SMEs AND GREEN ECONOMY CONCEPT – CASE OF NORTH MACEDONIA

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Abstract

SMEs are the engine of economic development, they are the key driver of employment, GDP, export and innovation. Green economy is a new strategy for enhancing human well-being and reducing environmental risk, being defined as low-carbon, resource-efficient and socially inclusive. This concept is a new and a big challenge for SMEs. The main aim of the paper is to point the importance of this concept and to analyze the awareness and implementation of green practices by SMEs in North Macedonia. To achieve the aim a review of this concept was made and also a survey was conducted. At the end of the paper conclusion and recommendations are presented.

Key words: SMEs, green economy,

1. Intruduction

SMEs are the backbone of the socio - economical development. They have a key role in job creation, GDP, export and innovation. According to the World Trade Organization (2019) SMEs represent about 90% of businesses and contribute up to 40% of national income (GDP). They create more than 50% of employment, most formal jobs are generated by SMEs, which create 7 out of 10 jobs. The number of SMEs is increasing permanently in developed countries, but also in developing countries. SMEs have numerous advantages and disadvantages, as well as numerous barriers and challenges during their operation. Green economy is a new strategy for enhancing human well-being and reducing environmental risk, being defined as low-carbon, resource-efficient and socially inclusive. The UN defines the green economy as "low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution,

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enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services". (UN Environment Programme)

Many SMEs see a green economy as a highly strategic target, so they need to adapt their financial and operational planning in order to transform to green business.

The main purpose of the paper is to analyze the awareness and implementation of the green economy concept by the SMEs in Republic of North Macedonia. To achieve the aim, a survey was conducted and the target group was micro, small and medium enterprises mostly from the Pelagonia region.

The rest of the paper is organized as follows. Section 2 is literature review. Section 3 gives theoretical overview for SMEs, section 4 introduce briefly the readers with green economy concept and programs, plans to promote green behavior among SMEs. Section 5 provides insights into the data, methodology, and results of the analysis and the last section concludes.

2. Literature review

It's widely recognised that SMEs have a significant role in economic development. SMEs are crucial in the 21st century for the development of the countries. Many studies have attempted to explore the importance of SMEs for economic development. According to the World Trade Organization (2019) SMEs represent about 90% of businesses and contribute up to 40% of national income (GDP).

SMEs play an ever more imperative role towards market evolution locally and overseas, influencing sustainable growth in the trading, production and service areas via attracting investments.

Gherghina et all (2020) said that SMEs are crucial for local economic development, playing a noteworthy role in job creation, poverty alleviation and economic growth, but they encounter many funding barriers.

Also, Sipa et all (2015) claim that SMEs play an ever more imperative role towards market evolution locally and overseas, influencing sustainable growth in the trading, production and service areas via attracting investments.

In his research, Homohom has explained the following reasons for SMEs contribution to economic development: SMEs are more labor-intensive and tend to lead to a more equitable distribution of income than larger enterprises; SMEs contribute to a more efficient allocation of resources in developing countries; SMEs support the building of systemic productive capacities.

Throughout the years, SMEs are facing with numerous challenges during their operations. Today, the big challenge for SMEs is the implementation of green economy concept.

A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services. (UNEP, 2011). The green economy requires a new mindset for doing

business, a new level of skilled workers and professionals who have the ability to work across sectors, and work as part of multidisciplinary teams. (Hadi Hassan Al-Taai, 2021)

Hadzi Naumova-Mihajlova and Petroska –Angelovska (2023) in their paper, have made analysis for the implementation green economy concept in SMEs and the results shows that SMEs have lack of information on how can apply this concept in their operations and also they are facing with complex administrative procedure in implementing environmental practices. Besides that most of the surveyed companies take measures for more efficient use of resources in order to save and reduce costs. They recommend that it is necessary to create a regulatory framework for green economy in North Macedonia by bringing clear and appropriate documents with specific activities and measures, harmonized with EU standards.

3. Theoretical overview for SMEs

Nowadays, the modern conditions of the market economy characterized by increasingly pronounced dynamism, technological discoveries and competition arise the need for the development of a dynamic sector that can quickly and easily adapt to changes. Small and medium-sized enterprises with their characteristics, such as: simple organizational structure, greater centralization in decision-making, greater flexibility, short-term orientation in operations, more efficient coordination in operations, etc. can adapt much faster to these modern business conditions, compared to large companies.

Considering the fact that small enterprises are a heterogeneous group, it is hard to determine a single criteria or a unique combination of criteria, which will give a definite and unique response. There is no single, uniformly accepted definition of a small firm (Storey, 1994). European Commission has given the definition for SME, and according to the last modification (in 2003), these are the quantitative criteria: number of employees, annual turnover and annual turnover and annual current assets. Medium firms are those with fewer than 250 employees, turn over less or equal of 50 mil ϵ , and total balance sheet less or equal ϵ 43mil ϵ , while small have at most 50 workers, turn over less or equal 10 mill. ϵ and total balance sheet less or equal ϵ 10mil ϵ , and micro firms are those with 10 workers, turn over less or equal of 2 mil ϵ , and total balance sheet less or equal 2mil. ϵ .

The key advantages of SMEs are: (Tomash, 2010)

- flexibility and increased reaction capacity to adapt to market changes.
 The structure of these entities allows them to adapt faster and better to market needs and consumer preferences, compared to large companies.
- Making quick and timely decisions. Most often, due to individual decision-making, decision-making is quick and timely.
- Simple and low hierarchical structure. This kind of organizational structure makes it possible control and other functions to be performed immediately;

- Contribution to the increase competition. SMEs due to their large number, contribute to maintaining a satisfactory level of competition, and development of products and services that meet the needs of consumers;
- Better access to market information. Due to direct communication, they
 have better contact with consumers and are aware of new challenges on
 the market, unlike them, large companies have indirect communication
 with consumers;
- Encourage and increase the innovation. Due to their flexibility, SMEs have the opportunity to constantly innovate, introduce new products to the market, services or promotions without too much risk, which is not the case with large companies that have a complex organizational structure and a wide production program;
- Increased ability to correct errors. Due to the size of the structure, SMEs have opportunities for quick correction of products and other errors. The exchange of experiences contributes to the fact that these errors do not appear in large companies because they will cause huge costs;
- Team work. Namely, there is a small number of employees who know and communicate with each other, so they work as a team, unlike large companies that can have thousands of employees who do not know each other at all;
- Higher worker productivity. Employees in SMEs are usually more motivated due to direct communication with responsible persons and personal motives for making a profit.

The main reasons for SMEs failure are: lack of access to the financial market; limited access to the market; lack of skilled workers or poor access to public and private institutions for the development of workers skill; restricted access to new and advanced technology and equipment; reduced access to information vital to have strong and affective business management; absence of business management skills. (Pedraza, 2021)

SMEs make up over 99% of European Union (EU) businesses and have gone through significant challenges over the past year such as pandemic, the global supply chain disruptions during the post-pandemic era, Russia's war aggression against Ukraine, transition to green and digital economy.

Table 1. Economic structure of enterprises per size class, in EU-27 for 2023

	Number of		Number of persons		Value added	
	enterprises		employed			
Class -	Number	Share	Number	Share	Billion €	Share
size						
Micro	24,209,297	93.6%	40,803,310	30.0%	1,799	19.8%
Small	1,387,888	5.4%	26,770,763	19.7%	1,527	16.8%
Medium	210,551	0.8%	21,156,339	15.5%	1,512	16.6%
SMEs	25,807,736	99.8%	88,730,412	65.2%	4,839	53.1%
Large	43,420	0.2%	47,355,823	34.8%	4,265	46.9%
Total	25,851,156	100%	136,086,235	100%	9,104	100%

Source: Annual Report on European SMEs 2023/2024

Table 2. Proportion of EU-27 NFBS SMEs in industries of different knowledge and technology intensities by EU Member State – 2023

	High- technology industries	Medium- technology industries	Low- technology industries	Knowledge- intensive services	Less knowledge intensive services
EU - 27	0.2%	4.5%	5.2%	31.0%	59.1%

Source: Annual Report on European SMEs 2023/2024

According to the data in Annual Report on European SMEs 2023/24 ((European Commission, 2024) in 2023, there are 25.8 million SMEs in the EU-27 and they create 65.2% of employment and more than half of the EU-27 value added.

4. Green economy concept

In 2008 was launched Green Economy Initiative which provides analyses and policy support for green sector investments and in the greening of environmentally unfavorable sectors. In the United Nations Environment Programme the green economy is defined as economy which results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. According to UNEP growth in income and employment should be driven by public and private investments that reduce carbon emissions, enhance resource efficiency, and prevent biodiversity loss and ecosystem services. These investments, should be supported by targeted public expenditure, policy reforms, and regulation changes because they maintain rebuild natural capital as a critical economic asset and as a source of public benefits, especially for poor people whose livelihoods and security depend on nature. National economies should take urgent measures in order to transition from a brown to a green economy because a green economy: recognizes the value of, and invests in, natural capital; is central to poverty alleviation; creates jobs and enhances social equity; substitutes renewable energy and low-carbon technologies for fossil fuels; promotes enhanced resource and energy efficiency; delivers more sustainable urban living and low-carbon mobility; grows faster than a brown economy over time, while maintaining and restoring natural capital. (UNEP, 2011)

The five principles of green economy are: (Partners for Inclusive Green Economy, 2019)

- The Wellbeing Principle. A green economy enables all people to create and enjoy prosperity.
- The Justice Principle. The green economy promotes equity within and between generations.
- The Planetary Boundaries Principle. The green economy safeguards, restores and invests in nature.
- The Efficiency and Sufficiency Principle. The green economy is geared to support sustainable consumption and production.
- The Good Governance Principle. The green economy is guided by integrated, accountable and resilient institutions.

The transition from brown to green economy is necessary, but on the other hand, it is difficult to measure the progress towards a green economy because "conventional economic indicators, such as GDP, provide a distorted lens for economic performance particularly since such measures fail to reflect the extent to which production and consumption activities may be drawing down natural capital. By either depleting natural resources, or degrading the ability of ecosystems to deliver economic benefits, in terms of provisioning, regulating or cultural services, economic activity is often based on the depreciation of natural capital". (UNEP, 2011)

SMEs are essential element of the European economy, they provide over 133 million jobs and creating over half of the gross value added, so using efficiency practices among SMEs and involving them in ecoinnovations and new business models will have significant impact in making the EU green, competitive and sustainable economy.

Also, transformation the busieness to green business is a big challenge but also there are many benefits. Hillary (2004) classified the benefits of greening a business into *internal* and *external*. Internal benefits are related to the internal operation of SMEs, while external benefits are related to external interaction. The internal benefits are categories as follow: organizational benefits (e.g., improved working conditions and safety); financial benefits (e.g., cost savings from materials efficiencies) and people benefits (e.g., improved employee ethical benefits (e.g., gaining competitive marketing advantage); environmental benefits (e.g., reduced pollution), and communications benefits.

In EU, a numerous plans, programs, projects have been adopted to promote green behavior among small and medium-sized enterprises.

For example, the European Union Green Action Plan for SMEs introduced in 2014 (GAP) aims "to contribute to the re-industrialization of Europe by enhancing SMEs competitiveness and supporting green business developments across all European regions, notably in view of the fact that, at this stage, significant differences in resource efficiency exist between sectors and Member States". (European Commission, 2014).

The GAP is expected to raise SMEs' awareness of resource efficiency improvements and circular economy's potential and to inform SMEs about EU resource efficiency actions. The objectives and actions in GAP are divided in five areas: (European Commission, 2014)

- Greening SMEs for more competitiveness and sustainability. Improving the resource efficiency for reducing production costs and increasing productivity gain.
- Green entrepreneurship for the companies of the future. GAP aims to create business environment where SMEs can develop green ideas..
- Opportunities for SMEs in a greener value chain. The activities in GAP are focus on addressing barriers to green value chain collaboration, and promoting new green business models.

- Access to the markets for green SMEs. The activities in GAP are focus on promoting a greener internal market and enabling access to international markets.
- Governance. Governance ensures monitoring and updating of the actions supporting SMEs, as well as coordination, cooperation and best practices exchange at European, national and regional level.

Also the 9th dimension of the Small Business Act is *SMEs in a green economy* which presents the two sub-dimensions: 1) framework for environmental policies targeting SMEs, which considers the greening aspects in national SME, sectoral and innovation policy frameworks and 2) incentives and instruments for SME greening, which looks at the various tools and instruments in place – such as regulatory and information-based instruments, financial incentives, and green public procurement – to support SMEs in their greening efforts. (OECD, ETF, European Union and EBRD, 2019)

5. SMEs and green economy – Case of North Macedonia

SMEs have a crucial role in the economy of the Republic of North Macedonia. The data of the State Statistical Office shows that the number of active enterprises in the Republic of North Macedonia in 2022 was 71 228. The highest share of 84.2% belongs to enterprises with 1-9 persons employed, followed by enterprises with no persons employed and enterprises with unascertained number of persons employed (no data on persons employed) with 5.9%, and enterprises with 10-19 persons employed with 4.6%. The share of enterprises with 20-49 persons employed was 3.0%, those with 50- 249 persons employed participated with 2.0%, while enterprises with 250 or more persons employed had a share of only 0.3%. (State Statistical Office, 2024).

According to the data of OECD in 2020 SMEs create 73.9% of employment, 67.9% of added value and 26% of export.

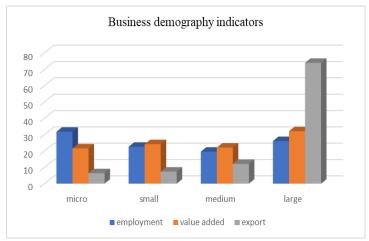


Figure 1. Business demography idicators Source: SME Policy Index: Western Balkans and Turkey, OECD 2022

North Macedonia is a small economy with natural endowments, so achieving sustainable and green economic growth is essential. The concept of green economy offers a new approach to work dedicated to the principles of environmental sustainability, to meet the human needs by using the sources efficiently and also using renewable energy source.

The Republic of North Macedonia is a party to the United Nation Framework Convention on Climate Change (UNFCCC) (Official Gazette of RM – 61/97) and its Doha Amendment (2019), ratified the Kyoto Protocol (Official Gazette of Republic of North Macedonia – 49/04), the Paris Agreement (Official Gazette of Republic of North Macedonia – 161/2017) and has associated itself with the Copenhagen Accord (2009). The Country has agreed to the following contribution to the global efforts for GHG emissions reduction (Macedonian NDC): "To reduce the CO2 emissions from fossil fuels combustion for 30%, that is, for 36% at a higher level of ambition, by 2030 compared to the business as usual (BAU) scenario." (Ministry of Environment and Physical planinig, 2020)

The green economy concept is a new concept for SMEs in North Macedonia. Our country signed international agreements related to environmental protection and sustainability.

North Macedonia has improved its score under 9th dimension of Small Business Act (SMEs and green economy) from 2.72 in 2019 to 3.16, with the main progress achieved in scaling up its financial incentives for SME greening (table 3). To fully implement the related SBA Principle 9 (Enable SMEs to turn environmental challenges into opportunities), North Macedonia will need to ensure effective implementation and monitoring of its greening measures.

Table 3. North Macedonia ranking - SBA

Dimension	Sub - dimension	Thematic Blocks	North
			Macedonia
Dimension 9:	Sub-dimension	Planning and	3.70
SMEs and	9.1: Framework	design	
green economy	for environmental	Implementation	2.62
	policies targeting	Monitoring and	1.89
	SMEs	evaluation	
		Weighted average	2.80
	Sub-dimension	Planning and	4.40
	9.2: Incentives	design	
	and instruments	Implementation	3.23
	for SME greening	Monitoring and	2.60
		evaluation	
		Weighted average	3.46
North Macedonia	's overall score for D	3.16	

Source: SME Policy Index: Western Balkans and Turkey, OECD 2022

The SME Strategy (2018-2023), has a special focus on environmental policies but none of the measures planned has been implemented so far. The adopted Plan for Accelerated Growth (2022-2026) is expected to provide a stronger impulse for greening SMEs. Also elements of the green economy targeted at SMEs are part

of several sectoral strategies in the Waste Prevention Plan (2021-2031), which is harmonised with the Law on Waste Management.

5.1 Methodology and research

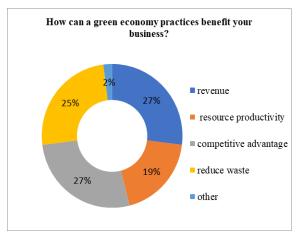
The methodology of research is based on primary data obtained from previously prepared, structured questionnaire. The survey comprised 100 SMEs from North Macedonia, and there were 67 questionnaires. In order to perceive the current situation, questions were referred to awareness and knowledge of SMEs on environmental regulation and application of environmental practices and principles of green economy in their operations.

The businesses that were part of the research are usually from the manufacturing industry, wholesale and retail trade. The questions were divided into 3 groups. The first set of questions concerns general company data. The second group of questions refers to the awareness of managers about the concept of green economy and it's benefits. The third group of questions are related to the implementation of the green economy concept.

On the basis of data analysis from the first group of questions, the following results have been obtained: from the businesses-respondents, 31 were older than 10 years, 36 were older less than 10 years. Most of the respondents, were micro business 45%, 38% small and 17% were medium bisiness. The most of the managers of the businesses that were part of the survey had more than 10 years of work experience. The second group of questions refers to the awareness of managers about the concept of green economy and it's implementation. On the question "How much do you know about the green economy concept?" 7% of the respondents answered that is an expert, 26% that are informed, 37% knows a little about it and 30% doesn't heard.

The results of the next questions shows that only 15% of the respondents was involved in green economy and 69% don't have a strategy for implementing the green economy concept. Also on the question "Do you believe in the positive feedback from green products" 64% of the respondents replied with yes and 36% with no.

The results of the question "How can a green practices benefit your business?" are as follow: 27% of the respondents thought that the benefit is revenue, 19% resource productivity, 27% competitive advantage, 25% of the respondents answered reduce waste is a key benefit and 2% other. (Fig. 2)



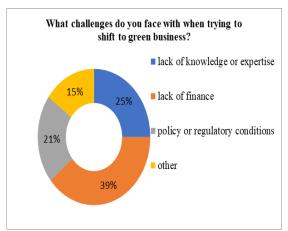


Figure 3

For applying the green economy concept businesses have been faced with numerous challenges and according to the research results the biggest challenge is lack of finance (See Fig. 3).

The results that emerged allow to formulate conclusion that a very small number of SMEs implement some green practices during their operations, hence it's necessary to encourage awareness among managers, employees and consumers about the benefits of this concept and the need for its implementation as soon as possible. Also, the government should take measures to stimulate businesses to switch into green business.

6. Conclusion

The green economy concept is a big challenge for SMEs in Macedonia. Green economy can generate as much growth and employment as a brown economy. But the green economy transition means involving many actors and and undertaking of numerous reforms, measures and policies.

The results of the research shows that very small number of SMEs know about this concept or implement some green practices. The SMEs in North Macedonia are facing with numerous barriers and challenges such as: lack of knowledge or expertise, financial or economic barriers, policy or regulatory conditions, leadership within the organization not supportive, lack of an overarching body responsible for coordinating SME greening policies and corresponding funds, etc.

In order to encourage and increase awareness for the importance of this concept, the following measures should be taken: establishing regulatory frameworks, financial support, limiting spending in areas that deplete natural capital, using sustainable supplier and production chains etc.

Future studies may focus on exploring the ways for improving company competitiveness through green solutions.

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