

A SHORTENED VERSION



BOSNA I HERCEGOVINA
FEDERACIJA BOSNE I HERCEGOVINE
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FEDERACIJE BOSNE I HERCEGOVINE

THE STRATEGIC PRIORITIES
on the Management and Supervision of
Climate-Related Risks and Environmental
Risks in the Banking Sector for the 2023-
2025 Period

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Abbreviations and Terms

BCBS	Basel Committee on Banking Supervision
GDP	Gross domestic product
BiH	Bosnia and Herzegovina
CO ₂	Carbon dioxide
CRR	Capital Requirements Regulation
EBA	European Banking Authority
ECB	European Central Bank
EGD	European Green Deal
ESG	Environmental, social and governance
EU	European Union
FBiH	Federation of Bosnia and Herzegovina
GAWB	Green Agenda for the Western Balkans
GHG	Green House Gases
NDC	National Determined Contributions
SREP	Supervisory Review and Evaluation Process
UNFCCC	United Nations Framework Convention on Climate Change

Glossary

The Strategic Priorities on the Management and Supervision of Climate-Related Risks and Environmental Risks in the Banking Sector for the 2023-2025 Period (hereinafter: the Strategy) contains a number of terms related to the risks of climate change and environmental risks, as well as sustainable financing:

- 1) **Climate-related financial risks** are potential risks that may arise due to climate change or out of efforts to mitigate climate change, their associated impact and their economic and financial consequences.
- 2) **Environmental, social and governance (ESG) risks** mean the probability of losses or additional costs, or the loss of planned income, or the loss of the financial institution's reputation due to the negative financial impact of the current or future ESG factors on counterparties and their assets.
- 3) **Global warming** is the estimated increase in the global mean surface temperature of the Earth compared to a 30-year average, or a 30-year period centered on a specific year or decade, expressed in relation to pre-industrial levels, unless otherwise stated. Regarding 30-year periods covering past and future years, it is assumed that the current multi-decade warming trend will continue.
- 4) **The GHGs** are gaseous components of the atmosphere, both natural and anthropogenic (related to humans), absorbing and emitting radiation at certain wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself and clouds. This property causes the greenhouse effect. H₂O, CO₂, N₂O, CH₄ and O₃ are the primary greenhouse gases of the Earth's atmosphere.
- 5) **Manipulative green marketing** means deceiving clients, investors and other economic entities about the use of borrowed or invested funds about the financial institution's intentions to achieve sustainable development objectives by taking into account the ESG factors with the aim of seeking preferential treatment or financial conditions from investors, borrowers or clients.
- 6) **A physical hazard** is a potential occurrence of a natural or man-made physical event or trend or physical impact that may cause the loss of life, injury or other health impacts, as well as the damage to and loss of property, infrastructure, subsistence means, provision of services, ecosystems and natural resources. In this Strategy, the term hazard refers to climate-related physical events or trends or their physical impacts.
- 7) **Physical risks** are economic costs and financial losses arising from an increased severity and frequency:
 - a) Climate-related extreme weather events (or extreme weather events), such as heat waves, landslides, floods, forest fires and storms (i.e. acute physical risks),
 - b) Longer-term gradual climate change, such as precipitation change, extreme weather change, ocean acidification, rise of sea levels and average temperatures (i.e. chronic physical risks or chronic risks),
 - c) Indirect impacts of climate change such as the loss of ecosystem services (e.g. desertification, water shortage, degradation of soil quality or marine ecology).
- 8) **Stranded assets** are assets that, at a certain point before the end of their economic life, are no longer able to generate an economic return because of changes related to the transition to a low-carbon economy.
- 9) **Sustainable development** means long-term economic prosperity being less dependent on the use of limited resources and exploitation of the environment, as well as being more socially inclusive and including the closely related ESG aspects.

- 10) **Transition risk** (risks of transition) to the low-carbon economy model refers to the bank's financial loss that may result, directly or indirectly, from the process of adjustment towards a low-carbon and more environmentally sustainable economy.
- 11) **The taxonomy** of economic activities means a classification system with a list of ecologically sustainable economic activities and thresholds that may be used to clearly identify which economic activity is in accordance with sustainable development, environmental objectives and principles of sustainable economic activity. This taxonomy helps investors, issuers and project promoters to focus on the transition to a low-carbon and more resource-efficient, risk-resilient economy, as well as facilitates a climate-related information disclosure system.

1. Introduction

Climate change and transitioning to a green, less carbon-intensive economy are processes having a major impact on economic activity, and hence on the financial system of every country. Climate-related risks and environmental risks are becoming more and more relevant for banks and their business environment, and they must be taken into account in the risk management process. The role of the Banking Agency of the Federation of Bosnia and Herzegovina (hereinafter: the Agency) is to ensure that the banks are ready to adequately respond to the challenges caused by climate change, while taking a proactive role in building the banks' resilience to the emerging financial risks arising from climate change, and their ability to support the transition to an acceptable rate of emissions at the level of the economy, and within the jurisdiction stipulated by the Law on Banks and the Law on the Banking Agency of the Federation of Bosnia and Herzegovina.

Taking into account that one of the strategic objectives of the Agency is the alignment with the EU regulations and international principles in all segments of supervision and bank resolution, i.e. maintaining the equivalence of the regulatory framework with the one in the EU, and following the trends and events in the development of the EU supervisory and regulatory framework, the Strategic Priorities on the Management and Supervision of Climate-Related Risks and Environmental Risks in the Banking Sector for the 2023-2025 Period (hereinafter: the Strategy), as a document, was prepared. It aims at defining the activities of the Agency in the planned period, which do not encourage the banks' financial flows towards greener investments, but rather strive to ensure that the banks properly identify, manage, control and report on climate-related risks and environmental risks which they are exposed to or could be exposed to.

The Strategy sets out the principles which the road map is based on and concrete measures to be implemented in the four areas: regulatory measures, risk assessment, supervision and international cooperation, in the 2023-2025 period. The Agency expects that the measures provided for under the Strategy will significantly improve the understanding and management of climate risks by banks.

The Agency will assess the optimal ways of implementing the regulatory and supervisory requirements associated with climate-related risks and environmental risks, and in relation to the current regulations in the FBiH, taking into account the degree of development of the financial market, the characteristics and specifics in the provision of financial services, and the progress of BiH on the EU membership path.

2. Relevance in the context of BiH

A clear international consensus on the need to minimize the negative impact of climate change, both through mitigation and adaptation measures, was also accepted by BiH, as a signatory to many international agreements and initiatives. BiH became a contracting party to the UNFCCC on 6 December 2000, and ratified the Kyoto Protocol on 16 April 2007. The Paris Climate Agreement was signed in December 2015, aiming at limiting the global temperature rise, ideally, to 1.5 °C. BiH took the first step in the operationalization of these obligations in 2016 by submitting its National Determined Contributions (NDC) to the UNFCCC, which will help solve the problem of global warming and which relate to the reduction of GHG emissions by 33.2% until 2030, and by almost 66% until 2050, compared to 1990 levels. They were revised in 2021, and include:

- increased emission reduction objectives by 50% until 2030, with an emphasis on the key sectors in the country: power sector, district heating sector, construction, industry, transport, forestry, agriculture and waste;
- climate change adaptation, with the most interventions in the sectors vulnerable to climate change such as agriculture, water resources, forestry, energy, tourism, biodiversity and human health;
- significant decarbonization of the economy, especially in the power sector.

In addition to the above, BiH submits its national reports and biennial reports on greenhouse gas emissions. The obligations of BiH in the field of environmental protection are followed by the EU strategy, given that BiH applied for the membership in 2016. BiH is one of the 6 countries of the Western Balkans that signed the Sofia Declaration (November 2020), in which the countries recognized the European Green Deal (EGD), as a cornerstone for the Green Agenda for the Western Balkans (GAWB). This Agenda includes the obligations related to mitigation and adaptation to climate change, which include: climate, energy and mobility, circular economy, pollution removal, sustainable agriculture and food production, and biodiversity. Climate change will increase the risk and severity of natural disasters in BiH, and in certain economic sectors (agriculture and forestry, water management, construction sector, transport, industry and tourism) the impact of these is noticeable, which may intensify in the upcoming period. Also, the concerned sectors may be additionally exposed to new regulations and technological changes, which BiH will need to introduce due to the assumed obligations towards the EU and international obligations.

Although the state taxonomy has not yet been developed, climate issues are covered by various institutions in the country, both at the state and entity levels. Regarding the above, the Agency has intensified its activities in this area in the previous period; this Strategy is an initial step in including climate-related risks and environmental risks in the banking sector.

3. Activities of the FBiH Banking Agency related to climate change and environmental risks

The financial sector will have an important role in facilitating the transition to the new model of sustainable growth, incorporated in the NDC and EGD, and in minimizing the impact of physical hazards by properly identifying and implementing them within their risk framework. Considering the banking sector's dominant role in financial intermediation, the banks may have a key role in the greening of the financial sector. Identifying the transition path to a more sustainable economy and harmonization with the Paris Agreement is not a task for banking supervisors, nor it is defining a classification system (taxonomy) of economic activities that should be identified as green or sustainable. National objectives and strategies are to be set out by other state and entity institutions. However, climate-related risks and environmental risks may result in physical and transitional risks, which could affect the safety and strength of individual banks and have wider consequences for the financial stability of the banking sector. In order to manage the financial risks related to climate change and the environment in the banking sector, the main objective of the Agency is to ensure that the banks properly identify, manage, measure and control these risks. The Agency's role is not to actively encourage financial flows towards more sustainable investments, but to develop a regulatory and supervisory framework to ensure that the banks properly approach climate risk solving.

The analysis of the exposure of the banking sector to the transition risk shows that one quarter of the total loans to the private sector (25.5% in the FBiH) were given to the climate-sensitive economic sectors, especially construction (6.7%), transport (6.3%), fossil fuels (5.3%) and to

a lesser extent utility services, energy-intensive industries and agriculture (combined weight less than 10%). The 2021 BiH Climate Risk Profile prepared by the World Bank showed that the projected climate change would make BiH increasingly vulnerable to natural hazards: droughts, heat waves, heavy rainfall, landslides and floods. According to the estimates, weather-related disasters cause economic losses of up to 1.5% of GDP per year for the region. More than 20% of the territory of BiH is prone to floods, which affect on average about 100.000 people and about BAM 1.2 billion in GDP per year. Mountainous terrain, obsolete infrastructure and high urbanization rates exacerbate the vulnerability to earthquakes and landslides. The concerned physical risks will indirectly, through the population and companies, affect the risk profile of the banking sector, and potentially cause a significant impact on the credit risk, market risk, operational risk and liquidity risk of the banking sector.

The exposure of the banking sector to climate-related risks and environmental risks is one element relevant to the financial stability of the banking sector. Another element is the banks' preparedness to recognize, include and manage those risks and exposures. In the previous period, the Agency conducted an overview of the current practices of the climate and environmental risk management in the FBiH banking sector through a comprehensive Questionnaire on Climate and Environmental Risks. By analyzing the submitted data and information, it was concluded that the banks in the FBiH were aware of the existence of the concerned risks, but that the progress in this segment was still at a low level. Certain banks have developed "green" products and practices under the influence of international financial institutions. Significant shortcomings in the legal and regulatory framework, as well as the need for significant improvement of governance and management practices, were particularly highlighted. The information systems of the most banks have still not adapted to the needs for timely recording, monitoring and reporting from the aspect of climate-related risks and environmental risks.

All of the above, as well as the potential impact on capital and capital requirements in the case of the risk materialization, represent the basis and reason for adopting this Strategy. It is based on 10 principles for dealing with climate risks, which the road map and concrete measures to be implemented in the 2023-2025 period are based on:

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|---|--|--|----|
| 1 | An increased understanding of climate risks by the Agency as a common objective | The need to monitor the work of European and international organizations | 6 |
| 2 | The Strategy shall take into account the role of the Agency in accordance with legal regulations | A continuous engagement with international and regional organizations | 7 |
| 3 | The Agency will not directly or indirectly direct financial flows towards green investments | Cooperation with other state and entity bodies, institutions and authorities | 8 |
| 4 | The need for a gradual and iterative approach | The Strategy Socialization | 9 |
| 5 | Inclusion in the regulatory framework will be progressive and initially based on principles | Integrating the climate risk assessment into the existing mechanisms, tools and supervisory procedures | 10 |

The activities provided for under this Strategy are classified into four groups:

- **REGULATORY MEASURES** - include the preparation and adoption of regulations for the management of climate and environmental risks, and may also include other activities, such as e.g. the modification of the existing regulations on the internal process of capital adequacy assessment, internal management and risk management, etc.
- **ASSESSMENT ACTIVITIES** - include the activities of assessment and detailed understanding of the banks' exposure to climate-related risks and environmental risks by using the scenario analysis and, if necessary, stress testing.
- **SUPERVISORY MEASURES**, which include the activities of the Agency after the adoption of regulations and/or other regulations referring to taking measures necessary to assess the banks' compliance with new requirements, updating the SREP and other assessment methodologies used by supervisors in their daily work.
- **KNOWLEDGE/COOPERATION MEASURES** - include possible activities of holding conferences and workshops on climate-related risks and environmental risks, as well as cooperation with other state and entity bodies competent for the country's sustainability policies and participation in regional and international forums in order to expand expertise and knowledge in those areas.

4. Regulatory initiatives for financial risks related to climate change and environmental risks

Climate change is a global problem that one tries to solve by reducing CO₂ and GHG emissions, primarily in the energy sector, by reducing the consumption of fossil fuels (thermal coal, oil and gas) or by replacing fossil fuels with renewable/alternative energy sources. Policy measures taken around the world result in physical and transition risks for banks and other financial institutions, which may cause direct or indirect losses. Strict measures, technological development or rapidly changing consumer preferences may lead to the loss of value of certain assets (stranded assets), which will affect the bank's activity (transition risks). In this context, prudential regulators and supervisors are taking decisive measures with a dual objective: (i) ensuring that banks properly understand, manage, identify and control the climate risks which they are exposed to and (ii) that supervisors are able to properly measure the risk profile related to climate change and environmental risks.

Regulatory and supervisory authorities have taken multiple measures in this area. In April 2019, the Bank of England was the first institution to issue the Guidelines on Climate-Related Risk Management in Banks. A very important milestone came with the publication of a comprehensive Guide on Climate-Related and Environmental Risks in November 2020 by the ECB. Also, other supervisors in the EU have issued their expectations and/or recommendations on the management of these risks. The BCBS issued the final version of its Principles for the Effective Management and Supervision of Climate-Related Financial Risks in June 2022.

Regulatory authorities are also making progress in including climate-related risks and, more broadly, the ESG risks in the SREP. The work of the European bodies on the SREP is crucial for BiH, given that the supervisory and regulatory framework in BiH is aligned with the one in the EU. Regulatory and supervisory institutions are also improving their methods for measuring the exposure of financial institutions to climate-related risks, through the scenario analyses and stress tests, taking into account a longer time horizon (because the most profound negative impacts of climate-related risks are expected to occur in the medium or long term). The regulation requires banks to make prudential disclosures about sustainability. In the EU, the CRR Regulation requires banks to publish quantitative and qualitative information on climate-

related risks under the pillar III in order to enable investors to assess the banks' exposure to climate-related risks and their management practices. Less progress has been made in the integration of climate-related risks into the prudential framework for capital requirements, and it is still too early to consider how the inclusion of those risks can be directed towards a standardized approach for capital requirement calculating.

4.1. Taxonomies and other regulatory initiatives

Economic entities, including the banks, should have a clear and common framework for setting out the criteria on the basis of which the economic activity is defined as green or sustainable (green taxonomy). In the absence of a common framework, the banks will need to use their own definitions of sustainable/green activities, avoiding the risk of manipulative green marketing, whereby the banks may assess the sustainability of their portfolios. Defining the green taxonomy is not within the scope of the Agency's authority, since the state sustainability classification of economic activities will not only affect the supervised institutions, but also many other economic entities, including the non-financial companies and public sector entities. The Agency will be at disposal for the cooperation with the competent authorities and bodies of BiH, being responsible for the development of the green taxonomy and related requests for disclosures.

In the context of the 2020 Sofia Declaration and the rapid emergence of the EU Green Taxonomy as the global gold standard for the classification of economic activities, the European Taxonomy is quickly becoming the main reference in the Western Balkan countries. The EU Green Taxonomy was created by the European Commission as part of the EU's Sustainable Action Plan supporting the EU's ambitious climate and energy objectives to reduce greenhouse gas emissions to zero net carbon emissions by 2050 and to halve emissions by 2030. The overall objective of the concerned taxonomy is to enable investors, companies, issuers and project promoters the transition to a low-carbon, resilient and resource-efficient economy, and to serve as a reporting framework for the new EU regulation on climate-related disclosures by investors, companies and banks.

4.2. Bank exposure to climate-related risks and environmental risks

4.2.1. Identifying climate-related main risks and environmental risks

Banks are exposed to climate-related financial risks through the two key channels: physical risks and transition risks. While physical risks arise directly from climate change, transition risks arise from the responses of policy makers, innovators or consumers, with the aim of preventing and/or combating climate change.

Physical risks refer to the effects of rising temperatures and extreme weather events becoming more and more frequent, and can be divided into acute and chronic risks. Acute risks are sudden short and severe events having a significant negative impact (droughts, heat waves, cyclones, storms, etc.). Chronic risks reflect environmental conditions getting continuously worse (sea level rise, increase in average temperatures, decrease in precipitation, etc.).

Transition risks reflect the potential losses that banks may face as a result of new regulations and policies, technological developments and customer preferences, due to the process of transitioning to a more sustainable, less carbon-intensive economy.

In addition, there is the exposure to liability or litigation risks, being increasingly considered a subcategory of the physical and transition risks, and arising as a result of seeking the compensation for losses suffered by natural persons or business entities, due to the

aforementioned climate-related physical or transition risks, or demands for damage compensation due to the impact that the entity's activities had on the environment.

The basic characteristics of climate-related risks and environmental risks imply that they are:

- a) **systemic** and will affect every consumer, every society, in all sectors and all geographical areas;
- b) **simultaneously uncertain, yet predictable**. The exact combination of physical and transition risks that will arise is uncertain, but it seems clear that they will either continue on their current emissions path and face higher physical risks, or change their approach by reducing emissions and face higher transition risks;
- c) the magnitude and balance of future risks we face will be **determined by the measures we begin to take now**.

4.2.2. Banking sector exposure to physical risks

BiH is exposed to the risk of natural disasters, affecting various economic sectors and people's health. In 2014, unprecedented amounts of rainfall affected 25% of the population, causing severe disruption to the economy, with river floods inundating farmland and 81 municipalities. It caused more than 3.000 landslides, affecting almost 15% of GDP. The main sectors that will be affected by climate change and physical risks are the agricultural sector, the construction sector, the water supply sector and the energy sector.

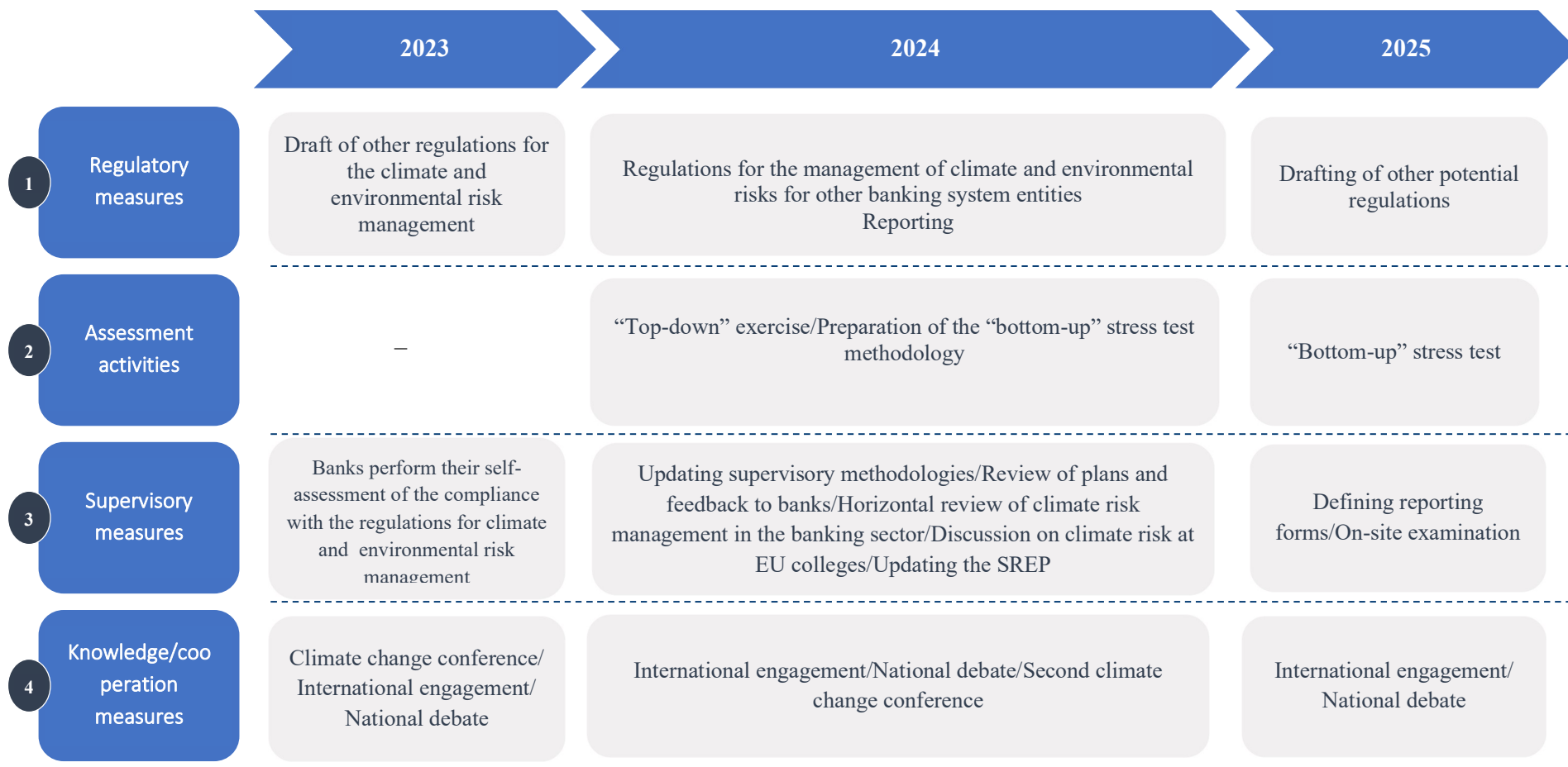
Regarding the banks, the physical risks are considered to influence the growth of the credit risk, market risk, liquidity and operational risk. If damages from the physical risks are not insured, the banks may face increased credit risks. The physical risks may negatively affect the availability of bank clients' cash flows, reducing their financial resources and negatively affecting the banks' deposits. In addition, if funding providers (professional investors, international financial institutions, etc.) consider that the banks are materially subject to climate-related risks and environmental risks, they may refrain from funding. An increase in the frequency of extreme weather events could also affect macroeconomic conditions through permanent damage to the state infrastructure and weaken the basic factors such as the economic growth, employment and inflation. Extreme weather events could also affect business continuity, including branch networks, offices, infrastructure, processes and workers, and could increase input costs such as energy, water and insurance.

Regarding the transition risks, the reputational risk could also arise from changes in customer sentiment and increased attention and scrutiny by other stakeholders on the banking sector's response to climate change. In addition, more frequent environmental litigations may expose the banks to additional costs.

5. Strategic activities of the Agency on the management and supervision of climate-related risks and environmental risks

The planned activities of the Agency in the 2023-2025 period, in accordance with this Strategy and the planned categories of the activities, are given below in abridged form, and they include an overview of the most relevant aspects of each of the Agency's main activities and measures.

5.1. General overview of the activities included in the Strategy



6. Conclusion

Taking into account that one of the strategic objectives of the Agency is the alignment with the dynamic EU regulations and international principles in all segments of supervision, i.e. banking regulations, and maintaining the equivalence of the regulatory framework with the one in the EU, the Strategic document on the management and supervision of climate-related risks and environmental risks in the banking sector was prepared. The Strategy represents a road map in the activities that the Agency will undertake in the 2023-2025 period with the aim of significantly improving the understanding and management of the risks related to climate change and environmental risks by the banks. It aims at defining the activities of the Agency in the planned period, which do not encourage the banks' financial flows towards greener investments, but rather strive to ensure that the banks properly identify, manage, control and report on the risks related to climate change and environmental risks which they are exposed to or could be exposed to.

The Agency has a mandate to assess the way in which climate-related risks and environmental risks can be included in the three pillars of the prudential supervision. As part of the supervisory dialogue, the Agency will communicate with the banks about the expectations and obligations related to the banks. In the planned period, the regulatory framework will be drafted, and the supervisory approach to the management of the risks related to climate change and environmental risks will continue to be developed.

The Agency's Strategy can be revised through regular processes of business planning in the Agency, and harmonized with possible extraordinary regulatory measures and activities due to changed circumstances.

Banking Agency of the Federation of Bosnia and Herzegovina