UDK 336.74-022.316(4-672EU)
336.74-022.316(497-15)
336.74-022.316(497.7)
(Professional paper)

DIANA BOSHKOVSKA*
NATASHA DANILOSKA**
TATJANA PETKOVSKA MIRCHEVSKA***

INSTITUTIONAL READINESS FOR SUSTAINABLE FINANCE IMPLEMENTATION UNDER THE EU REGULATORY FRAMEWORK: EVIDENCE FROM NORTH MACEDONIA

Abstract: *This paper examines the role of sustainable finance in advancing sustainable business models, focusing on the European Union regulatory framework and its implications for the Western Balkans, with particular reference to North Macedonia. The study analyzes the evolving EU sustainable finance architecture, anchored in the EU Taxonomy and operationalized through instruments such as the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR), as mechanisms for enhancing transparency, mitigating ESG-related risks, and directing capital toward sustainable economic activities.*

A qualitative institutional and policy analysis is applied to assess the level of regulatory alignment and market readiness for sustainable finance implementation in North Macedonia within the regional context. The analysis identifies key structural constraints, including regulatory fragmentation, limited technical capacity, insufficient data infrastructure, and the absence of national taxonomies. Although recent regulatory initiatives and green financial instruments indicate gradual alignment with EU standards, the relatively low share of green lending suggests that sustainable finance integration remains at an early stage.

* Ph.D. full time professor, Institute of Economics – Skopje, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, diana@ek-inst.ukim.edu.mk

** Ph.D. full time professor, Institute of Economics – Skopje, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, natasha.daniloska@ek-inst.ukim.edu.mk

*** Ph.D. full time professor, Institute of Economics – Skopje, Ss. Cyril and Methodius University in Skopje, Republic of North Macedonia, tatjana@ek-inst.ukim.edu.mk

The findings indicate that effective consolidation of sustainable finance requires strengthened institutional capacity, improved regulatory coherence, and enhanced regional cooperation. The paper contributes by providing an integrated assessment of sustainable finance readiness in an EU-accession economy.

Keywords: sustainable business models, sustainable finance, regulatory framework, Western Balkans, North Macedonia

JEL classification: G1, G28, Q01, Q56

Introduction

In recent years, sustainability has become a defining criterion for business strategy and financial decision-making. Modern enterprises are increasingly expected to integrate environmental, social, and governance (ESG) considerations into their operations, moving beyond short-term profit to create long-term value for society, the environment, and stakeholders. This shift reflects broader societal pressures, rising consumer awareness, and global commitments to climate action and sustainable development.

Sustainable finance plays a pivotal role in this transition by directing capital toward activities that support environmental protection, social inclusion, and responsible governance.

In the European Union, the development of comprehensive regulatory frameworks—including the EU Taxonomy, the Corporate Sustainability Reporting Directive (CSRD), and the Sustainable Finance Disclosure Regulation (SFDR)—provides a standardized approach for transparency, risk management, and sustainable investment.

For the Western Balkans, including the North Macedonia, alignment with EU sustainable finance standards presents both opportunities and challenges. While it can attract international investment and foster economic integration, limited technical expertise, fragmented regulatory practices, and the absence of national taxonomies constrain progress.

This paper examines the role of sustainable finance in promoting sustainable business strategies, highlighting regulatory developments, regional challenges, and the practical implementation of ESG principles in North Macedonia and the broader Western Balkan context.

The objective of this paper is to evaluate the degree of institutional and regulatory readiness of North Macedonia for the implementation of EU sustainable finance standards within the context of EU financial integration. The research addresses the following question: To what extent is the national financial system aligned with the evolving EU sustainable finance framework?

To address this question, the study applies a qualitative case-study approach based on institutional and policy analysis. The assessment relies on secondary data sources, including EU regulatory documents, reports of the National Bank of North Macedonia, Ministry of Finance publications, and regional assessments prepared by international organizations. The analytical framework evaluates sustainable finance development across three interrelated dimensions: regulatory alignment, institutional capacity, and market implementation.

1. CONCEPTUAL FOUNDATIONS OF SUSTAINABLE FINANCE

In the new era, increased awareness of environmental and social issues has led businesses to increasingly recognize the importance of adopting sustainable business strategies into their operations. So the focus of sustainable business model is not limited to financial gain, but also takes into account the broader consequences for the environment and society (Schlütter et al., 2023).

This trend indicates a fundamental shift in the modern business model, where sustainability becoming a key strategic priority for organizations that want to remain competitive and relevant in a time of consumer increased environmental awareness. In recent years, consumer awareness of the environmental impact of the products they consume has increased, significantly influencing their preferences and purchasing decisions. (Lopes et al., 2024).

Sustainable businesses along adopting environmentally friendly business practices such as energy efficiency, waste reduction, and socially responsible material usage, additionally, they also consider their social responsibilities to employees, local communities, and society at large, aiming to create sustainable positive impacts for all stakeholders involved (Etikan, 2024).

Sustainable business refers to business practices that consider three aspects of sustainability: environmental, social and corporate governance (ESG). Business are becoming more aware that environmental, social, and corporate governance (ESG) factors significantly influence the long-term performance of a company (Chen et al., 2023).

Sustainable finance plays a very important role in achieving a sustainable business model. By including ESG criteria in investment and lending decisions, the financial sector creates an economic incentive for companies to improve their sustainable performance. Within this context, sustainable finance operates as a transmission mechanism through which regulatory incentives influence corporate sustainability behavior and capital allocation decisions.

Existing literature on sustainable finance increasingly emphasizes the role of regulatory frameworks as drivers of financial-system transformation, particularly in economies undergoing institutional convergence with the European Union. In this context, transition economies represent a distinct analytical setting, where regulatory adoption does not necessarily translate into immediate market transformation. The present study contributes to this discussion by examining how institutional readiness conditions the practical implementation of sustainable finance policies.

2. EU SUSTAINABLE FINANCE REGULATORY ARCHITECTURE

In the policy framework of the European Union, sustainable finance refers to financial activities that support economic growth while reducing environmental pressures, in order to achieve the climate and environmental goals set out in the European Green Deal, taking into account social and governance aspects. Sustainable finance also encompasses transparency when it comes to risks related to ESG factors that may have an impact on the financial system, and the mitigation of such risks through the appropriate governance of financial and corporate actors. (European Commission, 2024)

Globally, sustainable finance is driven by a combination of regulatory initiatives, voluntary guidelines and market-driven standards. In the EU context, over the past few years, the EU has introduced a series of sustainability regulations affecting companies both within and outside the EU. In this regard the EU Taxonomy has a key role, because it serves as a foundational element across these regulations, guiding companies in identifying and reporting on environmentally sustainable activities. In the Table 1 is shown how this sustainability regulations contribute to the enhancing sustainability and transparency within the EU, and it link with EU Taxonomy.

Table 1. CSDD, CSRD, SFDR and ESRS and their link with the EU taxonomy

Act	Key elements	Timeline	Mandates		Link to EU Taxonomy
CSDDD (Corporate Sustainability Due Diligence Directive)	Establishes a framework requiring companies to manage their environmental and social impacts.	Endorsed in April 2024	Companies must conduct due diligence on environmental and human rights impacts, mitigate risks, report publicly and establish grievance mechanisms.		Aligns with the EU Taxonomy by requiring due diligence that considers environmental risks.
CSRD (Corporate Sustainability Reporting Directive)	Replaces earlier directives, expanding reporting on sustainability impacts from a double materiality perspective.	Rule starts applying between 2024 and 2028	Companies must disclose sustainability risks and their alignment with the 1.5°C target.		Requires reporting on operations aligned with EU Taxonomy-defined sustainable activities.
SFDR (Sustainable Finance Disclosure Regulation)	Mandates ESG risk disclosure by financial market participants.	Applicable since March 2021	Requires transparency on sustainability risk assessments and promotion of ESG features.		Links financial products to sustainable activities as defined by the EU Taxonomy.
ESRS (European Sustainability Reporting Standards)	Promotes interoperability with existing standards to ensure comprehensive sustainability reporting.	Starting between 2024 and 2026	Establishes guidelines on what topics and indicators companies should include in their sustainability reports.		Complements the EU Taxonomy by providing detailed reporting guidelines for aligning disclosures with Taxonomy criteria.

Source: Regional Cooperation Council, 2024

The EU Taxonomy for sustainable activities is a framework that identifies which economic activities can be considered environmentally sustainable. It gives businesses and investors a shared set of criteria to determine whether an investment is genuinely sustainable. Under this system, an activity must make a significant contribution to at least one of six environmental goals: reducing climate change, adapting to climate change impacts, protecting water and marine resources, promoting a circular economy, preventing and controlling pollution, and protection and restoration of biodiversity and ecosystems.

As see from Table 1, along EU Taxonomy, important role have the regulatory frameworks like the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable Finance Disclosure Regulation (SFDR). The Corporate Sustainability Reporting Directive (CSRD) broadens the scope and depth of sustainability reporting obligations for companies. It enhances transparency on environmental, social, and governance (ESG) matters and improves the consistency and comparability of sustainability data across organizations. In contrast, the Sustainable Finance Disclosure Regulation (SFDR) requires financial market participants to explain how they integrate sustainability risks into their investment processes and to disclose the extent to which their investments meet stated sustainability objectives.

According this, since January 2022, companies within the scope have been required to disclose the percentage of their turnover, capital and operational expenditures, as well as Assets Under Management (AUM) for asset managers or Green Asset Ratio for financial institutions (FIs) that are eligible under the Taxonomy. As of January 2024, all FIs in the EU need to report on the Taxonomy alignment of their investments, applying only to investee companies that have already reported their own alignment. (Regional Cooperation Council, 2024)

3. REGIONAL CONTEXT: SUSTAINABLE FINANCE DEVELOPMENT IN THE WESTERN BALKAN

In the paper of particular interest is to make insight into sustainable finance practices in the WB, especially that these countries are one of the most affected regions in Europe regarding climate issues. In 2020, those countries have signed Green Agenda for Wester Balkan, with the main goal to reach carbon-neutral status in these countries until 2050 and harmonization with the EU Green Deal.

For countries from WB, aligning with the EU Taxonomy and international standards for sustainable finance is an important step in fostering sustainable finance across the region. Such aligning present strategic imperative to attract international investments, integrate into the broader European financial market and meet the global sustainability commitments. Moreover, adherence to international standards, such as those set by the IFRS (International Financial Reporting Standard) and PRI (Principles for Responsible Investment), enhances the credibility and attractiveness of the region's financial systems.

To gain a clearer picture of the state of sustainable finance in this region, a survey was conducted across the Western Balkan countries.[1] The results from survey show that a significant portion of institutions (88%) currently offer sustainable finance products, with an equal split between those offering multiple products and those with a few offerings. These findings indicate an emerging institutional commitment toward sustainable finance adoption, although implementation remains uneven across national financial systems in the region. Nearly half of the institutions have implemented specific classification systems for green and sustainable activities, while over a third use a general framework. Energy efficiency and renewable energy initiatives are the top priorities, highlighted by 64% and 60% of respondents, respectively. The importance of sustainable finance is widely recognized, with 84% of institutions actively preparing for their increased role in the next 2-3 years (Regional Cooperation Council, 2024).[2]

The authors B. S. Rakočević and S. Benković used SWOT analysis in their research to describe the level of ESG adoption in the banking sector of the WB countries. (Rakočević B. S. and Benković S., 2023). According to this analysis, the perceived strengths of the WB banking sector indicate a strong willingness to implement ESG criteria. Therefore, it appears that every country has already begun progressing toward an ESG framework. The main weaknesses identified include a lack of ESG professionals and specialists, the absence of common metrics for ESG reporting, and the insufficient integration of ESG metrics into current bank credit analyses. The main opportunities for the WB banking sector in adopting ESG criteria include building new value propositions, developing innovative products and value-added solutions for clients, maintaining a competitive advantage, and driving sustainable growth.

[1] The survey sent to all 134 financial institutions, but only 20% responding.

[2] For more information on the survey results, see https://www.rcc.int/download/docs/Sustainble%20Finance%20and%20Taxonomy%20in%20WB.pdf/b50848aa3ff9948b5a050a10edb114a4.pdf

Finally, the threats that WB banks may face are reflected in the constant flow of new regulations, increasing compliance requirements, the extensive and diverse collection of ESG data, and the numerous ESG-related risks associated with companies acting as bank clients or partners.

From a literature review as well as from the research conducted in the WB region,   can realize that regulatory convergence with EU sustainable finance standards represents not only compliance requirement but also a structural transformation challenge for WB economies. Key issues include relatively small market size in each economy, a general lack of awareness and understanding of sustainable finance principles among stakeholders, limited technical capacity and expertise and the absence of standardized taxonomies. Addressing these issues requires targeted capacity building, development of clear regulatory frameworks and enhanced regional cooperation to align with EU standards and global best practices. (Regional Cooperation Council, 2024)

4. INSTITUTIONAL AND MARKET READINESS IN THE REPUBLIC OF NORTH MACEDONIA

The following analysis assesses sustainable finance development in North Macedonia through the dimensions of regulatory alignment, institutional capacity and market implementation introduced in the methodological framework. North Macedonia as other countries in WB has also aligned itself with international initiatives like the Paris Agreement and the European Green Deal, highlighting a robust regulatory framework and international collaboration to support sustainable finance.

The Ministry of Finance (MoF), the Central Bank (CBNM), and the Stock Exchange play a pivotal role in advancing sustainable finance policies. These institutions are responsible for the development and implementation of regulatory frameworks, the issuance of supervisory guidance, and the alignment of national practices with European Union standards.

As the principal regulatory authority, the CBNM has adopted guidelines for the management of climate-related risks, grounded in the frameworks established by the European Central Bank, the European Banking Authority, and the Basel Committee on Banking Supervision. Although these guidelines currently remain non-mandatory, there are ongoing initiatives aimed at their formal incorporation into domestic legislation, consistent with evolving EU risk management requirements.

Along this, CBNM has developed also a comprehensive mid-term plan (2023-2025) aimed at embedding climate risks into financial analyses and improving the resilience of banking sector. The plan includes introduction of guidelines for climate risk management, stress testing and data collection on green financing. (CBRM, 2023)

Furthermore, the CBNM has adopted a new Disclosure Regulation that introduces regulatory requirements for ESG reporting by banks, effective from January 2026. In addition, it has developed a Green Dashboard, which offers a structured framework for monitoring green indicators across three key areas: Environment and Energy, Climate Risks, and Green Finance. This framework is intended to facilitate informed decision-making and to foster the advancement of sustainable finance and green investments. (CBNM, 2024)

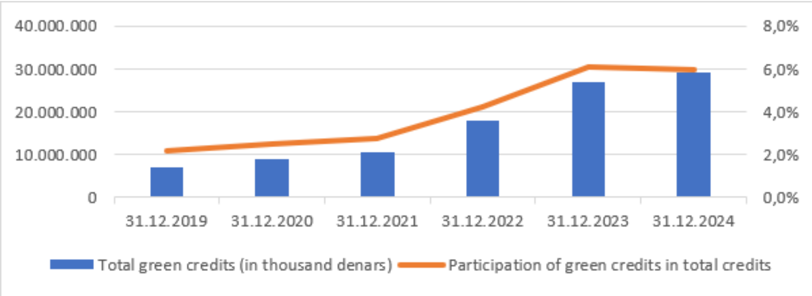
The Stock Exchange in collaboration with Securities and Exchange Commission as an another regulatory authority has adopted the new Corporate Governance Code that requires the largest and most liquid listed companies to disclose information on environmental and social matters, emphasizing transparency and compliance with applicable legal requirements as well as recognized international best practices (MSE, 2021). In addition, the Stock Exchange has introduced ESG guidelines that listed companies are expected to follow, although these remain voluntary. The ESG Reporting Guide serves not only as general guidance for all listed companies but also as a targeted tool for those aiming for full compliance with the new Corporate Governance Code. (MSE, 2022)

The role of the Ministry of finance (MoF) in collaboration with other regulatory bodies is to review and adapt various EU directives and regulations related to climate risk management and ESG reporting.

North Macedonia's financial sector offers sustainable finance products such as: Green bonds supported by the Development Bank of RNM and Green loans offered in collaboration with IFIs like the EBRD, EIB and others.

In the country, generally the sustain business are financed by green loans. According to data published by the National Bank of the RNM green credits from 7.176.453 000 denars in 2019 year has increased to 29.176.949.000 denars in 2024 year, while the share of green lending increased gradually from 2.2% to 6 % (see Graph 1). Although the upward trend reflects growing policy responsiveness, the relatively low portfolio share confirms that sustainable finance remains marginal within overall banking sector intermediation.

Graph 1. Green lending in the banking sector in RNM from 2019-2024 year



Source: Own presentation from data provided by CBNM, https://www.nbrm.mk/ns-newsarticle-sostojba-na-pobaruvana-i-obvrski-vrz-osnova-na-krediti-za-zeleno-finansirane-po-sektori-i-nivno-ucestvo-vo-vkupnite-krediti.nspx *(accessed 25 February)*

European Bank for Reconstruction and Development (EBRD) presents the major institutional investor in RNM, with over €3 billion invested in more than 200 projects to date, through the Green Finance Facility (GFF). (Paic J., 2025), The fund enable partner local banks to lend to local small and medium-sized enterprises (SMEs) and underserved groups for investments that reduce greenhouse gas emissions and air pollution. The program along the funds (with incentives up to 10% for SMEs and up to 30% for households), also it provides technical assistance to the entities.

In 2023, for the first time in RNM is introduced a new financial instrument – a green bond – through which approximately EUR 10 million was raised from a green bond auction (0.4% of the total bonds issued in 2023). The funds raised are intended to support projects through the Energy Efficiency Fund within the Development Bank of RNM. The proceeds from these green bonds are used to finance projects that improve energy efficiency and promote the use of renewable energy sources. (MoF, 2023)

In 2022, the CBNM conducted a survey among banks and savings houses to assess climate-related risks. The findings indicate that around 90% of financial institutions perceive climate change as a significant risk to financial stability. However, 87% of banks have yet to develop internal policies for managing climate risks. Fewer than half of the surveyed financial institutions have introduced new green financial products, most of which have been developed in cooperation with the EBRD. The main challenges identified include the lack of regulatory guidance, insufficient standards and analytical tools, and limited availability of relevant data. Overall, the survey highlights the necessity of establishing more comprehensive regulatory frameworks and strengthening institutional capacities in order to align with EU standards and enhance climate risk management practices. (CBNM 2022).

A positive aspect worth highlighting is that North Macedonia collaborates with international financial institutions (IFIs) such as the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB), which provide technical assistance, financing, and institutional expertise. These partnerships support the country's efforts to align its regulatory framework with EU acquis requirements and to implement best practices in sustainable finance, green transition, and climate resilience. Through these institutions, North Macedonia benefits from capacity-building programs, policy advisory services, and blended finance instruments that strengthen public institutions and mobilize private sector investment.

In addition to bilateral engagement with IFIs, there is a strong emphasis on regional cooperation and knowledge sharing. By participating in regional platforms and peer-learning initiatives across the Western Balkans, North Macedonia exchanges experience on sustainable finance taxonomies, green bond frameworks, climate risk assessment methodologies, and regulatory harmonization. This collaborative approach enhances institutional learning, promotes policy consistency across the region, and accelerates progress toward EU integration objectives.

Currently, RNM doesn't have a green taxonomy. The absence of a national taxonomy therefore represents a key structural constraint limiting consistent risk classification and investment alignment with EU standards. In the near future, the adoption of the such Taxonomy will be necessary, but at the same time it will create serious challenges for financial institutions in North Macedonia (Regional Cooperation Council, 2024), such as:

- General lack of awareness among, especially, smaller FIs and companies about the EU Taxonomy and its implications;
- Lack the necessary expertise and resources by many FIs to fully implement the detailed requirements of the EU Taxonomy;
- The absence of a taxonomy and clear regulatory guidance makes it difficult for FIs to uniformly apply the EU Taxonomy;
- Collecting the necessary data to comply with the EU Taxonomy's requirements that is a significant hurdle for many institutions.

Considering the absence of a national green taxonomy in the RNM, it needs to establish an internal classifications as the most appropriate step for identifying climate-related risks. The primary challenge in developing and implementing internal classifications concerns the determination of the level at which the classification will be applied, namely whether it should be based on the sector of the client's activity, on the client itself and its characteristics, or on the specific asset, i.e., the bank's exposure. (CBNM, 2023).

Conclusion

Sustainable finance has evolved into a central pillar of contemporary economic governance, linking financial stability, corporate accountability, and long-term sustainable development. The integration of ESG principles into regulatory frameworks and investment decisions reflects a structural shift from short-term profit maximization toward a model grounded in resilience, transparency, and responsible capital allocation.

The European Union has established a comprehensive and harmonized sustainable finance architecture, with the EU Taxonomy and related directives providing a clear framework for classification, disclosure, and risk management. For the Western Balkan countries, alignment with these standards represents both a strategic opportunity for deeper financial integration and a demanding institutional challenge. Limited technical capacity, regulatory fragmentation, and the absence of standardized taxonomies remain key constraints.

The analysis demonstrates that sustainable finance development in North Macedonia is characterized by regulatory advancement without equivalent market deepening, indicating partial alignment with EU sustainable finance architecture.

In North Macedonia, notable progress has been achieved through regulatory initiatives, climate risk management measures, and the introduction of green financial instruments. Nevertheless, the relatively low share of green lending and the lack of a national taxonomy indicate that sustainable finance is still in an early stage of development. Strengthening institutional capacity, improving regulatory clarity, and enhancing regional cooperation will be essential for accelerating the transition and ensuring effective alignment with EU sustainable finance standards.

The study provides evidence that institutional readiness, rather than regulatory adoption alone, represents the decisive factor for effective sustainable finance integration in EU accession economies. Consequently, alignment with EU sustainable finance regulation depends not only on formal regulatory transposition but on the institutional capacity to translate regulatory frameworks into effective financial market practices.

References:

1 CBNM, 2022,

2 https://www.nbrm.mk/content/Regulativa/Anketa_rizici_klimatski_promeni_ENG1.pdf (accessed 15 January)

3 CBNM 2023, https://www.nbrm.mk/content/National-Bank%E2%80%99s-Medium-Term-Climate-Change-Action-Plan-for-2023-2025.pdf (12 January)

4 CBNM, 2023, https://www.nbrm.mk/content/Regulativa/Q3_2023_ENG.pdf (1 February)

5 CBNM, 2024, https://www.nbrm.mk/content/Regulativa/Metodoloski_Vodic_Pregled_Zeleni_Pokazateli_ENG_dec24.pdf (12 February)

6 Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. Journal of Environmental Management, 345, 118829. https://www.sciencedirect.com/science/article/abs/pii/S0301479723016171?via%3Dihub (25 January)

7 European Commission, 2024, https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en (30 January)

8 Etikan, J. (2024). Corporate Social Responsibility (CSR) and its Influence on Organizational Reputation. Journal of Public Relations, 2(1), 1–12. https://carijournals.org/journals/JPR/article/view/1694/2067 (25 January)

9 Lopes, J. M. M., Gomes, S., & Trancoso, T. (2024). Navigating the green maze: insights for businesses on consumer decision-making and the mediating role of their environmental concerns. Sustainability Accounting, Management and Policy Journal,1–23. https://www.emerald.com/sampj/article/15/4/861/1228752/Navigating-the-green-maze-insights-for-businesses (18 January)

10 Ministry of finance, 2023, https://arhiva.finance.gov.mk/2023/, (5 February)

11 MSE (Macedonian Stock exchange) 2021, https://www.mse.mk/Repository/%D0%9A%D0%BE%D0%B4%D0%B5%D0%BA%D1%81/KKU%20na%20angliski%20final.pdf (10 February)

12 MSE (Macedonian Stock exchange) 2022, https://www.mse.mk/Repository/%D0%9A%D0%BE%D0%B4%D0%B5%D0%BA%D1%81/ESG%20Reporting%20Guide.pdf (12 February)

13 Paic J., 2025, https://www.ebrd.com/home/news-and-events/news/2025/ebrd-boosts-support-for-green-investments-in-north-macedonia.html (12 January)

14 Rakočević B. S. and Benković S., 2023, ESG Adoption in the Banking Sector of the Western Balkan Countries, Proceedings from 4th international scientific conference: Economic and Business Trends Shaping the Future, Faculty of economics, UKIM. https://repository.ukim.mk/server/api/core/bitstreams/80205ef0-e588-4d70-9a38-23f92ba3cb7a/content (30 January)

15 Regional Cooperation Council, (2024) https://www.rcc.int/download/docs/Sustainble%20Finance%20and%20Taxonomy%20in%20WB.pdf/b50848aa3ff9948b5a050a10edb114a4.pdf (20 January)

16 Schlütter, D., Schätzlein, L., Hahn, R., & Waldner, C. (2023). Missing the Impact in Impact Investing Research – A Systematic Review and Critical Reflection of the Literature. Journal of Management Studies, 1–25. https://onlinelibrary.wiley.com/doi/10.1111/joms.12978 (12 January)