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Master thesis

**“Green transition: The challenges and opportunities for the
private sector in the Republic of North Macedonia”**

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Declaration

I, Naser Nuredini (ID: 103582) certify that this thesis represents my research work. To the best of my knowledge and that I have not used any other sources than those acknowledged. Any portion quoted from other sources is sufficiently referred to. This thesis has not been submitted to any other program at any other university.

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Abstract

North Macedonia, like many nations globally, is undergoing a transformative journey towards a more sustainable and environmentally friendly future, often referred to as a "green transition." This study presents a concise analysis of the ongoing green transition in North Macedonia, focusing on the challenges, opportunities, and sustainable pathways that define the country's commitment to environmental stewardship and economic development. North Macedonia faces a multitude of environmental challenges, including air pollution, deforestation, and inefficient waste management. These issues have not only had adverse effects on public health and environmental quality but have also hindered economic growth and the country's ability to meet European Union (EU) accession requirements. The European Green Deal and North Macedonia's aspirations to join the EU provide a strategic framework for aligning the green transition with EU environmental standards and regulations. While this offers opportunities for financial support and increased market access, it also necessitates substantial reforms in various sectors, including energy, transportation, and waste management. To ensure a successful green transition, North Macedonia must address critical challenges, such as the need for robust environmental legislation and enforcement, the development of sustainable transportation systems, and investment in eco-friendly infrastructure. Furthermore, public awareness and engagement are crucial to fostering a culture of sustainability and responsible resource management. In conclusion, the green transition in North Macedonia is a complex and multifaceted process that holds promise for the country's environmental quality, economic growth, and international integration. However, it requires a concerted effort from government, industry, and civil society to overcome challenges and seize opportunities. By pursuing sustainable pathways, North Macedonia can build a more resilient and prosperous future while contributing to global efforts to combat climate change and protect the environment.

Keywords: green transition, sustainability, energy, transportation, waste management, EU environmental standards and regulations, North Macedonia

Chapter I: Introduction

1.1 Introduction

The Republic of North Macedonia is a small, upper-middle-income country in southeastern Europe. It has a population of just over 1.8 million people and a nominal GDP of \$13.8 billion (Word Bank, 2023).

North Macedonia's economy is mainly based on the service industry, accounting for more than 50% of the GDP. The industrial sector is also significant, particularly the production of chemicals, base metals, machinery and textiles. Agriculture plays a smaller role in the economy but remains important for rural employment and food security.

The country is a candidate country for European Union (EU) membership and is expecting to open the negotiations on the first chapter shortly. Joining the EU will bring many economic benefits to North Macedonia, especially given the EU's strengths in the strategy to implement the Western Balkans Green Agenda, which not only will bring funds but also requires the country to step up its activities in terms of sustainability.

Green transition and sustainability are extremely relevant and important issues today, both at the global level and at regional and local levels, as well as in the Republic of North Macedonia. The world has been talking about its negative impact on our livelihoods for decades, now we are not just talking about necessary mitigation, but also about adaptation. This means we have not put in place the appropriate mitigation measures in the past and have not taken steps to address the consequences. However, this does not mean that mitigation is not a priority, it remains an urgent issue, and therefore we all need to invest in sustainable development to avoid further negative impacts on our livelihoods, especially those of future generations. Only after North Macedonia's independence has the country started to review its environmental issues, addressing key environmental laws and regulations on issues such as water and air pollution, waste management and nature conservation.

There is growing global awareness and concern about environmental issues such as climate change, air and water pollution, deforestation and biodiversity loss. These problems have reached serious levels and pose major threats to the ecosystems, human health and the overall stability of the planet. Climate change caused by greenhouse gas emissions is one of the most pressing global challenges. This results in rising global temperatures, more frequent extreme weather events, rising sea levels, and disruptions to agriculture and water resources. Tackling climate change is critical to avoiding catastrophic consequences.

Continued economic growth and expansion around the world has raised concerns about the increased use of natural resource, water, soil and air pollution, which will further create adverse effects of climate change. Furthermore, scholars paradoxically point out that the economy cannot continue to expand in this direction with the current continued use of natural resources, because climate change will eventually become a barrier to economic prosperity.

The growing awareness from the public and their concern for a sustainable and healthy future has stimulated the practices of "green business". This started in the latter half of the 20th century and further enhanced over the last few decades. In 2008 the United Nations Environment Program (UNEP) launched a programme to motivate policymakers to support environmentally friendly investments and in 2015 further stressed the need for creating an "inclusive green economy". UNEPs statement is "An inclusive green economy is one that improves human well-being and builds social equity while reducing environmental risks and scarcities. An inclusive green economy is an alternative to today's dominant economic model, which exacerbates inequalities, encourages waste, triggers resource scarcities, and generates widespread threats to the environment and human health".

Moving towards a green economy, particularly through business-related activities, could be one of the solutions needed to address climate change and creating an economy which is sustainable while protecting the environment. Greening of the economy is an attractive concept for both governments and businesses, as it aims to provide solutions to

both the economy and businesses addressing environmental issues. Often strategies related to the green economy are viewed as pathways to sustainable development.

Small and medium-sized enterprises (SMEs) play an important role in creating products and services, accounting for more than 95% of all enterprises in OECD countries and accounting for approximately two-thirds of employment and 74% in North Macedonia (OECD). Generally speaking, small and medium-sized enterprises are companies with fewer than 250 employees. Due to their large size in numbers, SMEs have the potential to become key drivers of green innovation and reduce their carbon footprint and not harm the environment with their activities, but rather support the innovation of sustainability.

Although the individual environmental footprint of SMEs may be smaller than that of large companies, as a whole they can exceed their footprint compared to many of the large ones. Therefore, reducing the negative impact of SMEs on the environment may be a way to green the overall economy. Furthermore, green practices can also bring direct benefits to SMEs, by branding themselves as environmentally friendly, a topic which is becoming evidently more important to the consumers who are more conscious about their consumer behaviour and prefer environmentally friendly products.

The concepts and practices of green enterprises in various places have been significantly enhanced. However, a larger proportion of the historical literature focuses on large firms, and there is a growing but still underdeveloped body of research focusing specifically on the environmental business practices of SMEs.

Although many works have identified strong links between green business practices and firm performance, there is a continued need to better understand the role that SMEs play in the adoption of such practices. Small and Medium-sized Enterprises (SMEs) are vital economic players in North Macedonia, accounting for a significant share of employment and GDP (Polman and Winston, 2022).

As the world moves towards a more sustainable future, there is an increasing need for SMEs to transition to environmentally friendly business models. However, this

transition is not without its challenges. This research paper will explore what green transition means and the challenges and opportunities for SMEs and the role and obligations the European Union has on candidate countries such as North Macedonia. It will examine the current state of green transition in the country, the potential benefits and role of financial institutions and development banks in the sustainable transition, and strategies for supporting SMEs in their transition to a more sustainable business model. By exploring these issues, we hope to provide insights into how SMEs in North Macedonia can successfully navigate the challenges and seize the opportunities presented by the green transition.

1.2 Relevance of the study

A study on the green transition in the Republic of North Macedonia is relevant because it addresses a complex intersection of economic, environmental, and social factors, providing valuable insights for policymakers, businesses, and researchers in the region and beyond. It offers a unique perspective on how a specific country navigates the challenges and seizes the opportunities associated with the green transition.

Specifically, the world is facing significant environmental challenges, including climate change, resource depletion, and pollution. Transitioning to a green economy is a global imperative to mitigate these challenges. Understanding how a specific country like North Macedonia can contribute to this transition is relevant in the broader context of addressing global environmental concerns.

1.3 Purpose of the research

The purpose of this research is to analyse the impact the necessary regulations will have on the private sector. The costs that will be implied on the companies and will it be beneficial to prepare for a sustainable future. Some of the key points will be:

Green energy, will companies need to secure renewable energy for the production, especially the EU is about to introduce the Carbon Border Adjustment Mechanism.

Being energy efficient, can investments today create lower costs in the medium to long run.

Circular economy, will investing in reusing “waste” and valuing it as a raw material create opportunities for companies to lower costs and export their products to the EU market.

1.4 Hypotheses

The hypothesis this study are:

H₁: The private sector needs to prepare for the future, the sooner the capital investments are made the better the businesses will be prepared for the EU common market.

H₂: There is no way around the green agenda, as CBAM will already introduce barriers to certain sectors in the country as of 2026, thereby making it a must for companies to strive for greener energy or to leaving them with an unfavourable outcome of looking for new markets outside of the EU.

H₃: Companies need to start to understand that using waste as a raw material will create more cost-effective cost of production, as well as create higher export opportunities to the EU market.

H₄: Lastly decarbonising the economy is a must, should they desire to be competitive in the future.

1.5 Research methodology

In order to present the hypothesis, comparative data from other EU countries will be used. Furthermore, analysis of the potential negative impact on the private sector will be argued if timely investments are not made to comply to the new regulation. Certain sectors will be highlighted to show the impact of the green transition will have on them.

Most importantly though the research should show the opportunities the transition will create for the companies and the green jobs that will be created through them.

1.6 Objective of the research

The objective of this research is to show that the private sector needs to understand and be prepared for the new regulations. The preparedness and development of such practices will be imperative to the survival of the companies being competitive outside of the local market, as well as prepare for the common free market the future will bring. The objective is to show that what currently companies see as costs, in reality are investments in the future of their success. Corporate Environmental, Social governance is a given in developed markets and will be further highlighted in the near future.

1.7 Structure of the Thesis

The thesis is structured as follows.

Chapter II provides a review of the theoretical and empirical literature on green transition. Questions such as what is green transition, its concept, and sustainable development have been answered to examine this issue.

Chapter III discusses circular economy.

Chapter IV discusses the role of development banks and financial institutions.

Chapter V presents the role that the EU plays and what are their requirements.

Chapter VI critically reviews the evidence on where North Macedonia stands on the green transition.

Chapter VII will provide an overall summary of the findings of the research and also draw out their policy implications.

Chapter II: Green Transition

2.1 What is the Green Transition?

The emergence of theories such as post materialism (Inglehart, R., 1997) and ecological modernization (Mol et al., 2009). has promoted the view that economic growth is compatible with environmental quality. A central argument in recent literature is that continued economic development is accompanied by changes in social values, with people placing greater emphasis on non-economic interests such as social equality and environmental issues. This change in values subsequently manifested itself in the emergence of environmental laws and new institutions to protect the environment (Inglehart & Welzel, 2005).

After the 2007-2008 financial crisis, there was an increase in policies focusing on coordinating economic development and environmental quality, and greater efforts to promote a green economy based on green growth and green jobs. These strategies are often described as win-win situations, where market-based policy measures can achieve both economic benefits and environmental improvements. (Poschen, 2017) The focus is on “greening” the economy through market instruments and the use of policy tools such as environmental taxes and trading systems. New clean and environmentally friendly technologies are given a central role and seen as key drivers in reducing the environmental impact of growth. Furthermore, the creation of new green products, markets and green jobs has been suggested as a means to further develop the economy without increasing environmental impact. (Faccer, Nahman & Audouin, 2014).

With the emergence of green growth and green economy concepts, concerns have been raised about the consequences of going beyond planetary boundaries and the need for dematerialization has been highlighted. Instead of green growth, a degrowth scenario has also been proposed, inspired by (Latouche, 2009) who argued that we need to abandon the idea that our society should be based on economic growth. This idea has since been further developed, (Kallis, Kerschner & Martinez-Alier, 2012) with degrowth defined as a

reduction in production and consumption that increases human well-being in the short and long term and improves ecological conditions at local and global levels (Hickel, 2020)

2.2 Concept of Green Economy

David Pearce (Pearce, Markandya & Barbier, 1989) pioneered the concepts of sustainable development and limits it to growth in A Blueprint for a Green Economy, in which he emphasized the need for a green economy to put it on a path to sustainable development. After a period of absence from the main political and economic arena, the current mainstream version of the green economy concept entered political discourse after the 2007-2008 financial crisis, breathing new life into the term (Borel-Saladin & Turok, 2013). Since then, it has become an established concept in national and international policy making. There is currently no unified definition of the green economy, but two components appear repeatedly: (i) a clear link to the concept of sustainable development; (ii) compatibility of economic, ecological and social goals.

Perhaps the clearest part of the green economy concept is its relationship to the concept of sustainable development, whereby the green economy can be seen as a path to sustainable development (Loiseau et al., 2016)

As mentioned above, it seems most appropriate to view the green economy as an enabler of sustainable development, with the ultimate goal of achieving sustainability.

2.3 What does it mean to transition to a green economy?

Viewing the green economy concept as a path to sustainable development requires greater focus on the actual implementation of economic and social changes. In this context, green economy is combined with sustainable transition theory. Sustainability transformation is goal-oriented and aims to solve environmental problems. Public authorities are therefore key actors in promoting the transition towards a more sustainable society (Smith, 2005).

Sustainable transition requires changes in the economic framework such as taxes, subsidies and regulatory framework. Since there is no unified understanding of what a sustainability transition should look like, conflicts are expected to arise between authorities regarding the benefits of specific solutions and the most effective policy instruments or packages. Furthermore, changes in framework conditions lead to struggles between political actors and interest groups that resist change for various reasons. In summary, sustainability transformation requires interaction between business, politics and civil society. Therefore, it can be said that the green economy is actually based on four pillars: environmental, economic, social and political (Geels, 2010).

Different understandings of the concept of green economy, as well as different views on sustainability and sustainable development, have led to different views on what the transition to a green economy is. That said, there are differing views on the extent to which a green economy requires economic, political and social change to become sustainable. Opinions also diverge on the extent to which transformation tools should focus on government regulation and investment, technological innovation and market mechanisms.

Green economy frameworks currently in use fall into two categories. The first is smaller in scope and focuses on market transformation and the pursuit of green growth. It's about the idea of decoupling emissions and resource consumption from economic growth through technological innovation and market-based policy instruments. Therefore, this narrow approach does not necessarily limit economic growth. The second approach is more comprehensive, including the market focus of the narrow approach but with a strong emphasis on broader social transformation.

2.4 Sustainable development of small and medium-sized enterprises

SMEs have long been recognized as an important driver of economic growth and development around the world. SMEs are vital to the economy but also have a significant impact on society. For example, SMEs are known for promoting innovation, generating capital, and creating jobs, all of which contribute to the eradication of poverty. SMEs

contribute to regional development and social cohesion by providing goods and services, creating jobs, and expanding the local tax base, especially in rural areas, sustainable business is becoming increasingly important for SMEs (Ramadani, Kjosev & Sergi, 2023).

Sustainable business practices can help SMEs reduce costs, improve reputation, and strengthen relationships with stakeholders by balancing economic, social, and environmental goals. Integrating climate change into business strategy is one of the biggest challenges facing businesses today. They face growing pressure from governments and interest groups to reduce their carbon footprints and thereby mitigate climate change. However, even if there is no alternative to sustainability, it may prove difficult for companies to integrate emissions reductions into their strategies.

There are many ways that SMEs can pursue sustainable business practices. For example, the goal of “eco-efficiency” is to increase resource efficiency and reduce waste while maintaining economic performance. Eco-innovation is the creation of new goods, services or processes that benefit consumers while minimizing negative impacts on the environment. Sustainability-focused innovations aim to solve pressing social and environmental problems (Schaltegger et al., 2012)

The adoption of sustainable practices by SMEs is influenced by institutional and external variables. Institutional pressures such as industry standards and government laws may force SMEs to implement sustainable practices to comply with rules or meet stakeholder expectations. To achieve an advantage and enhance brand reputation, SMEs can be encouraged to adopt sustainable practices through external factors such as customer demand and competition.

Stakeholder engagement is critical for companies seeking to adopt sustainable business practices. SMEs can identify areas where sustainable performance can be improved and gain support for their sustainable practices by interacting with stakeholders such as employees, customers, suppliers and local communities. SMEs can also collaborate with other groups, leveraging their resources and expertise, such as suppliers and industry associations, to address sustainability issues (Re & Magnani, 2023).

There are many benefits that SMEs can gain by adopting sustainable business practices. For example, sustainability can save costs, improve stakeholder relations, and enhance reputation (Siems, Seuring & Schilling, 2022). However, many SMEs face difficulties in implementing sustainable business practices due to limited organizational capacity, knowledge and financial resources.

SMEs face a lack of resources, particularly financial and technical resources, making it difficult to invest in sustainable technologies and adopt sustainable practices. Additionally, SMEs may place more emphasis on short-term financial goals than long-term sustainability goals, making it difficult to defend investments in sustainable practices.

Lack of knowledge and skills among SMEs, which limits their ability to analyse and implement sustainable practices and access relevant information and training programs, is another important barrier in the implementation of such practices. In addition to internal factors, SMEs also face external constraints such as regulatory frameworks, market trends and stakeholder expectations. For example, regulatory barriers may prevent SMEs from investing in sustainable practices, while pressure from larger companies with greater resources to do so may undermine their efforts. Furthermore, despite increasing demand for sustainable goods and services, SMEs may find it difficult to differentiate themselves and market their sustainable practices to customers (Polas et al., 2021).

Simply put, by implementing sustainable practices, companies can strengthen relationships with stakeholders, enhance reputation, reduce costs, and achieve long-term success and sustainable growth. Although SMEs can gain from implementing sustainable practices, this may cause them particular difficulties. Several studies have examined barriers to sustainable business practices in SMEs. However, research on the prospects and difficulties of implementing these practices in SMEs is still needed, and further research is needed to explore the motivations and barriers on SMEs implementing sustainable business models.

Social performance covers a wide, including environmental sustainability, employee well-being, civic engagement, and ethical behaviour (Jamali, & Mirshak, 2007). Research on social performance of SMEs has mainly focused on understanding the drivers, consequences and challenges of social performance. Several studies have shown that social performance can help SMEs improve their reputation, increase customer loyalty, and improve employee retention. Several studies have shown that social performance can also support SMEs financially, for example through better financial performance and better access to financing (Giannarakis et al., 2016)

The driving factors of social performance of small and medium-sized enterprises are diverse, including internal factors and external factors. Values and beliefs of owners and managers and organizational culture and structure are examples of internal variables. Pressure from stakeholders, including customer expectations and legal requirements, as well as industry norms and standards, are examples of external forces (Pfajfar et al., 2022).

Despite the potential benefits of social performance for organizations, there are significant difficulties in implementing and quantifying them. Due to limited financial and human resources, it may be difficult for SMEs to invest in social performance initiatives. Furthermore, it may be difficult for SMEs to develop and implement successful social performance initiatives due to a lack of knowledge and skills in this area. To address these issues, researchers have proposed some strategies to promote social performance of SMEs. For example, some studies claim that SMEs can benefit from interacting with stakeholders to set social performance priorities and increase support for social performance efforts (Baumann-Pauly et al., 2013).

Chapter III: Circular Economy

3.1 Circular Economy Strategies to Achieve Sustainable Development

The growing concern for the environment has led to the emergence of the concept of a circular economy, which is viewed as an economic system that aims to minimize waste and maximize the use of resources. Unlike a linear economy that follows a "take-make dispose" model, a circular economy promotes the reuse, repair, and recycle of resources and materials. By adopting circular economy strategies, it is possible to reduce the environmental impact products have and promote sustainability.

3.2 What is Circular Economy

It is the replacement to the traditional linear economy, which relies on a 'take, make, dispose' model (Korhonen et al., 2017), and seeks to reduce negative environmental impacts while improving economic performance. In circular economy, raw materials, components, and products should retain their quality and value for as long as possible, and in the best-case scenario is powered by renewable energy sources (Murray et al., 2015). In addition, circular economy seeks to increase the continuous use of materials as an economic model that protects the ecosystem and therefore the human well-being. China has gone as far as adopting Circular Economy as the basis of their economic development with the Circular Economy Promotion Law (World Bank, 2020).

Figure 1 shows the famous circular economy diagram, originally proposed by the Ellen MacArthur Foundation in 2013. This diagram essentially shows how biological and technological components circulate within an economic system. It effectively illustrates the differences in recycling patterns between biological and technological components and takes into account their inherent differences.

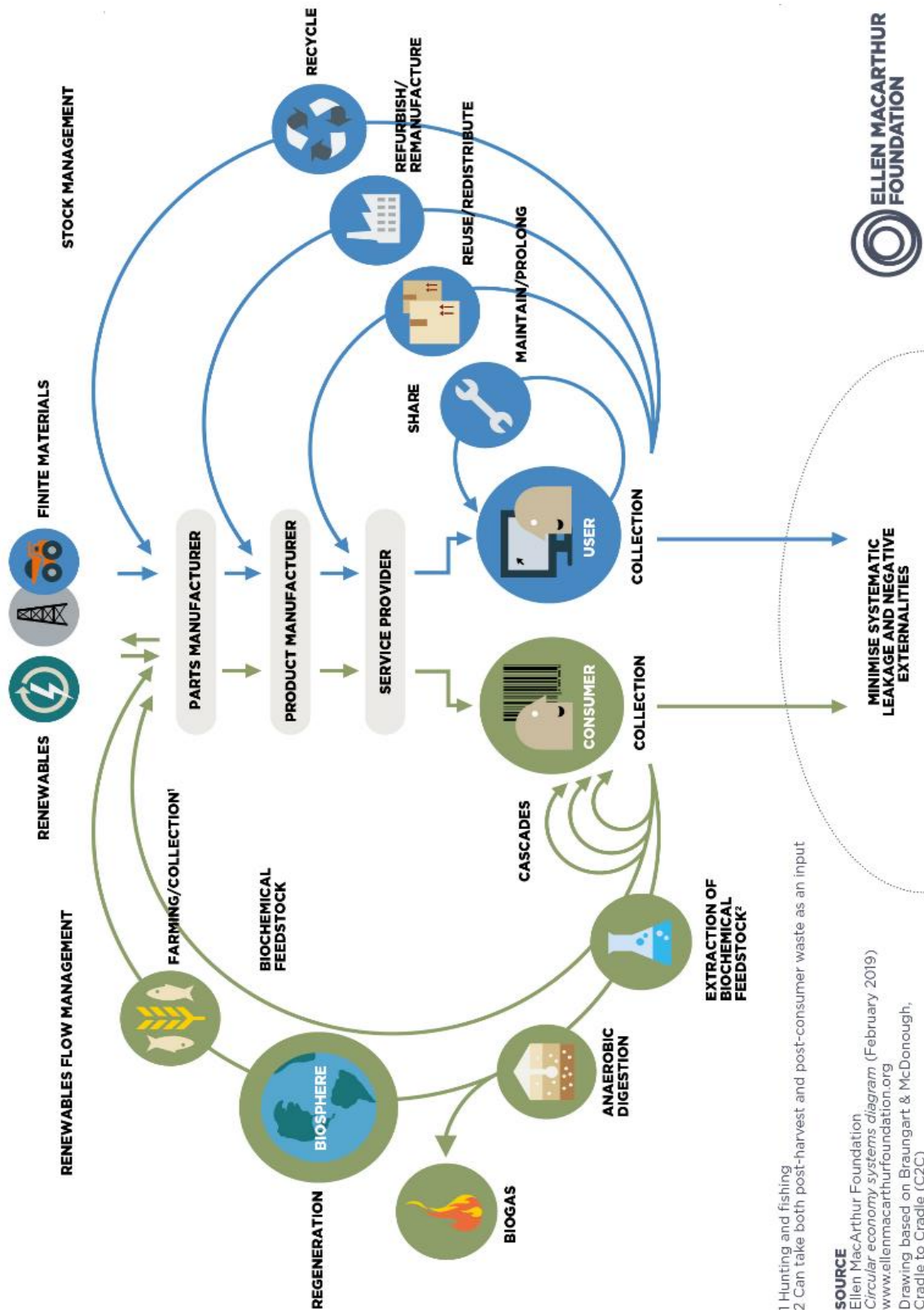


Figure 1. Circular economy diagram

Source: Ellen MacArthur Foundation (2013)

It's worth noting, as the Ellen MacArthur Foundation points out, that smaller circles in the chart the better, this means that reducing these cycles can bring greater benefits in terms of savings in materials, labour, energy and capital, as well as reducing external factors such as greenhouse gas emissions and toxic substances.

Furthermore, an important aspect of the circular economy concept is extending the service life of products and materials. This goal can be achieved by going through several consecutive cycles or by increasing the duration within a single cycle.

3.3 Advantages of Circular Economy

One of the most compelling advantages of the circular economy is its environmental benefits. By minimizing waste generation and reducing the need for landfilling and incineration, the circular economy makes a substantial contribution to waste reduction and pollution mitigation. This not only alleviates the burden on landfills but also curbs the detrimental environmental effects associated with incineration, such as air pollution and greenhouse gas emissions.

In addition to waste reduction, the circular economy actively promotes resource conservation. Through the optimization of resource use and the implementation of efficient recycling practices, this model helps safeguard valuable natural resources (Bocken et al., 2014). This not only includes minerals, metals, and water but also extends to the preservation of forests and ecosystems, which are vital for biodiversity and overall environmental health. As the circular economy fosters the conservation of these resources, it inevitably aids in reducing the carbon footprint and mitigating climate change (Kirchherr et al., 2017)

The circular economy generates a ripple effect in the economy, starting with job creation. By embracing circular practices, businesses and entrepreneurs unlock fresh opportunities, particularly in sectors such as recycling, refurbishment, and remanufacturing. These ventures result in an upsurge in employment, with a particular emphasis on green and sustainable jobs. The circular economy is not just an environmental endeavor, it is also an

economic driver that nurtures a workforce engaged in activities crucial for a sustainable future. (Ghisellini et al., 2017).

Moreover, the circular economy offers substantial cost savings to businesses. The optimization of resource utilization, coupled with the design of durable and easily maintainable products, enables companies to reduce their operational costs. By curbing waste and extending product life cycles, enterprises can enhance efficiency, reduce production expenses, and boost their overall profitability (World Economic Forum, 2014).

Furthermore, the circular economy contributes to market growth. As consumers worldwide become increasingly environmentally conscious, there is a growing demand for sustainable products and services. This shift in consumer behavior has significant implications for businesses. Companies that align with circular economy principles stand to benefit from this trend by offering eco-friendly, durable products, and services. This, in turn, leads to market expansion and economic growth (Ellen MacArthur Foundation 2020).

Beyond economic prosperity, the circular economy enhances the quality of life and well-being of communities. The reduction of pollution, in combination with the decreased reliance on landfills, leads to better health and an improved overall sense of well-being among the population. Cleaner air, reduced exposure to harmful chemicals, and a healthier environment collectively contribute to a higher quality of life for communities that embrace circular practices (Ellen MacArthur Foundation, 2020).

Additionally, the circular economy fosters accessibility to affordable, high-quality products. The focus on product durability over frequent replacements makes sustainable goods more accessible to consumers. This affordability not only benefits individual consumers but also addresses issues of affordability and access in various communities (World Resources Institute, 2019).

In the context of global sustainability, the circular economy plays a pivotal role in addressing critical challenges. Climate change mitigation is among its central objectives. By reducing greenhouse gas emissions through measures such as minimizing energy consumption and promoting the use of renewable resources, the circular economy

contributes to global efforts to combat climate change. This shift aligns with the broader goal of a low-carbon economy and a reduced ecological footprint (Cantler et al., 2020).

Chapter IV: The Role of Development Banks and Financial Institutions

4.1 Introductory remarks

Environmental sustainability and the financial system are intricately linked in a profound way and the academic community has shown an increased interest and the topic has become one of the most important topics, in order to find a way to lower our carbon footprint in our economy.

Climate change has become and continues to be a pressing issue that requires immediate attention, because the global economy is facing an indirect threat that is having a considerable impact on the financial sector. To reposition themselves and conform to current trends, financial institutions are constantly adopting new approaches and harmonising their activities to support an economy with a lower carbon footprint.

4.2 Financial institutions

Financial institutions play a crucial role in the economy, especially supporting developing nations in their pursuit to mitigate emissions and safeguard against climate change through financial assistance. They are often the primary source of external funding for the private sector as well as governments. The Development Banks (DBs) and the International Monetary Fund (IMF) are prime examples of such institutions in the financial world. Then there are the funds specializing in climate change and environment, such as the Global Environment Facility (GEF), Adaptation Fund, Green Climate Fund and other national funds that support developing nations such as Germany's GIZ, Austria's ADA and France's AFD. These all play a significant role in financing and driving progress towards sustainable development goals.

4.3 Development banks

Development banks have a significant role in closing the financial divide and fostering innovation. Assessing the key challenges is essential for the achievement of a low-carbon economy. Institutions are currently grappling with the challenge of integrating climate change concerns into their operations and when it comes to lending, there are numerous approaches that can be taken. The exact method chosen will depend on various factors such as the nature of the loan, the borrower's creditworthiness, and the lender's risk tolerance. Hence it is essential to select an approach that is both profitable for the lender and fair to the borrower.

4.4 The role of development banks and financial institutions

The effective allocation of funds towards addressing challenges related to a low carbon economy remains a crucial concern, which involves investing in solutions that can effectively mitigate the impact of climate change while promoting sustainable development.

One of the key issues in combating climate change and the necessity to transition to an economy with a lower carbon footprint is making sure that there are available financial funds. A lot of studies have been conducted to examine the role of the financial sector in implementing the Paris Agreement. Bold ecological goals often require significant financial resources to make the necessary investments, therefore it is important for financial institutions to increase their support for the low-carbon economy, which has become a major debate in the context of climate change (Ouyang & Li, 2018).

In recent decades, financial actors and stakeholders have introduced many bottom-up initiatives to promote responsible investing and sustainable finance. There is no denying that green and sustainable finance are rapidly being established and pursuing better achievements. However, it is also fair to say that the financing impact of the transition to a low-carbon economy is nowhere near the level needed. UNEP states that financial

institutions should acknowledge the risks and the costs to be better prepared for climate shocks to facilitate the decarbonisation of the economy (Timilsina & Malla, 2021)

Economies around the world are working hard to find solutions to adapt to climate change and reduce carbon emissions, in order to combat the looming risk of climate-related disasters. However, governments and regulators must overcome many financial, technical and structural barriers and to make such a large-scale investment possible requires a large number of novel strategies and a large amount of capital. This creates significant opportunities for financial institutions to which they can significantly contribute to the process of decarbonization and support innovation to support the transition to a low-carbon economy (Campiglio, Dafermos & Monnin, 2018).

In recent years, climate finance has been put under the spotlight that it needs to be, because finance instruments such as grants are an integral part of financing such activities. In the climate and environment sector, grants are often used for non-profit activities in such as funding knowledge management and capacity-building initiatives.

Combating climate change requires financial resources and strong investment by reducing emissions, supporting adaptation to impacts that are already occurring, and building resilience. However, the benefits of such investments far outweigh any upfront costs. Research conducted in the past showed that investments in climate protection would contribute significantly to build a sustainable economy and moving towards a green economy can open up new economic opportunities (Hallegatte, Rentschler & Rozenberg, 2019).

Recent research on low-carbon economies shows that climate change is affecting human society and global economic activities. The Paris Agreement was implemented by 196 parties at the COP 21 in Paris, with a target of limiting global warming to 1.5 degrees Celsius. With this agreement countries pledge to assist each other with financial aid, capacity-building and sharing technical expertise. In the financial area, the agreement reaffirms the need for climate finance to mitigate the adverse effects of climate change and this can only be addressed through if enough investments are directed towards lowering the emissions (UNFCCC, n.d.). On the other, hand it is evident that we need to learn to live

with the new norm and invest in adaptation. The Agreement creates a new context for financial institutions to contribute to climate action, including by playing a role in achieving the objectives, which aims to direct funds towards low greenhouse gas emissions and development adapted to climate change.

Chapter V: The role of EU on Green Transition

5.1 What role does the EU play and what are their requirements?

The EU is committed to achieving the most ambitious and science-based international climate policy goals and wants to be a leader on combating climate change. As such, it provides mechanisms through which to directly or indirectly contribute to the green transition in the Western Balkans. Underlying these approaches is the ever-present prospect of accession, which implicitly and explicitly encourages the adoption of rigorous EU policies and standards in a wide range of areas, including climate change (Oberthür & Dupont, 2021).

In order to one day become a member of the European Union, North Macedonia must complete the accession process, the foundation of which is the adoption and implementation of the Acquis chapters. They represent the fundamental obligations that all EU member states must adhere to, upon becoming a member. It consists of 35 chapters, each one of these chapters covers different areas that candidate countries must align to through reforms and adaptations in their laws in order to prepare an accession treaty (European Commission, n.d.).

Chapter 27, one of the largest chapters, sets out the EU's environmental policy, which aims to "promote sustainable development and protect the environment for present and future generations" and focuses on some basic principles such as polluter pays principal, creating preventive measures, combating environmentally harmful activities and lowering greenhouse gases. The environmental acquis is a collection of over 200 legal acts that regulate everything from nature and air quality to industrial pollution, agriculture practices, land use and climate change (European Commission, n.d.).

In addition, the EU's environmental acquis includes horizontal legislation, which applies to all areas of environmental management and provides tools and processes for improving decision-making, lawmaking, and implementation. North Macedonia must align its environmental laws and practices with the EU standards in order to join the European

Union. Aligning with Chapter 27 requires significant investments in environmental infrastructure, as well as a competent and educated public administration that has the understanding of applying and enforcing the necessary regulations and practices (European Commission, n.d.).

The EU's requirement that candidate countries adopt the *acquis* provides a significant boost to the green transition in the region by promoting environmental protection and sustainable development. In addition to making strict demands in accession negotiations to facilitate the green transition, the EU has also established a number of processes and frameworks to promote its perspective, rules, and principles in the Western Balkans, thereby improving the region's prospects of integration with the EU. These actions include support for reforms and programs in sectors critical to the green transition, such as energy. The signing of the Energy Community Treaty in 2006 was a key initiative aimed at extending the EU's internal energy market to Southeast Europe and the Black Sea region. The specific goals include improving the environmental status of the region's energy supply as well as promoting energy efficiency and supporting the transition into more renewable energy production (Energy Community Secretariat, n.d.)

5.2 Berlin process and sustainability

The Berlin Process, which was launched in 2014, aims to help the Southeast European Energy Community contracting parties to strengthen their regional cooperation and promote sustainable growth. The second noteworthy summit of the Berlin Process was the 2019 Poznan Summit, where the EU presented the ambitious Western Balkan Green Agenda.

A year later, the green agenda was fully recognized and launched at the third major summit of the Berlin Process in Sofia. The Western Balkans Green Agenda is one of the EU's current strategic priorities and is part of the European Green Deal. The package of measures is undoubtedly the EU's most ambitious and comprehensive climate protection plan to date.

The strategy unveiled in late 2019 aims to tackle the existential threats of climate change and environmental degradation and achieve net-zero emissions by 2050. It consists of a set of policies and initiatives aimed at reducing greenhouse gas emissions while increasing investment in energy efficiency and renewable energy (European Commission, n.d.).

The European Green Deal is primarily intended to guide domestic policy and economic growth; however, it also has a strong external dimension, representing core elements of its trade, development and, above all, foreign policy.

5.3 Carbon Border Adjustment Mechanism (CBAM) and sustainability

Furthermore, what needs to be considered is the Carbon Border Adjustment Mechanism (CBAM), it is a proposed policy tool that would put a price on carbon-intensive goods imported into the European Union. The aim of CBAM is to prevent carbon leakage, this is seen when companies move their production outside of the EU to countries with less stringent climate policies to avoid paying for their carbon emissions.

CBAM would work by requiring importers of certain goods, such as steel, cement, and aluminium, to purchase carbon credits for each ton of embedded carbon in their products. The price of the carbon credits would be based on the EU's carbon trading system, which happens to be the world's largest carbon market. CBAM is still under development, but the European Commission has proposed that it be implemented in 2026. The proposal is currently being negotiated by the European Parliament and the Council of the European Union (European Commission, n.d.).

It is important to note that CBAM is not a carbon tax. It is a market-based mechanism that would use the price of carbon credits to incentivize businesses to reduce their emissions. CBAM would also provide a financial incentive to non-EU countries to adopt more ambitious climate policies. This mechanism will oblige countries like North Macedonia to become more sustainable and lower their greenhouse gas emissions.

6.1 Where does North Macedonia stand on the Green Transition?

North Macedonia signed international agreements related to environmental protection and sustainability. Notably, it became a party to the United Nations Framework Convention on Climate Change (UNFCCC) and adopted the Kyoto Protocol. Over the last few years North Macedonia has gradually shifted its energy focus toward renewables and energy efficiency. Investments in hydropower, wind energy, and solar energy projects have increased, reducing reliance on coal-fired power plants, however coal remains the largest source. The country has made efforts to protect its natural environment and biodiversity. National parks and protected areas were established to conserve unique ecosystems and species, increasing their protected area from 8.4% to 13.9% (UNEP, n.d.).

North Macedonia has witnessed a shift in its approach to environmental concerns and sustainable practices over the years. From a period of industrialization and environmental neglect, the country has evolved to recognize the importance of environmental protection and sustainable development. Factors such as international agreements, public awareness, and economic diversification have contributed to this transformation. However, challenges remain, particularly in addressing air pollution and ensuring the sustainable use of natural resources.

6.2 Resource Efficiency

In order to evaluate the green transition process in North Macedonia it is important to see whether companies are trying to change their practices on the following activities among others: (Rizos, 2015)

- Minimizing waste
 - minimizing waste means adopting practices and strategies aimed at reducing various forms of waste in their operations.
- Saving energy

- adopting practices and strategies aimed at reducing energy consumption and improving overall energy efficiency within their operations.
- Recycling by reusing materials
 - incorporating sustainable practices into their operations to reduce waste and environmental impact. It involves the collection, processing, and reintroduction of materials or products back into the production process, rather than discarding them as waste.
- Saving water
 - adopting practices and strategies aimed at reducing water consumption and improving overall water efficiency within their operations.
- Selling residue waste and waste to another company
 - process of finding a buyer interested in purchasing or repurposing waste materials that are generated as byproducts of their operations.
- Using predominantly renewable energy
 - Relying on energy sources that are generated from renewable and sustainable resources to power their operations.

All these factors have the following in common, they create cost saving, environmental sustainability, improved efficiency and better reputation amongst other things. However, at the same time they often face the following barriers: environmental culture and lack of awareness, financial barrier, lack of information, lack of technical skills and lack of administrative support.

These can be grouped into two, waste and material resource management and energy efficiency and use. North Macedonia recently presented six new laws that were aligned to the EU directives and introduced the circular economy and polluter pays concepts. Introducing the obligations of the producers and defining the responsibilities of the different waste streams (Ministry of Environment and Physical Planning MOEPP, n.d.). The previous law on waste management lacked these definitions and obligations. In order for the companies to start seeing the benefits of these aforementioned practices it is important to have the appropriate infrastructure in place and enforce the laws. On the matters of water, there a new proposal on the law on water, however it has still not passed

the parliament. Currently the law states that the cost of water is nearly equivalent to the cost for households therefore it is not an expense that the producers feel, or one might even go as far as say that it is misused, and no accountability is held (MOEPP, n.d.).

6.3 Energy production

Energy has and will always play a key role in greening the economy and cost saving. In 2022, the electricity generation in North Macedonia had a significant share of fossil fuels, accounting for over half, approximately 58%, of total production. This predominantly came from coal (40%), natural gas (13%), and oil (5%). Low-carbon sources made up nearly a quarter (around 22%) of the overall electricity generation, primarily sourced from hydropower (19%). Wind, biofuels, and solar energy together constituted a smaller portion, with wind contributing 1.6%, biofuels at 0.57%, and solar at an even lower 0.34% (Energy Regulatory Commission, n.d.).

Additionally, North Macedonia supplemented its energy mix with net imports, which comprised around 20%-25% of the country's electricity consumption. Over the last decades the country has focused mainly on adding hydro power to the energy mix and lately focusing on solar and wind. However, the country is ambitious in its strategy and plans, and has presented a Strategy for Energy Development until 2040, which aims to be a lot greener and environmentally friendly. Furthermore, it has presented an enhanced nationally determined contribution to the Paris agreeing vowing to reduce greenhouse gas emissions by 51% compared to 1990 (UNFCCC, n.d.).

This will enable companies to use renewable energy sources from the grid, however what companies can do is invest in energy efficiency and installing solar panels on their roofs. These are both being subsidized by the government through subsidies (Ministry of Economy, n.d.). Some of these policies are directed at SMEs, such as installing photovoltaic panels up to 40kW and any excess production can be sold to the universal provider at fixed price. For larger installations they are able to sell into the free market (Ministry of Economy, n.d.).

6.4 Collaboration with development banks

The role of the development banks, national development banks and agencies, as well as international funds such as GEF and GCF are of huge importance to addressing climate change and sustainable development. Especially for a country like North Macedonia which is still not developed. There are numerous projects in North Macedonia addressing this topic, by working on soft projects to create analysis for their needs. This kind of collaboration has led to successful new financing opportunities for the private sector and especially for the SME sector in North Macedonia. In the past the Development banks have mainly focused on financing infrastructure projects, which have not been focusing on the green transition and sustainable investments. However, over the last few years there have been developments such as the new Green Financing Facility, which is supported by EBRD, UN, government and private banks (European bank for Reconstruction and Development, 2022). Another example would be the EUR 100m loan agreement with EIB which will be managed by the North Macedonian Development bank to boost green transformation of SMEs (European Investment Bank, 2023).

6.5 EU Process and policies

The EU has set ambitious goals for environmental sustainability and the reduction of greenhouse gas emissions, and countries aspiring to join the EU, like North Macedonia, must align their policies and practices with EU standards. North Macedonia has made progress in aligning itself to the EU requirements of green transition. It has passed the National Energy and Climate Plan, which was resented to the Energy Community Secretariat. It has also passed an enhanced NDC to the Paris agreement, which presents 63 measures of addressing the reduction of Green House Gas emission. In these measures the private sector plays a key role.

The NECP outlines numerous policies and measures, many of which include estimated budgets and identified funding sources for implementation. However, the policies associated with the just transition process lack such cost estimations, and they lack a clear timeframe, funding sources, and monitoring indicators. Additionally, the NECP lacks a comprehensive action plan and information regarding the substantial investments

required for the expansion of gas transmission and distribution networks (climate Action Network Europe, n.d.).

Notably, the country has recently ratified the Growth Acceleration Financing Plan for the period 2022-2026. This plan encompasses a range of financial instruments, such as green bonds, a Hybrid National Green and Digital Fund tailored for SMEs, start-ups, and innovative enterprises seeking to invest in environmentally sustainable technologies.

Additionally, North Macedonia has introduced an Energy Efficiency Fund and a Strategic Green Investment Fund with the specific goal of expediting investments in renewable energy sources and financing solutions that enhance energy efficiency (OECD, n.d.).

Over the last decade and especially over the last few years North Macedonia has adopted certain programs to help the private sector invest in greening the economy. However, it is important to see if these policies and programs are being used by the private sector and being enforced by the authorities. In order to evaluate the activities of the SMEs in the green transition process and gain insight we will use the survey compiled by Ipsos European Public Affairs at the request of the European Commission.

6.6 Where does North Macedonia stand on the Green Transition?

North Macedonia is still in the early stages of transitioning to a circular economy, but there is a growing awareness of the importance of this concept for the country's sustainable development. The government has adopted several policies and initiatives to support the circular economy, such as the National Strategy for Sustainable Development 2021-2030, the National Waste Management Plan 2021-2027 as well as legislation.

The majority of the funding is directed at the energy sector and infrastructure development. Most there projects are being financed through grants from the European Union or through loans from development banks. The ongoing projects and ones in the process to be started are; the Waste Water Treatment Plant in Skopje, Tetovo and Bitola,

accounting for over EUR 250 million. Furthermore, funding has been secured through EBRD and grants from the EU to construct landfills and transfer stations with sorting systems across the country (Ministry of Finance & Ministry of Environment).

6.7 Survey data

The survey consists of 504 SMEs and 11 large companies from North Macedonia which was done over the period of 8th of November 2021 until 30th of November 2021 (Data Europe, n.d.).

Q. Over the past year, how much have you invested on average per year to be more resource efficient?

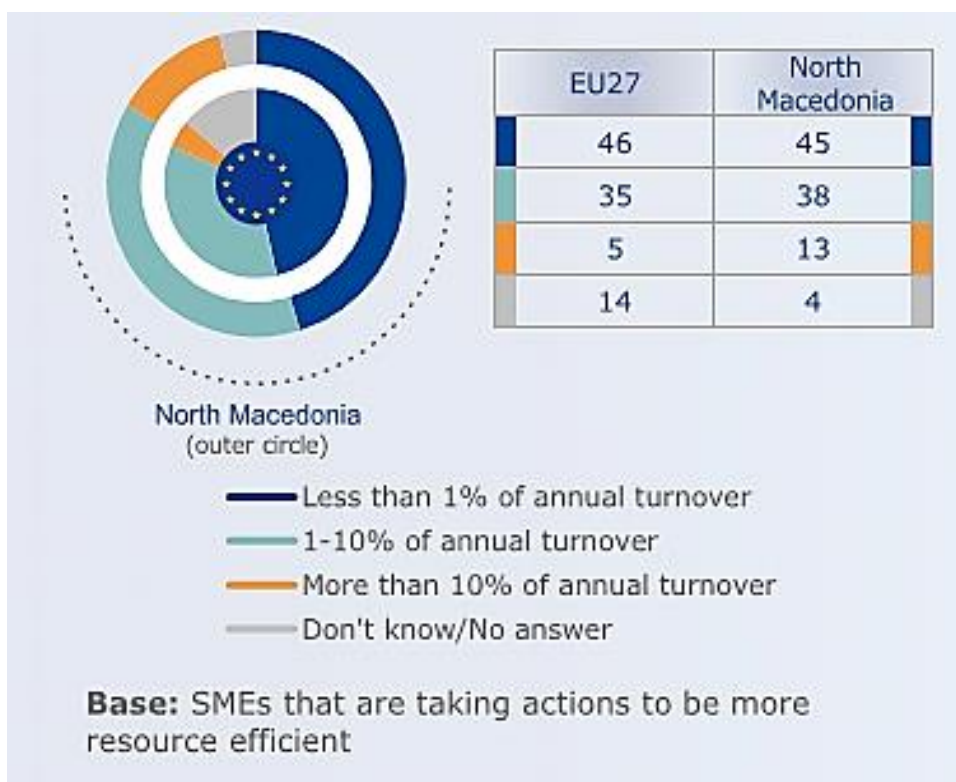


Figure 2. Average investments per year to be more resource efficient

The following results show us that the answers do not deviate drastically from the average of the EU 27. However, what needs to be considered is that a lot of the green transition reforms have already been implemented in the EU member countries. Therefore, this could be misleading when comparing the answers from North Macedonia

to the EU27. However, what is overwhelmingly evident is that nearly half of the respondents have not invested at all and over a third less that 10 percent of the annual turnover.

Considering the benefits of investing in resource efficiency it is important to review the effects it has had on the ones that have invested in such practices.

Q. *What impact have the undertaken resource efficiency actions had on the production costs over the past two years? The production costs have... (%)*

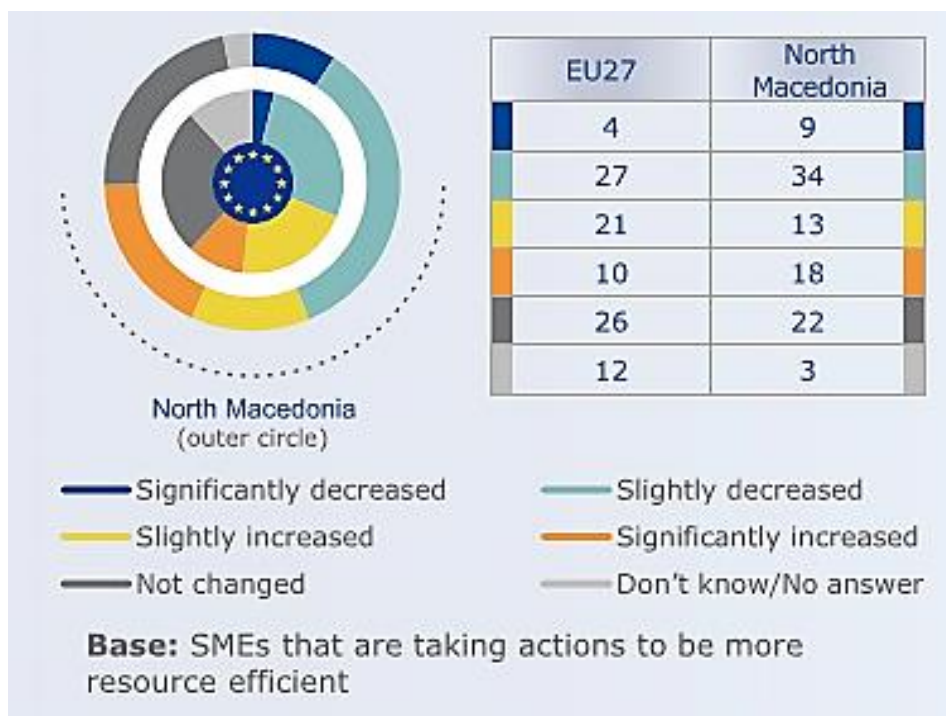


Figure 3. Impact of undertaken resource efficiency actions on production costs over the past two years

Based on the following answers it seems that results and savings can be realized by investing in sustainable practices. However, at the same time there are respondents which claim that for some production costs have increased. This can be down to the fact that the companies are not implementing resource and energy audits, which would show the direct effect it would have on production costs. Furthermore, it is important to note that the energy prices in North Macedonia are regulated by the Regulatory Energy Commission.

Q. Does your company have a concrete strategy in place to reduce your carbon footprint and become climate neutral or negative? (%)



Figure 4. Companies that have a concrete strategy in place to reduce the carbon footprint














Figure 5. Companies size

The following answers show that the awareness is either there on being more sustainable, or the companies see the costs benefits of investing and implementing such

practices. However, it raises the question why not more companies are applying these practices.

Now let's look at the whole survey compared to the EU27 and non-Eu countries to see how the SMEs in North Macedonia responded. The following diagrams represent what the companies are currently, as of the survey date, and what their plans are.

Q. What actions is your company undertaking to be more resource efficient? (% by country)












	Minimising waste	Saving energy	Saving materials	Recycling, by reusing material or waste within the company	Saving water	Switching to greener suppliers of materials	Designing products that are easier to maintain, repair or reuse	Selling your residues and waste to another company	Using predominantly renewable energy	Other	None	Don't know/No answer
EU27 	64	61	57	47	46	33	26	24	19	2	9	2
UK 	75	63	54	74	46	47	26	17	18	1	5	0
TR 	73	65	74	56	65	52	42	24	11	0	7	0
MK 	16	22	11	11	8	8	8	25	8	2	31	0
ME 	43	41	33	21	31	25	17	20	6	2	15	4
RS 	44	44	38	26	28	19	17	28	7	1	16	0
AL 	10	23	8	18	8	6	9	12	4	3	49	0
IS 	64	50	59	54	22	22	21	28	28	1	10	0
NO 	87	67	65	69	29	60	41	31	39	1	2	1
MD 	58	54	47	21	52	23	18	13	7	0	19	0
US 	60	51	47	61	37	32	22	24	17	1	16	2

Caution should be exercised when interpreting the results of Albania, Moldova and Montenegro, due to the smaller number of interviews having been conducted (between 93 and 107 per country).

Most-frequently selected response shown in green
Base: all SMEs, non-EU countries (n=3 200)

Figure 6. Undertaken actions of companies to be more resource efficient

Q. Over the next two years, what are the additional resource efficiency actions that your company is planning to implement? (% by country, non-EU countries)

	Minimise waste	Save energy	Save materials	Recycle, by reusing material or waste within the company	Save water	Switch to greener suppliers of materials	Designing products that are easier to maintain, repair or reuse	Sell your residues and waste to another company	Use predominantly renewable energy	Other	None	Don't know/No answer
EU27 	50	53	48	39	41	32	27	24	30	2	20	3
UK 	66	62	50	59	41	49	26	22	34	1	15	3
TR 	69	65	71	58	65	59	47	32	27	0	9	3
MK 	12	22	8	8	8	5	7	12	19	5	31	6
ME 	38	51	38	14	44	24	21	19	34	0	24	0
RS 	34	43	31	28	27	22	16	25	23	1	20	3
AL 	14	17	14	5	8	1	7	10	12	0	59	4
IS 	27	28	25	30	10	19	13	15	22	3	37	1
NO 	58	51	46	56	35	53	42	31	38	11	13	4
MD 	45	47	46	23	51	37	20	21	32	1	11	5
US 	51	47	43	51	38	29	28	25	22	6	25	4

Caution should be exercised when interpreting the results of Albania, Moldova and Montenegro, due to the smaller number of interviews having been conducted (between 93 and 107 per country).

Most-frequently selected response shown in green
 Base: all SMEs, non-EU countries (n=3 200)

Figure 7. Additional resource efficiency actions that companies are planning to implement.

6.8 Analyses of Survey

These results unfortunately show us that the SMEs in North Macedonia are not only very far off the EU27 average, however unfortunately also at end of the list only rivalled by Albania when it comes to companies addressing changing practices and investing in order to be resource efficient and sustainable. The only question where they fair average or above average is on selling their waste to other companies. This can probably be mainly attribute to them seeing this a quick gain.

The next set of results shed light on how to motivate companies to invest in being more sustainable and at the same time potentially give insight on why SMEs in North

Macedoni have not implemented these activities. The following question is based on funding the change.

Q. Which of the following would help your company the most to be more resource efficient? (Maximum 3 answers) (%) (Top 4 responses)



Figure 8. Actions that will help companies to be more resource efficient

What becomes evident is that it is mainly down to the cost of investment. Most of the companies claim funding as a top four answer to be the barrier. When reviewing the previous set of results, it shows that they are interested and willing.

Chapter VII: Conclusion

7.1 Conclusion

Although a unified definition on green economy remains elusive, two core components consistently emerge: a strong link to the principles of sustainable development and the harmonization of economic, ecological, and social objectives.

Central to the green economy concept is its role as an enabler of sustainable development. Viewing it as a conduit to sustainability necessitates a focus on practical implementation and aligns with the theory of sustainable transition. Transitioning toward sustainability requires systemic changes, including shifts in the economic framework encompassing aspects like taxation, subsidies, and regulatory policies. These changes can foster sustainability but often give rise to disputes between authorities and other stakeholders, especially the private sector, regarding the most effective policy instruments and approaches. Moreover, adapting to altered framework conditions may lead to conflicts among political actors and interest groups resistant to change, underscoring the intricate nature of sustainable transition.

The frameworks for the green economy can be broadly categorized into two approaches. The first, more focused on market transformation, seeks green growth and endeavours to decouple emissions and resource consumption from economic growth through technological innovations and market-driven policies. The second approach adopts a more comprehensive stance, integrating market-oriented strategies with a robust emphasis on broader social transformation.

In the realm of small and medium-sized enterprises (SMEs), sustainability has gained prominence. SMEs are recognized for their contributions to economic growth and social impact, including innovation, job creation, and poverty reduction. Adopting sustainable business practices can enhance cost-efficiency, stakeholder relations, and reputation. However, SMEs face unique challenges in their pursuit of sustainability, ranging from limited resources and short-term financial objectives to a lack of knowledge and skills.

These challenges may hinder their ability to invest in sustainable technologies and practices and to integrate emissions reductions into their strategies.

Stakeholder engagement plays a fundamental role in facilitating SMEs' adoption of sustainable business practices. Collaborating with employees, customers, suppliers, and local communities can uncover areas for improvement and gain support. Moreover, leveraging partnerships with other entities, such as suppliers and industry associations, can provide SMEs with resources and expertise to address sustainability concerns.

Despite the obstacles, the adoption of sustainable practices yields tangible benefits. These include cost savings, improved stakeholder relations, enhanced reputation, and long-term success. However, more research is needed to explore the motivations and barriers to SMEs implementing sustainable business models, especially in developing countries.

Implementing and quantifying social performance initiatives can present substantial challenges. Limited resources may hinder investment in these initiatives, while a lack of knowledge and skills can affect their development and execution. Strategies to promote social performance in SMEs may involve stakeholder engagement, the use of labelling and certification schemes, and the creation of social performance frameworks.

In summary, the journey to a green economy, sustainability, and social performance in SMEs is multifaceted and intricate. These endeavours require cooperation, innovative strategies, and continuous learning to overcome barriers and promote sustainable practices for a better future.

Environmental sustainability and the financial system are now inextricably interconnected, commanding significant attention within the academic and financial communities. This relationship is driven by the urgent need to reduce our carbon footprint within the global economy. The imperative to adapt to current trends has spurred financial institutions to adopt new approaches and align their strategies with the goal of a lower carbon footprint economy.

Financial institutions hold a decisive role in supporting the transition to sustainability, particularly in developing nations, where they provide essential financial assistance on sustainable investments that also address mitigation factors. The role of Development Banks extends to bridging financial gaps and driving innovation. To achieve a low-carbon economy, institutions must address the challenge of integrating climate change considerations into their operations, especially when it comes to lending practices.

Efficient allocation of funds remains a critical concern, requiring investment in solutions that effectively mitigate climate change impacts while promoting sustainable development. The financing gap between the resources needed to support and enhance the transition to a low-carbon economy and the current funding levels is a central issue. Despite various initiatives promoting responsible and sustainable finance, the funding necessary for the transition is still insufficient.

Financial institutions have the potential to play a fundamental role in decarbonization and the transition to a low-carbon economy by facilitating large-scale projects, capitalizing on the need to finance the green transition with innovation. These institutions can contribute significantly to combatting climate change, driving carbon emissions reduction, and fostering innovation to enable the transition to a low-carbon economy.

The European Union (EU) stands as a committed leader in the global effort to combat climate change, driven by ambitious climate policy goals. For the Western Balkans, the EU plays a pivotal role in implementing the green transition and central to this role is the ever-present prospect of accession, however they need to adopt the EU policies and standards across various domains, including climate change.

North Macedonia, aspiring to become an EU member, must complete the accession process, anchored in the adoption and implementation of the Acquis chapters. Chapter 27, the EU's environmental policy chapter, assumes particular importance, emphasizing sustainable development and environmental protection.

The introduction of the Western Balkan Green Agenda marks a significant stride in the EU's climate protection efforts for the region. Crucially, the European Green Deal is not confined to domestic policy but also carries a robust external dimension, influencing trade, development, and foreign policy. The Carbon Border Adjustment Mechanism stands as a key component of this strategy, aimed at preventing carbon leakage. It functions by requiring importers of carbon-intensive goods to purchase carbon credits based on the EU's carbon trading system, encouraging businesses to reduce emissions and incentivizing non-EU countries to adopt more ambitious climate policies.

In essence, the EU's unwavering commitment to science-based climate goals, environmental standards, and comprehensive climate protection plans reflects its dedication to leading the global charge against climate change and, in the process, empowering regions like the Western Balkans to embrace a sustainable and green future.

In conclusion, North Macedonia's journey towards environmental protection and sustainable development is marked by significant progress and notable challenges. The nation has embraced international agreements such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, demonstrating its commitment to addressing global environmental concerns.

The transformation in North Macedonia's approach to environmental matters, moving from a period of industrialization and environmental neglect to recognizing the significance of sustainability, can be attributed to several factors, including international agreements, increased public awareness, and economic diversification. However, despite these positive developments, certain challenges persist, particularly in addressing air pollution and ensuring the sustainable use of natural resources.

A key aspect of the green transition process in North Macedonia involves encouraging businesses to adopt eco-friendly practices. These practices encompass minimizing waste, saving energy, recycling materials, conserving water, selling waste to other companies, and utilizing predominantly renewable energy sources. These activities

not only contribute to cost savings but also enhance environmental sustainability, improve operational efficiency, and boost a company's reputation. Nevertheless, companies face barriers, including limited environmental awareness, financial constraints, lack of information, technical skills, and administrative support.

The government has taken steps to overcome these challenges, presenting new laws aligned with circular economy principles and polluter-pays concepts to manage waste more efficiently and define producer responsibilities. However, effective implementation hinges on having the appropriate infrastructure and rigorous enforcement.

Partnerships with development banks, national development institutions, and international funds have become more common over the last few years in addressing climate change and promoting sustainable development. These collaborations have opened financing opportunities for the private sector and SMEs, fostering the green transition and sustainable investments.

While North Macedonia has introduced programs to incentivize the private sector to invest in sustainability, the extent to which these policies are being adopted and enforced remains a subject of evaluation. The Ipsos European Public Affairs survey offers insights into SMEs' activities and intentions regarding resource efficiency.

In summary, North Macedonia has made efforts in embracing environmental sustainability and green development. However, continued commitment, increased awareness, enhanced infrastructure, and targeted support for businesses, especially SMEs, are essential to overcome the existing challenges and accelerate the transition towards a more sustainable and environmentally responsible future. Financial incentives, such as subsidies, can play a pivotal role in motivating businesses to invest in resource-efficient and sustainable practices. While cost remains a significant barrier, these incentives, coupled with public-private partnerships and international collaboration, can help North Macedonia achieve its goals of environmental protection and sustainability.

The country might have made progress unfortunately the list for recommendations remains long and should be addressed in order to fulfil the requirements set out by the EU and in order to help the SMEs in addressing the pressing issue of transition to a green economy.

Chapter VIII: Recommendations

7.2 Recommendations

- Policymakers and stakeholders in North Macedonia need to adopt a comprehensive and integrated approach to the green economy, considering its environmental, economic, social, and political dimensions. This approach should prioritize sustainable development as the ultimate goal.
- The government and authorities should actively engage in sustainable transition, altering economic frameworks through taxation, subsidies, and regulatory reforms.
- Interaction and cooperation between businesses, political actors, and civil society needs to be fostered in order to facilitate sustainable transition. Stakeholder engagement is critical in identifying areas for improvement and gaining support for sustainable practices. Collaboration can also leverage resources and expertise from various sectors.
- Provide support to SMEs in their pursuit of sustainability, including financial incentives, training programs, and information dissemination. Offer incentives for SMEs to invest in sustainable technologies and practices.
- Address the knowledge and skills gap among SMEs by providing access to relevant information and training programs. Governments must play a crucial role in increasing awareness and capabilities in sustainable business practices.
- Recognize the value of social performance for SMEs, including improved reputation, customer loyalty, employee retention, financial performance, and access to financing. Encourage SMEs to integrate social performance initiatives into their business strategies.
- Create a regulatory environment that supports and incentivizes sustainable practices in SMEs. This can involve setting industry standards, providing tax incentives for sustainable initiatives, and ensuring compliance with environmental and social norms.

- Promote technological innovation as a means to decouple emissions and resource consumption from economic growth. Encourage SMEs to adopt environmentally friendly practices and innovations that benefit consumers while minimizing negative environmental impacts.
- Acknowledge that the field of sustainable business practices in SMEs is continually evolving. Support further research to explore the motivations and barriers to implementing sustainable business models in SMEs.
- North Macedonia should expedite efforts to align its environmental laws, regulations, and practices with EU standards, particularly those outlined in Chapter 27 of the Acquis. This alignment is crucial for progress toward EU accession and will significantly advance the green transition.
- Prioritize the need for substantial investments in environmental infrastructure to meet EU requirements.
- Enhance the competence and capacity of the public administration to effectively apply and enforce environmental regulations and practices. Provide training and resources to public officials responsible for environmental management.
- Prioritize energy efficiency improvements and the transition to renewable energy sources. Develop and implement policies and initiatives that encourage energy efficiency measures and the expansion of renewable energy production.
- Facilitate access to resources, information, and training to help SMEs reduce costs, improve their reputation, and strengthen relationships with stakeholders.
- Prepare for the implementation of the Carbon Border Adjustment Mechanism (CBAM) by taking proactive steps to lower greenhouse gas emissions. This includes setting targets for emissions reduction, implementing measures to reduce emissions, and preparing for the potential impact of CBAM on trade.
- Seek opportunities to access EU funding and support programs aimed at promoting sustainable practices, energy efficiency, and renewable energy development.

- Promote policies that encourage sustainability and the green transition at the national level. Environmental protection and sustainable development must be a priority in the government agenda.
- Increase public awareness and education on the importance of sustainability and the green transition. Foster a culture of environmental responsibility and engage citizens in sustainable practices.
- Development Banks should enhance their capacity to integrate climate change considerations into their operations. North Macedonia should seek new loans related to supporting the private sector in finding funding for to invest in green practices.
- Financial institutions should actively promote sustainable finance practices in developing countries.
- Financial institutions should explore partnerships and collaboration with climate funds like the Green Climate Fund, Global Environment Facility, and Adaptation Fund to mobilize resources and drive sustainable development goals.
- Close the Funding Gap: Address the funding gap by exploring innovative financial mechanisms, public-private partnerships, and incentives to attract more investments in low-carbon and climate-resilient initiatives. Seek opportunities to leverage international funding for sustainable projects.
- Development Banks should encourage countries to create responsible investment strategies that consider environmental, social, and governance (ESG) factors.
- Development Banks should anticipate and prepare to support non-EU countries such as North Macedonia for carbon pricing mechanisms such as Carbon Border Adjustment Mechanism. This includes conducting impact assessments on how such mechanisms may affect their operations and portfolios.
- North Macedonia should continue its commitment to international agreements on environmental protection and sustainability, ensuring the implementation of measures required by these agreements.

- Given the current reliance on coal for energy generation, North Macedonia should expedite the transition to renewable energy sources. Investment in renewable energy infrastructure should be prioritized to reduce greenhouse gas emissions.
- Implement and enforce the new laws related to waste and material resource management, emphasizing waste reduction, recycling, and responsible waste disposal. Develop the necessary infrastructure and accountability mechanisms for effective implementation.
- Revise the law on water to reflect the true costs of water usage, creating incentives for more responsible water consumption by producers. Ensure proper oversight and accountability for water usage in industrial processes.
- Encourage businesses, especially SMEs, to invest in energy efficiency measures and the installation of solar panels through government subsidies and financial incentives. These measures can significantly contribute to reducing energy consumption and carbon emissions. These efforts should be coupled with regulations and incentives to facilitate the transition.
- Promote collaboration with Development Banks and international funds to secure financing for green projects and sustainable initiatives.
- North Macedonia should continue aligning its policies, strategies, and regulations with European Union standards. This alignment will facilitate the green transition, making it easier for the country to become an EU member in the future.
- Develop comprehensive action plans with clear timeframes, funding sources, and monitoring indicators for climate change mitigation and adaptation efforts. Ensure that such plans cover all relevant aspects, including the expansion of green infrastructure.
- Promote energy audits for companies to help them understand the direct impact of sustainable practices on their production costs. This can result in more informed decision-making and potential cost savings.
- Provide additional subsidies for SMEs to invest in green practices, particularly in sectors like energy efficiency and renewable energy. These subsidies can help overcome financial barriers and incentivize change.

- Offer financial incentives and funding to motivate businesses to become more resource efficient. Support programs and mechanisms that help cover the costs of sustainable investments.
- Enhance access to green financing for SMEs, including the provision of loans and grants for sustainable projects. Create awareness among SMEs about available funding sources and support mechanisms.

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