Pursuant to Articles 80, 81, 83 and 111 of the Banking Law ("Official Gazette of the Federation of BiH", number 27/17), Articles 5(1)(h), 19(1)(c) and 47 of the Law on the Banking Agency of the Federation of Bosnia and Herzegovina ("Official Gazette of the Federation of BiH", number 75/17) and Article 12(1)(d) of the Statute of the Banking Agency of the Federation of Bosnia and Herzegovina („Official Gazette of the Federation of BiH“, number 03/18), the Management Board of the Banking Agency of the Federation of Bosnia and Herzegovina adopted, at its session that was held on July 25th, 2023, the following

GUIDELINES ON MANAGEMENT OF CLIMATE-RELATED AND ENVIRONMENTAL RISKS

1. General provisions

1.1. Climate-related and environmental risks, as part of environmental, social and governance (ESG) risks, are becoming increasingly more relevant to banks and need to be considered when managing risks. These risks need to be adjusted to the business strategy, risk-taking strategy and risk appetite of a bank, taking care that the role and responsibility in managing these risks are fully transparent across all three lines of defence. The role of control functions is important, especially that of internal audit, starting from understanding the materiality and categories of climate-related and environmental risks, quality assessment of management of these risks within integrated internal governance system, etc. Starting from the aforementioned, banks in the Federation of Bosnia and Herzegovina (hereinafter: FBiH) are expected to timely and systematically undertake activities in managing the aforesaid risks in the following areas:

a) business model and strategy of a bank,
b) internal governance system and risk appetite of a bank,
c) integrated risk management framework, including ICAAP and ILAAP and
d) policies, procedures and contents of disclosures on climate-related and environmental risks.

1.2. The purpose of the Guidelines on Management of Climate-Related and Environmental Risks (hereinafter: Guidelines) is to guide the banking sector in relation to the identification, measurement, management and control of climate-related and environmental risks and disclosures of data and information relating to these risks, as well as the integration of environmental sustainability segment into the business activities of a bank.

1.3. These Guidelines define the term of the safe and prudent management of climate-related and environmental risks under the current legislative and regulatory framework and expectations from banks on the identification of climate-related and environmental risks as drivers of existing categories of risks when defining and implementing their business strategies, internal governance and risk management systems. These Guidelines aim to enhance transparency through timely and adequate disclosure of information and data on climate-related and environmental risks.

1.4. A bank is expected to apply the established guidelines in accordance with the nature of the business model used and the characteristics of the services provided, including the specific characteristics arising from its organisational structure, its dimension and complexity, its risk profile and the extent of its credit risk exposure.

1.5. These Guidelines apply to banks headquartered in the FBiH, which are licensed by the Banking Agency of the Federation of Bosnia and Herzegovina (hereinafter: Agency).

2. Definitions

The terms used in these Guidelines have the following meanings:

2.1 Environmental, social and governance (ESG) risks means the probability of losses or additional expenses, or loss of planned income, or loss of reputation of a financial institution due to the negative financial impact of current or future ESG factors on counterparties and their assets. These Guidelines are focused on climate-related and environmental risks, and not on the broader concept of environmental, social and governance (ESG) risks.

2.2 Greenhouse gases (GHGs) are those gaseous constituents of the atmosphere, both natural and anthropogenic (human related), that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, by the atmosphere itself, and by clouds. This property causes the greenhouse effect. Water vapor (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4) and ozone (O_3) are primary greenhouse gases in the Earth's atmosphere.

2.3 Green economy (low-carbon economy) means an economy with low carbon emissions that uses resources efficiently and is in the public interest.

2.4 Green lending/investment (broader term "green products") refers to the lending, investment or other financial products of a bank dependent on environmental criteria for the planned use of funds, with the purpose of reducing the adverse impacts of activities on the environment or environmental hazards.

2.5 Transition risks refer to the financial loss of a bank that can result, directly or indirectly, from the process of adjustment towards a low-carbon and more environmentally sustainable economy, relating to:

i. **Policy-regulatory risks** - risks arising from energy efficiency requirements, carbon pricing mechanisms that increase the price of fossil fuels or policies that promote sustainable land use;

ii. **Technological risks** – when a technology with a less harmful impact on the climate replaces a technology with a more harmful impact on the climate;

iii. **Market risks** - when, for example, consumer and corporate client preferences and demand shift towards less climate-damaging products and services.

2.6 Physical risks are economic costs and financial losses resulting from the increasing severity and frequency of:

i. Extreme climate change-related weather events (or extreme weather events) such as heatwaves, landslides, floods, wildfires and storms (i.e., acute physical risks).

ii. Longer-term gradual shifts of the climate such as changes in precipitation, extreme weather variability, ocean acidification, and rising sea levels and average temperatures (i.e., chronic physical risks or chronic risks).

iii. Indirect effects of climate change such as loss of ecosystem services (e.g., desertification, water shortage, degradation of soil quality or marine ecology).

2.7 Greenwashing refers to the practice of gaining an unfair competitive advantage in the market by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met.

2.8 Taxonomy of economic activities means a classification system that establishes a list of environmentally sustainable economic activities and thresholds that can clearly determine which economic activity is in line with sustainable development, environmental goals, and principles of sustainable economic activity. Such a taxonomy helps investors, issuers, and project promoters focus on the transition to a low-carbon, risk-resistant, and more resource efficient economy, and facilitates a climate disclosure system. As there is currently no taxonomy that is in force in BiH, a bank will develop these definitions internally and apply them, where necessary, to products offered to its clients. For these purposes, the bank can use the definitions from other international practices. According to the principle of proportionality, applicable taxonomy should be adequate for the nature, scale, size and business model of the bank.

2.9 Large legal entities – for the purposes of applying these Guidelines, a large legal entity is defined in accordance with the applicable Law on Accounting and Auditing in the Federation of Bosnia and Herzegovina and includes also public enterprises under the Law on Public Enterprises in the Federation of Bosnia and Herzegovina, i.e., extrabudgetary users under the Law on Budgets in the Federation of Bosnia and Herzegovina.

3. Guidelines on management of climate-related and environmental risks

3.1. Business model and strategy of a bank

3.1.1. Climate-related and environmental risks may affect the business environment of a bank. In accordance with Article 4 of the Decision on the Internal Governance Systems in Banks, in the course of setting up an efficient and reliable risk management system, a bank is expected to identify the risks arising from climate and environmental changes at the level of key sectors, geographic areas as well as in relation to products and services which it offers or plans to offer, taking into account that some of these risks may materialise over a fairly long period of time.

3.1.2. Climate-related and environmental risks can have a direct impact on the efficiency of a bank's existing and future strategies. In accordance with Article 6 of the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank, a bank is expected to identify and assess which climate-related and environmental risks are material in the short, medium and long term, and the resilience of its business strategy to these risks. The time horizon is particularly relevant, as most of these risks are expected to manifest themselves in the medium, i.e., long term, usually going beyond the common business planning cycles.

3.1.3. A bank is expected to adequately document the process by which it assesses the significance of climate-related and environmental risks to its business environment. Where applicable, this significance assessment needs to be included in the ICAAP and ILAAP processes with explanation of the key elements considered during the assessment.

3.1.4. The implementation of a bank's business strategy is expected to reflect its assessment of significant climate change and environmental risks. The process is considered more credible if the bank defines and monitors sustainability key performance indicators (hereinafter: KPIs), that should be quantitative, when feasible. Depending on the nature, complexity and scale of the bank's activities, these indicators may be cascaded down across business lines, clients and products, where material and relevant.

3.1.5. A bank is expected to also consider the impact that its business model and strategy development may have on the environment, for example through measuring and limiting its own GHG emissions or the GHG emissions of the most significant part of its portfolio.

3.2. Guidelines on internal governance system and risk appetite in a bank

3.2.1. Climate-related and environmental risks should be included in the internal governance system in a bank as set out in Article 4 of the Decision on the Internal Governance Systems in Banks. Accordingly, the supervisory board must have sufficient knowledge and understanding of climate-related and environmental risks to ensure that the level of risk assumed is consistent with the bank's risk appetite and risk strategy, internal rules and policies, and that the bank complies with applicable legal requirements and other obligations.

3.2.2. In accordance with the application of Article 48(4) of the Banking Law, the supervisory board of the bank is expected to have adequate collective knowledge, ability and relevant experience also in the field of climate-related and environmental risks. The bank may require the management board and senior management to have expertise in the field of climate-related and environmental risks relevant to the performance of their duties. Members of the supervisory board, management board and senior management need to be familiar with the climate-related and environmental risks of the bank as soon as at the start of their employment, as part of their onboarding and training for their duties.

3.2.3. With the aim of clearly delimitating the responsibilities within the established control functions and in line with the general principles of internal controls and control function relating to the general responsibilities referred to in Articles 31 to 42 of the Decision on the Internal Governance Systems in Banks, a bank is expected to clearly define the duties and responsibilities, work processes and objectives for these functions and in the field of climate-related and environmental risks. It is the responsibility of the supervisory board of the bank to ensure that the relevant responsibilities are clear, well defined, consistent, enforceable and adequately documented.

3.2.4. A bank is expected to clearly define the duties and responsibilities for climate-related and environmental risks and to adequately prescribe them by relevant policies, procedures and other internal acts. The bank may allocate such duties and responsibilities within existing organisational structure or may establish a separate department or function responsible for the coordination of the bank's overall approach to managing climate-related and environmental risks. Taking into account the principle of proportionality, a member of the bank's management board may be designated to carry out the function of management and control of climate-related and environmental risks, in accordance with an appropriate separation of duties and responsibilities. Where the bank establishes a separate department or function for climate-related and environmental risks, it is expected that the integration of the separate department or function into existing processes and its relationship with other functions is clearly defined.

3.2.5. A bank is expected to ensure that the functions involved in managing climate-related and environmental risks have adequate resources, both human and financial, and have good stature and authority to fulfil their role efficiently. The bank is expected to provide relevant training opportunities for their staff focused on climate-related and environmental risks, as well as the possibility of a general environmental and climate awareness training, especially to those performing control function activities, in accordance with Article 39(16) of the Decision on the Internal Governance Systems in Banks.

3.2.6. In line with the general requirements of the Decision on the Internal Governance Systems in Banks, the supervisory board is expected to exercise efficient oversight over the bank's exposure to climate-related and environmental risks, as well as the impact of the business strategy on the overarching climate and environmental sustainability objectives.

3.2.7. In order to take a comprehensive approach to risk management, taking into account the long-term financial interests of the bank, the supervisory board is expected to ensure that the bank includes climate-related and environmental risks in the risk strategy, taking into account the overarching climate and environmental sustainability objectives. In this sense, the bank is expected to integrate these risks into its risk culture.

3.2.8. In line with Article 10(p) and Articles 43-47 of the Decision on the Internal Governance Systems in Banks, remuneration policy and practice are expected to contribute to a long-term approach to managing climate-related and environmental risks. A bank is expected to set indicators related to sustainable finance that are relevant to the bank in its remuneration policy, which will be consistent with the indicators defined in the bank's business strategy and/or risk management framework.

3.2.9. A bank is expected to integrate climate-related and environmental risks into its internal reporting system, in accordance with Article 21 of the Decision on the Internal Governance Systems in Banks, and to report on its risk exposures and risk profile so as to provide all relevant levels of management in the bank with timely, accurate and sufficiently detailed information necessary for making business and risk decisions. In the short term, the bank is expected to identify the need for data required for the process of including climate-related and environmental risks in the bank's strategy and risk management framework, as well as to identify the quality and possible gaps in existing data and define a plan to overcome and address them.

3.2.10. In accordance with Article 55 of the Banking Law and Article 10 of the Decision on the Internal Governance Systems in Banks, the supervisory board is expected to ensure that the bank has efficient and reliable systems for internal and external reporting, disclosure and communication of aggregated data on climate-related and environmental risks.

Given the nature of these risks, the bank is expected to identify data needed to assess its exposure to climate-related and environmental risks, identify which data is missing, and develop a plan to overcome identified shortcomings. Accordingly, the bank is expected to make necessary adaptations to its information system with the aim of creating a database with required data to be able to collect and aggregate data (internal and/or external) to assess its exposure to these risks. Reports on climate-related and environmental risks are expected to show the impact of these risks on the bank's business model, strategy and risk profile, and to be included in existing risk reporting framework.

3.3. Guidelines on risk management

3.3.1. Risk management system

3.3.1.1. A bank is expected to have a comprehensive and well-documented overview of the impact of climate-related and environmental risks on existing risk categories. The bank is expected to consider climate-related and environmental risks as factors affecting existing risk categories, but the bank may treat these risks as a separate risk category for organisational and analytical purposes.

3.3.1.2. A bank is expected to take steps to quantify climate-related and environmental risks in accordance with Article 7 of the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank. The bank needs to make efforts, on a proportionality basis, to use quantitative measures for this quantification. However, banks may apply qualitative approaches, where data availability, methodological limitations or other aspects prevent their availability for the development of quantitative measurements of these risks.

3.3.1.3. In accordance with Article 7 of the Decision on the Internal Governance Systems in Banks, a bank is expected to consider the need to review its risk management policy (i.e., Risk Policy) and other internal acts defining in detail the functions, systems, processes, procedures, activities and methodologies, as well as competencies, responsibilities (collective and individual) and reporting lines at all levels of the bank's organisational structure, in the context of climate-related and environmental risks.

3.3.1.4. When reviewing its risk appetite, the bank is expected to develop appropriate risk indicators (hereinafter: KRIs) and set appropriate limits for climate-related and environmental risks. Also, the bank is expected to monitor and disclose, where available, its policy for economic sectors, geographical exposures, current data on climate-related and environmental risk exposures, based on a combination of historical data and forward-looking estimates, in accordance with the requirements in chapter 4. In the absence of quantitative measures, the bank may use qualitative data in the initial data collection process, but the bank is expected to actively develop quantitative measures.

3.3.1.5. According to Article 7 of the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank regarding the methodology for measuring or assessment of material risks, a bank is expected to assess the impact of climate-related and environmental risks when calculating its internal capital requirements. In calculating capital requirements, it is recommended for the bank to consider the impact of climate-related and environmental risks in a way that allows the bank to pursue its business model in a sustainable manner, while ensuring regulatory capital adequacy.

3.3.1.6. In line with Decision on the Internal Governance Systems in Banks and the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank, where a bank considers that climate-related and environmental risks are material risks, the bank is expected to consider the potential impact on its projected capital and liquidity sustainability as reflected in its baseline and adverse scenario assessments. The impact may initially be based on qualitative elements, but the bank is expected to make progress in the development of quantitative models.

3.3.2. Credit risk management

3.3.2.1. In line with the requirements set out in chapter 2 of the Decision on Credit Risk Management and Determination of Expected Credit Losses, a bank is expected to define specific details of its environmentally sustainable credit risk management rules and related internal processes and procedures. The bank is expected to set out its environmentally sustainable policies and procedures on exposure approval and internal processes and procedures in line with its overall objectives, strategy and policy on sustainable finance. Defining environmental sustainability requires the development of new internal set of criteria or the incorporation of existing or forthcoming standards into the credit risk rules, process and procedures.

3.3.2.2. A bank is expected to consider climate-related and environmental risks at all relevant stages of credit exposure approval and credit risk management.

3.3.2.3. For large legal entities, the bank is expected to have an updated overview on the following:
a) the sustainability of the client,
b) the exposure of the client to the physical and transition risks and
c) the climate change mitigation plans for the client.
The bank may incorporate into its credit risk rating these aspects, to broaden its understanding of the impact that a sustainability of a client may have on its credit risk.

3.3.2.4. In addition to credit exposure approval, in accordance with Article 6 of the Decision on Credit Risk Management and Determination of Expected Credit Losses, the bank is expected to understand the use of the loan, and particularly, whether the loan is being used for funding sustainable or unsustainable activities, in accordance with the criteria defined by the bank as part of its environmentally sustainable credit risk management policy. The bank requests this information directly from its client and updates it regularly. Furthermore, the process of credit risk management also requires procedures and methodologies based on which the bank can verify that the loan has in fact been used to finance sustainable activities, which include:

a) collecting information about the climate-related and environmental or otherwise sustainable business objectives of the client,
b) assessing the conformity of the funding of the client with the qualifying environmentally sustainable projects or activities and related criteria,
c) ensuring that the clients have the willingness and capacity to appropriately monitor and report the allocation of the proceeds towards the environmentally sustainable projects or activities.

3.3.2.5. For loans to other legal entities, a bank is expected to request information on the use of the loan before its approval to assess whether the loan is being used for environmentally sustainable economic activities, i.e., whether the loan is being employed to fund economic activities that are in accordance with the bank's risk appetite. The bank is expected to consider the exposure to physical and transition risks for clients operating in regions or sectors that the bank considers to be particularly vulnerable to these risks.

3.3.2.6. For loans to individuals, a bank is expected to, when defining a "sustainable product" ("green loans"), ensure that the loan features are consistent with the definition of the product and the funds have been deployed accordingly. The bank is expected also to assess the exposure to physical risks of clients that are identified as particularly exposed to physical risk (i.e., those living in areas at high risk of flooding).

3.3.2.7. A bank is expected to start the process of collecting data on the impact of climate-related and environmental risks on the client's probability of default (PD), the value of the exposure at default (EAD) in the event of default and the average loss given default (LGD). In this regard and for the purposes of assessing the impact of these risks, the bank may consider the quality of climate-related and environmental risk management of its clients, changes in the risk profile of sectors and geographic areas driven by these risks.

3.3.2.8. A bank is expected to conduct climate-related and environmental risk assessment on its clients before and after approval of exposure. The bank is expected to collect and verify information and data necessary to assess the vulnerability of clients to climate-related and environmental risks, in particular before entering into a credit agreement or a significant modification thereof, in line with the bank's onboarding policies and procedures, and following the principle of proportionality and considering their features and activities. The bank is expected to understand the impact its clients have on climate change and the environment, as well as their vulnerability to them. Also, the bank is expected to be aware of its clients' approach in the context of managing and impacting the risks concerned.

3.3.2.9. In accordance with Articles 7, 8 and 11 and chapter 4 of the Decision on Credit Risk Management and Determination of Expected Credit Losses, a bank is expected to take climate-related and environmental risks into account when assessing collateral, as they may affect the value of the collateral.

3.3.2.10. It is expected that the bank's credit pricing framework reflects climate-related and environmental risks and those are reflected in its credit risk appetite (i.e., by specifying risk limits, tolerances and thresholds) and business strategy.

3.3.2.11. A bank is expected to monitor and manage climate-related and environmental risks in its credit portfolio with the general requirements of the Decision on Credit Risk Management and Determination of Expected Credit Losses in mind, for example through concentration analysis and stress testing.

3.3.3. Operational risk management

3.3.3.1. A bank is expected to assess the impact of physical risks arising from climate change and environmental risks on its operations, including the bank's ability to quickly restore its capacity to continue providing services, in accordance with point 2.2 of the Instruction on the Application of Specific Standards in the Management of Individual Risks in Banks. The geographic location in which a bank operates may make it more susceptible to the impact of physical risks. This is particularly relevant for outsourced services and IT activities, especially if service providers are located in locations with a higher risk of extreme weather events or other events that adversely impact the environment.

3.3.3.2. When assessing critical functions, a bank is expected to consider the impact of climate change and environmental risks on the provision of such functions. Where the outcome of that assessment is material to any business line or the overall operations of the bank, it needs to be reflected in the bank's business continuity plan.

3.3.3.3. Also, a bank is expected to consider its exposure to reputational risk in accordance with the nature of the activities it carries out. With the aim of making constructive contributions to the efforts required by international agreements, a bank is expected to undertake activities to reduce its own GHG emissions and pollution it produces, as insufficient knowledge or failure to reduce them efficiently also entails reputational risk.

3.3.3.4. In line with the requirements of chapter 4, a bank is expected to publish the progress in the activities undertaken in the context of sustainability or integrated reports prepared according to internationally accepted standards.

3.3.4. Market risk management

3.3.4.1. Regarding the management of market risk, a bank is expected to take into account that climate-related and environmental risks may lead to shifts in the supply and demand of financial instruments (e.g., securities, derivatives), products and services, which may affect their value.

A bank that invests in companies with business models that are assessed as environmentally unsustainable or in geographic areas exposed to physical risks may suffer a decline in the value of its investments as a result of policy measures, changes in market sentiment or technology, or as a result of gradual adverse changes in extreme weather events or climatic conditions. This is relevant when financial instruments issued by companies in highly vulnerable sectors or that do not apply a comprehensive sustainability governance approach suffer a sudden drop in value.

3.3.5. Liquidity risk management

3.3.5.1. In connection with the general requirements of Article 4 of the Decision on the Internal Governance Systems in Banks, a bank is expected to consider whether climate-related and environmental risks impact its liquidity position, i.e., to assess whether climate-related and environmental risks can cause net cash outflows or adversely impact its liquidity buffers. Where these risks are considered material in accordance with Article 6 of the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank, the bank is expected to take steps to identify, measure, manage and monitor the impact of climate-related and environmental risks on its liquidity position over appropriate time horizons and to maintain adequate liquidity buffers, in accordance with the regulations requiring liquidity risk measurement and management, and to incorporate them in the internal liquidity adequacy assessment process in the bank.

3.3.5.2. The previous assessment is expected to be forward-looking, assuming both business-as-usual and stressed conditions, and, in particular, to consider unlikely events which may have severe consequences, with a focus on key vulnerabilities. Consequently, the bank is expected to assess whether climate-related and environmental risks could have a material impact on its liquidity position. The bank is expected to include analysis of climate-related and environmental risks in its report on the application of the ICAAP and ILAAP.

3.3.6. Scenario analysis and stress testing

3.3.6.1. In line with Article 24 of the Decision on the Internal Governance Systems in Banks, as well as Article 8 of the Decision on the Internal Capital Adequacy Assessment Process and the Internal Liquidity Adequacy Assessment Process in a Bank, a bank is expected to assess climate-related and environmental risks through the use of sensitivity, scenario analysis or stress testing. Unlike traditional stress tests, the most dramatic impacts of climate-related risks are likely to be expressed in the medium, i.e., long term, and therefore a considerably longer time horizon will be required for these exercises. These exercises need to consider the bank's size, business model and complexity, as well as the materiality of these risks to the bank's business model.

3.3.6.2. As regards climate-related and environmental risks, a bank is expected to consider the use of scenarios that are consistent with scientific climate change pathways. When conducting sensitivity, scenario analysis or stress testing as regards climate-related and environmental risks, the bank is expected to take into account at least the following aspects:

a) how physical and transition risks may affect the bank,
b) how climate-related and environmental risks may evolve under different scenarios, taking into account the features of this type of risk (uncertainty and non-linearity, probability that cannot be based on historical data, potentially extreme and widespread impacts),
c) how climate-related and environmental risks may occur in the short, medium and long term, depending on the scenario considered.

3.3.6.3. A bank is expected to define its own risk profile and assumptions regarding its specific features, as well as consider several scenarios based on different combinations of assumptions. It is expected that as part of its capital planning the bank assesses its capital adequacy against a credible baseline and bank-specific adverse scenarios. As regards adverse scenarios, the bank is expected to assume extraordinary but plausible developments that are sufficiently adverse from aspect of their impact on capital adequacy.

3.3.6.4. A bank is expected to understand the results of stress tests and, if necessary, to take clear risk mitigation measures based on them. It is expected that stress-testing programmes are communicated across all relevant business lines and at senior management level in order to raise risk awareness, improve risk culture and facilitate efficient dialogue within the organisation on possible risk management measures.

4. Guidelines on disclosures of climate-related and environmental risk data and information

4.1. In relation to the disclosure obligations regarding climate-related and environmental risk data and information, a bank is expected to specify in the disclosure policy how it assesses the materiality of climate-related and environmental risks, as defined in the Decision on Disclosure of Bank Data and Information.

4.2. Where a bank does not consider climate-related and environmental risks to be material and, thus, omits their disclosure in accordance with Article 3 of the Decision on Disclosure of Bank Data and Information, the bank is expected to document this decision with qualitative and quantitative information supporting such assessment.

4.3. When a bank discloses data and information, metrics and targets that are considered material to climate-related and environmental risks, it is expected to disclose or refer to the methods, definitions and criteria related to them.

4.4. Following a principle of proportionality, a bank is expected to undertake necessary activities to be able to disclose the total GHGs it finances and its own GHGs. The bank is expected to adopt a sufficiently detailed approach to measuring and disclosing GHG emissions.

4.5. A bank is expected to contribute to the achievement of overall climate change and environmentally sustainable objectives in order to provide a comprehensive overview of the impact of the bank as a whole, providing comprehensive and meaningful information on how it contributes to the above objective, in order to avoid greenwashing risk.

4.6. Given the rapidly evolving climate-related and environmental risk data and information disclosure frameworks and the needs of market actors in this area, it is expected that disclosures are actively developed on an ongoing basis.

5. Final provisions

5.1. Annexes 1, 2, 3 and 4 form an integral part of these Guidelines.

5.2. The Instruction on the Application of these Guidelines is provided in Annex 1 to this act. A bank is expected to gradually comply with the expectations provided under these Guidelines. Annex 2 provides the Plan for Compliance with the Guidelines on Management of Climate-Related and Environmental Risks, with the defined implementation deadlines under each individual activity. Exceptionally, the Agency may set different deadlines and scope for an individual bank if needed due to the specific characteristics of the bank itself and circumstances.

5.3. Annexes 3 and 4 provide standardised templates with instructions for filling them out, which are necessary for a bank for the purpose of the initial self-assessment of the bank's compliance and creating the bank's activity plan in order to achieve compliance with these Guidelines, in accordance with the Compliance Plan provided in Annex 2 to these Guidelines. The Agency may request a bank to provide it with the self-assessment and activity plan of the bank from Annexes 3 and 4 to these Guidelines, with the aim of monitoring the status and timeline of the process of the bank's compliance with the expectations in these Guidelines.

5.4. These Guidelines shall enter into force on the eighth day from the date of their gazetting in the „Official Gazette of the Federation of BiH“.

Number: U.O. – 14-02/23	**CHAIRWOMAN OF**
Sarajevo, July 25th, 2023	**THE MANAGEMENT BOARD**

Ivanka Galic, BSc (Econ.)

ANNEX 1

Instruction on the Application of the Guidelines on Management of Climate-Related and Environmental risks

1. In applying point 3.1.1 of these Guidelines, in relation to the impact of climate-related and environmental risks on the business environment of a bank, they can affect, for example, economic growth, employment or property prices at national, regional or local level. Weather events can cause droughts or floods that affect a region's agricultural production, property demand or the value of collateral at national, regional or local level. In parallel, competitiveness is influenced by the developments in a „green" financing market and consumer preferences that are shifting away from high carbon or otherwise polluting goods and services towards low carbon or otherwise "green" products and services. In the domain of technology, a bank serving clients in energy-intensive sectors and power plants that rely heavily on fossil fuels (i.e., coal-fired power plants) may assume that its clients will face significant investment requirements to decarbonise their energy mix. Thus, in identifying risks, a bank may categorise its clients or portfolios according to climate risk exposures. For example, geographic grouping can help to identify exposures that are exposed to high physical risks, such as high risk of flood or drought. Sectoral categorisation can help to identify transition risks, for example by assessing the share of highly GHG-intensive sectors in the lending portfolio.

2. In applying point 3.2.1 of these Guidelines, in relation to the need to include climate-related and environmental risks in the internal governance system in a bank, it is considered a good practice to regularly report on climate-related and environmental risks or to regularly inform about them at the meetings of the supervisory board and risk committee (if there is one), under an agenda item dedicated to these risks.

3. In applying point 3.3.1.1 of these Guidelines, in relation to the need for a comprehensive and well-documented overview of the impact of climate-related and environmental risks on existing risk categories, extreme weather event (e.g., drought) may be considered as a factor affecting credit risk (as an existing category) in agricultural lending, whereas other physical risks (i.e., floods) may influence several risk categories simultaneously (i.e., credit risk, operational risk, liquidity risk). Additionally, a continuous drought period may affect the profitability of clients, for example, in the agricultural sector, increasing their probability of default (PD), followed by loss given default (LGD), and ultimately higher share of non-performing loans in the bank. Floods may cause damage to the branches of a bank, its headquarters or other property, resulting in increased operational risks, while this may at the same time result in additional losses for the bank's clients, leading to an increase in the credit risk. As regards transition risks, such as, for example, regulatory measures under international commitments of the country to undertake necessary activities to reduce the adverse impact of climate change with clearly defined implementation deadlines can expose clients in high emission sectors to higher costs (due to limiting GHG emissions and/or introducing taxes on them), which will reduce free cash flows, affect the solvency and ultimately the creditworthiness of the client. Additionally, clients who are exporters may be exposed to additional costs due to introduction of regulatory measures by other countries (e.g., cross-border carbon tax in the EU), which may ultimately affect the creditworthiness of the client and the credit risk of the bank.

4. In applying point 3.3.1.2 of these Guidelines, in relation to undertaking activities to quantify climate-related and environmental risks, in the case of a subsidiary of a legal entity from other countries with more advanced models, a bank may consider methodology developed

by the parent company but adapted to the local business environment and tailored to the bank's needs, which can contribute to a more adequate understanding of risks.

5. In applying point 3.3.2.8 of these Guidelines, relating to the need to assess climate-related and environmental risks for clients before and after approval of exposure, a bank may consider using analytical tools that highlight climate-related and environmental risks of each economic (sub)sector on a graph or scale. For loans or clients with higher climate-related and environmental risks, a more comprehensive analysis of the client's business model is required, including a review of current and projected GHG emissions, the market environment and regulatory environmental requirements, as well as an analysis of the likely impact of regulation concerning the environmental aspects on the client's financial position.

6. In applying point 3.3.2.9 of these Guidelines, in relation to the need to take climate-related and environmental risks into account when assessing collateral, a bank needs to consider the location of the commercial or residential property, its technical and energy characteristics and the efficiency of the mechanical engineering systems.

7. In applying point 3.3.2.10 of these Guidelines, in relation to including climate-related and environmental risks in a bank's credit pricing framework, as well as in its credit risk appetite and business strategy, the bank may, as part of defining its business strategy and risk appetite, choose to reduce or limit its exposures to sectors that are harmful to the environment and climate, while increasing its exposures to sectors that have a positive impact on the environment and climate.
   The pricing framework needs to support the chosen risk perspective and strategy, for example, by differentiating the price of loans according to the energy efficiency of the exposures or by applying sector- or client-specific fees.
   In line with its business strategy and risk appetite, a bank needs to guide clients to understand the significance of climate-related and environmental risks in order to improve creditworthiness and resilience to such risks. This may involve, for example, reduced interest rates on an environmentally sustainable loan or linking the interest rate of the loan to a sustainability target to be achieved by the client that contributes to or is consistent with the overall climate change-related and environmentally sustainable goals.

8. In applying point 3.3.3.3 of these Guidelines, relating to the need for a bank to strive to reduce its own GHG emissions and pollution that it produces, the bank may, for example:
   a) As regards the GHG emissions, use the following:
      i. measuring direct emissions from own activities,
      ii. measuring indirect emissions related to purchased energy,
      iii. measuring other indirect emissions, with the financed emissions primarily related to credit and market risk management rather than to operational risk management.
   b) As regards other environmental impacts of operations and measures to reduce them, use the following:
      i. introduction and promotion of the use of cashless payment methods,
      ii. reduction in the use of paper for client and/or product contracting promoting the use of digital media,
      iii. other initiatives related to own operations, along with the validated environmental performance indicators.
   c) As regards the ecological footprint, use the following:
      i. reducing the use of paper and water both in bank's headquarters and branches,

ii. enabling the teleworking (if efficient for the bank) in order to reduce staff mobility and, thus, the use of cars and other means of transport,
iii. ensuring long-term contracts with electricity suppliers ensuring energy renewable sources,
iv. other ways that may either ensure the reduction of the ecological footprint or may contribute to its fight.

9. In applying point 3.3.6.2 of these Guidelines, in relation to the use of scenarios that are consistent with scientific climate change pathways, a bank may, for example, use scenarios from the Intergovernmental Panel on Climate Change (IPCC).

10. In applying point 4.4 of these Guidelines, in relation to undertaking activities aimed at measuring and disclosing GHG emissions, this may, for example, require a project-by-project approach to measuring the intensity of GHG emissions of large corporate portfolios, as well as a property-by-property measurement of actual energy consumption or an energy efficiency rating of property portfolios.

11. In applying point 4.5 of these Guidelines, in relation to providing comprehensive and meaningful information on how a bank contributes to the achievement of overall climate change and environmentally sustainable objectives, for example, in the case of a bank committed to discontinuing or restricting the financing of certain industries or activities, the precise definition of the activity and the related objectives, time frames and extent of outstanding exposures must be disclosed. It is also important for the bank to disclose the progress it made towards achieving these objectives, the internal monitoring processes and relevant methodological considerations, in particular the criteria for identifying the counterparties covered by the funding policy and the size of the business relationships involved. Likewise, when reporting on its contribution to environmental objectives, it is appropriate for the bank to take into account all business lines and the entirety of its exposures.

ANNEX 2
Plan for Compliance with the Guidelines on Management of Climate-Related Risks and Environmental Risks

ACTIVITY		IMPLEMENTATION DEADLINE	FORMAT FOR SUBMISSION	COMMENT
1.	**Materiality assessment**	By October 31st, 2023, according to data as at June 30th, 2023	Electronic documents (scanned signed version of document with all accompanying documentation for this activity is to be submitted)	Materiality assessment covers: - Identifying risk drivers (mapping risk drivers to identify transmission channels) - Identifying exposures (methods for assessing risks to assess exposure materiality) - Determining materiality (establishing methodology for assessing materiality to define materiality limits and subsequent follow-up activities)
2.	**Including climate-related and environmental risks in business model and strategy**	By March 31st, 2024	Electronic documents (scanned signed version of document with all accompanying documentation for this activity is to be submitted)	This activity covers the manner in which the bank includes the results of previously conducted materiality assessment of its exposures to physical and transition risks in its business model and strategy and identifying strategic tools to be used for the purpose of managing these risks. Under these activities, the bank may, for example, make a transition plan, create scenarios for setting its targets, create and/or adapt its products and services to the transition plan, define strategy towards existing and/or new clients, assess transition plans and the like.
3.	**Including climate-related and environmental risks in internal governance system and risk appetite**	By June 30th, 2024	Electronic documents (scanned signed version of document with all accompanying documentation for this activity is to be submitted)	These activities entail defining the role and responsibilities of the bank's supervisory board, management board, senior management, control functions and all other employees in management of climate-related and environmental risks. Also, these activities cover integration of these risks into the organisational structure, remuneration policy, risk appetite (setting KRIs), and data management and internal reporting system.

4.	**Climate-related and environmental risk management system**	By December 31st, 2024	Electronic documents (scanned signed version of document with all accompanying documentation for this activity is to be submitted)	These activities entail setting up processes for managing the impact that climate-related and environmental risks may have on existing risk categories. This covers, for example, detailed client analysis, risk classification, collateral valuation, pricing, capital adequacy and portfolio analysis.

ANNEX 3
Template for Self-Assessment with Instruction for Filling It Out

Chapter of the Guidelines		Bank's status description	Compliance status	Comments	Non-compliance
Bank's business model and strategy	-				
Internal governance and risk appetite	-				
Risk management	**Risk management system**				
	Credit risk management				
	Operational risk management				
	Market risk management				
	Liquidity risk management				
	Scenario analysis and stress testing				

Chapter of the Guidelines		Bank's status description	Compliance status	Comments	Non-compliance
Disclosure of data and information	-				

Instruction for filling out the template
Instruction for filling out the above table is provided below:

- **Chapter of the Guidelines**: Refers to the provisions defined in chapters 3 and 4 of these Guidelines and the provisions defined in related points 3.3.1 to 3.3.6 of the Guidelines. The fields are not revisable.
- **Bank's status description**: Bank is expected to describe in detail the current situation in relation to (non-)compliance, as well as all other activities aimed at compliance with the expectations defined in related provisions of these Guidelines.
- **Compliance status**: Three compliance levels are possible, where the bank is expected to carry out compliance assessment in accordance with the provisions provided in individual chapters/points of these Guidelines:
  - **Compliant**: The bank is fully compliant with the expectations provided in the provisions of each individual chapter/point of these Guidelines, or there are minor deviations from the expectations and the bank adopted a compliance action plan which is expected to be implemented in a very short period of time (up to 6 months).
  - **Partially compliant**: The bank is partially compliant with the expectations provided in the provisions of each individual chapter/point of these Guidelines, or the bank does not meet any of the provided expectations, but it adopted an action plan for compliance with them.
  - **Noncompliant:** The bank does not meet any of the expectations provided in the provisions of each individual point of these Guidelines nor does it have an adopted action plan for compliance or partial compliance with them in a very short period of time.
- **Comments**: Any additional comment that the bank considers to be relevant to the current status of activities to be implemented, any plan that is in the process of development or implementation and the like.
- **Non-compliance**: Numeration of non-compliances that the bank needs to establish with the aim of subsequently following up on remedial activities (e.g., 1, 2, 3, and the like).

ANNEX 4
Template for Activity Plan with Instruction for Filling It Out

The bank is expected to develop and implement activities to remedy all non-noncompliances identified in the Self-Assessment Template in Annex 3 of the Guidelines, with the aim of meeting the deadlines in the Plan for Compliance with the Guidelines provided in Annex 2 of these Guidelines.

Activity to be implemented	Description of activity to be implemented	Related gap(s)	Complexity	Potential barriers	Compliance deadlines
…					

Instruction for filling out the template:

- **Activity to be implemented**: Numeration of activities to be implemented to comply with the expectations provided in these Guidelines (e.g., 1, 2, 3 and the like).
- **Description of activity to be implemented**: The bank is expected to provide a detailed description of activities to be implemented to comply with the expectations defined in related points of these Guidelines. If these activities also entail involvement of other areas, outsourcing and the like, this needs to be specified.
- **Related gap(s)**: The bank needs to link the numerical identification from the field „Non-compliances“ in Annex 3 of these Guidelines to specified activities that the bank plans to implement to remedy them. The bank should bear in mind that one planned activity may have an impact or be linked to one or more non-compliances, as well as that one or more non-compliances may be linked to one activity.
- **Complexity**: There are three possible levels of complexity of activities that are planned to be implemented (low, medium and high):
  - **Low level of complexity**: The bank expects that planned activity will be implemented in a short period of time, with a few engaged resources, and/or without the need to involve the general meeting of shareholders in decision-making on given activity and the like.
  - **Medium level of complexity**: Activities that cannot be classified as either low level or high level of complexity.
  - **High level of complexity**: The bank expects that planned activities will be implemented in the short-term or medium-term period, with a number of engaged resources and/or with the need to involve the general meeting of shareholders in decision-making on given activity and the like.
- **Potential barriers**: The bank is expected to specify and explain any potential barrier that may prolong the implementation of activities. In this part, the bank also needs to include potential mitigation measures for identified barriers, which it will adopt or implement.
- **Compliance deadlines**: The bank is expected to specify implementation deadlines for planned activities, which cannot be longer than the implementation deadlines defined in the plan for compliance with these Guidelines in Annex 2.