a safer and more conducive environment for women to start and grow businesses, including those related to waste management, recycling, and CE practices.	Aims to protect women from domestic violence, fostering an environment where women feel safer and more empowered to participate in various fields, including entrepreneurship.
Law No. 05/L-021 on Protection from Discrimination	Protection from discrimination can result in improved access to resources, funding, and support for women entering the waste management sector or starting entrepreneurial ventures.	Challenges gender biases that may hinder women's participation in waste management activities and entrepreneurship. It fosters an environment where women can contribute fully and equally in these fields.
Law No. 03/L-212 on Labour	Ensures equal employment opportunities, addresses workplace discrimination, and encourages women's participation in waste management and entrepreneurship, contributing to a more inclusive CE.	Provides a legal framework to address workplace discrimination, promote equal treatment, and improve working conditions, fostering a conducive environment for women's participation in all areas of work.
Kosovo Program for Gender Equality 2020-2024	Aims to create equal opportunities for women to contribute to and benefit from economic development. When women have equal access to the labor market, it can lead to increased participation in CE initiatives.	Organized into three strategic pillars, the program focuses on economic empowerment and social welfare, human development and gender relations, and women's rights, access to justice, and security. It aims to place gender equality at the forefront of transformation processes in all structures and institutions in Kosovo.

Source: Own presentation

Imprint

As a federally owned enterprise, GIZ supports the German Government in achieving its objectives in the field of international cooperation for sustainable development.

Published by:
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

Address
Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 6196 79-0
F +49 6196 79-11 15

E info@giz.de
I <https://www.giz.de/en/worldwide/127407.html>

Programme/project description:
Circular City Labs – Testing Reusable Packaging Systems in Cities

Authors:
Burcu Tuncer, Paolo Facco, Evita Hegmann (adelphi consult GmbH),
Prof. Besnik Krasniqi

Responsible:
Elena Rabbow
E elena.rabbow@giz.de

Editors:
Paula Hackeborn, Angelina Schreiner, Elena Rabbow (GIZ)

Layout:
Umbruch Werbeagentur GmbH, Darmstadt

On behalf of
German Federal Ministry for Economic Cooperation and Development (BMZ)

Digital publication only
Eschborn 2023

On behalf of



Federal Ministry
for Economic Cooperation
and Development



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 - 5
65760 Eschborn, Germany
T +49 61 96 79-0
F +49 61 96 79-11 15

E info@giz.de
I www.giz.de