EU4GREEN

GUIDELINE ON CIRCULAR BUSINESS MODELS IN KOSOVO

EU 4 Green Recovery:
Support the implementation of the Green Agenda for the Western Balkans

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CONTENT

ABBREVIATIONS

CBM(s)..... Circular Business Model(s)

CE..... Circular Economy

EIPWB..... Economic and Investment Plan for the Western Balkans

EPR..... Extended Producer Responsibility

GAWB..... Green Agenda for the Western Balkans

GROW..... Green Recovery Window of Opportunity

GPP..... Green Public Procurement

SEA..... Strategic Environmental Assessment

SME(s)..... Small and medium sized enterprise(s)

SPP..... Sustainable Public Procurement

WB4Green..... Western Balkan 4 Green project

WEEE..... Waste Electrical and Electronic Equipment

Country Specific Abbreviations Kosovo

XK..... Kosovo

OBJECTIVES AND SCOPE

This document aims to be a guideline providing general guidance towards the development and adoption of circular business models (CBMs) in Kosovo. It was established with support of the Western Balkan 4 Green project.

The document gives an overview on the following topics:

1 – Introduction to circular business models and principles.
Description on generic principles on CBMs, their characteristics and basic functioning. Introduction to alternative business models, including industrial symbiosis and industrial ecology.

2 – Policy framework and priority sectors for Kosovo.
Description of the policy framework in Kosovo and preliminary identification of sectors which can benefit from the application of CBMs in Kosovo, based on the information identified in the EU4Green inception report and the national waste management strategy. The scoping on sectors is aligned to the national waste management strategy with focus on reuse and recycling.

3 – Relevant stakeholders and the need for cooperation with and among stakeholders.
Identification of the needs for cooperation between the government and the private sector to promote CBMs. This shall foster the improvement of the

- understanding and awareness on CBMs among the consumers and their willingness to shift from product ownership to product as service;
- know-how exchange between companies to advance innovation and uptake of CBMs;
- the legislative and regulatory framework.

4 – Financing and innovation to promote circular business models.
Identification of the needs and opportunities for financing and innovation to promote CBMs, mitigate investment risks with focus on the private sector. Formulation of recommendations to consider a risk and contingency plan for the preparation of an Action Plan.

5 – Identification of key policy measures to promote circular business models in Kosovo.
Discussion on possible policy interventions which are required to create the conditions for the wider adoption of CBMs in Kosovo. Highlighting the important role of implementing policy measures to address the market failures, policy misalignments, and status quo biases that currently hinder the competitiveness of CBMs.

This guideline is addressed to stakeholders in Kosovo, in order to be provided with information on the listed topics on Circular Business Models (CBMs). The guideline is proposed to be continuously updated with more recent information.

1. INTRODUCTION TO CIRCULAR BUSINESS MODELS AND PRINCIPLES

In recent years, the concept of circular economy has gained considerable attention as an alternative to the linear "take-make-dispose" model of industrial production and consumption. The circular economy is based on the principles of reducing waste, reusing materials, and recycling secondary raw materials, with the ultimate goal of creating a closed-loop system where waste is minimized and the value of materials and resources is retained in the economy for as long as possible. Circular business models (CBMs) are based on a set of principles that prioritize sustainability and resource efficiency. These principles can be summarized as follows:

- **Design for circularity**: One key principle of CBMs is to design products, processes, and systems for circularity from the outset. This involves considering the entire lifecycle of a product or process, from raw materials extraction to end-of-life disposal, and optimizing it for resource efficiency and waste reduction.
- **Resource efficiency:** CBMs prioritize resource efficiency by designing products and processes that use fewer resources and generate less waste. This can result in significant cost savings and environmental benefits.
- **Closed-loop systems:** CBMs aim to create closed-loop systems where waste is minimized and resources are conserved. This involves designing processes that materials and by-products can be predominantly reused, repaired, and recycled within the processes.
- **Value preservation**: CBMs prioritize the preservation of the value of materials and products over time. This involves designing products and processes that retain their value through multiple cycles of use and recovery, and creating systems that enable the recovery and reuse of materials and energy.
- **Collaboration**: CBMs require collaboration between different actors in the value chain, including suppliers, manufacturers, distributors, and consumers. This involves creating partnerships and networks that enable the sharing of resources, knowledge, and expertise, and the co-creation of value.
- **Shift from product ownership to product as a value**: Product ownership is a key aspect of CBMs, as it determines how products are used, reused, and ultimately disposed of. With CBMs, the concept of ownership is shifting from a traditional model of ownership to one of stewardship, where products are seen as assets that are used and maintained over time, rather than disposable items that are used once and discarded. CBMs prioritize customer value by designing products and services that meet customer needs and preferences while also minimizing environmental impact. This can result in increased customer loyalty and brand value.

1.1. Typologies of circular business models

Different circular business model (CBM) approaches can be identified. They can be classified according to the typology of relation between business and consumers, including B2B (Business to Business), B2C (Business to Consumer), C2B (Consumer to Business) and C2C (Consumer to Consumer).

In the **product-as-a-service (PAS) model** customers do not own the product, but rather pay for access to its functions or services (Riina et al. 2021). For example, a company may lease out washing machines or lighting systems to customers, and charge a fee based on usage. At the end of the lease period, the company takes back the product and either refurbishes it for reuse or recycles its components. Examples of PAS models include products as chemicals (e.g. chemical leasing), furniture, garden machines, clothing, electric tools, carpets tiles, etc. This approach is a classic B2C approach.

Box 1: Example of PAS model: chemical leasing

Chemical Leasing is an innovative business model that aims to promote the more efficient and sustainable use of chemicals. The model emphasizes the performance of the chemical product, rather than the volume sold, and it is based on a long-term partnership between the chemical supplier and the customer. In a chemical leasing arrangement, the chemical supplier provides the customer with a chemical product, along with the necessary equipment and technical expertise to use the product effectively. The customer pays for the service provided by the chemical product, rather than the product itself[1]. The supplier and the customer agree on a set of performance targets, such as reducing the amount of chemical used, improving product quality, or minimizing waste generation. The supplier is then responsible for achieving these targets, and is incentivized to do so through a profit-sharing arrangement.

Chemical leasing has been adopted by a growing number of companies and organizations around the world, including multinational corporations, small and medium-sized enterprises, and government agencies. It has been used in a variety of industries, such as textiles, pharmaceuticals, and automotive manufacturing. There are several benefits to adopting a chemical leasing model (Krajnc, D., & Hrovatin, N., 2013). For customers, it can lead to reduced costs, improved product quality, and a more sustainable business model. For suppliers, it can lead to increased customer loyalty, improved reputation, and new revenue streams. In addition, there are numerous environmental benefits to chemical leasing, first and foremost that the amount of used chemical is reduced through optimized utilization, and by the fact that the profit of the chemical company is not based on the quantities sold (the more is sold, the highest the profit), but rather on the full service delivered with the chemicals, including its management, equipment, technical expertise, etc.

[1] https://chemicalleasing.com/

Box 2: Example of PAS service: clothing for kids

The textile industry is responsible for huge environmental impacts due to cheap quality, affordability, fast-fashion trend and energy, resources and water demand for their production. Textile waste is also an increasing problem causing enormous environmental impacts worldwide (Yoon, H., & Lee, J., 2020; Saleem et. al, 2019).

PAS models for clothing can help mitigate these effects by renting the clothes, rather than selling them. Clothing rental service designed specifically for kids are becoming increasingly popular. Customers can choose from a variety of clothing items for their children, ranging from everyday wear to special occasion outfits. The services usually operate on subscription models, where customers pay a monthly fee in exchange for access to the clothing collection. Once the items are returned, the renting company takes care of the cleaning and maintenance, ensuring that each garment is ready to be rented out again. This approach promotes sustainability and reduces the amount of clothing waste generated by children's rapidly changing sizes and preferences. This way also provides a convenient and affordable way for parents to keep their children's wardrobes up-to-date without the need for constant purchasing and disposal of clothes (Park, S., & Kim, S., 2020; Hou et. al, 2019)

In **sharing-economy models**, multiple users share the access to a certain product or asset just for a limited amount of time, usually limited to the time the product or asset is needed, such as a car, a tool, or a space. This can reduce the need for individual ownership, increase the utilization of the product, and decrease the total number of products or assets that need to be produced. These models have gained popularity in recent years, particularly with the rise of digital platforms and the increased availability of peer-to-peer services (Sundararajan 2016). There are several types of sharing economy models, each with their own unique characteristics and benefits.

- Peer-to-peer sharing: Peer-to-peer sharing is perhaps the most well-known type of sharing economy model. This model involves individuals sharing or renting their personal assets, such as their homes, cars, or tools, to others in exchange for a fee. Examples of peer-to-peer sharing platforms include Airbnb (accommodations) and Uber (cars) (Hammer, R., & König, A., 2018). This approach include C2C, although it can rapidly evolve to B2C when the consumer expands this activity into a business.
- Business-to-peer sharing: Business-to-peer sharing involves businesses renting out their assets to individuals. This can include companies that rent out office spaces, equipment, or even high-end fashion items. Examples of business-to-peer sharing platforms include WeWork (office spaces), Zipcar (cars), and Rent the Runway (luxury clothes). As the name suggests, this typology promotes a B2C approach.
- Collaborative consumption: Collaborative consumption is a model in which individuals or groups share resources among themselves, rather than with businesses. This can include sharing goods, services, or skills within a community or group of friends. Examples of collaborative consumption platforms include

NeighborGoods, Shareable, and Nextdoor (Heinrichs, H., & Mayer, S., 2019). These include C2C approaches.

- Circular economy sharing: Circular economy sharing involves the sharing or renting of products and services that are designed to be used and reused, rather than disposed of after one use. This model encourages a more sustainable approach to consumption and production. Examples of circular economy sharing platforms include The Renewal Workshop (clothing), Stuffstr (clothing), and Closed Loop Partners (investment firm) (Blomsma, F., & Brennan, G., 2017). Typically B2B and B2C approaches.

There are several benefits to sharing economy models, including increased access to goods and services, lower costs, and reduced environmental impact. Sharing economy models also promote innovation and entrepreneurship, as they provide new opportunities for individuals and businesses to monetize their assets and skills. However, there are also challenges associated with sharing economy models, particularly in terms of regulation and legal issues. Many sharing economy platforms operate in a legal gray area, and there is ongoing debate over how to regulate these models in a way that ensures consumer protection and fairness (Ferreira, D., & Martins, A., 2020).

Through **Extended Producer Responsibility (EPR)** schemes the producer of the product takes responsibility for its end-of-life disposal, and may offer take-back programs or recycling services to ensure that the product is properly managed. EPR schemes are very popular in the EU, with countries as Germany, Austria and Sweden having over 30 years of experience with such schemes, and have shown some impressive results in increasing the collection and recycling of different product categories such as packaging, WEEE, and batteries (Watkins et al. 2017). Whereas the primary goal of EPR schemes is to impose a fee on producers based on the number of products they place on the market, so that the fee can be used to finance and organize waste collection and management, the ultimate goals of EPR is to encourages producers to design products that are easier to recycle, refurbish and can reduce waste and environmental impact, so that the payment of the fee can be avoided. EPR schemes are applied in the EU on many waste streams.

Eco-modulated fees are a variation of EPR to promote a circular economy and include environmental and social externalities of products at their end-of-life (EoL). While collective EPR schemes mostly use a basic-fee modulation based on criteria that consider unit, weight, and/or material (Laubinger et al., 2021), eco-modulation of EPR fees means charging producers differentiated fees based on criteria that support design changes toward the environmental sustainability of their products (Sachdeva et al., 2021). This is a B2B approach.

Circular supply chains: In this model, products and materials are kept in circulation through a closed-loop supply chain, where waste is minimized and resources are conserved. This involves designing products and processes that can be reused, repaired, and recycled at the end of their life, and creating systems that enable the recovery and reuse of materials and energy. This include B2B and B2C approaches.

Industrial symbiosis consists of a collaborative approach that seeks to improve the sustainability and efficiency of industrial processes by identifying and developing synergies between different companies and sectors. This approach involves sharing resources, such as energy, water, materials, but also waste and by products among industrial processes, in order to reduce waste, lower costs, and create new business opportunities. One of the most well-known examples is the Kalundborg Eco-Industrial Park in Denmark, which has been operating since the 1960s and involves the exchange of heat, water, and materials between several companies in the area (Chertow 2000). Industrial symbiosis can also take the form of regional networks or clusters, where companies and organizations work together to identify and develop synergies within a particular geographic area. These networks can be facilitated by government agencies, industry associations, or other organizations, and can provide a range of benefits, such as increased innovation, job creation, and economic development (International Synergies 2020). The benefits of industrial symbiosis are well-documented, and include improved environmental performance, reduced costs, and increased competitiveness. In addition, industrial symbiosis can help to promote sustainable development and support the transition to a circular economy (Chertow und Lombardi 2005). Industrial symbiosis is a B2B approach.

1.2. Opportunities for circular business models

Several opportunities exist in Kosovo linked to the development and adoption of circular business models in Kosovo. Similar to the barriers, these can be divided into socio-economic and technical, legislative, and financial opportunities.

One of the main **socio-economic opportunity** of the circular economy in Kosovo is the potential for job creation. The implementation of circular business models can create new jobs in waste management, recycling, and the development of sustainable products. (Ellen MacArthur Foundation, 2019). By investing in waste management infrastructure and leveraging technology to improve resource efficiency, Kosovo can unlock significant economic and environmental benefits while promoting sustainable development (World Bank, 2018), while reducing unemployment in Kosovo, which stood at 17.4% in 2020 (World Bank, 2021). Moreover, the circular economy can provide new opportunities for entrepreneurship and innovation, which can drive economic growth. Another socio-economic opportunity is the potential for cost savings. The circular economy can reduce production costs by reusing materials and reducing waste, which can translate into cost savings for businesses. Additionally, circular practices can create new revenue streams from the sale of recycled materials, contributing to business sustainability (Ellen MacArthur Foundation (2019).

Legislative opportunities exist in Kosovo for the development of circular business models. The government can create policies and regulations that support circular practices and provide incentives for businesses to adopt circular models. This can include tax incentives, subsidies, and grants for businesses that invest in circular infrastructure and technology. Moreover, the government can create regulations that require businesses to adopt circular practices, such as extended producer responsibility (EPR) schemes and take-back schemes for different products, such as plastic packaging, that require businesses to take responsibility for the disposal of their products at the end of their lifecycle. The implementation of EPR schemes and takeback schemes can incentivize businesses to adopt

circular practices and reduce waste. Circular business models can be also introduced as practices in Green Public Procurement, to promote their adoption for the procurement of public goods and service, stimulate the market and the trust of stakeholders.

Financial opportunities can be identified that can support the development of circular models. International donor funds are particularly important to start developing circular business models in countries with little experience and know-how on the matter, such as Kosovo. The European Bank for Reconstruction and Development (EBRD) provides financing and technical assistance to businesses in Kosovo to support the adoption of circular practices. The European Union has established several programs to support circular economy initiatives, such as the Horizon 2020 program and the European Structural and Investment Funds (ESIF) (European Commission, 2021). Additionally, there are several international funding opportunities available for circular projects, such as the Global Environment Facility (GEF) Circular Economy Program, and the GEF Program. Funds from international donor are particularly important to set the basis for a circular economy and provide funding for the development and testing of innovative solutions that would be otherwise hardly financed by private investors, due to the uncertainties and lack of trust.

Other types of financial opportunities also exist, which can be unlocked through appropriate policies. These include for instance public-private partnerships (PPP) that can help mobilizing finance and knowledge for sustainable infrastructure development, EPR schemes to generate the funding for appropriate waste collection and recycling. The government can also implement environmental funds financed form revenues collected form taxes and levies such as environmental taxes, fees from consumers on certain products (like plastic bags). Likewise, part of the state budget can be dedicated to promote circular economy business models.

In addition to government support, private sector financing can also play a significant role in promoting circular business models. Private investors can provide the necessary capital to finance innovative projects and help businesses scale up their operations. Impact investing, which aims to generate positive social and environmental outcomes while generating financial returns, has emerged as an important source of financing for circular business models. Impact investors are often willing to take on more risk than traditional investors and are attracted to businesses that are addressing social and environmental challenges (KPMG, 2019).

Another critical factor in promoting circular business models is **innovation**. Innovation is essential for developing new technologies, products, and services that can support the transition to a circular economy. In the Kosovo context, innovation can play a critical role in creating new markets and opportunities for businesses. The government can support innovation through **funding research and development programs** and providing **tax incentives** for businesses that invest in new technologies. Businesses can also drive innovation through collaboration and partnerships. Collaboration between businesses can help to identify new opportunities and develop innovative solutions to shared challenges. For example, in the fashion industry, businesses have formed partnerships to promote circularity by sharing resources and knowledge. The H&M Foundation has partnered with the Hong Kong Research Institute of Textiles and Apparel (HKRITA) to develop a technology that can separate and recycle blended fabrics. Civil society organizations can also play an

important role in promoting innovation by raising awareness about the benefits of circular business models and creating demand for sustainable products and services. For example, organizations like Green Art Center in Kosovo are working to promote circularity in the arts and crafts sector by training local artisans to use waste materials in their products and promoting sustainable consumption practices.

The development of circular business models can have **different positive impacts** on various economic sectors in Kosovo. For instance, the textile industry can benefit from the implementation of circular practices by sourcing sustainable materials and developing circular supply chains. Similarly, the construction industry can benefit from the adoption of circular practices by using recycled materials and reducing waste in construction sites, while the agricultural sector can benefit from the implementation of circular practices by adopting sustainable farming practices and using waste as a resource for fertilizer.

In conclusion, the promotion of circular business models in Kosovo requires a coordinated approach to financing and innovation that involves multiple stakeholders, including government, financial institutions, businesses, and civil society organizations. Access to finance is a significant challenge for innovative business models, but government support and private sector financing can provide the necessary capital to finance circular initiatives. Innovation is essential for developing new technologies, products, and services that can support the transition to a circular economy, and collaboration between businesses and civil society organizations can drive innovation and create new opportunities for businesses. By working together, stakeholders can create a more sustainable and resilient economy in Kosovo.

1.3. Barriers for circular business models

Circular business models are designed to keep resources in use for as long as possible, extracting maximum value from them before disposing of them. In Kosovo, the development of circular business models is hindered by various socio-economic, legislative, and financial barriers, which are explored in this chapter for different economic sectors in Kosovo.

One of the main socio-economic barrier to the development of circular business models in Kosovo is the **lack of awareness** and understanding of the concept of circular economy. Many businesses and individuals are not familiar with circular business models and do not understand their potential benefits, since the traditional linear economy has been dominant in Kosovo for many years, and changing the mindset and behavior of stakeholders is challenging (Beqiri, 2021). According to various studies, the **lack of infrastructure and technological capabilities** is a significant socio-economic barrier to the implementation of circular business models (Bocken et al. 2016; Ghisellini et al. 2016). In Kosovo, this is particularly evident in the limited waste management infrastructure and resources for waste collection and recycling (World Bank, 2018), which makes it difficult to develop circular supply chains. Moreover, the high cost of technology and the lack of access to finance have also been identified as major hindrances to the development of circular business models (Korhonen et al. 2018).

Legislative barriers exist in Kosovo for the development of circular business models. The **absence of ad hoc laws and regulations** that support circular business models makes it

difficult for businesses to implement circular practices. The existing legal framework often favors the traditional linear economy and lacks a comprehensive policy and legal framework that supports the circular economy, and businesses may face legal challenges when trying to adopt circular practices (Deloitte, 2020). This creates a lack of levelled playing field that guarantees that the same opportunities and restrictions are applied to all players.

The **lack of access to finance** is another major financial barrier to the development of circular business models in Kosovo (International Finance Corporation (IFC) 2019). The transition to a circular economy requires significant investments in innovation, infrastructure, and business models that can create value from waste and promote resource efficiency. The promotion of circular business models in Kosovo requires a coordinated approach to financing and innovation that involves multiple stakeholders, including government, financial institutions, businesses, and civil society organizations. Most businesses in Kosovo have limited financial resources, and the high cost of implementing circular practices may be prohibitive. Innovative business models often require upfront investments that can be difficult to finance, especially in emerging markets like Kosovo. Access to finance is often limited in emerging markets, and financial institutions may be hesitant to invest in innovative projects due to perceived risks and lack of experience with new business models. The problem exacerbates with SMEs and MSMEs, which often lack the financial capital, know-how and resources to adopt more circular business models. Furthermore, the limited availability of funding from financial institutions and investors may discourage businesses from adopting circular business models."

The barriers to the development of circular business models have **different impacts** on various economic sectors in Kosovo. For instance, the agricultural sector faces challenges in implementing circular practices due to limited resources for waste management and lack of awareness. The textile industry, on the other hand, faces challenges in sourcing sustainable materials and implementing circular supply chains due to the limited availability of recycling infrastructure. Addressing the barriers will require concerted efforts from businesses, policymakers, and stakeholders to promote awareness, improve infrastructure, and develop a supportive legal and financial framework. Achieving a circular economy in Kosovo will require a sustained effort, but the benefits of the circular economy will be worth it in terms of sustainable development, job creation, and economic growth.

1.4. Digitalisation as an enabler of circular business models

Circular economy requires integrated approaches that allow to increase and prolong the use of products, consider the reusability and repairability of products in the design phase, and ensure that materials can be substantially recovered after use. To unlock these approaches, information about the material composition of each individual product, its patterns of use, its availability and its location are necessary. The fast pace of evolution of digital technology has unlocked unprecedent opportunities for information and data recording, storage, sharing, and analysis. This allows addressing in a very accurate manner, and in real time, the following issues (Riina et al. 2021).

- **enable real-time positioning of products and materials** to improve product accessibility and enhance collection, refurbishment, recycling, and reuse of waste

materials. Numerous digital and collaborative platforms and marketplaces already enable consumers to get real-time information about the availability and location of primary and secondary raw materials, products and even services.

- **improve knowledge on product and materials condition**. The increasing use of smart technologies, such as artificial intelligence, smart sensors, and blockchain technology, will offer new ways of improving information on the actual usage path as well as condition of materials and products, traceability and transparency throughout the life of the product.
- **enable predictive product maintenance**. Mainly based on the combination of the IoT and big data analysis, predictive product maintenance is made possible thanks to connected smart sensors which are increasingly embedded into machines, appliances, and products that can communicate and send information about the functioning of components, their failures or need for maintenance.

Both scientific and grey literature acknowledge IoT, Big Data, and Data Analytics as well as their combination as enablers for the development of Circular Business Models (Pagoropoulos et al. 2017). Through IoT, companies can predict product conditions, status, location, and usage and allow technical support and other services, such as repair and maintenance, and resource and energy saving. Real-time information on product availability, thanks to the diffusion of smartphones and apps, allows product sharing between multiple users and fosters the so-called collaboration economy. Besides, companies have a great opportunity to gain knowledge on the way customers are using products and may achieve a closer proximity with their customers, thus transforming the interactions between a manufacturer and customers from negotiation to communication.

2. POLIY FRAMEWORK AND PRIORITY SECTORS FOR KOSOVO

Kosovo is a country that faces numerous environmental challenges, including air pollution, waste management, and water scarcity (OECD, 2020). These environmental issues have a direct impact on the health and well-being of its citizens and the country's sustainability. In the context of Kosovo, circular business models (CBMs) can help to address environmental challenges, improve resource efficiency, and boost economic growth. CBMs can also have social benefits, such as improving public health and creating more resilient communities.

One of the main environmental challenges in Kosovo is waste management. The country has limited landfill capacity, and the current waste management system is inefficient and generates high levels of pollution (World Bank, 2020). CBMs can help to address this challenge by **promoting waste reduction, reuse, and recycling**. For example, a CBM for waste management could involve the collection and sorting of waste materials, which are then processed into new products or materials. This would reduce the amount of waste sent to landfill, reduce pollution, and create new economic opportunities.

In addition to waste management, CBMs can also help to **improve resource efficiency** in Kosovo. The country is resource-poor, and many of its resources are imported (OECD, 2020). CBMs can help to promote the efficient use of local resources, and by reusing and recycling materials and products. This would reduce the country's reliance on imported resources and improve resource efficiency.

CBMs can also **drive economic growth** in Kosovo by creating new economic opportunities and driving innovation. CBMs can promote the development of new technologies and business models, particularly in areas such as waste management, renewable energy, and sustainable agriculture. By promoting CBMs, Kosovo can attract new investment, create new jobs, and drive economic growth. Finally, CBMs can have **social benefits** by improving public health and creating more resilient communities. For example, a CBM for waste management could reduce the health impacts of pollution by reducing the amount of waste sent to landfill. CBMs can also create new job opportunities, particularly in areas such as waste management and sustainable agriculture, which can help to create more resilient communities (Bocken et al. 2014).

In conclusion, CBMs can play a crucial role in driving economic growth while reducing environmental impacts and creating social benefits in Kosovo. By promoting CBMs, Kosovo can address environmental challenges, improve resource efficiency, and drive economic growth. Circular business models can also have social benefits, such as improving public health and creating more resilient communities. Therefore, policymakers in Kosovo should consider promoting CBMs as part of their efforts to improve the country's sustainability.

2.1. Policy framework in Kosovo relevant to CBMs

To facilitate this transition towards a circular economy, Kosovo has adopted a legal framework that supports the implementation of circular economy principles consisting of a number of different laws and regulations.

One of the key pieces of legislation is the Law on Environmental Protection (No. 03/L-051, which was adopted in 2010. This law provides the legal basis for the protection, conservation, and sustainable use of the environment in Kosovo. The law also includes provisions that support the implementation of circular economy principles, such as the requirement for waste management plans implemented for all types of waste generated in Kosovo including measures to prevent waste generation, promote reuse and recycling, minimize waste disposal, and reduce the environmental impact of waste management activities (Article 20) and the promotion of recycling and recovery with particular focus on hazardous waste (Article 24).

The second, important piece of legislation relevant for circular economy is the Law on Waste Management (No. 04/L-117), which was adopted in 2013. This law establishes the legal framework for waste management in Kosovo, including the collection, transport, treatment, and disposal of waste. The law also requires waste management to be conducted in a manner that promotes the principles of the circular economy, such as waste prevention, reuse, and recycling (Article 4). Additionally, the law requires the establishment of a system for extended producer responsibility, which is designed to ensure that producers are responsible for the management of their products and packaging throughout their lifecycle. The law requires the establishment of collection and recycling systems for specific types of waste, such as packaging waste, batteries and accumulators, and waste electrical and electronic equipment (Article 7). The Law on Waste has been revised and a new Law supplementing and amending the Law on Waste has been adopted in 2022.5 The new changes mainly focus on: introducing the legal basis for regulating ‘Extended Producer Responsibility’ including ‘Deposit Refund System’,; simplifying licenses and permits, as well as introducing minor offences in the legal framework. Additionally, around 53 sub-legal acts derive from the Law on Waste further regulating specific aspects of the main law.

The Law on Strategic Environmental Assessment (SEA) (No. 05/L-066) also supports the implementation of circular economy principles in Kosovo. The SEA law was adopted in 2013 and requires that environmental considerations be integrated into the planning and decision-making processes for projects and plans that are likely to have significant environmental impacts. This includes the consideration of circular economy principles, such as resource efficiency and waste reduction, in the development of strategic plans and projects (Article 6), and the requirements for monitoring and evaluation of the environmental impacts of the plans of programmes during their implementation (Article 12).

In addition to these laws, Kosovo has also adopted regulations and guidelines that support the implementation of circular economy principles. For example, the Administrative Instruction on the Management of Waste Electrical and Electronic Equipment (WEEE) was adopted in 2015 and establishes the requirements for the management of WEEE in Kosovo. The regulation includes provisions that:

- Promote waste generation through eco-design principles to make products that are durable, reusable, and easy to repair. They are also required to provide information to consumers on how to use and maintain products to extend their lifespan (Article 4)
- Promote reuse and preparation for reuse, by requiring producers to establish systems for the collection and reuse of products that are still functional or can be repaired, and to provide information to consumers on the availability of these systems (Article 5)
- Promote recycling, by requiring producers to establish systems for the collection and recycling of waste electrical and electronic equipment, and to meet recycling targets that are established by the Ministry of Environment and Spatial Planning (Article 6)
- Promote separate collection of waste electrical and electronic equipment from other types of waste (Article 7)
- Promote appropriate waste treatment and disposal, to be carried out in a manner that is environmentally sound and does not pose a risk to human health (Article 8).

The Guidelines on Sustainable Public Procurement (SPP) were also adopted in Kosovo in 2015. These guidelines establish the requirements for sustainable public procurement practices in Kosovo, including the promotion of circular economy principles such as the use of recycled materials and products with a longer lifespan.

Overall, the Law on Waste is aligned to a good extent with the Waste Framework Directive of the EU, however further harmonisation with other directives and regulations is needed to fulfil the obligations that derive from the SEA. On the other hand, human, technical and financial capacities of responsible institutions for the waste management sector are considered rather limited and insufficient to ensure proper implementation and enforcement of the legal framework. One of the main challenges is the lack of infrastructure and capacity for waste management and recycling. Another challenge is the lack of awareness and understanding of circular economy principles among the general public and businesses. Furthermore, the weak enforcement of existing laws and regulations is also a challenge. Additionally, due to lack of proper infrastructure for separation at source of different waste fractions, treatment and processing, the recycling market is still underdeveloped.

Hence, despite these legal instruments, the implementation of circular economy practices in Kosovo still faces challenges. To address these challenges, Kosovo needs to invest in infrastructure and capacity building for waste management and recycling. Additionally, there is a need for awareness-raising campaigns to educate the public and businesses about circular economy principles and their benefits. Finally, the government needs to improve the enforcement of existing laws and regulations to ensure that circular economy practices are effectively implemented.

In conclusion, Kosovo has adopted a legal framework that supports the implementation of circular economy principles. This includes laws and regulations that establish the legal basis for waste management, promote the use of recycled materials, and require environmental considerations in the planning and decision-making processes. However, there are still significant challenges to the implementation of circular economy practices in Kosovo,

including the lack of infrastructure and capacity for waste management and recycling, as well as a lack of awareness and understanding of circular economy principles. Addressing these issues will require an holistic approach to foster different aspects relevant to circular economy, including legal and policy development and enforcement, infrastructure development, inclusion of relevant stakeholders in the design phase as well as in the implementation phase through capacity building and awareness raising, promotion of research and innovation, and unlocking the necessary financing.

2.2. Priority sectors in Kosovo to promote circular economy

Kosovo's economy is primarily driven by the **service sector**, which accounts for the majority of its gross domestic product (GDP). However, there are several other sectors that are crucial to the country's economy and are considered priority sectors for development.

Agriculture is an important sector for Kosovo's economy, accounting for about 13% of GDP and employing a significant portion of the population. Efforts are being made to modernize the sector and increase productivity through the adoption of new technologies and practices.

The **energy sector** in Kosovo relies on its significant reserves of lignite coal, which is currently the primary source of energy in the country. However, there is a push to diversify the country's energy mix and increase the use of renewable energy sources such as solar and wind power. The development of a reliable and sustainable energy infrastructure is seen as crucial for economic growth and stability.

Kosovo's **manufacturing sector** is relatively small but has the potential for growth. The country has a skilled workforce and a strategic location, which makes it an attractive destination for foreign investment in manufacturing. Efforts are being made to improve the business environment and attract investment in the sector.

Concerning the **services sectors**, tourism in Kosovo relies on its rich cultural heritage and natural beauty, which makes it an attractive destination for tourists. The country has been investing in tourism infrastructure and promoting its attractions to increase the number of visitors. Tourism has the potential to become a significant source of income for the country and create jobs in related industries.

Regarding **Information and Communication Technology** (ICT), Kosovo has a young and tech-savvy population, which makes it an ideal location for the development of the ICT sector. The government has been investing in infrastructure and supporting the growth of startups and established companies in the sector. The ICT sector has the potential to drive innovation and create high-value jobs in the country.

The recent Circular Economy Roadmap for Kosovo, developed by the Environment Ministry of Kosovo and supported by UNDP (Ministry of Environment, Spatial Planning and Infrastructure 2023) identifies a number of sectors to be considered for the development of circular economy approaches:

- The **food system** covers economic sectors along the food value chain: agriculture, fisheries, aquaculture, food processing, and production. These sectors are important foundations of its culture, heritage, and society.
- The **forest system** covers the economic sectors of the forest-based value chains: forestry and logging, wood processing, pulp and paper, wood and cellulose-based production, and advanced bio based production. Kosovo has a large proportion of forested land, and forest resources whether primary or secondary – such as by-products that can enable the creation of circular value chains.
- The **manufacturing sector** covers the manufacture of textiles, furniture, electrical equipment, and machinery and equipment. Other manufacturing subsectors are also present to a smaller extent. The manufacturing sector is characterized by declining labour productivity and limited manufactured exports, which reflects unused potential negatively affecting Kosovo's competitiveness.
- The **creative sector** covers creative product design, creative design of the built environment, creative art including manual arts, theatre, film and video, music, the other performing arts, fashion, crafts and architecture. It is an enabling agent of circular transformation in all priority areas.
- The **retail sector** covers one of the largest service sectors in the economy in Kosovo. More than half of SMEs are engaged in the retail sector and a large proportion of the country's female workforce is employed in retail.
- The built environment covers the **construction sector** and comprises the buildings, roads, infrastructure and other human-made features of the surrounding environment. It is one of the largest industrial sectors in Kosovo in terms of resource flows.

2.3. Examples of CBM practices for relevant sectors

This chapter presents examples of CBMs in the priority economic sectors for Kosovo.

2.3.1. The food system

Circular business models have gained significant attention in the food system as a way to address sustainability challenges, such as resource depletion and waste reduction. Examples of circular business models in the agriculture sector include regenerative agriculture, vertical farming, and precision farming. Regenerative agriculture is an approach that focuses on soil health, biodiversity, and ecosystem resilience. It promotes the use of techniques like crop rotation, cover cropping, and minimal tillage to improve soil health, sequester carbon, and increase crop yields (The Carbon Underground, 2019). In contrast, vertical farming allows for the efficient use of space by growing crops in stacked layers. This model can reduce water use and fertilizer consumption while increasing productivity (The Economist, 2021). Precision farming utilizes technology such as sensors, data analytics, and machine learning to optimize resource use and reduce waste, leading to improved crop yields and resource efficiency (FAO, 2018).

In the fisheries and aquaculture sectors, circular business models include closed-loop aquaculture systems that recycle waste and reduce environmental impact (World Economic Forum, 2020). For instance, oyster farming can be a circular business model as oysters can

be used to filter the water and remove impurities while providing a sustainable source of seafood (UN Environment Programme, 2021). Additionally, innovative approaches to seafood processing can minimize waste and increase efficiency in the production process, such as the production of fishmeal and fish oil from fish processing waste (FAO, 2020).

Food waste reduction initiatives are also an essential aspect of circular business models in the food system. These initiatives can include using food waste as animal feed, composting, or utilizing it for energy production. For example, a Belgian company, MOWI, produces insect-based animal feed from food waste, reducing waste while creating a sustainable protein source for animal feed (EU Science Hub, 2020). Similarly, the Dutch company, Protix, utilizes black soldier fly larvae to convert organic waste into a sustainable source of protein for animal feed (Protix, n.d.).

The transferability of these circular business models to Kosovo is possible, but it requires consideration of the local context. The affected stakeholders in the food system in Kosovo, such as farmers, food processors, retailers, and consumers, can benefit from the adoption of circular business models, reducing waste and increasing efficiency (European Commission, 2020). Financing opportunities for circular business models in the food system in Kosovo are available from public and private sources, such as the European Union's Rural Development Program (European Commission, 2021).

In conclusion, circular business models are gaining momentum in the food system as a way to address sustainability challenges. Examples of circular business models in the agriculture, fisheries, aquaculture, and food processing sectors have the potential to reduce waste, improve resource use, and increase efficiency. The transferability of these models to Kosovo is possible, but it requires adaptations to fit the local context. The affected stakeholders in the food system in Kosovo can benefit from the adoption of circular business models, and financing opportunities are available from public and private sources.

2.3.2. The forest system

Circular and innovative business models in the forest system have emerged as a means to address sustainability challenges in the industry. In the forestry and logging sector, circular business models include responsible and sustainable forest management, which seeks to balance economic, social, and environmental objectives. This approach promotes the use of forest resources in a sustainable manner by ensuring that harvested wood is replanted or naturally regenerated, and that forest ecosystems are conserved (European Forest Institute, 2021).

In the wood processing sector, circular business models include the use of waste wood and other by-products as raw materials. This approach reduces waste and increases resource efficiency by creating value from what was once considered waste. The use of innovative technologies such as circular sawmills that maximize the recovery of sawn timber and the adoption of prefabrication and modular construction techniques can also contribute to circularity in the wood processing sector (CIRC-PACK, 2021).

In the pulp and paper industry, circular business models include closed-loop systems that recycle water and chemicals used in the production process. This approach reduces waste

and water consumption while increasing the efficiency of the production process (Ellen MacArthur Foundation, 2017). Additionally, the use of alternative fibers such as recycled paper and agricultural residues as raw materials can also contribute to circularity in the pulp and paper industry (European Commission, 2018).

In the wood and cellulose-based production sector, circular business models include the use of waste and by-products as raw materials for the production of bio-based materials and chemicals. This approach reduces waste and greenhouse gas emissions while creating new revenue streams and reducing dependence on fossil fuels (World Economic Forum, 2019). Advanced bio-based production can also contribute to circularity in this sector by producing bio-based products that are fully recyclable or biodegradable (Ellen MacArthur Foundation, 2019).

The transferability of these circular business models to Kosovo is possible but requires consideration of the local context. The affected stakeholders in the forest system in Kosovo, such as forest managers, wood processors, paper manufacturers, and bio-based product producers, can benefit from the adoption of circular business models, reducing waste and increasing efficiency. Financing opportunities for circular business models in the forest system in Kosovo are available from public and private sources, such as the European Union's Rural Development Program (European Commission, 2021).

- One example is the use of residual forest biomass for energy production. Instead of letting the waste from forestry and logging operations decompose, it can be utilized to produce renewable energy. This practice reduces greenhouse gas emissions and promotes a circular economy by turning waste into a resource (International Energy Agency, 2018).
- Another example is the production of biochar from forest residues. Biochar is a charcoal-like substance that is created through pyrolysis, a process of heating organic material in the absence of oxygen. It has several environmental benefits, including reducing greenhouse gas emissions, improving soil quality, and promoting carbon sequestration (Finkbeiner et al., 2019).
- Additionally, the use of sustainable forest management practices can promote circularity in the forestry sector. For example, selective logging, which involves removing only a portion of the trees in a forest, can promote natural regeneration and biodiversity while also providing a sustainable source of timber (Food and Agriculture Organization, 2021).
- Circular business models can also be applied in the wood processing industry. One example is the use of innovative technologies such as cross-laminated timber (CLT), which is made by gluing layers of timber together. CLT has several advantages over traditional building materials, including lower carbon emissions, faster construction times, and improved thermal insulation (European Forest Institute, 2020).

- Another example is the use of circular sawmills, which maximize the recovery of sawn timber by minimizing waste. These sawmills can also produce value-added products such as engineered wood products and furniture components, further promoting circularity in the industry (Economic Development Board, 2019).
- In the pulp and paper industry, circular business models can include the use of alternative fibers as raw materials. For example, agricultural residues such as wheat straw and corn stove can be used to produce pulp and paper products, reducing the industry's reliance on virgin wood fibers (European Commission, 2018).
- Closed-loop systems can also promote circularity in the industry. For example, water and chemicals used in the production process can be recycled and reused, reducing waste and conserving resources. The use of renewable energy sources such as biomass and hydropower can also reduce the industry's environmental impact (Ellen MacArthur Foundation, 2017).
- In the wood and cellulose-based production industry, circular business models can include the use of waste and by-products as raw materials for the production of bio-based materials and chemicals. For example, lignin, a by-product of the pulp and paper industry, can be used to produce bio-based materials such as adhesives and resins (World Economic Forum, 2019).
- Advanced bio-based production can also contribute to circularity in the industry. For example, the production of bio-based plastics that are fully recyclable or biodegradable can reduce waste and promote a circular economy (Ellen MacArthur Foundation, 2019).

The transferability of these circular business models to Kosovo can depend on several factors, including the local context, regulatory framework, and available resources. However, the adoption of circular business models in the forest system can have several benefits for stakeholders in the industry, including increased efficiency, reduced waste, and new revenue streams.

Financing opportunities for circular business models in the forest system in Kosovo are available from public and private sources. For example, the European Union's Rural Development Program provides funding for projects that promote sustainable forest management, renewable energy, and resource efficiency (European Commission, 2021).

In conclusion, circular and innovative business models in the forest system can contribute to sustainability in the industry by reducing waste, increasing efficiency, and creating new revenue streams. Best practices include responsible forest management, the use of waste and by-products as raw materials, closed-loop systems, and advanced bio-based production. The transferability of these models to Kosovo is possible, and financing opportunities are available from public and private sources.

2.3.3. The manufacturing sector

Circular business models in the manufacturing sector aim to minimize waste and increase resource efficiency by designing products with longer life spans and optimizing the use of materials and energy. The following are examples of circular and innovative business models in various manufacturing sectors.

The textile industry has a significant environmental impact due to its resource-intensive production processes and the disposal of textile waste. A circular business model that addresses this issue is the resale and refurbishment of used clothing. Companies such as Patagonia and The Renewal Workshop collect used clothing and repair or refurbish them for resale (World Economic Forum 2014). This model reduces waste and the need for new production, while also creating job opportunities in the repair and refurbishment sector.

In the furniture industry, the modular design approach allows for the disassembly of furniture and the reuse of its components. IKEA's "buy-back" program is an example of this model. Customers can sell back their used IKEA furniture to the company for store credit, which can then be used to purchase new furniture (Ellen MacArthur Foundation, 2019). This model promotes resource efficiency and reduces waste by reusing furniture components.

In the electrical equipment and electronics industry, a circular business model is product-as-a-service. This model involves the sale of services rather than products, and the manufacturer retains ownership of the product. Philips, for example, offers a lighting-as-a-service model where customers pay for the use of lighting rather than purchasing the products themselves. This model promotes the efficient use of resources and reduces waste by extending the life of products (Philips, 2020).

In the machinery and equipment industry, remanufacturing is a circular business model that involves the refurbishment and reuse of used equipment. Caterpillar, a global construction equipment manufacturer, operates a remanufacturing business that produces engines, transmissions, and other components for its equipment (Caterpillar, 2021). This model reduces waste and conserves resources by extending the life of equipment.

In the motor vehicle industry, car-sharing and car-rental services are examples of circular business models. These services provide customers with access to vehicles without the need for ownership, thereby reducing the production of new cars and the associated environmental impact. Car-sharing services such as Zipcar and Car2Go have gained popularity in urban areas, where car ownership is less common (Ellen MacArthur Foundation, 2019). Circular business models, such as product-as-a-service or sharing models, affect cash flow profiles in a different way from ownership-based models. E.g. Renault have taken advantage of this by offering battery leasing arrangements for electric vehicles (Ellen MacArthur Foundation 2020).

In the paper and print media industry, a circular business model is closed-loop paper recycling. This model involves the collection and recycling of used paper to produce new paper products. A company that has successfully implemented this model is the French paper manufacturer Clairefontaine. The company has a closed-loop system where it collects and recycles paper waste from its customers and reuses it to produce new paper products (World Economic Forum 2014). This model reduces waste and conserves resources by reusing paper fibers.

In the rubber and plastic products industry, a circular business model is chemical recycling. This model involves the conversion of plastic waste into chemical feedstock that can be used to produce new plastics. Ineos Styrolution, a global producer of styrene monomer and polystyrene, operates a chemical recycling plant in Antwerp, Belgium, that converts polystyrene waste into feedstock for the production of new polystyrene products (Ineos Styrolution, 2021). This model reduces waste and conserves resources by converting plastic waste into new products.

The transferability of these best practices to Kosovo will depend on the country's socio-economic context and the readiness of stakeholders to adopt circular business models. Kosovo can draw on the experiences of other countries that have successfully implemented circular business models and adapt them to its specific circumstances. For example, Kosovo can learn from the textile refurbishment model used

2.3.4. The creative sector

The creative sector is an important part of the global economy, generating income and providing jobs for millions of people worldwide. In recent years, there has been a growing interest in developing circular and innovative business models in the creative sector, with a focus on reducing waste and increasing resource efficiency. Circular business models in the creative sector involve the use of sustainable materials and production methods, as well as the repurposing and recycling of materials and products at the end of their lifecycle. These models often involve collaboration between different stakeholders, including designers, manufacturers, and consumers, to create closed-loop systems that minimize waste and maximize value.

- One example of a circular business model in the creative sector is the use of sustainable materials in product design. Many designers are now using recycled or biodegradable materials in their products, such as recycled plastic bottles in clothing or bamboo in furniture. These materials are not only more sustainable, but they also add value to the product and can appeal to consumers who are increasingly interested in eco-friendly products.
- Another example of a circular business model in the creative sector is the repurposing of waste materials. For example, in the fashion industry, companies such as Patagonia and Levi's have implemented take-back programs that allow customers to return used clothing, which is then repurposed into new products. Similarly, in the architecture sector, companies such as Interface have developed programs to repurpose old carpet tiles into new products, reducing waste and increasing resource efficiency.

In Kosovo, there is an opportunity to implement similar circular business models in the creative sector. With a growing interest in sustainability and eco-friendly products, there is a market for designers and manufacturers who can create products using sustainable materials and methods. Additionally, there is a need to repurpose and recycle materials to reduce waste and increase resource efficiency.

The transferability of these best practices to Kosovo may be limited by several factors. One challenge is the availability of sustainable materials and the infrastructure for recycling and repurposing materials. However, there are opportunities for collaboration with neighboring countries and international organizations to access sustainable materials and develop the necessary infrastructure.

The affected stakeholders in the creative sector include designers, manufacturers, consumers, and waste management companies. Designers and manufacturers have a responsibility to use sustainable materials and production methods, while consumers can support circular business models by purchasing eco-friendly products and participating in take-back programs. Waste management companies can play a role in repurposing and recycling materials, reducing waste and increasing resource efficiency.

The financing opportunities for circular business models in the creative sector include government funding, private investment, and partnerships with international organizations. Government funding can be used to support research and development of sustainable materials and production methods. Private investment can provide funding for startups and small businesses that are developing circular business models. Partnerships with international organizations can provide access to expertise, resources, and funding.

In conclusion, circular and innovative business models in the creative sector have the potential to reduce waste and increase resource efficiency while generating income and providing jobs. Examples of circular business models in the creative sector include the use of sustainable materials and repurposing of waste materials. While the transferability of these best practices to Kosovo may be limited, there are opportunities for collaboration and partnerships to access sustainable materials and develop the necessary infrastructure. The affected stakeholders in the creative sector include designers, manufacturers, consumers, and waste management companies, while financing opportunities include government funding, private investment, and partnerships with international organizations.

2.3.5. The retail sector

Circular and innovative business models in the retail sector involve the development of sustainable practices in supply chain management, waste reduction, and product life extension. These models aim to create more efficient and environmentally friendly processes that benefit both the business and the environment. In this article, we will explore some examples of circular and innovative business models in the retail sector, their transferability to Kosovo, affected stakeholders, and financing opportunities.

One example of a circular business model in the retail sector is the sharing economy model, which involves the sharing of goods and services among consumers. This model is exemplified by companies like Zipcar and Airbnb, which allow individuals to share cars and accommodation with each other. The sharing economy model is also applicable in the retail sector, where it can be used to share products between consumers, such as clothing, toys, and electronics. An example of such a model is Rent the Runway, which allows customers to rent designer clothing for a fraction of the cost of purchasing them. This model can be transferred to Kosovo with the establishment of rental services for various products. Affected stakeholders in Kosovo include consumers, retailers, and product manufacturers.

Financing opportunities for this model include government and private funding for small businesses.

Another example of a circular business model in the retail sector is the closed-loop supply chain model, which involves the reusing of products and materials within the supply chain. This model aims to reduce waste and increase efficiency by reusing resources rather than disposing of them. An example of this model is H&M's garment collecting initiative, which allows customers to bring in used clothing for recycling. The collected garments are then used to produce new products, reducing the need for virgin materials. This model can be transferred to Kosovo by establishing closed-loop supply chains for various products, such as electronics and furniture. Affected stakeholders in Kosovo include consumers, retailers, product manufacturers, and waste management companies. Financing opportunities for this model include government grants and subsidies for sustainable business practices.

A third example of a circular business model in the retail sector is the upcycling model, which involves transforming waste materials into new products. This model aims to reduce waste by repurposing materials that would otherwise end up in landfills. An example of this model is Patagonia's Worn Wear program, which repairs and resells used clothing. This model can be transferred to Kosovo with the establishment of upcycling initiatives for various products, such as furniture and textiles. Affected stakeholders in Kosovo include consumers, retailers, product manufacturers, and waste management companies. Financing opportunities for this model include government and private funding for sustainable initiatives.

In addition to these models, there are various other circular and innovative business practices being adopted by retailers globally, such as product life extension, sustainable packaging, and zero-waste practices. These practices aim to reduce waste and increase efficiency in the retail sector, while also promoting environmental sustainability.

The transferability of these best practices to Kosovo is dependent on the country's current economic and environmental conditions, as well as the availability of necessary infrastructure and resources. However, many of these models can be adapted to suit the needs and conditions of the Kosovo market, with the potential to create new opportunities for businesses and contribute to a more sustainable future.

- Take-back programs: Some retailers have implemented take-back programs where they accept used products from customers and ensure they are recycled or repurposed. For example, H&M offers a garment collecting program where customers can drop off used clothes and receive a discount on their next purchase (Menteşe et al., 2019).
- Resale platforms: Resale platforms enable customers to sell used products, extending the life cycle of the products and reducing waste. ThredUP is a popular online marketplace for secondhand clothing, while Poshmark allows users to sell used clothing and accessories directly to other users (Paksoy et al., 2020).
- Renting and sharing platforms: Renting and sharing platforms allow customers to access products without having to purchase them outright, reducing the demand for new products and the associated resource consumption. For example, Rent the

Runway offers designer clothing rentals, while Zipcar provides car-sharing services (Paksoy et al., 2020).

- Packaging-free stores: Packaging-free stores eliminate the need for disposable packaging, reducing waste and resource consumption. One example is Original Unverpackt in Berlin, which offers products in bulk without packaging (Menteşe et al., 2019).
- Collaborative consumption: Collaborative consumption involves sharing goods or services among a group of people, reducing the need for each individual to own their own. For example, ShareWaste is an app that connects people who have organic waste with others who can use it for composting (Paksoy et al., 2020).

These examples demonstrate the potential for circular business models to be applied in the retail sector. However, their transferability to Kosovo would depend on the specific cultural and economic context of the country. Retailers would need to consider the preferences and behaviors of Kosovan consumers, as well as the availability of infrastructure and resources to support circular practices.

Stakeholders in the retail sector would include retailers themselves, as well as consumers, waste management companies, and regulators. Retailers would need to be willing to adopt circular business models, while consumers would need to be willing to participate in these models by, for example, returning used products or using rental services. Waste management companies would play a key role in collecting and processing used products, while regulators could create policies and incentives to encourage circular practices.

Financing opportunities for circular business models in the retail sector could come from a variety of sources, including government grants and loans, private investments, and crowdfunding. For example, the EU's Horizon 2020 program provides funding for circular economy projects, while the Circularity Capital fund invests in circular businesses (Menteşe et al., 2019).

In conclusion, circular and innovative business models in the retail sector offer a range of benefits for businesses and the environment, including waste reduction, increased efficiency, and improved sustainability. The transferability of these models to Kosovo requires careful consideration of the country's economic and environmental conditions, as well as the availability of necessary resources and infrastructure. Affected stakeholders include consumers, retailers, product manufacturers, and waste management companies, and financing opportunities can come from both government and private sources. By adopting circular and innovative business models, retailers can contribute to a more sustainable future and establish themselves as leaders in the retail industry.

2.3.6. The construction sector

The built environment has a significant impact on the global economy and the environment, making the transition to circular and innovative business models essential. These models

focus on reducing waste, reusing resources, and maximizing the lifespan of materials in buildings, roads, and other human-made features of the surrounding environment. This essay will describe existing examples and best practices of circular and innovative business models in the built environment, their transferability to Kosovo, the affected stakeholders, and financing opportunities.

One of the most notable examples of circular business models in the built environment is the concept of the circular economy, which focuses on keeping materials in use for as long as possible. This model involves designing buildings, roads, and other infrastructure for disassembly, reuse, and recycling. An example of this is the Dutch company, StoneCycling, which produces building materials from waste. The company takes construction waste, including ceramics, glass, and rubble, and recycles them into new materials, such as bricks and tiles, for use in building construction (Eckardt, 2018). Similarly, the Danish company, GXN, produces building materials from agricultural waste, such as potato peels and seaweed, which are processed to create sustainable materials for building construction (Wainwright, 2018).

Another circular business model in the built environment is the sharing economy, which involves the shared use of resources, such as tools, machinery, and equipment, to reduce waste and maximize resource utilization. One example is the Dutch company, Peerby, which provides a platform for individuals and businesses to share and rent tools and equipment, reducing the need to buy new items (Scholl, 2019). Similarly, the German company, Sharely, provides a platform for renting out equipment, such as generators, to construction sites, reducing the need to purchase new equipment (Circle Economy, 2017).

The concept of the circular economy also involves the use of renewable energy and the reduction of greenhouse gas emissions. One example is the Dutch company, PowerNEST, which produces renewable energy by installing wind turbines on the roofs of buildings, reducing the need for large-scale wind farms (PowerNEST, n.d.). Another example is the Swedish company, Vasakronan, which produces renewable energy by converting waste heat from buildings into energy, reducing the need for fossil fuels (Eckardt, 2018).

These circular business models can be transferable to Kosovo, given the similarities of the building materials, infrastructure, and economic sectors. However, the implementation of these models requires the involvement of stakeholders, including government, businesses, and consumers. The government can play a vital role in creating a supportive legislative framework for circular business models, such as implementing tax incentives for recycling and establishing policies for sustainable construction practices. Businesses can also drive the transition by adopting circular business models in their operations and supply chains, while consumers can support the transition by choosing products and services that follow circular principles.

Financing opportunities for circular business models in the built environment can come from various sources, including public and private investments, grants, and subsidies. For instance, the European Investment Bank has provided funding for circular economy projects in Europe, including the building of a circular economy park in the Netherlands (European Investment Bank, 2019). Similarly, the European Union has launched the Horizon 2020

program, which provides funding for research and innovation projects that promote the circular economy (European Commission, 2019).

Some more practical examples of circular and innovative business models in the built environment:

- Waste heat recovery systems: Waste heat recovery systems are used to capture waste heat from buildings or industrial processes and use it to produce heating or electricity. These systems can be implemented in a variety of settings, including hospitals, data centers, and manufacturing plants. Waste heat recovery systems can reduce energy costs and greenhouse gas emissions, making them a financially and environmentally sustainable option (BASF, 2021).
- Building material recycling: Building material recycling is the process of salvaging materials from buildings that are being demolished or renovated and repurposing them for use in new construction projects. This reduces waste and conserves resources, and can be a profitable business model for companies that specialize in material salvage and resale (Ellen MacArthur Foundation, 2021).
- Green roofs and walls: Green roofs and walls are living systems that are installed on building roofs or walls and provide a variety of benefits, including insulation, stormwater management, and improved air quality. These systems can also provide opportunities for urban agriculture or recreational space. Green roofs and walls can be a profitable business model for companies that specialize in their design, installation, and maintenance (Green Roofs for Healthy Cities, 2021).
- Circular economy building design: Circular economy building design is an approach that prioritizes the use of renewable resources, maximizes resource efficiency, and minimizes waste in building design and construction. This approach can include the use of recycled or renewable materials, as well as designing buildings for disassembly and reuse. Adopting circular economy building design principles can be a profitable business model for architects, developers, and construction companies, as well as providing environmental benefits (Ellen MacArthur Foundation, 2021).
- Smart building technologies: Smart building technologies are systems that use data and automation to optimize building operations, including lighting, heating, and cooling. These systems can reduce energy consumption and costs, as well as improve occupant comfort and productivity. Smart building technologies can be a profitable business model for companies that specialize in their design, installation, and maintenance (Global Market Insights, 2021).

These examples of circular and innovative business models in the built environment can provide valuable insights and opportunities for Kosovo to pursue sustainable economic development. By implementing these practices, stakeholders can reduce waste and emissions, conserve resources, and improve economic and environmental sustainability.

Additionally, these practices can create new opportunities for entrepreneurs and investors in Kosovo.

In conclusion, circular and innovative business models in the built environment can have significant benefits for the economy and the environment. The examples and best practices mentioned in this essay demonstrate the potential of circular models in reducing waste, maximizing resource utilization, and promoting renewable energy. The transferability of these models to Kosovo requires the involvement of stakeholders, supportive legislative frameworks, and financing opportunities. The implementation of circular business.

3. RELEVANT STAKEHOLDERS AND CONSUMER PROTECTION

The development of circular business models (CBMs) requires collaboration and engagement from a diverse range of stakeholders. Government and policy makers, businesses and industry associations, consumers and civil society organizations, as well as other stakeholders such as investors and research institutions, all have important roles to play. In Kosovo, stakeholders can work together to develop and implement CBMs that are tailored to the local context, while also considering the potential impacts on all stakeholders. The identified stakeholder groups playing a role to develop CBMs include the following ones.

3.1. Key stakeholders

Government and policy makers: they play a critical role in creating an enabling environment for circular business models policies and legislation. They can support the development of circular business models and practices through enabling policies and legislation, such as implementing extended producer responsibility schemes, incentivizing eco-design and eco-innovation, and promoting sustainable procurement and GPP. Other polices include also the development of standards and certifications against green claims. In addition, governments can provide funding and technical support to businesses looking to transition to circular models. In Kosovo, the government can work to create policies and regulations that might include establishing a framework for circular business models including eco-design, developing public procurement guidelines for circular products and services, supporting the development of circular business networks and especially between the private sector and the waste management operators (such as EPR schemes), etc.

Businesses and industry associations also have an important role to play in the development of circular business models. They are responsible for designing and implementing circular business models, and can lead the way in the transition towards a circular economy. Industry associations can provide technical support, best practice sharing and collaboration opportunities to their members, and can also advocate for policies that support the adoption of circular business models. The business and industry sector can also partner up to adopt voluntary actions to promote circular business models. In Kosovo, this can include creating new products and services that are designed to be reused, remanufactured or recycled, as well as collaborating with other businesses in the supply chain to develop circular solutions. For instance, business can partner up with the waste management sector to implement improved waste collection and recycling practices, or with the retailer sector to implement take-back schemes for different products.

Waste management operators play a crucial role as stakeholders in the development of circular business models in Kosovo. As highlighted earlier, limited waste management infrastructure and resources for waste collection and recycling in Kosovo are significant barriers to the implementation of circular supply chains. Waste management operators can help overcome these barriers by investing in the development of waste management infrastructure and improving waste collection and recycling processes. Moreover, waste management operators can also promote circular business models by collaborating with

businesses and other stakeholders to design and implement circular supply chains. By leveraging their expertise in waste management and recycling, waste management operators can help businesses identify opportunities to reduce waste and optimize resource use. In this way, waste management operators can act as enablers and facilitators of circular business models in Kosovo. To effectively engage waste management operators as stakeholders in the development of circular business models, it is essential to address their concerns and provide incentives for their participation. For instance, waste management operators may be hesitant to invest in new waste management infrastructure or adopt new waste collection and recycling processes due to concerns about the financial viability of these investments. To overcome these concerns, policymakers and other stakeholders can provide financial incentives such as subsidies, tax credits, or other forms of support to encourage investment in circular business models.

Consumers and civil society organizations are also critical stakeholders in the development of circular business models. They can play a key role in driving demand for circular products and services, such as Product as Services models, and in creating awareness about the benefits of a circular economy. Consumers can choose to purchase products that are designed to be circular, such as reusable packaging or recycled textiles, and can also participate in take-back programs and other initiatives that support the reuse or recycling of products. Civil society organizations can also play an important advocacy role, raising awareness of circular economy issues and pushing for policies and regulations that support the transition to circular business models. In Kosovo, consumers and civil society organizations can work to increase awareness of the circular economy and its potential benefits, and can support the development of circular initiatives by participating in take-back schemes and choosing to purchase circular products.

The informal waste management sector plays a significant role in the waste management of Kosovo. It is difficult to determine the exact size of the informal waste sector in Kosovo, as it is largely unregulated. Studies have estimated that the informal sector is responsible for the collection and sorting of up to 80% of the recyclable waste generated in Kosovo (World Bank, 2018; EU, 2015). By collecting and recycling waste, informal waste management operators help to prevent waste from ending up in landfills, reducing environmental pollution and contributing to the development of a circular economy. Hence, the informal waste sector has the potential to be integrated into circular business models and needs to be taken into account when developing these solutions, keeping in mind the health and safety concerns for workers and limited access to financing and technology. Addressing these challenges and providing support to informal waste management operators can help to integrate them into formal waste management systems and promote their participation in circular business models, for instance by developing training and capacity building programs. These programs can help informal waste management operators to develop new skills and knowledge, improve their waste collection and recycling processes, and adopt new technologies and equipment so that the informal waste management operators can become more competitive to participate in circular supply chains. Other approaches consist of developing partnerships and collaborations between informal waste management operators and formal waste management operators or businesses. By working together, informal and formal waste management operators can leverage their strengths and resources to design and implement circular supply chains and improve waste management infrastructure.

Other stakeholder groups. In addition to these three broad stakeholder groups, there are also a number of other stakeholders that can play a role in the development of circular business models. These include investors and financial institutions, who can provide funding and support to circular businesses, as well as research institutions and academia, who can provide technical support and expertise in areas such as eco-design and sustainable materials.

It is important to note that while circular business models have the potential to bring many benefits, they can also have significant impacts on stakeholders who are not directly involved in their development or implementation. For example, the adoption of circular business models may result in job losses in certain sectors, such as waste disposal or traditional manufacturing, or for the informal waste workers. It is therefore important to consider the potential impacts of circular business models on all stakeholders, and to work towards solutions that create positive outcomes for all.

With the Roadmap for a CE in Kosovo (Ministry of Environment, Spatial Planning and Infrastructure 2023), a process can be started to enable a comprehensive transition from linear to circular economy in order to bring together all relevant stakeholders – public institutions, international organizations, businesses, CSOs, academia and the general public – to ensure a successful and inclusive transformation process.

3.2. Circular Economy and consumer protection

Consumers are increasingly demanding products and services that minimize harm to, or have a positive effect on, the environment. As a result, there has been a proliferation of products, services and businesses which claim to meet that demand.

Consumer protection does not prevent businesses from making environmental claims about their products and services, provided they do not mislead consumers. It provides a framework for businesses to make environmental claims that help consumers make informed choices. Consumer protection therefore gives consumers important protection in relation to environmental claims.

In protecting consumers from misleading environmental claims, consumer protection also protects businesses from unfair competition. It creates a level playing field for those businesses whose products genuinely represent a better choice for the environment and who can make truthful environmental claims. In addition, consumer protection directly protects businesses from misleading marketing.

Consumer protection therefore has the effect of encouraging businesses to invest in the environmental performance of their products. It enables businesses to communicate these genuine efforts to consumers transparently and to reap the commercial benefits.

The purpose of consumer protection is to help businesses understand and comply with their existing obligations under consumer protection law when making environmental claims, with the hope it will give confidence to those businesses whose products are genuinely ‘green’ to provide consumers with the information they need to make informed decisions.

The European Commission is in the process of proposing to update the EU consumer rules to empower consumers for the green transition. The updated rules will ensure that consumers can take informed and environment-friendly choices when buying their products. Consumers will have a right to know how long a product is designed to last for and how, if at all, it can be repaired. In addition, the rules will strengthen consumer protection against untrustworthy or false environmental claims, banning ‘greenwashing' and practices misleading consumers about the durability of a product. Kosovo consumer protection should closely follow the evolvement on Consumer rights regarding the so called ban on greenwashing.

The Commission is proposing to amend the Consumer Rights Directive to oblige traders to provide consumers with information on **products' durability and reparability**. In the case of Durability, consumers must be informed about the guaranteed durability of products. If the producer of a consumer good offers a commercial guarantee of durability of more than two years, the seller must provide this information to the consumer. For energy-using goods, the seller must also inform consumers when no information on a commercial guarantee of durability was provided by the producer.

In addition, the seller must also provide relevant information on repairs, such as the reparability score (where applicable), or other relevant repair information made available by the producer such as the availability of spare parts or a repair manual. For smart devices and digital content and services, the consumer must be also informed about software updates provided by the producer. According to the directive, producers and sellers must decide on the most appropriate way to provide this information to the consumer, be it on the packaging or in the product description on the website. In any case, it must be provided before the purchase and in a clear and comprehensible manner.

The Commission is also proposing several amendments to the Unfair Commercial Practices Directive (UCPD) in order to ban greenwashing and planned obsolescence. First, the list of product characteristics about which a trader cannot mislead consumers is expanded to cover the environmental or social impact, as well as the durability and reparability. Then, it also adds new practices that are considered misleading after a case-by-case assessment, such as making an environmental claim related to future environmental performance without clear, objective and verifiable commitments and targets, and without an independent monitoring system. Finally, it amends the UCPD by adding new practices to the existing list of prohibited unfair commercial practices, the so-called ‘black list'. The new practices will include, among others:

- Not informing about features introduced to limit durability, for example, a software which stops or downgrades the functionality of the good after a particular period of time;
- Making generic, vague environmental claims where the excellent environmental performance of the product or trader cannot be demonstrated. Examples of such generic environmental claims are ‘environmentally friendly', ‘eco' or ‘green', which wrongly suggest or create the impression of excellent environmental performance;
- Making an environmental claim about the entire product, when it really concerns only a certain aspect of the product;

- Displaying a voluntary sustainability label which was not based on a third-party verification scheme or established by public authorities;
- Not informing that a good has limited functionality when using consumables, spare parts or accessories not provided by the original producer.

These amendments aim at ensuring legal certainty for traders but also at facilitating enforcement of causes related to greenwashing and early obsolescence of products. Furthermore, by ensuring that environmental claims are fair, consumers will be able to choose products that are genuinely better for the environment than their competitors. This will encourage competition towards more environmentally sustainable products, thus reducing negative impact on the environment.

4. FINANCING AND INNOVATION TO PROMOTE CIRCULAR BUSINESS MODELS

Worldwide, there is a **significant growth in capital market related to circular economy** activities between 2018 to 2020, including private market funds, lending, project financing and insurances. Companies are particularly adopting circular economy principles, often with direct implications for their operations, supply chains, and financing needs (Ellen MacArthur Foundation, 2020).

For the Western Balkan region, the EU established the Green Agenda (GAWB), including the **Economic and Investment Plan for the Western Balkans (EIPWB)**. The EIPWB is expected to fund budgets of approximately €9 billion by grants and up to €20 billion in investments over the next ten years (Ministry of Environment, Spatial Planning and Infrastructure 2023). In addition to the uptake of circular economy (CE) measures, this provides a significant opportunity for the implementation of circular business models (CBMs). New and innovative sustainable approaches for the Western Balkans are in the focus within this financing scheme. One of the focus areas of the EIPWB is laid on strengthening the competitiveness of the private sector with special attention to innovation.

Other relevant source of financing are the **Green Recovery Window of Opportunity (GROW)** or the **Kosovo SME Competitiveness Support Programme**. Those provide assistance to businesses investing in renewable energy, energy efficiency and improvements in implementation of EU standards and legislation.

The Ellen MacArthur Foundation provides an **overview of actions to scale up circular economy financing** (Ellen MacArthur Foundation 2020):

- Financial services sector:
    - Scale CE financial products and services;
    - Formalize the CE through financial tools and frameworks;
    - Integrate CE within strategies, capabilities, targets, and decision-making across business lines.
- Governments, financial regulators, and central banks:
    - Set direction and provide economic incentives through, for example pricing externalities or favourable fiscal treatment, such as Sweden's tax breaks on product repairs or Austria´s repair bonus on repair activities;
    - Invest in circular activities, infrastructure, and innovation;
    - Improve transparency through standardisation and reporting requirements;
    - Integrate circularity in financial regulation, risk assessments and modelling.

  The government in Kosovo supports the promotion of investments and will take measures to create a unified and structured governmental approach (process) through the development of a national policy with clear principles and criteria for attracting investments. The legal framework for strategic investments will be

continuously reviewed, for economic zones and for foreign investments. In addition to institutional reform, the follow-up care programme for investments will be established. New economic zones will be created as needed for the purposes of creating technology transfer centers and technology parks. In this aspect, special attention will be paid to the inclusion of foreign investments, by organizing conferences and information sessions, creating and strengthening business networks with potential investors, researching and identifying potential countries to promote opportunities for investments (The Program of the Government of Kosovo 2021-2025).

- Blended finance market:
    - Use blended finance mechanisms to de-risk investments and attract private sector capital to the circular economy by structuring and financing the harder-to-finance infrastructure and riskier, long-term innovation.

Generally spoken, each CBM has its own risk profile and may require different forms of capital. Fast-growing enterprises in particular are dependent on external financing whereas this financing can take the form of participations or loans. In addition, crowdfunding can be a suitable source of financing if the business model has a strong community aspect[2].

[2] https://kenniskaarten.hetgroenebrein.nl

5. DISCUSSION ON POLICY MEASURES TO PROMOTE CIRCULAR BUSINESS MODELS

Policy enablers supports business model innovation in providing adequate legislation, financial support, economic incentives and other policies to enable successful uptake of CBMs (European Environment Agency (EEA) 2021). Policy measures can be introduced at national or European level, e.g. at European scale there have already been regulated energy efficiency and some circularity features of energy-related products by the EU Eco-design Directive (2009/125/EC).

Beside, behavioral and education enablers as well as technical and social innovation play a crucial role to support CBMs (European Environment Agency (EEA) 2021).

Policy support by subsidies or tax reliefs, but also support mechanisms, or information campaigns help companies, to be economically viable in the context of changing conditions as is the case in a transition towards CE. Creating protected niches provides valuable support for companies with innovative CBMs that need to reach a certain level of maturity first in order to be able to compete in a later stage in the open market (Huijben, J., G. P. J. Verbong and K. S. Podoynitsyna, 2016).

The discussion on and formulation of potential policy measures shall take into consideration the following pre-conditions (OECD, 2018):

- to ensure that the full environmental costs of production and consumption activities are reflected in market prices;
- to ensure that existing regulatory frameworks are coherent and fit for purpose, and not serving to preserve an existing status quo;
- to improve existing educational and information programs to provide individuals with a better understanding of the unintended consequences of their consumption choices;
- to take use of behavioral insights and nudges, such as through labelling requirements;
- to promote the supply of circular products (“supply-push measures”) or demand for them (“demand-pull measures”).

The impact of the measures shall inter alia support one or more of the following aspects:

- Prevent waste generation in local events, activities and establishments.
- Increase levels of separate waste collection.
- Application of circular criteria to green public procurement (GPP).
- Promote the use of secondary materials and products.
- Construct infrastructure and buildings in a circular manner.

At local, regional or national level, following initiatives can be implemented in short term perspective:

- Nominate circular economy “champions” from local businesses and households.
- Develop a national CE online platform to promote circular projects, initiatives, news and events, focal points, supporting awareness materials, stakeholders profiles etc.
- Support specific business and community-led circular economy initiatives at local level.

The following aspects need to be taken into account in pushing forward measures to promote CBM at national level:

- Establish an action plan to **implement the Circular Economy Roadmap** of Kosovo considering the benefits of CBM.
- Establish a framework to **promote circular business models by innovation**. Innovation is essential for developing new technologies, products, and services to be supported through funding research and development programs and providing tax incentives for businesses that invest in new technologies.
- Set out principles which are designed to help businesses to **comply with the consumer protection**. Explain these principles and give examples of how each of them applies and more detailed case studies where multiple principles apply. The proposed revisions in EU consumer law - Circular Economy Action Plan, can be announced in the (amongst other), also in the upcoming Kosovo Consumer Protection draft strategy 2025. This should aim to support the changes needed in consumer behavior to achieve climate and environmental objectives under the European Green Deal by ensuring that consumers have better information on the durability and reparability of products, as well as protecting consumers from commercial practices that prevent them from shopping more sustainably.
- **Increasing consumer awareness** with regard to recycling economy. Many consumers in Kosovo are not aware about the benefits of the recycling economy. Educational programs and awareness activities should help to show the opportunities to recycle benefits. Along the awareness campaigns, there should be also run on a long-term educational program in schools throughout the country to spread information about recycling, interactive way and is helping raise awareness of the recyclability. Upcoming Consumer Protection Program, amongst other, should also aim to reach these targets.

At national level, following policy frameworks may serve for taking up supporting measures for the implementation of CBM:

The Program of the Government of Kosovo 2021-2025, including the law on residue and the law on Waste from the Mineral Extraction Industry:

- Improving physical functions for waste, remediate waste dumps, consolidating public companies for waste collection and setting up recycling transfer centers.

- Strengthening the inspection mechanism through the training of inspectors, the prohibition of illegal activities for the sources of resources and the improvement of the condition of the remaining waste.

In the National Waste Strategy 2021-2030, in strategic objective 4 to promote the values and practices of a CE, following specific objectives are defined:

- Raise awareness of the importance and benefits of waste management and recycling.
- Stimulate innovations in waste prevention.
- Establish reuse and recycling systems based on the extended producer responsibility concept.

The Strategy for industrial development and business support 2023-2030, including Strategic Objective "Facilitation of circular and green industry". This objective of the policy is to encourage the manufacturing sector to switch to green manufacturing. The creation of a green industry aims to decouple economic growth from negative environmental externalities by maximizing the implementation of circular strategies, the application of energy from renewable sources and the efficient use of inputs. This strategy provides a general orientation for further policy actions needed for the transition to green production. A key requirement for the design of these actions is the provision of data on the environmental performance of industries.

Also, this objective includes support for enterprises to increase recycling and circulation in production, support for the production and consumption of green products, support for technological improvement with a focus on increasing the efficiency of energy and materials.

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