

Review

# Sustainable Banking in Serbia: The Importance of Managing ESG Risks

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**Abstract:** Sustainable development in banking refers to conducting financial activities in a manner that supports long-term economic growth while taking into account environmental protection and social well-being. Banks play an important role in the economy because they influence how capital is allocated across different sectors. An increasing number of banks, both globally and in Serbia, are integrating ESG factors into their operations and decision-making processes related to lending, investment and risk management. The paper aims to highlight the importance of ESG risk management in the banking sector in Serbia. The focus is on regulatory developments, institutional processes and emerging challenges. The research has shown that some banks in Serbia have made significant progress in the area of ESG risk management and the integration of ESG factors into their operations, while others have only recently begun activities in this field. Banks engagement with ESG issues represents one of the leading trends in the global financial market and is becoming an imperative for institutions that aim to maintain their market position.

**Keywords:** *ESG risks; banking sector; Republic of Serbia; sustainable finance; risk management.*

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## 1. Introduction

Climate change, social responsibility, the quality of corporate governance and the transition towards a sustainable economy have created new sources of risk that may affect the financial stability and reputation of banks. Because of that ESG risks are increasingly being integrated into banks risk management systems, credit policies and decision making processes. These risks may impact the value of collateral, the quality of loan portfolios, clients' business operations and the overall sustainability of the financial system, so their effective management is very important. In addition, regulatory requirements at the international level encourage banks to identify, assess and manage ESG risks.

The aim of this paper is to examine the importance of ESG risk management in the banking sector, with a particular focus on the regulatory framework and risk management practices of banks in the Republic of Serbia. The paper also analyzes the challenges that banks face in the process of integrating ESG factors into their existing risk management systems.

The research is based on the analysis of relevant domestic and international literature, as well as regulatory documents related to ESG risks and sustainable finance. Particular attention is given to the regulatory framework in the Republic of Serbia and to extent which domestic practices are aligned with international standards and recommendations in the field of ESG risk management.

## **2. ESG risks and their importance**

According to Madžar, Peković and Đekić [13], economic development in the SEE countries is insufficiently sustainable, emphasizing the necessity of stronger investments in sustainable infrastructure and renewable energy to support long-term sustainable development across Southeast Europe [13].

The importance of banks is reflected in the lending process, as lending presents a key mechanism for directing financial flows and directly shapes the structure of economic activities and their contribution to sustainability goals. Consequently, creditworthiness assessment criteria have become broader and more comprehensive. In addition to the traditional evaluation of a borrower's ability to meet financial obligations on time, banks also analyze the long-term sustainability of the business model and its alignment with the European Union's climate neutrality objectives [1].

The significance of environmental, social and governance factors in investment decision-making has been increasing, leading to the development of various instruments that facilitate the allocation of capital toward activities that contribute to sustainability. Sustainable financial products enable investors to channel capital into sustainable technologies and business models, thereby supporting the achievement of environmental objectives.

Sustainable banking operations involve the integration of environmental protection, social responsibility and corporate governance factors into banks business activities. This includes responsible lending practices, investment in sustainable projects, reducing the environmental footprint of banking operations and promoting financial inclusion. Sustainable banking is an evolving concept that has gained increasing importance due to growing global awareness of environmental, social and financial challenges. It encompasses a range of practices including green finance, corporate social responsibility and financial inclusion [3]. Green products and related practices represent one of the main channels through which sustainability considerations enter routine banking activities [11]. Green finance consists of diverse green financial products and policies that are implemented in banks to enhance operational and financial transactions [14].

Common examples of green financial instruments include: Green bonds, Green loans, Sustainability-linked loans, Carbon credits, Climate funds and green investment funds [2].

In order for a bank to be characterized as socially responsible or "green" it is necessary for it to integrate environmental considerations into the management of banking risks, employ personnel qualified to carry out green investment activities and raise public awareness of green projects [9].

The growing importance of sustainable banking ESG considerations has also increased attention to ESG risks [18]. As banks expand their financing of sustainable projects and integrate ESG criteria they are increasingly exposed to ESG risks. These risks can affect credit quality, asset values, operational performance and overall stability of the banking sector [15, 17].

The ESG risk is not a separate type of risk. It is a cross-sectional risk that affects banks' other types of financial and non-financial risks. Therefore, it impacts all traditional types of bank risk. That's why banks should implement a holistic approach to ESG risk by integrating it into their risk management frameworks [6].

The ESG risk comprises environmental, social and governance risks which are often interrelated and may intensify one another effects. Rather than constituting a separate category of risk, ESG risk acts as a cross-cutting factor that affects both financial and non-financial risk exposures. Through its impact on traditional risk categories, ESG risk can generate broader consequences for the stability of financial institutions and the financial system as a whole [6].

According to Nitescu and Cristea [7], ESG factors can influence risk such as financial, operational, strategic, reputational and compliance. Strategic risk may arise from changes in the business environment, inadequate responses to such changes or poor business decisions while environmental, social and governance factors can further affect a bank's business strategy. Compliance risk stems from failure to adhere to regulatory requirements and standards, particularly in the areas of environmental protection and social responsibility. ESG factors may also negatively affect a banks reputation among its clients. The relationship between ESG factors and operational risk is particularly pronounced, as climate change and extreme weather events can cause business disruptions and additional costs. ESG factors can contribute to the emergence of financial risks by affecting borrower's ability to meet their obligations [7]. Also, ESG elements greatly influence the liquidity risk faced by commercial banks. Good ESG performance can reduce liquidity risk and improve liquidity management [18].

Authors Todorović, Nedeljković and Đulić [8] examined the assessment of the potential impact of climate-related risks on credit risk in the Serbian banking sector. The results suggest that climate related macroeconomic changes transmitted through key variables such as GDP growth, inflation, unemployment and interest rates, can affect the dynamics of non-performing loans in Serbia. This emphasizes the need to recognize climate risk as a material determinant of credit risk and to integrate it into risk assessment practices [8]. The results also show that climate risks pose a considerably greater threat to corporate loan portfolios than to retail loans.

### **3. Challenges in ESG risk measurement**

The ESG risk management has emerged as a key element of banks sustainability strategies [19]. Banks worldwide are currently facing significant challenges in identifying and measuring this risks. There is a lack of standardized methodologies for ESG risk assessment as well as difficulties related to data availability, collection and the intended use of the analyses, including both the definition of risk appetite and the management and mitigation of risk exposure. The primary challenge relates to data and its sources [6]. The findings have pointed out that different levels of infrastructure, resources, as well as institutional and strategic commitment to sustainability, can significantly affect the effectiveness of implementing ESG initiatives, while employees in urban banks tend to demonstrate higher engagement, easier access to training, and stronger personal responsibility in ESG implementation [20].

Other problems with collecting data for measuring ESG risks are: lack of reliable and comprehensive data, as many areas of banking activity have not been previously monitored, making it difficult to assess exposure to risk factors and build appropriate risk models. Another major issue is data integration and lack of harmonized reporting frameworks across jurisdictions. There is also a lack of standardization in measurement methodologies, which makes it difficult to compare and verify external ESG ratings [6].

Improvements in ESG scores significantly reduce risk among banks with medium to high risk levels. Contribution of ESG factors to bank stability and consequently to sustainability, becomes more pronounced as a banks riskiness increases [16].

#### **4. Regulatory framework for ESG risk management**

The integration of ESG criteria into banking processes is essential for directing financial flows toward sustainable economic activities. Precisely because of the need to manage sustainability – related risks, the European Union has established a regulatory framework that includes the guidelines of the European Banking Authority, the EU Taxonomy and the Sustainable Finance Disclosure Regulation [1].

The EU Taxonomy is the central regulatory instrument that identifies which economic activities can be considered environmentally sustainable. The European Banking Authorities guidelines require banks to integrate risks related to environmental, social and governance factors into all categories of financial risk, including credit risk, liquidity risk, business model risk etc.

The regulatory framework for ESG risk management in the Serbian banking sector is still under development and is gradually being aligned with European Union standards which leads to the progressive strengthening of ESG practices in banks in Serbia. The National Bank of Serbia plays a key role in integrating ESG and climate related risks into supervisory expectations, primarily through analyses, guidelines and requirements in the areas of risk management.

The Association of Serbian Banks in cooperation with the International Finance Corporation (IFC) has developed Guidelines for Strengthening Capacity for the Implementation of ESG practices. These guidelines recommend that banks integrate ESG principles into their internal policies and governance frameworks. ESG considerations are also expected to form an integral part of financing approval processes. Banks should incorporate ESG related risks into their risk assessment methodologies and expand their risk management frameworks. Climate related risks and impacts should likewise be considered in lending and investment decisions. It is important to note that the Guidelines provide a voluntary guide for the adoption and implementation of these practices [10].

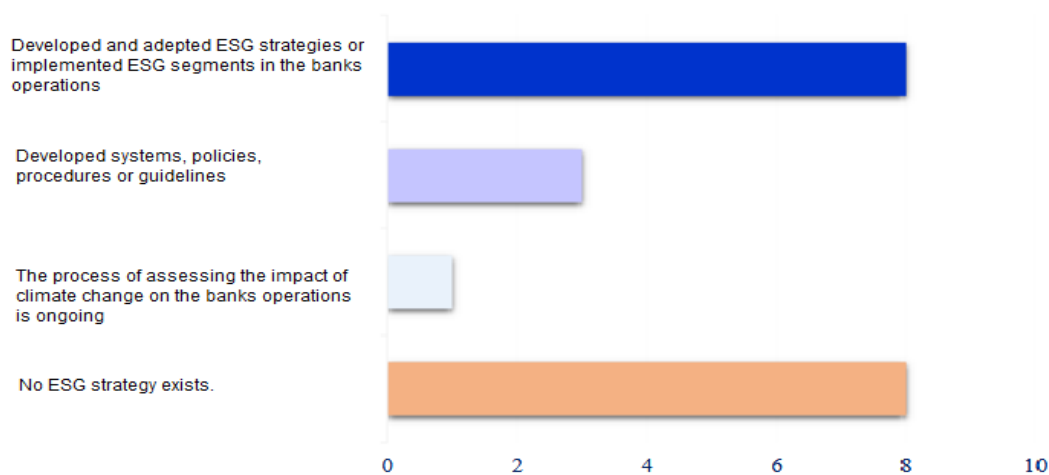
To promote sustainable finance, the guidelines encourage banks to channel financial resources toward sustainable assets and economic activities. They further recommend the establishment of mechanisms for the periodic monitoring of the ESG performance of loan and investment portfolios.

The guidelines are structured around five key areas:

- Establishing an ESG Strategy and Governance Policy;
- Strengthening Organizational Capacity;
- Introducing ESG Policies and Procedures;
- Disclosure and Reporting;
- Providing Sustainable Finance [5].

#### **5. ESG risk management practices in banks in Serbia**

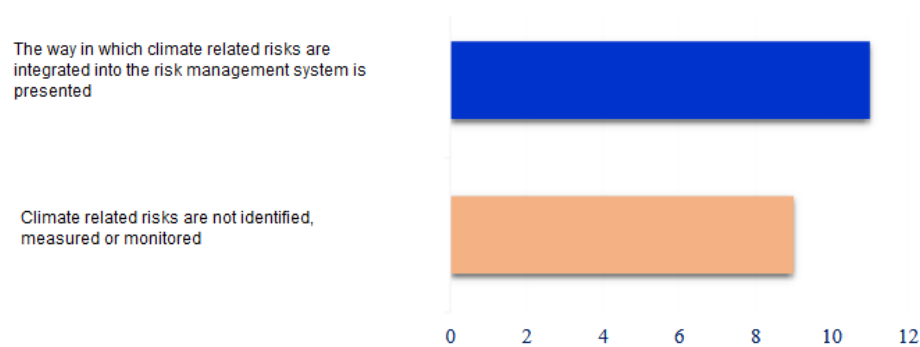
According to the National Banks of Serbia [4], banks are increasingly integrating ESG principles and climate-related risks into their business strategies, risk management frameworks and lending activities. The growing adoption of green financing and ESG practices reflects the recognition that climate-related risks can affect financial stability, credit quality. As a consequence of the growing integration of sustainability considerations into banking activities, ESG risks have emerged as an important category of risks that financial institutions must identify, assess and manage [4].



**Figure 1.** The banks strategy and objectives related to climate related risks.

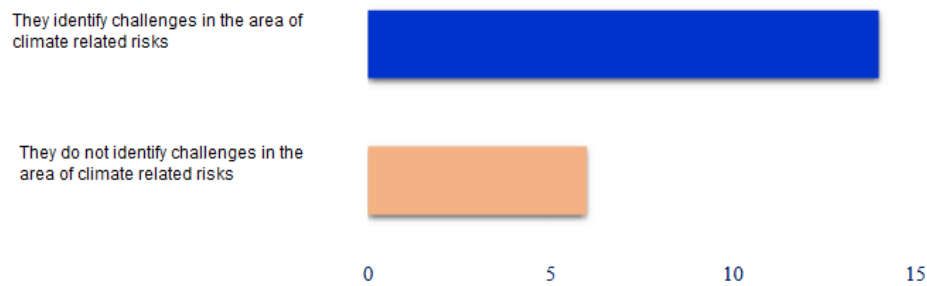
Banks that integrate climate risks into their strategies focus on two key aspects: operational sustainability and portfolio sustainability. To achieve a sustainable portfolio, they increase green investments and green mortgages, expand overall green financing, reduce exposure to high CO<sub>2</sub> emitting sectors and climate vulnerable assets and promote sustainable products that support renewable energy use, energy efficiency and climate change mitigation [4].

It is important because renewable energy is a major contributor to sustainable growth and long term economic development. Higher renewable energy consumption contributes to greater economic growth rates [12].



**Figure 2.** Identification, measurement and monitoring of climate related risks.

Based on banks responses and the Analysis of Banking Sector Activities Related to Climate-Related Risks, it can be observed that practices in managing climate-related risks vary, but generally include ESG risk questionnaires and other data collection tools used to assess clients and their creditworthiness, client risk categorization into high, medium and low risk based on climate related exposure and the identification of industries that are most vulnerable to ESG risks. Banks also assess the impact of climate change on their portfolios and collateral values, use NACE codes in the credit assessment process and consider clients non-financial reporting when evaluating ESG related risks [4].



**Figure 3.** Challenges for banks in the area of climate related risks.

In 2024 banks identified several key challenges in managing climate related risks, primarily related to the lack of reliable, comparable and systematically collected ESG data, as well as insufficiently developed methodologies for measuring ESG and climate-related risks, including their impact on traditional risk categories. They also highlighted limited ESG expertise among employees and stakeholders and gaps in the reporting framework in Serbia and the complexity arising from international standards. Additional challenges include the absence of a unified national database on emissions and energy performance, limited integration of IT systems for ESG risk monitoring.

## 6. Conclusions

Green financing in Serbia has been experiencing notable growth, largely driven by initiatives of international financial institutions and supported by the European Union. Although green financing practices in the Republic of Serbia are not yet widely adopted.

Nevertheless, there are clear indications of progress, as an increasing number of banks are beginning to integrate climate related and ESG risks into their business strategies. In Serbia, banks that have incorporated climate risk assessment into their operations have continued to improve their practices. They are continuing to develop credit lines for green financing and they are introducing and enhancing internal policies for climate risk management.

Although positive progress has been made, further improvements are still needed. To ensure the long term stability and competitiveness of the banking sector it is essential to strengthen ESG practices and develop sustainable financial models and instruments.

**Conflicts of Interest:** The authors declare no conflicts of interest.

**Declaration of Generative AI Use:** The authors declare that no generative artificial intelligence tools were used in the preparation of this manuscript.

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