



RESEARCH REPORT

PROJECT:

YOUTH EMPOWERMENT FOR CIRCULAR CITIES (YE-2C)

COUNTRY PROFILE:

MONTENEGRO



New Horizon NGO (Ulcinj - Montenegro)



Co-funded by the
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I Introduction and background information about CE in Montenegro

The economy of Montenegro is mostly dependent on services (60% of GDP) rather than products produced domestically. In addition to tourism, small and medium enterprises can also be considered a strength of Montenegro.

Currently, Montenegro's economy is based on linear management model. In order to keep up with the world's business management trend, Montenegro should consider and implement a circular economy. In a circular economy, multiple value creation mechanisms are discovered as finite resources are consumed and depleted. As a result, it aims to maintain products, components, and materials in the highest state of usefulness and value over time. A technical cycle is distinguished from a biological cycle, which coexists with it.

Montenegro, a small and service – oriented country, has many potential areas where a circular economy could be implemented. Putting regulations in place and setting clear goals are the most challenging tasks.

The Chamber of Commerce of Montenegro introduced this topic to society through its "Roadmap towards a circular economy in Montenegro". The roadmap is based on a systematic approach, and it recognises that the transition process will take time and effort. The main goals of the roadmap are to identify the potential of Montenegro, its stakeholders, and opportunities for implementing a circular economy, supporting and putting in the first picture improving the quality of life of people in Montenegro. This initiative and transition are examples of circularity from the Ellen MacArthur Foundation, which helped organizations contribute one roadmap, representing an efficient strategic plan toward a circular economy in Montenegro.





Figure 1: The Roadmap towards a circular economy in Montenegro.

Source: The Chamber of Commerce – Montenegro and United Nations Development Programme (2021).

“Roadmap towards a circular economy in Montenegro” began with a draft of theoretical knowledge on the circular economy. Identifying CE mission and goals is the first step of a roadmap. The roadmap should next proceed down the route of reviewing the circular transition's priorities, creating the formal roadmap, papers, action, and communication plans, and finally releasing the Roadmap as an official document.

Furthermore, the plan to "green" the commercial sector is another strategic plan that will lead Montenegro toward a circular economy. Although tourism is one of Montenegro's main strengths, it has a significant negative impact on the environment.

Hotels are the main factor in tourism that has a negative impact on the environment. Hotel energy waste and usage are enormous, and something must be done about it. There are 470 hotels in Montenegro. However, not all of them recognize the significance of eco-design, sustainability, and the ecological environment. Only 14 hospitality establishments in Montenegro have the eco-sign. The sign represents the host's commitment to sustainable development and indicates that the object has taken on some measurements in the direction of circularity.

Some international hotel chains have already implemented some circular principles. It could be used in hotel construction and decoration, energy efficiency, water management, waste management, employee and guest education and training, and partnership development. Hotels should consider the 3R concept (recycle, reuse, and reduce).

Socially responsible behaviour of hospitality hosts will influence the behaviour of clients who use their services, resulting in societal change.

Restaurants, coffee shops, and supermarkets are also important parts of the commercial sector. Furthermore, these entities have a negative impact on the environment. Small changes to the regular working system could result in significant changes. The massive waste generated by these entities, as well as the packaging they use, are issues concerned with sustainability.

They could help and promote that kind of behaviour to their clients and customers if they are more environmentally responsible and take serious steps to reduce waste.

Implementing a circular economy in daily business operations could assist the commercial sector in managing the business more sustainably, paying attention to waste management and providing packaging that can be recycled or re-used.

“We must respect what we have and constantly add value to products and services with a circular approach because in that way we take care of nature and natural resources” (The Chamber of Commerce - MNE & UN, 2021, p. 38).



II Data about CE potential

The circular economy has the potential to drive development and progress in Montenegro. It has the potential to influence technological innovation and development.

This work follows the research conducted in Montenegro in April 2022, involving 14 small and medium-sized businesses. The findings of this study provided a nice and very interesting picture of Montenegro's economy and society.

The questionnaire contains 15 questions designed to assess how and to what extent the industry is familiar with the circular economy.

According to the research, 57% of the companies studied have some knowledge of the circular economy, and 79% want to implement a circular economy in their daily business operations.

Furthermore, 86% of the small and medium-sized businesses in Montenegro believe that implementing CE would change the way the industry thinks, and 86% believe that implementing CE would require experts in this field. According to the findings, 79% of the companies surveyed believe that a circular economy will result in new job opportunities for young and innovative people. As a result, all companies were given the task of rating the current state of the Montenegrin industry, and the results showed that 36% of them gave the industry a grade of 2 (not bad), while only 14% gave it a grade of 4, which was related to good.

All of the above results can provide an accurate picture of the Montenegrin industry. Given that the Montenegrin economy is based on small and medium-sized businesses, their opinion on a particular topic is more than reliable. Involving them in implementing CE in Montenegro will aid in the promotion and expansion of CE throughout the industry.

As previously stated, companies that are more oriented to the circular economy could assist Montenegro's industry in increasing demand for its needs by opening new positions for young and innovative people in circularity.

Changing the perspective of economic entities' thinking may be the most difficult task, but the current situation and previous period have caused societies to consider future situations and the possibility of changing and implementing a circular economy more quickly.

The COVID19 pandemic period influenced businesses to provide online work for their employees, online markets, and services for their customers/clients, in other words, to digitalize their work. This could be viewed as a great starting point for incorporating the circular economy into everyday business. How? Companies can reduce their environmental impact while also expanding their products to a more global market with no geographic limitations by providing online work or markets.



The current situation of rising gas prices had an impact on the prices of other goods and services, so doing business as usual will cost more, and it may be a good time to consider alternative options. Furthermore, it implies that previously used resources will be more expensive or difficult to obtain, so companies should consider alternatives, and some new ways of doing business, so that this situation does not affect their business.

Circumstances such as those mentioned can have an impact on the implementation of new innovative business models, strategies, and opportunities. A good example of this is the rapid response of businesses and entrepreneurs during the pandemic period, when they switched to an online mode of working, selling, buying, purchasing, and other activity. So now might be a good time to consider and implement a circular economy, as well as pursue economic entities to change their perspective – to think in a more circular innovative way. According to the data, 71% of the companies surveyed believe that a circular economy equals development and progress.

Parallel to mentioned research, The Chamber of Commerce – MNE conducted its own with the assistance of UNDP. The following are the final results of the preparations for the document "The Roadmap towards a Circular Economy in Montenegro":

- 34 small and medium-sized businesses are surveyed;
- 59% believe that investing is necessary to transition to a circular economy.
- Only 29% of them measure their company's waste, while 71% do not;
- All of the companies studied believe that the main reasons for the difficulty in changing the way things work are a lack of knowledge, a lack of human resources, employees from that field, and a lack of resources;
- They want the roadmap to include workshops on the following topics: the basics of circular economy, market stakeholders for transition, analysis of re-used resources, creation of reusable resources, collaboration with other entities, collaboration with clients, creation of a green brand, how banks support a transition to CE, and many others.

On the other hand, the findings of work's research revealed the following situations:

- Of the 14 small and medium-sized businesses studied, 21% pollute the environment, and 36% do not;
- Only half of them have a solution for it;
- Recycling is viewed as the easiest to implement by 43% of the SMEs polled;
- Agriculture is easier to implement CE for 29% of SMEs, tourism for 14%, and SMEs for 14%;
- On the contrary, 36% of the surveyed SMEs believe that the energy, mining, and metallurgy industries are the most difficult to implement CE, while 21% believe that construction work is the most difficult.



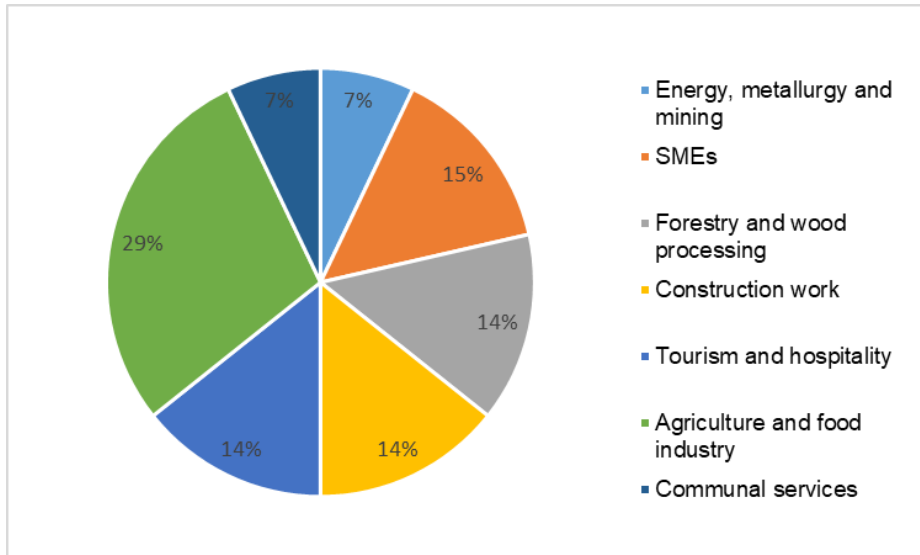


Figure 2: The opinion of companies about implementing CE in the industry sectors.
Source: Authors' elaboration.

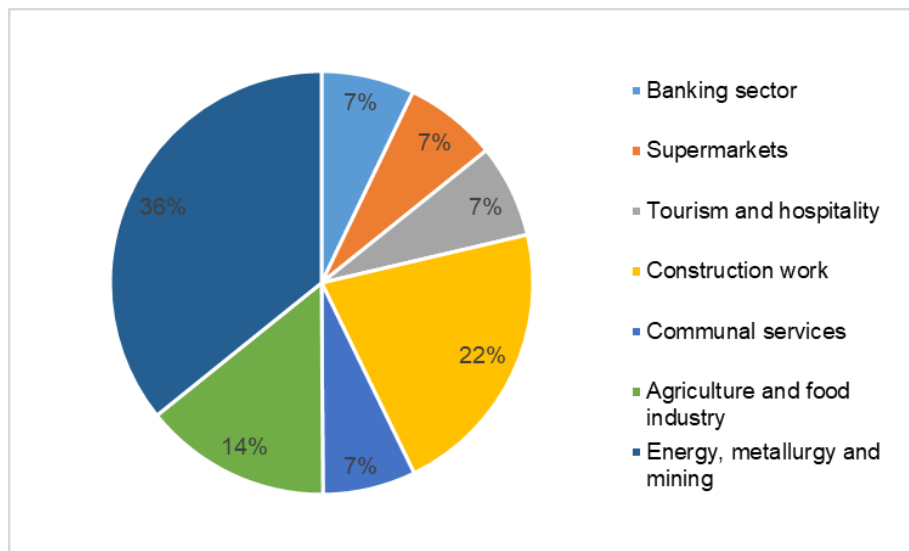


Figure 3: The opinion of companies about implementing CE in the industry sectors – the hardest to implement.
Source: Authors' elaboration.

Summarising the findings of both studies, it is clear that Montenegro's industry is ready for change. According to the findings, Montenegrin SMEs believe that the agricultural sector is more adaptable to change. One of the reasons for this is the use of bio-materials in agriculture, which are agricultural inputs that can be converted from manufactured to natural. As previously discussed, tourism could also be managed through waste management.

Finally, SMEs may be the most amenable to change because of their adaptability to changes and market conditions. Entrepreneurs typically lead SMEs with innovative ideas that can promote, upgrade, and influence the design of products and services.

Expect the mentioned to implement and learn more about the circular economy, as evidenced by research conducted by The Chamber of Commerce – MNE. Following the steps of the Roadmap, useful workshops on this topic could be discussed and small goals defined to begin.

Subventions and special programmes led by the Montenegrin government are one sure way to help the industry in Montenegro upgrade the current situation and implement CE faster. Programs like Fundo Ambiental in Portugal would have an impact on the industry's faster and more inclusive implementation of CE. Subvention programmes would assist businesses with investment and provide the foundation for them to begin to change their traditional business practises.



III Strategy on circular economy in Montenegro

According to research, expectations about the future of the circular economy and its importance in the country are mostly approved. Companies are aware that doing business as usual is inefficient and only leads to scarcity and a lack of natural resources and production capabilities.

As a result, businesses are willing to change their traditional business practises to implement new techniques and materials. Implementing CE in Montenegro could be done in several ways. The industry could impact many sectors and every sector could give a different solution, different variety of understanding and seeing circular economy. And precisely, that makes the circular economy interesting and different from a linear model.

In Montenegro, for example, tourism, companies, and hospitality of MNEs could improve their waste management and pay more attention to protecting the sea and the cost. Every summer, many tourists visit Montenegro to spend their vacation, but many leave a lot of trash and waste behind them. As a result, the tourism industry, as well as private and public hospitality establishments, should be more concerned with their customers' behaviour. Perhaps some warnings or different entry conditions would help to improve the current situation.

Small and medium-sized businesses could implement CE by redesigning their products and switching to reusable materials. Different product designs with more sustainable details will communicate to their customers that their company is socially responsible, sustainable, and committed to protecting the environment and its resources. Using reusable materials extends a product's life cycle and increases its usage.

In education, for example, institutions could better manage their waste. Because, as is well known, many people don't care how they dispose of their trash, influencing increased waste around these institutions. More warnings and rules on how to dispose of trash would make pupils and students more socially responsible and aware of their individual responsibility. Caring outside of educational institutions will allow them to transfer their knowledge to society and influence the behaviour of others.

Supermarkets and restaurants could use CE in recycling by repackaging their products and services. Because these two institutions generate a lot of waste, it is critical to be aware of the harm they cause. Using more environmentally friendly packaging for their products, packaging that is easier to recycle and does not harm the environment, institutions would send a message to the market that the circular economy could be implemented easily, with small but significant steps.

When it comes to construction work, Montenegro's construction sector could improve and upgrade their materials, as well as their supply of zero-energy houses. Building sustainable houses with solar panels could improve energy efficiency and reduce electricity consumption. Houses and buildings could also last longer if that type of construction work was done, meaning they would not be ruined after a shorter period of time and would be more resistant to deterioration. In this way, the construction industry would implement CE while also upgrading



their supply and gaining new clients and companies concerned with sustainability and the environment.

Finally, the public sector implementing CE could be more decentralised and digitally oriented. Companies owned by the Montenegrin government could use new digital tools, such as blockchain, to decentralise their businesses, reduce costs (as some positions will be rendered obsolete after implementing blockchain), and set a good example for the rest of the industry. The application of blockchain can be seen in saving data and personal information about businesses using this one-of-a-kind tool. Companies can also pay and trade with other companies using blockchain without incurring any additional costs. Everything would be much simpler and more efficient.

All of the methods mentioned for implementing CE in various sectors demonstrate how Montenegro can provide various sustainable solutions as well as innovative products and services to the market. And, in many of the ways mentioned, the circular economy could be promoted as a new trend, a new normal. Product and service differentiation presents Montenegro to the world as a distinct and beautiful country. As a result of the innovative circular way of thinking, the country can offer a wide range of products and services to the market.

Digitalisation is one method of implementing a circular economy in Montenegro's industry.

Digitalisation has a significant impact on product production, design, and distribution. So, in a circular sense, digitalisation helps companies reduce production costs, emphasises the importance of the human factor in production, and has an impact on reducing environmental damage.

Companies' level of development and openness to digitalisation represents a company's ability to adapt to the industry's daily changes and challenges.

With the pandemic of the virus COVID19, the importance of digitalisation has grown significantly in Montenegro. Social media marketing, promotion, distribution, and sales are some of the most common applications of digital technologies in Montenegro's industry.

Social media created an online market, and social media and their massive influence created the need for a social network market.

Customers spend a lot of time on their mobile phones and social media platforms. As a result, businesses considered how to be available there as well, so that their customers could easily contact them and get in touch with them even through social media. Furthermore, because virtual ones are replacing physical stores, the negative impact that a company can have by opening a physical store is reduced.

The transition to digitalisation in Montenegro's industry takes time and several steps. As a result, it provided a few strategic plans that will lead to the desired outcome. The Ministry of Public Administration, Digital Society and Media (2021) stated that one of them is the Development Strategy Plan 2016-2020, which has resulted in 50% of digitalisation -related



activities being implemented, 31% being partially implemented, and 20% not being implemented at all.

Implementing e-government, e-business, e-portals, e-education, e-inclusion, and eDMS – electronic document management system will help Montenegro achieve a digital society. A society like that will upgrade, improve, and make things easier for its citizens. A digital environment ensures that all collected data is saved, all transactions are recorded, and there is no room for failure.

The mentioned digital platforms in Montenegro would have an impact on the faster flow of information because everyone would have access to the platform, allowing every entity to be aware of current events.

According to the Development Strategy Plan 2016-2020, the main problems in Montenegro are a lack of knowledge and experience and a lack of investment. Institutions believed that Montenegro needed experts in specific fields and large investments to establish a digital society. Because of this, more attention should be paid to e-education and the provision of more young, innovative people who will promote this mode of communication and information dissemination in the future, so that the digital society can become the new normal.



IV Main challenges – possible solution area

In Montenegro, a circular economy should replace the linear (traditional) business model. The circular economy in Montenegro should represent a new era, a new period of prosperity, social development, and industrial development that will lead Montenegro to the European Union and the rest of the world.

Reduce, reuse, and recycling are all possible in Montenegro's industry, but only the right person, an innovative and entrepreneurial person, will know how to implement them most efficiently in Montenegro's current industry.

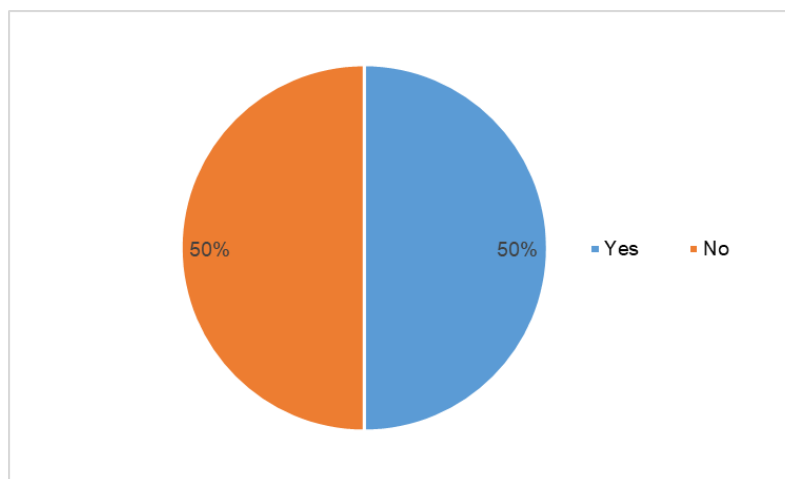


Figure 4: The solution for waste disposal.

Source: Authors' elaboration.

Recycling is one of the most well-known general principles of the circular economy. Many people are already familiar with this process, and many are unaware that it can make it easier to implement a circular economy not only in industry, but also in a country.

Precisely because of this, it is essential to promote and provide the country with available places to dispose of waste and ensure that it is sorted and recycled. In this manner, neither industry nor people will have a negative impact on the environment, and the ecological system will remain unaffected by economic or other activities.

Per the research, half of the companies studied do not have a current waste disposal solution. One possible explanation for this situation is a lack of knowledge, resources, and capacity for "green" waste disposal. Recycling, on the other hand, is one of the simplest principles to implement in a business, according to the research.

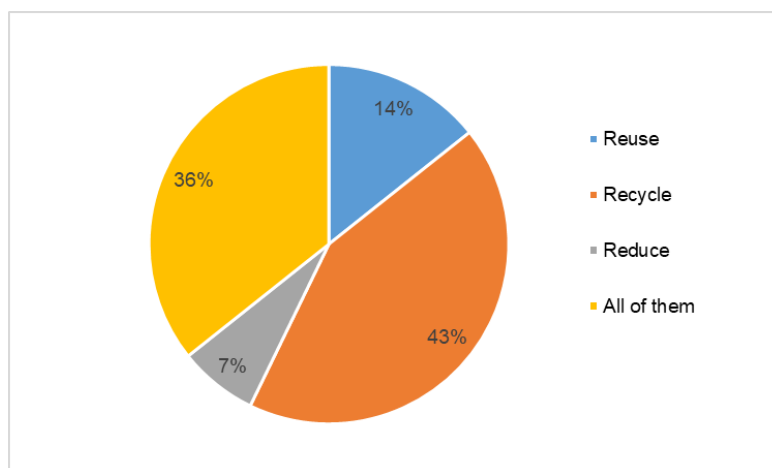


Figure 5: The easiest principle of the CE to implement.

Source: Authors' elaboration.

As shown in the figure above, companies have decided that recycling is the simplest way to implement a circular economy in a business. This result could be, as previously stated, familiarity with the recycling process and the capacities that are available for the recycling process.

Montenegro's waste infrastructure consists of nine recycling yards, 4 material sorting facilities and 2 sanitary landfills. As stated by European Environment Agency (2021), there are 155 small, unregulated landfills, 68 medium unregulated dumpsites, and 50 larger than 1000m³ in Montenegro.

Montenegro's waste management legislation is in line with EU standards. As a result, Montenegro must provide its people with the means to dispose of their waste in a sustainable manner. The National Waste Management Plan establishes targets and goals to strengthen institutional and individual capacities, such as designing and constructing new waste management facilities, raising public awareness of the importance of proper waste management and public participation in decision-making, establishing a mobile waste collection system, and many others.

In this regard, some of the activities could contribute to and increase the impact of recycling in the industry. Companies must determine the best way to recycle and dispose of their waste. In this way, in addition to recycling, they demonstrate social responsibility to the environment and encourage the general public to do the same.

Recycling, as previously stated, is one of the three R's of the circular economy (reduce, reuse and recycle). Starting with recycling could provide a great foundation for implementing other principles.

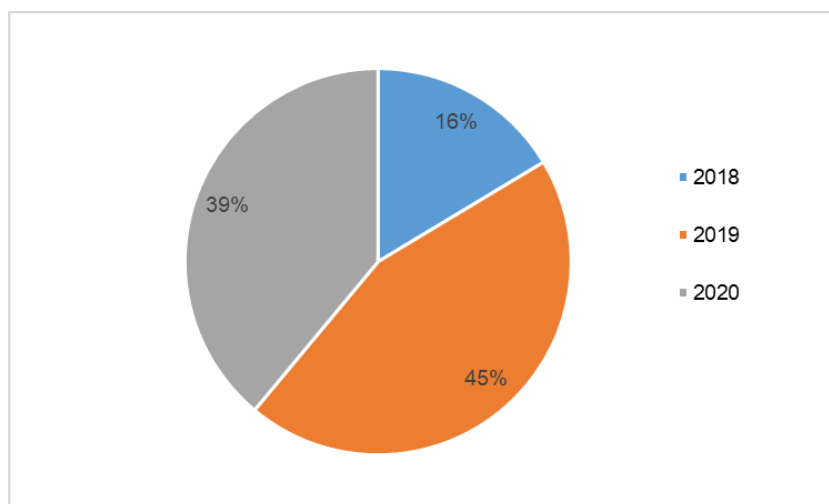


Figure 6: Recycling rate in municipal waste.

Source: Eurostat (2020).

Regarding the results presented in the figure 6, it is essential to enhance them and thus affect the increase in recycling waste. Companies will find the most efficient way to dispose of their waste by providing special areas for waste disposal and recycling.

To summarise, recycling could be a potential growth area for Montenegro's industry. As previously stated, if the government provides proper disposal facilities for the population, the population and businesses will likely recycle and dispose of their waste more sustainably. Aside from protecting the environment, this could impact promoting and changing the way industry works in Montenegro, from a linear to a circular way of doing business.

Finally, the aforementioned "Roadmap towards Circular Economy in Montenegro" was released in April 2022, as scheduled. During the process of developing the plan, five focal areas for Montenegro's circular transition were identified through literature analysis and feedback from stakeholder activities. These are the food system, the forest system, the built environment, the tourism sector, and the manufacturing sector.

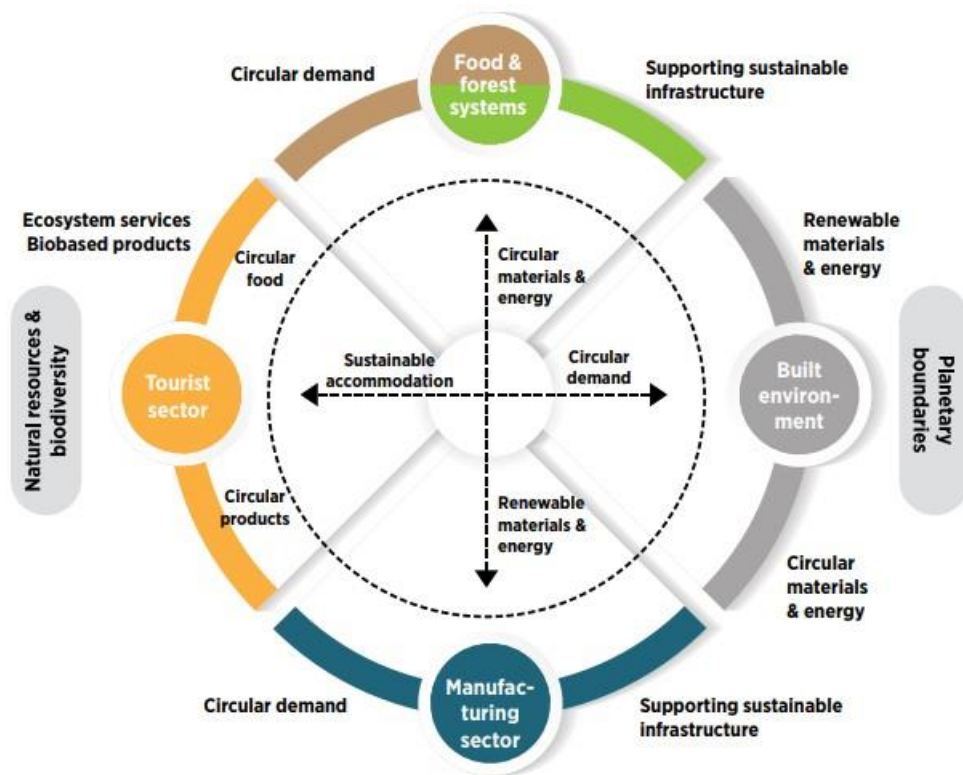


Figure 7: The circular system of Montenegro (simplified).

Source: Deloitte and Circular Change, The Roadmap towards a circular economy in Montenegro – Chamber of Commerce Montenegro (2022).

Montenegro's transition period is just begun. As a result, reaching our priority areas will necessitate a number of actions and processes. One thing is certain: Montenegro, despite its small size, will revolutionize the way things function around here. With distinct methods in mind, Montenegro will discover a unique way to change the way the economy thinks and its stakeholders think. Figure 8 depicts the important stakeholders in Montenegro's transition. Montenegro will achieve its goals with everyone's cooperation. But, it will only be achievable if all parties commit to changing the Montenegrin system.



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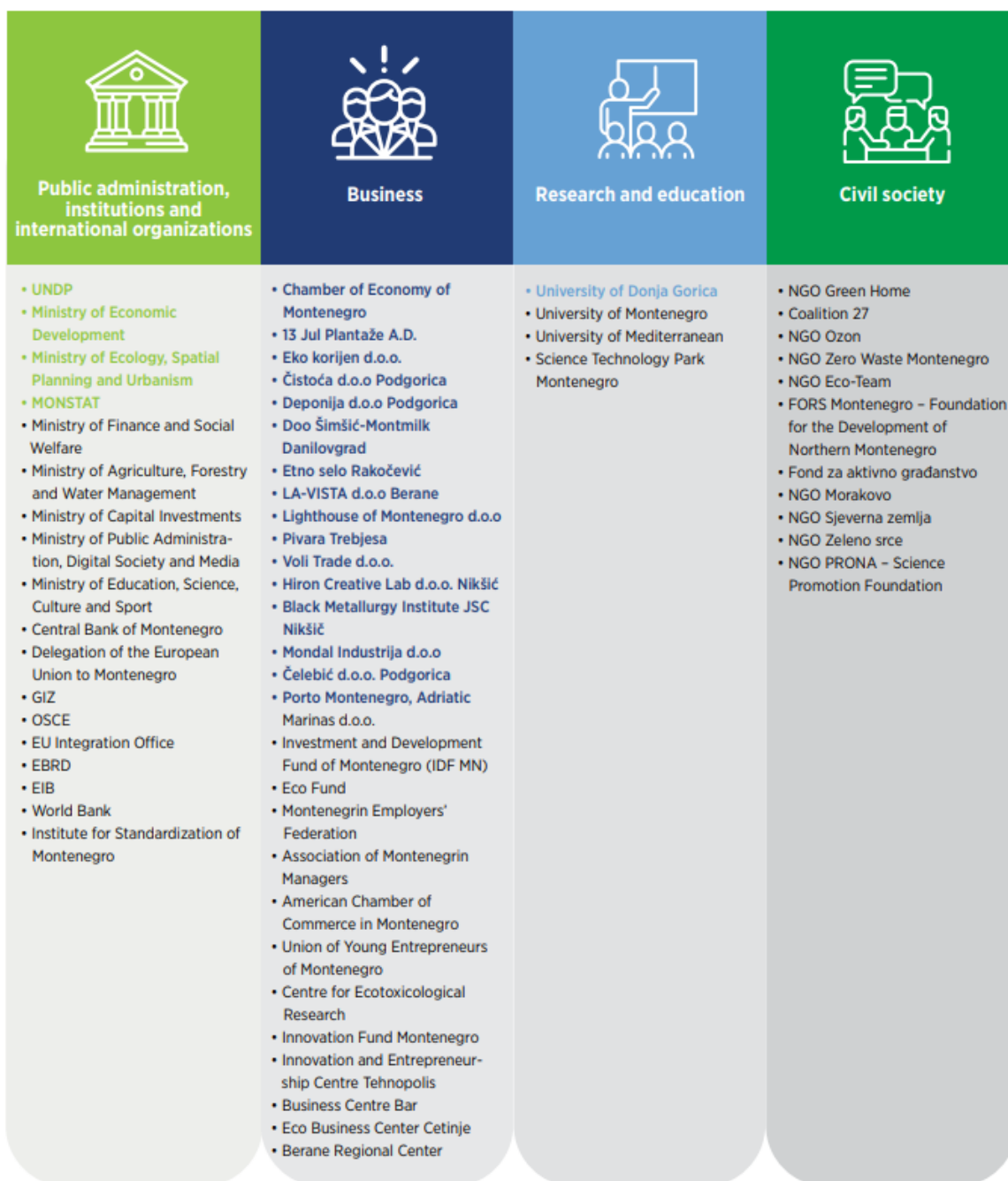


Figure 8: Stakeholder mapping in Montenegro.

Source: The Roadmap towards a circular economy in Montenegro – Chamber of Commerce Montenegro and UNDP (2022).



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V Findings and conclusions

Change can be brought about through innovation and entrepreneurship. The importance of youth and innovative young people is critical to Montenegro's success.

SMEs in Montenegro lead the economy, as detailed in this chapter. They have the greatest impact on MNE GDP through the tourist sector. In this country, young and imaginative people are driving change.

Creative entrepreneurship and innovations could provide a positive and good example of how to modify the traditional business model. The circular economy allows for the testing of innovative business models centred on sustainability, environmental protection, and natural resource conservation.

With the assistance of the economy and all of the aforementioned stakeholders, it should not be difficult to execute change and give a much healthier and better living for all Montenegrin residents and people.

Circular economy is more than simply a trending topic. It is still poorly known, and it might be a great place to put one's creativity and invention to the test. In and of itself, the circular economy offers a vast range of diverse things that may be done, alternatives to current that could replace and improve present. As a result, all future activities could experiment with this uncertainty, test and try all of the boundaries, and make the most of this as-yet uncharted sector of economic discipline.



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