

# STRATEGY – ROADMAP

## The management and supervision of climate-related financial risks in the financial sector



PHASE I: 2023-2025

# STRATEGY – ROADMAP

## The management and supervision of climate-related financial risks in the financial sector

### PHASE I: 2023-2025

# ABBREVIATIONS

<b>BIS</b>	Bank for International Settlements
<b>BoA</b>	Bank of Albania
<b>CAR</b>	Capital Adequacy Ratio
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>COP</b>	Conference of the Parties
<b>CPRS</b>	Climate Policy Relevant Sectors
<b>CRER</b>	Climate-Related and Environmental Risks
<b>CRO</b>	Chief risk officer
<b>CEO</b>	Chief Executive Officer
<b>EBA</b>	European Banking Authority
<b>ECB</b>	European Central Bank
<b>ESG</b>	Environmental, Social and Governance
<b>EU</b>	European Union
<b>GDP</b>	Gross Domestic Product
<b>GHGs</b>	Greenhouse Gases
<b>IC</b>	Insurance Companies
<b>IF</b>	Investment Funds
<b>MSMEs</b>	Micro, Small, and Medium-sized Enterprises
<b>NACE</b>	Nomenclature statistique des Activites economiques dans la Communaute Europeenne -Statistical classification of economic activities in the European Community
<b>NBFI</b>	Non-Bank Financial Institutions
<b>NDC</b>	Nationally Determined Contribution
<b>NGFS</b>	Networks for Greening the Financial System
<b>NPL</b>	Non-Performing Loans
<b>PF</b>	Pension Funds
<b>RoA</b>	Return on Assets
<b>RoE</b>	Return on Equity
<b>SDGs</b>	Sustainable Development Goals
<b>SECO</b>	State Secretariat for Economic Affairs
<b>SLAs</b>	Saving and Loan Associations
<b>TCFD</b>	Task Force for Climate-related Financial Disclosures
<b>UN</b>	United Nations
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change

# CONTENT

<b>1.</b>	<b>Introduction</b>	<b>7</b>
<b>2.</b>	<b>National context of Climate Change</b>	<b>8</b>
2.1	The steps taken by the Albanian government	8
2.2	The steps taken by the Bank of Albania	9
<b>3.</b>	<b>Main features of the Albanian financial sector</b>	<b>10</b>
3.1	Financial sector: Data	10
	3.1.1 <i>Financial non-bank sector</i>	11
	3.1.2 <i>Albanian banking sector features</i>	12
<b>4.</b>	<b>Climate-related financial risks in the context of Albania</b>	<b>13</b>
4.1	Transmission channels of climate related risk into economic and financial risks	16
<b>5.</b>	<b>Albanian banking sector and climate-related risks</b>	<b>19</b>
5.1	Within our mandate	19
5.2	Exposure of the banking sector to climate-related risks	19
	5.2.1 <i>Banking sector exposure to physical risks</i>	24
5.3	Discuss the results of the survey in the banking sector	27
5.4	Challenges for Bank of Albania	28
<b>6.</b>	<b>Roadmap: Green Strategic Plan (2023-2025)</b>	<b>30</b>
6.1	The Vision	30
6.2	Objectives	30
6.3	Goals and Targets	30
<b>7.</b>	<b>Actions / Roadmap (All)</b>	<b>32</b>
7.1	Culture / Own activities (All)	32
	7.1.1 <i>Definition of internal governance</i>	32
	7.1.2 <i>Central Bank Standpoint</i>	33
	7.1.3 <i>Communication strategy and plan</i>	33
7.2	Capacity building, Knowledge and Research	34
	7.2.1 <i>BoA capacity building</i>	34
	7.2.2 <i>Periodic "Sustainability Report" related to climate change</i>	34

<b>7.3</b>	<b>Risk assessment and measurement</b>	<b>35</b>
7.3.1	<i>Preparation of a green dashboard</i>	35
7.3.2	<i>Preparation of a survey for corporates on the state of the green market</i>	35
7.3.3	<i>Preparation of a methodology for a top-down assessment of transition risks</i>	36
7.3.4	<i>Climate stress testing exercise - Top-down stress test for transition risks</i>	36
7.3.5	<i>Point-in-time assessment of the exposure towards physical and transition risks for the Albanian banking sector</i>	36
7.3.6	<i>Preparation of a methodology for a top-down assessment of physical risks</i>	37
7.3.7	<i>Top-down stress test for physical risks</i>	37
<b>7.4</b>	<b>Macroeconomic analysis and monetary policy</b>	<b>37</b>
7.4.1	<i>Scenario analysis exercise</i>	37
<b>7.5</b>	<b>National and international engagement</b>	<b>38</b>
<b>7.6</b>	<b>Banking regulation and supervision</b>	<b>39</b>
7.6.1	<i>Develop clear understanding of sources of climate related risks (Capacity building)</i>	40
7.6.2	<i>Issuance of guideline with regulatory expectation on climate risk</i>	41
7.6.3	<i>Preparation of reporting templates</i>	41
7.6.4	<i>Banks submit self-assessment on compliance with supervisory expectations toward green finance</i>	42
7.6.5	<i>Preparation of an evaluation methodology for the assessment of the templates, review the self-assessment and identify issues to be addressed</i>	42
7.6.6	<i>Diligently trailing best practices</i>	42
7.6.7	<i>Peer-to-peer international collaborations</i>	43
7.6.8	<i>Cooperation with domestic institutions</i>	43
<b>8.</b>	<b>References</b>	<b>44</b>
<b>Annexe 1</b>		<b>45</b>
International initiatives		45
EU framework		46

## Figures

Figure 1:	Albania agreements	9
Figure 2:	Structure of the financial sector, in % of total assets of financial system	11
Figure 3:	Natural Hazard Statistics for 1980-2020 – Number of people affected	14
Figure 4:	Channels and spillovers for materialisation of physical and transition risks	18
Figure 5:	Share of CPRS and of other sectors in Albanian total banks' exposure 2016-2022	22
Figure 6:	Breakdown of banks' exposure to the climate policy related sectors for period 2016-2022	23
Figure 7:	Overview of the main hazards and their severity	25
Figure 8:	Branch distribution per region	26
Figure 9:	Share of loans for house purchase in total loans to households per county to natural persons	27
Figure 10:	Culture /own activities - overview	32
Figure 11:	Capacity building activities - overview	34
Figure 12:	Risk assessment and measurement activities - overview	35
Figure 13:	National and international engagement activities - overview	38
Figure 14:	Banking regulation and supervision activities - overview	39

## Tables

Table 1:	Banking loans distribution by resident economic sectors	12
Table 2:	Forecasted temperature and precipitation changes in Albania	14
Table 3:	Sector classification according to NACE	21
Table 4:	Main conclusions from the Survey on CRER on the banking sector	28

## ACKNOWLEDGEMENT

*This strategy for the management and supervision of climate-related financial risks in the financial sector (Phase I: 2023-2025) is a product of the Bank of Albania.*

*The strategy has been conceptualized by the staff of the Bank of Albania in close collaboration with the World Bank Group (FinSAC)*

*"The climate [...] changes have a direct and strong impact on the factors of output and their productivity. As such these forces will play a decisive role on price and financial stability on a global scale and must remain at the centre of attention of central banks, as being instrumental in price and financial balances."*

Gent Sejko (2021)

## 1. INTRODUCTION

Climate change is already and will increasingly weigh on Albanian businesses and households, impacting all agents in the economy, across all sectors and geographies.

The challenges that climate change and the transition to a net-zero economy<sup>1</sup> pose to the Albanian economy and its financial system requires urgent planning and action from national authorities through important structural transformations and significant investments in adaptation and mitigation measures and infrastructures. This will profoundly change the structures of the Albanian economy, representing both risks for some economic activities and opportunities.

Achieving this goal requires the involvement and coordination of all private and public institutions, including the Bank of Albania (BoA).

Climate risks are different from other risks as they are far-reaching, non-linear, irreversible, and characterized by deep uncertainty, even though foreseeable. But one thing is for sure: The costs of inaction will be much greater than the cost of action to minimize future risks.

The financial system<sup>2</sup> has a key role in the context of climate change. First of all, because climate change and the transition are a source of risk for financial institutions. Second, there is no sustainable development without sustainable financing and they are key in mitigating future climate risks for Albania.

The banking sector is likely to have a stewardship role for corporates in Albania due to the underdeveloped, shallow nature of capital markets, not only by "channelling funds" but also by "educating clients" to become more sustainable.

This is necessary if we want to ensure fiscal sustainability, increase transparency, and ultimately lay the groundwork for sustainable economic growth, therefore if well managed, the transition to a net-zero economy can potentially benefit all Albanians in the long-term. Nevertheless these impacts fall square into several parts of central banks mandates and addressing them, poses some challenges.

<sup>1</sup> Refers to net zero carbon dioxide emissions. Then it will be abbreviated as "net zero emissions".

<sup>2</sup> Refers to banks, nonbanks and other subjects licensed by the Bank of Albania.

In this context, the Bank of Albania has also a keen interest in better understating the economic and financial consequences of climate change and the transition, as well as adapt its policy framework to them.

And this precisely the aim of this Strategy, which is based on international best practices, as well as EU recommendations and action plans<sup>3</sup>. The core of the strategy includes an action plan, where each department shows the commitments undertaken for the medium-term period 2023-2025, within the framework of these climate risks and the role that the Bank of Albania must play. As climate risks are transmitted in financial risks, the Bank of Albania's role in identifying, monitoring and managing them is manifold. Therefore, the essential part of the strategy includes a roadmap with a series of activities to be undertaken by various departments within the Bank of Albania, depending on their mandate and urgency to act.

## 2. NATIONAL CONTEXT OF CLIMATE CHANGE

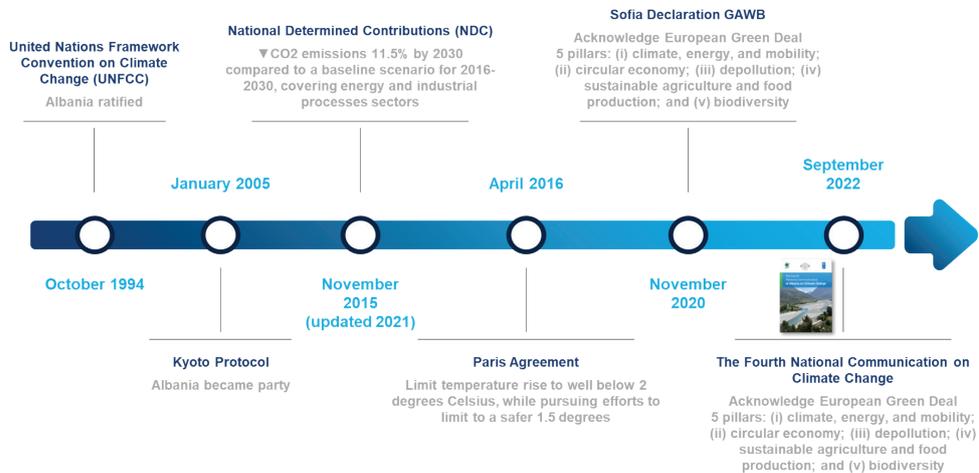
### 2.1 THE STEPS TAKEN BY THE ALBANIAN GOVERNMENT

Below are presented the current national initiatives and agreements for combating climate change and adapting to a warmer world (Kyoto Protocol, UN Agenda 2030, Sustainable Development Goals, and the Paris Agreement, etc.), and a pathway towards low-carbon and climate-resilient development.

Albania has taken necessary measures not only towards EU membership and the commitment to implement the Sofia Declaration but also towards achieving the Sustainable Development Goals (SDGs), where the key goals are reflected in the figure below (fig. 1).

<sup>3</sup> In Annex 1, more information can be found about international initiatives and agreements, as well as the European Union's sustainable finance action plan.

Figure 1: Albania agreements



## 2.2 THE STEPS TAKEN BY THE BANK OF ALBANIA

In Albania, green finance is still in its early stages. It is in the phase of “capacity building” and “raising awareness”.

The mission of the Bank of Albania, which is to maintain price stability and financial stability, fully aligns with the United Nations’ 2030 Agenda for Sustainable Development. Since July 2017, the bank has been part of the “Global Sustainable Development Resolution,” highlighting the importance of the financial sector in fulfilling the Principles of the United Nations’ Sustainable Development Goals and the projects of the Paris Agreement (COP21). In December 2020, the Bank of Albania joined the Central Banks and Supervisory Networks for Greening the Financial System (NGFS), emphasizing the “green” content.

In recent years, the Bank of Albania has been monitoring climate developments to achieve its objectives and has shown willingness to contribute to policy analysis and/or research on climate change issues (research studies, climate indicators, new data products). These products have also benefited from cooperation with the State Secretariat for Economic Affairs (SECO), the World Bank (FinSAC), the Vienna Initiative, and active participation in international networks.

Since 2018, the Bank of Albania has also been engaged in modernizing and digitalizing the payment market with the aim of promoting financial inclusion and the use of electronic payments in the Albanian economy. One of the key measures in this direction is the adoption and implementation of the “Payment Services Law,” which aims to reduce costs, promote competition and innovation in the payment market, and create the concept of “Open banking” to encourage

access to payment services for Albanian citizens and promote more efficient and lower-cost services. Specifically, based on studies by the Bank of Albania, the use of cash in the Albanian economy carries a cost of about 1.8% of GDP, while electronic transfers promoted by the law cost the Albanian economy about 0.2% of GDP.

In this line, the digitization of services is linked to green finance by contributing to the reduction of costs borne by the Albanian economy due to high cash usage, reducing the physical infrastructure required for banking transactions, and reducing energy consumption. Thus, financial digitization consumes fewer resources and generates less pollution, creating potential for the economy to function more efficiently and finance projects that can be channeled towards the green economy. International consensus shows that the use of digital financial services can contribute to advancing inclusive green finance policies. Furthermore, studies<sup>4</sup> have shown how innovative market developments enable low-income and rural families, as well as micro, small, and medium-sized enterprises (MSMEs), to increase their resilience to environmental risks and adapt to climate change through digital financial services.

All of these demonstrate the seriousness and importance that the Bank of Albania has attached to financial sustainability for a greener and more inclusive economy, and will continue to do so.

## 3. MAIN FEATURES OF THE ALBANIAN FINANCIAL SECTOR<sup>5</sup>

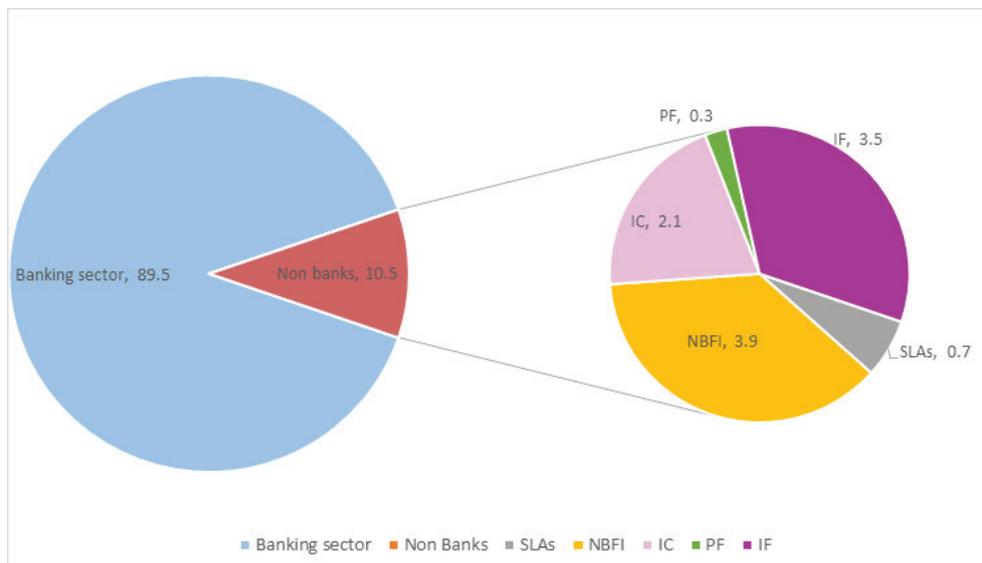
### 3.1 FINANCIAL SECTOR: DATA

The Albanian financial sector consist of 12 banks, 38 non-bank financial institutions (NBFIs), 16 Saving and Loan Associations (SLAs), 12 Insurance companies (IC), 12 Investment Funds (IF) and 5 Pension Funds (PF). The banking sector assets account for 89.5% of total financial assets and around 92% of GDP. The non-bank financial sector accounts for 10.5% of total financial assets and 10.8% of GDP. Non-bank financial institutions assets have the main share in the activity of the non-bank sector (around 3.9%) followed by Investment funds (3.5%) and Insurance corporations (2.1%).

<sup>4</sup> <https://www.afi-global.org/newsroom/blogs/how-digital-financial-services-can-move-the-needle-in-advancing-inclusive-green-finance/>

<sup>5</sup> The data is from June 2022

Figure 2: Structure of the financial sector, in % of total assets of financial system



### 3.1.1 FINANCIAL NON-BANK SECTOR

Non-Bank Financial Institutions (NBFI) main activity is lending, followed by payments and transfers. Households share around 54% of the credit portfolio granted by NBFIs. In the remaining 46% of loans granted to enterprises, the most financed sector is that of wholesale and retail trade, at 19%, followed by other service activities, at 16%. The NBFIs capital consist of 70% Albanian capital and 30% foreign capital.

Savings and Loans Associations (SLAs) main activity is investment in loans (69%) and investment in time deposits in banks (21%). The sector that has attracted the largest funding from the activity of the members is the agricultural sector (36%) followed by the wholesale and retail trade sector (13%). SLAs capital is entirely Albanian.

Insurance Corporations (IC) market is dominated by non-life insurance that comprises around 92% of insurance premiums. The IC market is 65% motor insurance, 19% real estate and others, and 16% life and health insurance. IC main activity is time deposits and bank accounts (33%), followed by real estate investment (15%), investment in securities (12%) and shares (9%). Around 79% of the capital is Albanian while 21% of the capital is foreign.

Pension Funds (PF) main activity is financial investment held to maturity (89%). The capital is made of 55% Albanian capital and 45% foreign capital.

Investment Funds (IF): The Investment Funds are administered by 5 administering companies and account of net assets of 71 billion lek. The main activity of the IF is securities with 88% of total assets, followed by cash and current accounts (11% of total assets).

### 3.1.2 ALBANIAN BANKING SECTOR FEATURES

Explanation of the main features of the Albanian banking sector (ownership, asset quality, profitability, solvency, liquidity, etc.) (data as of June 2022):

The financial sector is bank-centric in Albania with assets around 1,800 billion lek, and accounts for around 90% of total financial assets. According to capital origin around 30% of the banking sector's total assets is Albanian capital (4 banks) and 70% is foreign capital (8 banks).

According to the marginal contribution to systemic risk in Albania, banks are classified as systemically important banks that share around 60% of total assets of banking sector, and other banks.

The banking sector is characterised by an appropriate level of capitalisation with capital adequacy ratio (CAR) around 19%. Lending, as the main activity of the banking sector, accounts for around 40% of total assets of the banking sector, followed by securities transactions (around 30%) and treasury and interbank transactions (27%). The stock of loans granted by the banking sector during the first half of 2022 reached 700 billion ALL. Loans to resident entities constitute 96% of the outstanding loans. Loans granted to private sector (businesses) account for 63% of total loans while loans to households 34%. The main share of loans to resident businesses was occupied by loans for investment in real estate and loans for equipment purchase, each 30% of the stock of businesses loans. Loans for the purchase of real estate constitute the main share in the loan portfolio of households, 66%. Non-performing loans account for 5% of total loans, with a contribution of 4% of NPL from the businesses and 1% from households.

Table 1: Banking loans distribution by resident economic sectors

	Agriculture	Manufacturing	Electric energy, gas and air conditioner	Water supply	Construction	Wholesale and retail trade	Transport	Accommodation	Other	Households/ Real estate loans	Households/ Other loans
% of banking sector loans	1.0%	8.8%	7.9%	0.4%	10.3%	20.2%	1.4%	5.1%	7.8%	21.7%	11.4%

Albanian banking sector have a favourable level of liquidity position of 40% of liquid assets to liabilities with remaining maturity up to 1 year. Liquidity indicators

in lek (57%) and foreign currency (26%) remain significantly above the minimum regulatory ratios.

The net financial result of the banking sector is reported at 6.5 billion lek. The profitability indicators during the first half of 2022 are RoA 0.7% and RoE 7.2%. The net interest income of the banking sector represents the main item of revenue and non-interest expenses remain the main item of expenditure.

## 4. CLIMATE-RELATED FINANCIAL RISKS IN THE CONTEXT OF ALBANIA

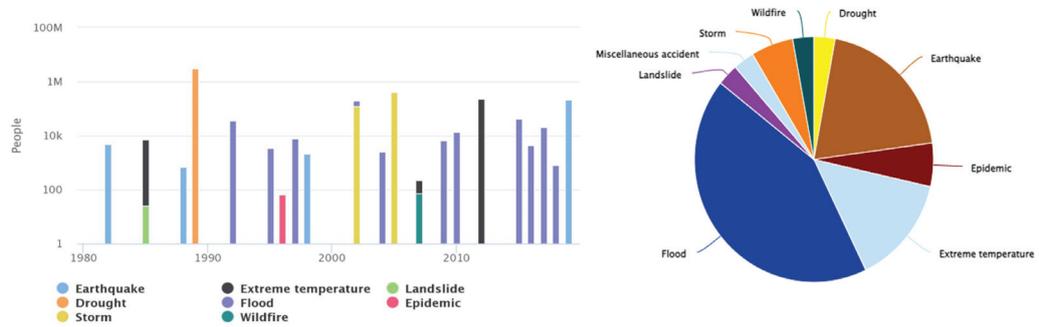
Banks are exposed to climate-related financial risks through two key channels, physical risks and transition risks. Physical risks emanate from climate change directly, while transition risks arise from the response – by policymakers, innovators, or consumers – to prevent and/or combat climate change.

Physical risks refer to the effects of both rising temperatures and extreme weather events, which are becoming ever more frequent. They can be broken down into acute and chronic risks: acute risks are sudden short and severe events that have a significant negative impact, e.g., heavy rainfall causing a flood. Chronic risks reflect continuously deteriorating ecological conditions, e.g., rising sea levels. Physical risks, which can damage material infrastructure and fixed investments, tend to vary from region to region, affecting, for instance, coastal areas differently than glacier regions. Climate-related physical risks fall into more traditional categories in financial risk management. Once physical risks materialize, they can destroy assets either immediately or gradually, for example by causing the depreciation rate of capital to accelerate through decay or corrosion. If the affected assets have been pledged as collateral for a loan, the loan originator's credit risk rises. Many physical risks are spatially correlated: if, for example, severe flooding destroys a significant proportion of real estate collateral in a particular area, lenders in that region might face higher concentration risk. If priced in accordingly, the rising uncertainty due to climate change might also lead to higher risk premiums on interest rates, which, in turn, increases market risk.

Physical risks are not just future risks, they are already impacting the economy and financial system today, and Albania is already experiencing climate change as one of the most vulnerable countries to acute weather events – floods, droughts, heat waves and wildfires – in the Western Balkans, according to World Bank and ND-GAIN Index<sup>6</sup>. Figure 3 provides an overview of the most frequent natural disaster in Albania and the impacts of those disasters on human populations.

<sup>6</sup> University of Notre Dame (2020). Notre Dame Global Adaptation Initiative. URL: <https://gain.nd.edu/our-work/country-index/>

Figure 3: Natural Hazard Statistics for 1980-2020 – Number of people affected



Sources: World Bank (2020), Albania - Vulnerability | Climate Change Knowledge Portal (worldbank.org)

It is estimated that physical risks will increase both in intensity and frequency in Albania in the next years. The trends in temperature rise and precipitation decrease are likely to continue according to both scenarios, from the Albanian Ministry of Environment and from the World Bank (see Table 2). Therefore, identifying, measuring and monitoring these risks by financial institutions will be an inevitable activity in the following years, and consequently their incorporation in the Bank of Albania’s actions.

Table 2: Forecasted temperature and precipitation changes in Albania

		Time horizon			
		2025	2050	2100	
Albanian Ministry of Environment	Annual temperature (°C)	+0.8 to +1.1	+1.7 to +2.3	+2.69 to +5.3	
	Annual precipitation (%)	-3.4 to -2.6	-6.9 to -5.3	-16.2 to -8.8	
		2020-2039	2040-2059	2060-2079	2080-2099
World Bank	Annual temperature (°C)	+0.4 to +2.3	+1.1 to +3.6	+1.8 to +5.0	+2.7 to +6.9
	Annual precipitation (%)	-18.0 to -10.5	-23.0 to -10.0	-27.5 to +8.6	-33.2 to +5.8

Transition risks are related to efforts to mitigate the effects of climate change as part of the transition from current modes of production to more a climate-friendly economy. Decreasing CO2 emissions, in line with Paris Agreement objectives, requires targeted climate policies (e.g., carbon taxes), changes in laws and regulations, as well as technical innovation and changes in consumer behaviour. However, disorder transition due to a late introduction of climate policies or their introduction in an uncoordinated way across countries, may cause lack of incorporation of these impacts by investors, and consequently emergence of new sources of financial risks. A disorderly transition may cause an increase in asset price volatility (both negative for high-carbon activities and positive for low-carbon activities) with implications for financial instability if large and correlated asset classes are involved.<sup>7</sup>

<sup>7</sup> Monasterolo, I., S. Battiston, A.C. Janetos and Z. Zheng. 2017. Vulnerable yet relevant: the two dimensions of climate-related financial disclosure. In: *Climatic Change* 145. 495–507.

Regulatory changes can alter the relative prices of low-carbon and green modes of production. Examples of policies that incorporate negative climate externalities include carbon pricing and emissions trading schemes where charges may be imposed for emitting greenhouse gases (GHGs). However, these policies may lower the emitter's debt-servicing capacity and shares and bonds of GHG-emitting companies will be discounted accordingly.

Further, the diffusion of climate-neutral technologies can act as a tipping point for markets and transform previously valuable investments into stranded assets whose value is no longer certain, as they cannot be used due to regulatory, social, or technical barriers. Technological innovation can reduce the costs of renewable energy sources and make the latter more competitive vis-à-vis fossil fuels, which are a major source of GHG emissions. On the other hand, coal or oil companies accounting for un-extracted reserves in their balance sheets, face significant downside risks regarding those assets' future prices in case technological breakthroughs turn the reserves into stranded assets. The accelerated diffusion of low-cost solar panels or e-mobility devices has disruptive potential, namely by crowding out traditional GHG-emitting machines. Finally, increased awareness of global warming might change consumer preferences and thus reduce demand for carbon-intensive goods, rapidly turning high-yielding assets into stranded assets. A severe devaluation of carbon-based assets and lower revenues for debtors due to demand shifts mean that banks face a higher probability of default on some of their loans. Depending on the timing of behavioural changes by governments, companies, and consumers, the transition could result in a "soft landing" or a "hard landing." The latter would yield assets at a time when more and more physical risks are likely to materialize.

Albania is committed to transition to a sustainable economy and has started to act on it. At the global level, Albania has committed to the 2030 UN SDGs and to meet NDCs under the Paris Agreement<sup>8</sup>. At the regional level, along with other Western Balkan economies, Albania has signed up to the ambitious Green Agenda outlined during the 2020 Sophia Summit that aligns with EU Green Deal<sup>9</sup>. At the country level, in 2019 Albania was the first Western Balkan country to adopt a national climate change strategy and action plan, even though the current NDC address only emissions reduction and not adaptation measures. All these agreements show clear path of Albania towards sustainable economy and envisage set of actions that will cause emergence of transition risks.

<sup>8</sup> With the objective to reduce by 20.9% GHD between 2016 and 2030. The government and its CCU are responsible to monitor the GHD emissions.

<sup>9</sup> This Green Agenda consists of five main pillars: (i) decarbonization (climate, energy, and mobility); (ii) circular economy; (iii) depollution (air, water, and soil); (iv) sustainable agriculture and food production; and (v) biodiversity.

Primarily, the transition to a sustainable economy will require profound sectoral changes, especially in energy and agricultural sectors. More investments are needed - in energy efficiency, renewable energy, and climate-resilient adaptation for agricultural and water-management – to increase the country's resilience to climate change.

Although physical and transition risk are considered as main climate-related risks, there are also liability (litigation) risks that can arise from people or businesses seeking compensation for losses they may have suffered from the physical or transition risks from climate change outlined above or legal challenges taken to require a particular course of action. Whilst litigation risks were previously identified as a separate channel, they are increasingly considered as a sub-category of physical and transition risks.

The main features of climate-related risks are:

- they are systemic and will affect every consumer and every corporate in all sectors and across all geographies. Their impact will likely be correlated, non-linear, irreversible, and subject to tipping points. They will therefore occur on a much greater scale than the other risks that firms are used to modelling and managing.
- they are simultaneously uncertain and yet totally foreseeable. Risks are inevitable, but decisions about reducing emissions will influence the combination of physical and transition risks that emerge.
- early action can help mitigate the size and balance of future risks. Once physical risks begin to manifest in a systemic way it may be too late to reverse many effects through emissions reductions.

## 4.1 TRANSMISSION CHANNELS OF CLIMATE RELATED RISK INTO ECONOMIC AND FINANCIAL RISKS

A first step to understanding how climate-related risks could cause financial instability is through the identification of the transmission channels between climate and economic and financial risks in the Albanian economy and financial system. A better understanding of these channels is of crucial importance for central banks and financial supervisors, to better identify, assess and manage the rising risks. Climate risks may convert into economic and financial risks.<sup>10</sup> Climate change poses severe risks and large damages for socio-economic stability through more frequent and severe natural disasters, sea level rise, lower productivity and output losses, deteriorating health outcomes, vector-borne diseases, increased

<sup>10</sup> Note that the Central Banks and Supervisors Network for Greening the Financial System (NGFS) usually refers to climate and environmental risks (see NGFS 2020a for a definition). In this report, we use the term climate risks as an equivalent to climate and environmental risk, given the similarities with climate risks that environment risks imply for central banks and supervisors (INSPIRE-NGFS 2022).

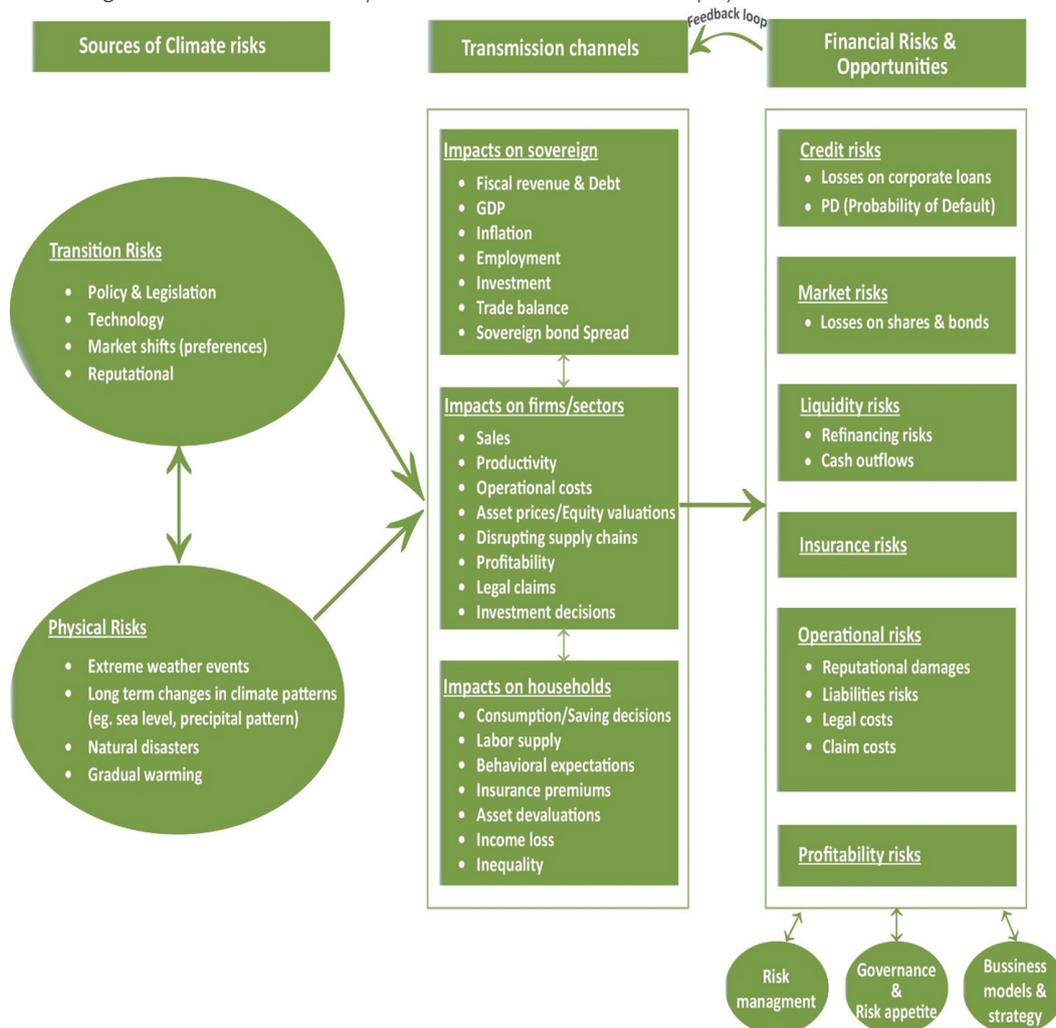
migration, poverty and inequality, and heightened macroeconomic and financial instability. Therefore, the sooner engagement in this area will result in, the more damages avoided tomorrow<sup>11</sup>. Given the environmental and economic profile of Albania, and the projections showing an increase in occurrence, intensity and unpredictability of natural and hydro-meteorological hazards (storms, floods, heat waves and wildfires) several economic risks are identified for Albania. These risks predominantly arise from the impact of climate changes on the agricultural sector, the energy sector, water resources management, transport and coastal zones. It is also likely to add pressure on health and social safety nets.

However, the understanding and assessment of physical and transition risks in Albania are still at an early stage. The economic risks identified above are thus only an initial list, which can serve as a basis for further studies, and which should not be considered exhaustive.

Climate change and the transition are a source of risk for financial institutions. Climate-related risks affect investment choices, the GDP volatility and potential growth, employment and productivity, and price levels, bringing them directly into the central banks 'mandate. According to BIS (2021) they translates into traditional source of risks for banks, hence the importance for the banking sector to adequately asses, monitor, address and mitigate them. Figure 4 presents the channels through which climate change can affect the economy and financial stability.

<sup>11</sup> The literature confirms that the GDP-losses are large enough to matter in net-present value terms. This implies that present-day and targeted climate policy actions are needed to mitigate climate change.

Figure 4: Channels and spillovers for materialisation of physical and transition risks



Source: Adapted from BIS (2021)

In Albania, climate financial risks are not yet well assessed and likely to be unaddressed. Nevertheless, even if in its early stages, the Albanian financial sector has started to acknowledge the importance of assessing and addressing climate-related financial risks. This will be a process that requires a lot of capacity building in order to keep the pace with the EU and neighbouring countries, but also to ensure their stability and ability to serve the economy in the future.

Finally, as no good crisis should go to waste, Albania should take advantage of the financing opportunities (new markets, new financial instruments) that will open up thanks to the EU Green Deal and the parallel Green Agenda for the Western Balkans, towards a more inclusive, resilient, and sustainable economy.

The Bank of Albania will have a leading role in this process, through a number of areas that are under its remit.

## 5. ALBANIAN BANKING SECTOR AND CLIMATE-RELATED RISKS

### 5.1 WITHIN OUR MANDATE

The “On Bank of Albania” law (1997) states that “the principal objective of the Bank of Albania is to achieve and maintain price stability.” To deliver on this objective, we need the full picture on all factors affecting inflation. Climate change has a widespread economic effect; and thus, it is our job to understand the consequences of climate change and the transition on price dynamic in Albania to take informed decisions.

The law also states that the BoA should “... foster the liquidity, solvency, and proper functioning of a stable market-based banking system.” This is de facto a financial stability mandate. The law further lists the measures that the BoA can take to control the access to the banking sector. This makes the BoA a supervisor and regulator of the Albanian banking system. Climate risks can become financial risks and (double materiality), as such, they fall squarely into this BoA mandate (NGFS 2019). Against this background, the BoA should follow NGFS recommendation for supervisors.

Finally, note that the Constitutions also tasks the BoA to “...maintain and administer the foreign currency reserves of the Republic of Albania.” BoA’s foreign exchange reserves are exposed to climate financial risks, like every other financial assets. A sound management of these foreign exchange reserves requires an adequate management of these risks.

### 5.2 EXPOSURE OF THE BANKING SECTOR TO CLIMATE-RELATED RISKS

Banks are exposed to climate-related financial risks through their business activities and operations. For example, these risks may impact the probability of default for a loan, resulting in greater than expected financial losses. In addition, firms may suffer from business interruption due to physical risks leading to property damage on their own premises or affect the service provision of third parties they rely on. Most financial intermediation in Albania is conducted by banks, those banks are exposed to climate risks. In this regard, climate risks can impair the value of financial assets, which in an extreme scenario can affect the solvency of the financial intermediaries holding them. If risks from climate change are not sufficiently assessed, lending and investments decisions may be based on incomplete

information, resulting in a biased expected risk-adjusted return on investment. This is the reason why banks will be progressively required to adequately assess, measure, and manage their climate related risks, particularly how climate related risks are integrated into a bank's credit risk management framework.

The quantification of climate-related financial risks (both physical and transition) requires reliable data on banks' credit risk exposures, mainly to non-financial corporates (including small and medium sized enterprises) and households. This data is currently not fully available<sup>12</sup>. Nevertheless, a first assessment of the exposure of the banking sector to transition risks stemming from climate risks, can be gauged by breaking down the banks' loan portfolio of non-financial companies by economic sector; by identifying the current exposure to the most sensitive sectors to transition risks. Climate-relevant sectors are classified using a 4-digit NACE classification (the industry standard classification system used in the European Union). Although this classification is not perfectly designed to cover all climate-related sectors and may not be as granular as desirable, it is widely used by other authorities and markets to gauge the banking exposures to transition risks.

The classification of economic activities that are climate-policy related is based on Battiston et al. (2017)<sup>13</sup> where they are called Climate Policy Relevant Sectors (CPRS) and defined as economic activities that could be affected positively or negatively (including being transformed into stranded assets) in a disorderly transition, i.e., they are relevant for assessing climate transition risk<sup>14</sup>. Using NACE level 4 classification and transforming the exposures to NACE sectors to exposures to CPRS, six sectors are determined as climate-policy relevant: (i) fossil fuels, (ii) utilities, (iii) energy-intensive, (iv) buildings, (v) transportation and (vi) agriculture<sup>15</sup>. These six sectors are then further disaggregated to the total of around 100 groups from NACE classification related to the main types of different technologies relevant for the energy transition. Sector classification is presented in Table 3.

<sup>12</sup> An alternative classification is used because Albania does not count on an own Green Taxonomy defining relevant sectors and this one is widely used by other authorities (ECB and OeNB among others) and academia.

<sup>13</sup> Battiston, S., A. Mandel, I. Monasterolo, F. Schütze and G. Visentin. 2017. A climate stress-test of the EU financial system. In: *Nature Climate Change* 7. 283–88.

<sup>14</sup> This classification is used as Albania has not yet developed its own Green Taxonomy defining relevant sectors and this one is widely used by other authorities and academia.

<sup>15</sup> Due to data availability, the analysis has been based on NACE level 1 data.

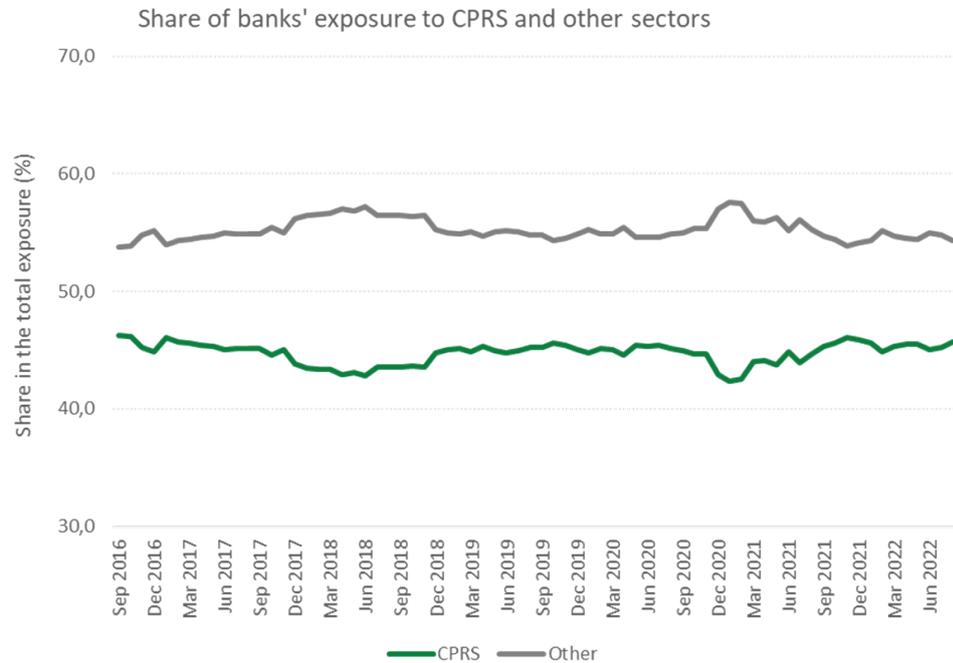
Table 3: Sector classification according to NACE

CPRS	Role in the greenhouse gas emission	Transition risk	NACE (4-digit code)
Fossil fuels	Production of primary energy based on fossil fuel; indirectly responsible for GHG emissions from fossil fuels	Revenues primarily from fossil fuels (e.g., extraction, refinement); diversification/use of different resources not possible	Extraction of coal, gas and oil (e.g., 05.20), manufacturing related to the refinement of coal, gas and oil (e.g., 19.10) electricity and gas (e.g., 35.21), retail sales of automotive fuels (e.g., 47.30)
Utilities	Production of secondary energy; responsible for GHG emissions relative to type of fuel used	Revenues from generation, transmission, or distribution of electricity; diversification possible (e.g., solar, wind)	Electricity production (e.g., 35.11)
Energy-intensive	Activities with intensive energy use as input	Affected by price changes of energy or restrictions on use of GHG-intensive sources	Mining and quarrying (e.g., 07.10), various manufacturing sectors (e.g., 11.01, 13.10, 23.51) based on the EU carbon leakage list
Transportation	Provision of and support for transportation services	Fossil fuel-intensive, but no strict dependence on GHG emissions; diversification possible	Manufacturing of motor vehicles, ships, and trains (e.g., 29.10), construction of roadways (e.g., 42.11), sale of vehicles (e.g., 45.32), transportation (e.g., 49.10)
Buildings	Provision of building services from construction to renting	Energy-intensive, but diversification possible	Residential and commercial construction (e.g., 41.10), accommodation (e.g., 55.10), real estate (e.g., 68.20)
Agriculture	Agriculture, forestry and related services	Energy-intensive, but diversification possible	Agriculture, forestry and fishery (e.g., 1.10)

Source: OeNB Financial Stability Report 40 – November 2020

The share of CPRS sectors and of other sectors in Albanian total banks' exposure in recent years following this methodology is shown in Figure 5.

Figure 5: Share of CPRS and of other sectors in Albanian total banks' exposure 2016-2022<sup>16</sup>



Less than half of total banks' exposure in Albania is attributed to climate-policy related sectors. The share of CPRS in banks' exposure in the last five years is slightly below 47% and around 53% to other sectors. This has remained relatively stable over the last five years. It is, though, a good sign for the banking sector that the share of CPRS is not dominant compared to other sectors that are not climate policy relevant. Yet, based on the analysed data, it is not possible to determine the magnitude of risks, only to determine the exposure to them.

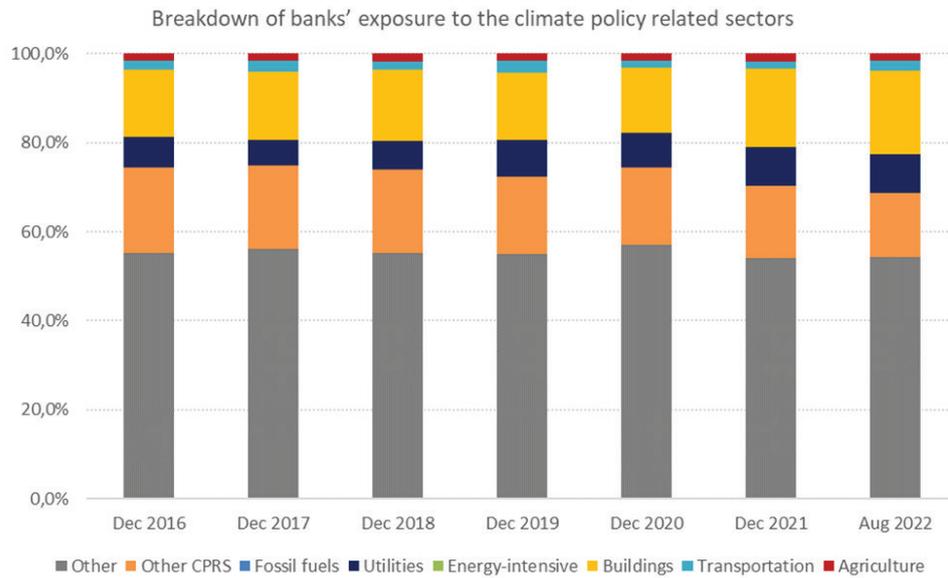
The exposure of the banking sector to each of the six (and the "other CPRS" made of sectors mining and manufacturing) CPRS relevant for transition risk is shown in

Figure 6. It evidences that the share in each sector has remained fairly constant over the observed period.

<sup>16</sup> Some remarks on data availability are important to be made:

- Sectors B (mining) and C (manufacturing) consist of classes that belong to a different CPRS and minority of them belong to other sectors that are not CPRS. To address this issue, a new climate policy relevant sector (other CPRS) has been created.
- Sectors D-I include more than one CPRS but presence of other sectors is minor and therefore we assumed that all classes belong to the predominant sector.

Figure 6: Breakdown of banks' exposure to the climate policy related sectors for period 2016-2022



Source: Internal calculations based on data from 31.08.2022

The single sector with the most significant exposure for Albanian banks to transition risk is the "Buildings" sector that includes residential and commercial construction, rental activities, and real estate. The share in the total exposure is between 15-19% with an increasing trend over time.

The second largest exposure is to the "other CPRS" aggregation (which accounted for the highest percentage at the beginning of the period), that includes mining and manufacturing sectors. These include activities that require significant use of energy, such as mining and quarrying, and various manufacturing sectors that are determined to be energy-intensive based on the EU carbon leakage list. The share for this sector is between 14-19% with a decreasing trend during the period under analysis.

Exposure of the "Agriculture", considered to be very sensitive to climate, is below 2% and stable over the observed period of time. One reason for such a low exposure may be that agricultural workers finance their production from other sources (their own) rather than from banks. Agriculture as a sector is associated with a much higher physical risk than transition risk.

Another sector considered very sensitive to climate, the "Transportation" sector, is between 2-3% and stable over the observed period of time. This sector includes manufacturing of transportation vehicles, construction of roadways, sale of vehicles, and transportation services. This sector is materially exposed to transition

risks, for example through the introduction of new regulations to improve the energy efficiency of vehicles, higher prices of fossil fuels due to carbon taxes, or other environmental regulations that may increase the costs of production or maintenance. Furthermore, there might be decreased demand for certain services or products. Movement towards greater use of electric vehicles and imposition of carbon taxes would represent significant risks to these activities.

### 5.2.1 BANKING SECTOR EXPOSURE TO PHYSICAL RISKS

The exposure of the banking sector to physical risks must not be neglected, as it could result in sizable losses to the banking sector.

Albania is at risk of natural disasters. Potentially damaging and life-threatening river, urban and/or coastal floods are expected to occur at least once in the next 10 years<sup>17</sup>. Heavy seasonal rains and the resultant floods have been affecting the country for the past three decades. Between 1980 and 2010, 9 floods and 2 storms affected more than 600 thousand people and caused economic damages of more than USD\$24 million. Additionally, intense rainfall events caused by strong storms along with poor land use practices and increasing deforestation, can lead to significant and damaging floods across the country<sup>18</sup>.

Heavy rainstorms may cause landslides (classified as high in Albania) and flooding of large areas of agricultural land, housing, and industrial buildings, as well as lead to other changes in the environment. Climate change is likely to alter slope and bedrock stability through changes in precipitation and/or temperature.

Water scarcity is classified as medium, meaning there is up to a 20% chance that droughts will occur in the coming 10 years<sup>19</sup>. Extreme heat hazard is classified as medium, meaning that there is more than a 25% chance that at least one period of prolonged exposure to extreme heat, resulting in heat stress, will occur in the next five years.

The wildfire hazard is classified as high, with a greater than 50% chance of encountering weather that could support a significant wildfire that is likely to result in both life and property loss in any given year. The risk is not only from direct flame and radiation exposure but also ember storm and low-level surface fire. In extreme fire weather events, strong winds and wind-born debris may weaken the integrity of infrastructure. The projected increase in temperature and greater variance in rainfall means the fire season is likely to increase in duration and

<sup>17</sup> <https://thinkhazard.org/en/report/3-albania/FL>

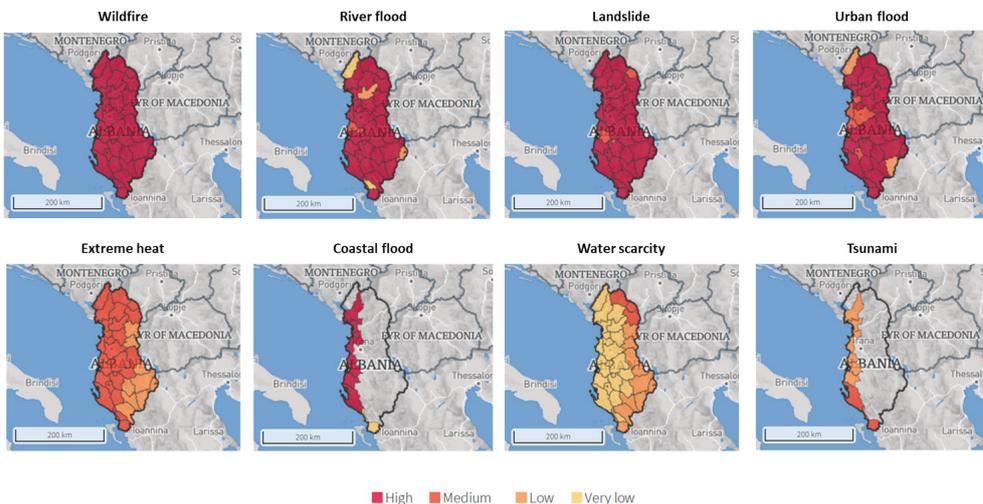
<sup>18</sup> <https://climateknowledgeportal.worldbank.org/country/albania/vulnerability>

<sup>19</sup> <https://thinkhazard.org/en/report/3-albania/DG>

include a greater number of days with weather that could support fire spread because of longer periods without rain during fire seasons. There could also be an increase in the severity of fire. Finally, earthquake is classified as medium, meaning there is up to a 10% chance of potentially-damaging earthquake shaking in your project area in the next 50 years.

Main hazards described above are not of the same relevance and intensity across the whole country. Only the probability of wildfires occurrence is recognized as high in the whole country, while other hazards are of different severity and probability of occurrence in different regions. The assessment of the exposure to these hazards requires the analysis of the geographical distribution of loans as this would describe the amounts of loans in certain areas that are more exposed to risks. For example, a bank with high exposure to loans to farmers in areas with high probability of floods, or wood manufacturers in the areas with high risk of wildfire should think about this exposure and assess the effects on their credit risk. Another example is the analysis of the mortgage portfolio in the areas prone to landslide, or floods as these events may damage the objects on the one hand, but also decrease the price of the real estate and consequently the value of collateral, which can have a significant consequence on banks' credit risk if not appropriately accounted for. Finally, branch network in the areas with a higher risk of natural disasters may cause disruption in business and increase operational risk if bank does not take appropriate preparatory and mitigation measures. The eight main hazards relevant for Albania are presented in Figure 7.

Figure 7: Overview of the main hazards and their severity



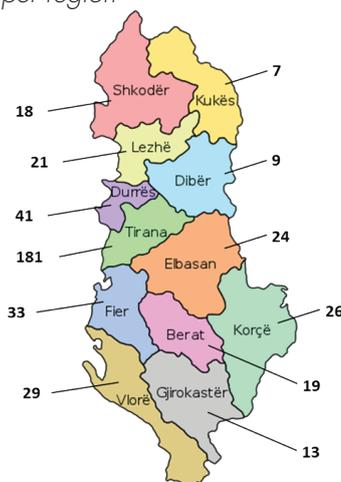
Source: Think Hazard

Figure 7 shows that hazards like wildfire and landslide (all but two regions<sup>20</sup>) are equally probable in the whole country, while other six hazards are differently distributed, and their analysis is more relevant as it provides differentiation between regions and may require different actions from banks.

The most direct effects of physical hazards on banks are through direct effects of the hazard on banks' branch network, and consequently on the operational risk of the bank, as well as through the exposure of bank's loan portfolio to these risks and consequently an increase of credit risk. Here the simplest example is size of the mortgage loan portfolio in the areas with high risk of severe hazards. Given currently available data about main hazards and their severity, it is possible to present only a broad idea about physical risks as map of hazards is not detailed enough.

At the end of 2021, there were 421 branches in Albania, with almost half of them (43.0%) in Tirana region. Figure 8 presents a regional distribution of branch network in the country. Taking into account all hazards, and current level of granularity, exposures to the west coast are the highest physical risk.

Figure 8: Branch distribution per region



Source: Internal calculations

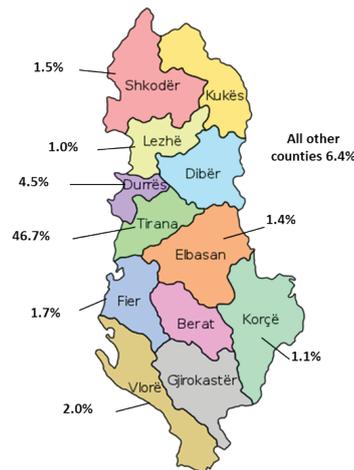
When it comes to the loan portfolio to natural persons, the real estate portfolio might be directly exposed to physical risks through hazards that may affect the value of the real estate. According to the data from June 2022, 66.3% of the total retail portfolio is a real estate portfolio, while the rest of the portfolio are consumer and other loans. When breaking down that 66.3% of real estate portfolio, the highest share of loans, 46.7%<sup>21</sup> is in Tirana region, while the second highest exposure is to Durrës region with 4.5%. From this analysis can be concluded that Tirana region has by far the highest exposure, and it would be necessary

<sup>20</sup> Regions Has and Lushjine show medium risk in landslide risk.

<sup>21</sup>Over the total retail portfolio.

to analyze this region in more detail in order to measure the real physical risks. Moreover, the analysis of individual bank's exposures is necessary in order to assess if this distribution holds for all banks on average, or some banks are more present in certain regions and therefore more exposed to certain hazards.

Figure 9: Share of loans for house purchase in total loans to households per county to natural persons<sup>22</sup>



Source: Internal calculations based on data from 30.06.2022

### 5.3 DISCUSS THE RESULTS OF THE SURVEY IN THE BANKING SECTOR

Twelve banks in Albania participated in the Survey on Climate-related and Environmental Risks (CRER) launched in August 2012. Its analysis evidenced a significant diversity in practices and progress in the management of climate risks across the participating banks. Overall, the survey showed that the banking sector is still at a very early stage in the area of managing these risks. The findings of the Survey are summarized in Table 4:

<sup>22</sup> Percentages calculated over the total retail portfolio

Table 4: Main conclusions from the Survey on CRER on the banking sector

#	Conclusion
1	Banks exhibit an uneven level of progress in the management of climate risks
2	Foreign-owned banks, especially those included in EU banking groups, are benefitting from the group expertise through the implementation of the group corporate policies and transfer-knowledge
3	Certain banks are making progress towards the development of green products, both for corporates and individuals. Typically, these green loans are provided to improve the energy efficiency of buildings
4	No bank has integrated climate-related risks into risk appetite. Commonly, banks define "exclusion lists" by listing the economic activities (or clients) that are considered incompatible with the bank's values, and therefore they are unwilling to fund
5	One third of banks have already distributed the roles and responsibilities on sustainability and, more concretely, on the management of climate related risks (in some cases performed by an independent manager, in other cases directly by the CRO and in one case by the deputy CEO). Nevertheless, the practices are still at a nascent stage. One third of banks are already reporting to the supervisory board and management on climate risks (ranging from a yearly basis (1) to a quarterly basis (2) and even a monthly basis (1))
6	The risk management function of a very few banks (2 out of 12) is actively involved in assessing climate risks, as well as the internal audit unit functions (2 out of 12) including climate-related risks in their annual plan. No bank reported any involvement of the compliance units in sustainability matters
7	Some banks have already begun to integrate sustainability into their credit risk underwriting decisions. These banks mainly make use of qualitative indicators embedded in their credit rating methodology, to assess their solvency before extending loans. Most banks are still not ready to start embedding climate risks into their credit risk management framework. The most extended criteria among the last ones is to accept or to reject loans based on the creditor's economic sector
8	No bank has a process for systematically collecting client data for assessing their carbon footprint (i.e., GHG emissions, alignment plans with the Albanian NDCs/Paris Agreement, etc.), and banks are neither obtaining information from external sources (only one bank for non-standardized data)
9	Progress has been made by most banks in integrating the climate risks into the operational risk management framework. Physical risks are being considered when defining business continuity plans and cover the most relevant physical risks through insurance (not for climate-related and environmental risks specifically, but they have insurances for, among others: fire, flood, earthquake, etc.)
10	No bank has made any relevant progress on integrating climate-related risks in market and liquidity risks
11	Albanian banks haven't issued any green bonds, and only one of them is planning to do it in the short or medium-term

## 5.4 CHALLENGES FOR BANK OF ALBANIA

The Bank of Albania, as other Central Banks across the world, has started to deepen the understanding of these risks. Nevertheless, the tools and methodologies for climate risk measurement are still at an early stage and there are a number of analytical challenges. As of now, there is still no uniform taxonomy for business activities so it will be of crucial importance to collaborate with the government

in developing and implementing a National Green Taxonomy based on the EU Taxonomy as we are also in process of integration.

And as a Central Bank, the first step to take to address climate risks is to identify and assess them. This task is already a challenge for us: most metrics (esp. scope 3) on which we usually rely to assess financial institutions' exposure to financial risks do not necessarily incorporate climate financial risks as their quantification requires the use of novel databases and estimation techniques. Some examples can be:

- a. Flood risk exposure metric. The share of loan exposures of Albanian banks to firms located in areas of flood risk relative to total loans can serve as a flood risk exposure metric.
- b. loan-carbon intensity, which captures the overall emission intensity of bank lending; etc.

In this context, supervisors must gain experience and knowledge of these new metrics and methodologies to be able to take the best-informed policy decisions. And here is the second challenge that we are facing: Capacity and awareness building. Our priority as central banks is thus to build the capacity to further analyse and study empirical evidence of the financial implications of climate related risks.

The assessment of climate risks for the financial sector is complicated by the fact that financial institutions themselves are insufficiently prepared to manage climate risk and often fail to report useful information on them.

Climate data are currently lacking not only to supervisors but also to financial institutions, due to a lack of disclosure from the customers they engage with. This complicates the assessment of climate risks both by financial institutions and by supervisors. We have thus an interest in supporting financial institutions when engaging with their customers and other parties to develop the data infrastructure that is needed to measure climate risks.

Macroeconomic models: There is a disconnection between climate and central bank macro-econometric models. To better account for climate risk, macroeconomic models will need to deal with various sources of asymmetry or heterogeneity, by sector, region, country, and types of households, and include a realistic expectation-formation process. Bridging methodological shortcomings and data gaps is crucial pre-requisite for action, to any conclusions on the prudential or monetary front.

Therefore, the importance of this strategy for a successful transformation towards sustainable finances.

## 6. ROADMAP: GREEN STRATEGIC PLAN (2023-2025)

The Roadmap for Green Finance has been created in cooperation with the World Bank (FinSAC). It is based on the best international practice and is consistent with the EU Commission Action Plan. The roadmap outlines the action plan for the next three years for green finance in the Bank of Albania.

As climate risks are transmitted into financial risks, the role of Bank of Albania in identifying, monitoring, and managing them is many folded. Therefore, the roadmap includes a set of activities that will be taken by different departments within the Bank of Albania, depending on their mandate and urgency to act.

### 6.1 THE VISION

- Sustainable, resilient and stable banking system

### 6.2 OBJECTIVES

- Growing the understanding of climate risks from the Bank of Albania and strengthening staff resources to engage on climate change analysis
- Gradual and iterative approach, underpinned by the technical knowledge of the BoA, following the work by European and international organizations and through continuous engagement with national/regional/international organizations
- Socialization of the Strategy
- Raising awareness of climate risks, both within the central banks and supervisors' staff and among financial institutions and economic actors
- Educational role for the banking sector in ensuring better informed financial decisions considering sustainability risks, impacts and opportunities

### 6.3 GOALS AND TARGETS

**Goal 1. Stocktaking: Build up the resources and knowledge** - Working to better understand, monitor, and manage the economic and financial implications of climate change and the transition on the economy and the financial sector.

- Target 1.1. Identifying data resources and gaps in climate economic and financial risks and opportunities and work to establish reliable and comparable data
- Target 1.2. Develop metrics/indicators for ongoing monitoring of banks exposures to climate risk

- Target 1.3. Reaching out to other national institutions involved in climate policies
- Target 1.4. Analysing the relevant channels through which climate change and the transition may impact Albanian firms and households, as well as financial institutions
- Target 1.5. Designing transition scenarios that are relevant for Albania for assessing possible transition pathway
- Target 1.6. Engaging with financial institutions to better understand their practices when it comes to climate risk management and the development of sustainable financial solutions
- Target 1.7. Mapping risk and opportunities from climate change for the banking sector as well as assessing their materiality across and within institutions
- Target 1.8. The climate risk management capacity of banks will be increased

**Goal 2.** Improving **Cooperation** between Relevant Parties on Sustainable Finance

- Target 2.1. Ensure that the relevant parties conduct joint studies in the field of sustainability
- Target 2.2. Enhancing collaboration with other international institutions;

**Goal 3. Fostering wider action**

- Target 3.1. Improving overall understanding of climate-related risks and working for the regulatory alignment with EU acquis for sustainable finance
- Target 3.2. Increasing transparency on climate related topics

## 7. ACTIONS / ROADMAP

The development of this strategical roadmap is to help organize the institutional work and clarify the roles and responsibilities. This roadmap should be updated on a regular basis. The roadmap explains the rationale for embedding climate risk within Bank of Albania's activities, creates dedicated organizational structures with work-plans to foster learning and development of climate analysis, elaborates guidelines on international cooperation, sets a policy agenda, with timeline, for the integration of climate dimensions in policy implementation, develops communication principles, etc. It is comprehensive, including all the main responsibilities conducted by the BoA, and it is divided into six different categories:

- Culture/own activities
- Knowledge and Research
- Risk Assessment and Measurement
- Monetary Policy
- National and International Engagement
- Supervision and regulation

### 7.1 CULTURE / OWN ACTIVITIES

Figure 10: Culture /own activities - overview



#### 7.1.1 DEFINITION OF INTERNAL GOVERNANCE

Embedding the work on climate change in dedicated organizational structures, through the creation of internal networks on climate change, of hubs within the institution, of domestic expert forums, or of dedicated units. The Bank of Albania will assess and benchmark the existing practices on governing sustainability in

similar central banks, including the potential establishment of green/sustainability committees or specialized, newly-created green centres.

### 7.1.2 CENTRAL BANK STANDPOINT

The Bank of Albania through this strategy and the activities in this direction aims to have the leading role and “lead by example” in the banking sector through legal acts (such as this strategy) and its concrete activity. The Bank of Albania will also keep frequent communication with the public about the performance of these activities and their impact. This stance will include certain rules of conduct applicable to all the Bank of Albania employees, such as: encouraging behavioural change of internal staff toward a more sustainable environment through training and information sharing.

### 7.1.3 COMMUNICATION STRATEGY AND PLAN

The Bank of Albania will raise awareness of climate risks and capacity building both within the central bank and among financial institutions under its mandate through “in house” trainings, conferences, round tables and campaigns. Another important tool to raise awareness are the public speeches delivered by the administrators of the Bank of Albania and the annual report of the bank.

In addition, the Bank of Albania sometimes holds education sessions (e.g. lectures, workshops, roundtables) aiming to enhance the overall culture of the public on climate related risks. Hence, the link between finance and the real economy and the way climate risks considerations integrate with banking, insurance and investment activities and business models needs to become an integral part of education. In this context, the Bank of Albania will develop, promote, and disseminate best practices in financial education in the field of sustainable development. The climate changes and the risk related to them needs to be embraced by decision makers, citizens and workers alike, in their private and professional lives and on a daily basis.

The communication strategy, informing about the risks that climate change and transition policies may exert on the economy and the financial system and how it can affect the projections or monetary policy decisions, can be a powerful tool, within central bank’s mandate, towards climate change mitigation and adaptation.

## 7.2 CAPACITY BUILDING, KNOWLEDGE AND RESEARCH

Figure 11: Capacity building activities - overview



### 7.2.1 BOA CAPACITY BUILDING

To deliver this strategy, it is of crucial importance to build capacity within the bank. Hence, the first step is upskilling the central bank's staff for strengthening its modelling and analytical capacity, as well as its assessment of climate risk for financial institutions (i.e., stress testing, regulation, banking supervision, etc.), and in the second, it is important to have the knowledge and human resources for implementing policies. This can be done after assessing the internal needs and considering the available training options (i.e., on-site, online trainings) offered by several international organizations.

The objective is to build up the resources and knowledge necessary to start preparing and implementing the BoA's policy response to address climate risk and support the Albanian economy and financial sector in seizing the related opportunities.

### 7.2.2 PERIODIC "SUSTAINABILITY REPORT" RELATED TO CLIMATE CHANGE

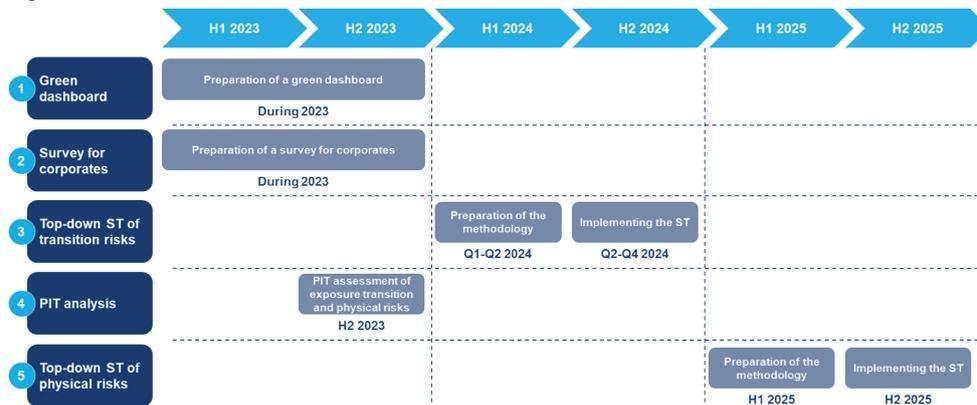
As a result of the annual work to be carried out for the implementation of this strategy, a periodic (annual) report, which will contain, discussion papers, policy briefs, research papers, etc., will be published. These papers typically include a comprehensive overview of sustainability-related issues in the context of Albania, but they will include also survey analysis (such as the one on corporates), the creation of relevant indexes or metrics, etc... In this annual report, a dedicated section will be devoted to the progress report of the Strategy implementation.

The periodic report will be drafted by organizational units involved in drafting this strategy or other entities according to the institution's decision-making and will be coordinated by the Research Department.

## 7.3 RISK ASSESSMENT AND MEASUREMENT

The main contributor to risk assessment and measurement will be the Department of Financial Stability. Figure 12 reflects their respective activities and their time span.

Figure 12: Risk assessment and measurement activities - overview



### 7.3.1 PREPARATION OF A GREEN DASHBOARD

As has been thoroughly discussed within this Strategy, the Bank of Albania will define a set of indicators that are related to sustainability that can be used for monitoring its impact on financial stability. To this end, the Bank of Albania will examine the practices of other central banks, and will particularly focus on the NGFS Green Dashboard, that has already been implemented by several peer institutions. The Green Dashboard, once defined and implemented, will have several benefits for pursuing financial stability goals, but also for the implementation of the monetary policy.

To prepare the Green Dashboard, it will be key to define the set of indicators to identify the data needs. Once these are defined, the Bank of Albania should be able to single out the data gaps, and design tools and mechanisms for addressing those gaps (i.e. surveys, proxies, information request to the banking system, etc.).

### 7.3.2 PREPARATION OF A SURVEY FOR CORPORATES ON THE STATE OF THE GREEN MARKET

One of the sources of information related to green finance is a survey for corporates that will be introduced and conducted on a regular basis in order to collect information about the sustainability practices of large Albanian corporates and for identifying the improvements made across time. Moreover, it will be used to fill in some of the data gaps identified while preparing Green Dashboard and bank exposure analysis. This survey may be prepared as stand-alone, or part of some other surveys communicated with the industry.

### 7.3.3 PREPARATION OF A METHODOLOGY FOR A TOP-DOWN ASSESSMENT OF TRANSITION RISKS

Top-down stress test is one of the activities taken by the central banks in their effort to assess and quantify the impact of climate-related risks on financial system. Due to data specificities and the nature of these risks, in general, it is necessary to adjust the existing top-down stress tests in order to include climate-related aspects. After capacity building and detailed data analysis and collection, the next step will be to prepare a methodology for conducting top-down stress testing. Here, the Bank of Albania will take a gradual approach, meaning: it will assess risks one by one, starting from transition risk.

During the first half of 2024 Financial Stability Department will prepare a methodology for the assessment of transition risks that will encompass current stress testing methodology in place, as well as international best practice in this area. Existing models in use already include a number of elements used for climate stress testing and the plan is to adjust these models to incorporate climate relevant aspects in the analysis. The main purpose of this activity is to define relevant scenarios and transmission mechanisms of transition risks in the financial sector.

### 7.3.4 CLIMATE STRESS TESTING EXERCISE - TOP-DOWN STRESS TEST FOR TRANSITION RISKS

After the preparation of a stress testing methodology for the assessment of transition risks, during the second half of 2024 Financial Stability Department will conduct a first top-down stress test for the assessment of transition risks. The main goal of this exercise is to test the methodology, identify potential areas for improvement and get the first idea about the quantitative impact of transition risk on the banking sector.

### 7.3.5 POINT-IN-TIME ASSESSMENT OF THE EXPOSURE TOWARDS PHYSICAL AND TRANSITION RISKS FOR THE ALBANIAN BANKING SECTOR

As a first step in quantifying the exposure of banking sector to transition and physical risks, the Financial Stability Department will work on setting up a framework for this type of analysis by identifying relevant mechanisms for the assessment of these risks, defining suitable scenarios and material hazards applicable for Albania, and based on internationally recognized scenarios and hazards. It will work on mapping necessary data for this type of analysis, as well as sources where this data is available and on defining relevant proxies and indicators when some of the data are not available. The outcome of this action will be a report of the exposure of banking sector to transition and physical risks that will be based on the one presented in this strategy but more granular and precise. This action will

build upon Greed Dashboard prepared and will be used as a basis for top-down stress testing planned for 2024 and 2025.

### 7.3.6 PREPARATION OF A METHODOLOGY FOR A TOP-DOWN ASSESSMENT OF PHYSICAL RISKS

Using the same approach as in case of transition risks, and knowledge and experience gained during the process of the preparation of methodology for the assessment of transition risks, first half of 2025 will be devoted to the preparation of the methodology for assessing physical risks. The assessment of this type of risks is more challenging as it requires information that are usually not collected by central banks. This is predominantly detailed information about geographical location of certain companies or sectors, as well as assessment of types of hazards and their magnitude in certain areas. Analysis conducted during 2023 will allow mapping the relevant data and their sources and the main goal of this action will be to define a relevant transition mechanism for physical risks and way to incorporate this hazard in the existing stress testing framework. The nature of these stress tests is very different than the usual one, as it takes into consideration long-time horizons therefore there are many aspects that are different compared to transition risk assessment.

### 7.3.7 TOP-DOWN STRESS TEST FOR PHYSICAL RISKS

Once the methodology is in place, second half of 2025 will be devoted to the first physical risk stress test that will help to examine the methodology and to provide first quantitative results about the effects of physical risks on banking sector.

All activities related to exposure analysis and stress testing are planned to be executed by Financial Stability Department, but of course in coordination with other relevant departments, such as for example the Monetary Policy Department.

## 7.4 MACROECONOMIC ANALYSIS AND MONETARY POLICY

### 7.4.1 SCENARIO ANALYSIS EXERCISE

In the monetary policy modelling, present and future shocks (events that have a potential to occur) that affect GDP growth, inflation, foreign demand, exchange rate or any other variable, are regular part of risk scenarios. These shocks alter the future path of the model derived monetary policy response compared to the

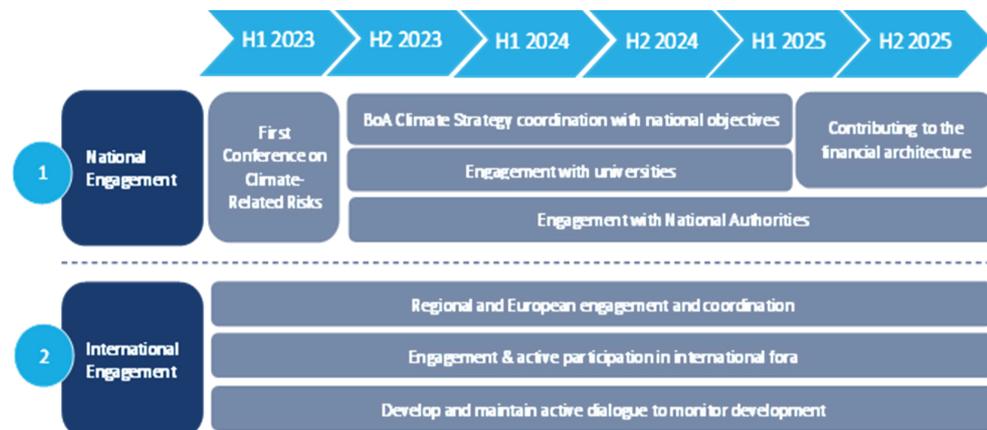
baseline scenario. Shocks associated with manifestations of climate change, have been incorporated in certain simulations although not explicitly identified as such. In the future, climate change associated shocks will be more actively incorporated in monetary policy forecasting on a regular basis. Of course, considering the mid-terms scope of monetary policy (including modelling), permanent shocks which can affect the economy in decades to come, are out of reach. However, chronic shocks that have become much more regular in recent years, are certainly within reach. Thus, dedicated scenarios can be implemented in a regular basis, explicitly defined as “climate change” related.

Lastly, the preparation of a monetary policy understanding of the impact of climate and environmental related shocks on economy will help to integrate them in existing policy analysis framework, forecasting, and risk assessments.

This analysis will be conducted by the Monetary Policy Department.

## 7.5 NATIONAL AND INTERNATIONAL ENGAGEMENT

Figure 13: National and international engagement activities - overview



In order to expand climate risks knowledge and adapt international and regional best practices, it is of crucial importance to continue engagements at different levels:

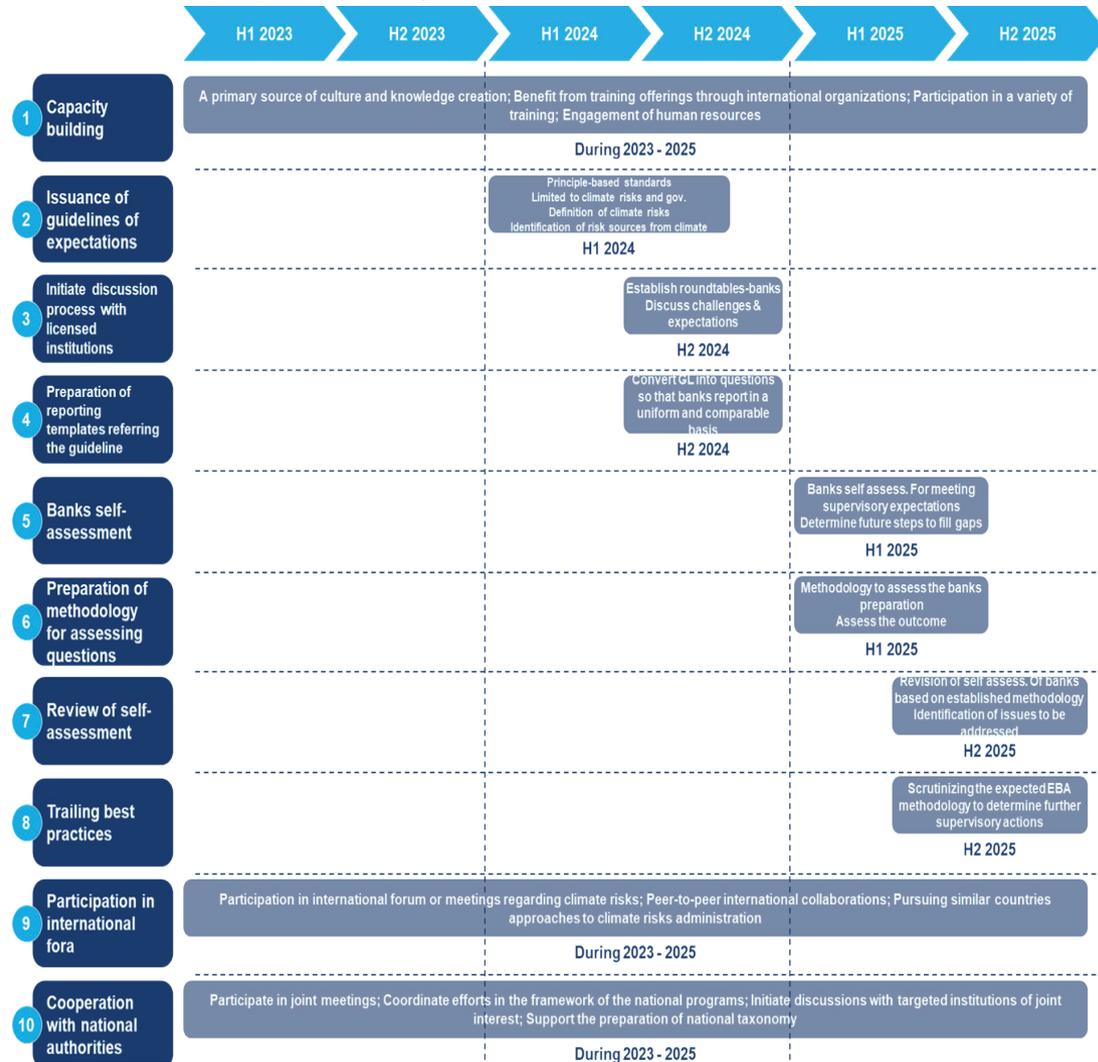
- National engagement: Through collaboration with relevant Ministries and other public institutions with responsibilities in the transition towards a low carbon economy; and through the organization of Climate Conferences with the banking sector and other public institutions. Through this engagement at the national level, the Bank of Albania will contribute to the financial architecture. Some potential examples, can be the development of the classification, standards, taxonomies, Indicators, metrics, dashboards and tools.
- Regional engagement: Participation in regional fora (i.e., Vienna Initiative, WBG).

- European engagement: (EU Green Deal and Sofia Declaration).
- International engagement: Continuous engagement within the Network for Greening the Financial Sector while aiming for a more active participation in the different work streams they have. Continuous cooperation with SECO, World Bank etc. and assessment of participation in other international organizations (i.e., BIS, Sustainable Banking Network, COP, etc.)<sup>23</sup>.

## 7.6 BANKING REGULATION AND SUPERVISION

The main contributor to banking regulation and supervision activities is the Department of Supervision. Figure 14 below reflects all their activities and time spans.

Figure 14: Banking regulation and supervision activities - overview



<sup>23</sup> <https://www.sbfnetwork.org/>

Regulatory measures regarding instance effective carbon pricing, clean energy, mobilizing industry for a clean and circular economy, energy efficiency in buildings, an environmentally friendly food system or the preservation of biodiversity have already been introduced by EBA and many supervisory authorities. The European Banking Authority (EBA) was given several mandates to assess how environmental, social and governance (ESG) risks can be incorporated into the three pillars of prudential supervision.

Whereas local banks need to develop their approach into shifting toward recent developments, banks of foreign shares origin, especially from European Union, have already adopted certain measures and internal developmental practices under the umbrella of their mother banks and shareholders, which have a leading role for the said processes.

Counting on the goodwill and the responsibility for making an impact on reversing climate changes, also being conscious on the uncertainty of the path ahead, the supervisory team is engaging on the initial steps specifically designed as a first stage and presented below.

#### 7.6.1 DEVELOP CLEAR UNDERSTANDING OF SOURCES OF CLIMATE RELATED RISKS (CAPACITY BUILDING)

Climate-related risks are sources of financial risks for financial institutions and can threaten financial stability. By having a clear understanding of the sources of these risks, supervisors are better able to focus their efforts and ascertain whether supervised entities are assessing and managing their exposures appropriately.

As the first step, should be considered building capacity for supervisors on climate risk as an important area which need a special focus from Human Resources Department of the Bank of Albania. This could be done through workshops, trainings from international organizations or through gaining supervisory experience from other supervisory authorities.

Also, as different jurisdictions experience different sources of climate-related risks, it is important for supervisors to work with their supervised entities to determine which sources of risks are relevant and their materiality.

There is no universal standard categorization of climate risks. These are risks arising from exposure of financial institutions to physical or transition risks caused by or related to climate change, for example, damage caused by extreme weather events or a decline in asset value in carbon-intensive sectors.

### 7.6.2 ISSUANCE OF GUIDELINE WITH REGULATORY EXPECTATION ON CLIMATE RISK

Supervision department will engage in issuance of a climate risk guideline with supervisory expectation, with the aim of encouraging banks to include climate risks in their framework of risk management. This guideline should be principle-based and not binding to banks and will serve as a basis for supervisory dialogue. It will raise awareness to banks regarding climate risk and set some expectations on how banks should integrate climate risks in the overall risk management framework, under current prudential framework. In this process will be considered also the harmonization with ECB initiatives by taking into consideration also practices from other countries.

The main supervisory expectations will include:

- Strategy and business model: Encouraging banks to take into account the short, medium and long-term impacts of environmental risks on their business environment when creating an overall business strategy.
- Governance and risk appetite process: Provide guidance to banks on how to properly integrate climate-related financial risk within risk management. Banks should take environmental risks into account when creating a risk management framework, to include climate related risks in risk appetite frameworks, and to clearly define responsibility for climate related risk management at all levels as part of their organizational structure.
- Risk management process: banks should include environmental risks in the framework of risk management as drivers of existing risk categories (e.g., credit risk) and to determine and quantify these risks.

Bank of Albania is also planning to establish frequent roundtables with the licensed institutions in order to discuss the areas of potential impact and challenges that are related to green finance. These meetings are intended to raise awareness among financial institutions. On the other hand, it is expected to receive any feedback on experiences faced by single institutions, areas of impact and identifying methods for promoting a smooth transition affordable by all parties.

### 7.6.3 PREPARATION OF REPORTING TEMPLATES

Supervisory expectations on adoption of climate risks concerns in banks' internal organization and processes, will be required to be reported on predetermined formats. Such reporting will be based on templates to be designed with the purpose to have a uniform understanding of banks preparation toward transitioning into a friendlier environment approach as well as toward meeting the supervisory expectations.

#### 7.6.4 BANKS SUBMIT SELF-ASSESSMENT ON COMPLIANCE WITH SUPERVISORY EXPECTATIONS TOWARD GREEN FINANCE

Once the guideline has been put in place, and the supervisory dialog has started with banks, the supervisors will undertake actions required to assess bank's compliance with the requirements. Each bank individually will be required to make a self-assessment of its preparational level toward supervisory expectations. The assessment will conclude in a gap analysis that will be structured through the reporting templates to be prepared accordingly. The banks assessment will also include the presentation of their individual engagement (action plans) on the steps they will undertake to raise the internal processes toward a climate friendly approach.

#### 7.6.5 PREPARATION OF AN EVALUATION METHODOLOGY FOR THE ASSESSMENT OF THE TEMPLATES, REVIEW THE SELF-ASSESSMENT AND IDENTIFY ISSUES TO BE ADDRESSED

Bank's reports of self-assessment will be analyzed by the supervisors. The evaluation will be based on a methodology that will be prepared on such purpose. The methodology will help evaluate the level of understanding and preparedness toward the expectation toward a green finance of each bank individually. It will also serve for creating a full picture of the banking system approach and support the determination of future actions for addressing the entire system on a more regulated basis.

#### 7.6.6 DILIGENTLY TRAILING BEST PRACTICES

Reallocation of finances to climate-sensitive sectors requires clear paths from supervisory authorities. Holding on to the general approach of Bank of Albania for accomplishing its mandate in line with the best international practices, especially international financial corporations such as the International Monetary Fund and the World Bank as well the directives issued by European Central Bank and European Banking Authority, it will closely follow the guidelines and supporting documents that will be produced in relation to improving the environment. Documents produced by the Basel Committee will also be of a foremost prominence to closely adhere being a primary source of guide to all supervisory authorities. The expected guideline documents will serve as an orientation milestone to identify the necessary changes that will be undertaken by Bank of Albania.

#### 7.6.7 PEER-TO-PEER INTERNATIONAL COLLABORATIONS

The Department of Supervision will enlarge its area of international cooperation with individual peer authorities with the purpose to exchange experiences on

building a sound environment for financial institutions to efficiently alter their activity into a greener and environment-friendly approach in their activity. The necessity to face risks and develop organizational and risk management practices from financial institutions, would better be tuned under a clear supervisory orientation and regulatory path. Though, initiating discussions and joining international conventions, of local or a broader landscape, will provide the supervision with the indispensable know-how to reconstructing the domestic financial framework with an appropriate approach for shifting to a greener economy.

#### 7.6.8 COOPERATION WITH DOMESTIC INSTITUTIONS

A sound supervisory framework is built through a thorough discussion with all decision makers in order to identify areas of impact, strategic plans and initiatives undertaken by all institutions and coordinate efforts in the framework of the national programs. The cooperation is projected to bring clarification of necessary steps to orientate the financial activity toward a green finance and calibrate quantitative requirements as to whether such undertaking will be deemed necessary.

## 8. REFERENCES

Battiston, S., Mandel, A., Monasterolo, I., Schütze, F., & Visentin, G. (2017). A climate stress-test of the financial system. *Nature Climate Change*, 7(4), 283–288. <https://doi.org/10.1038/nclimate3255>

BCBS (2022). *Principles for the effective management and supervision of climate-related financial risks*. Bank for International Settlements, June.

Boissinot, J., Goulard, S., Le Calvar, E., Salin, M., Svartzman, R. and Weber, P.-F. (2022). *Aligning financial and monetary policies with the concept of double materiality: rationales, proposals and challenges*. INSPIRE Policy Briefing Paper 05, June.

CCKP. (2021a). *Albania*. Climate Change Knowledge Portal. <https://climateknowledgeportal.worldbank.org/country/albania>

Climate Risk Profile: Albania (2021): The World Bank Group

Grippa, P., Suntheim, F., & Schmittmann, J. (2019). Climate Change and Financial Risk - Central banks and financial regulators are starting to factor in climate change. *Finance & Development*, 56(4).

IMF. (2021). *Climate Change Dashboard*. <https://climatedata.imf.org/pages/financial-indicators/#fi3>

IMF. (2022). *Financial Soundness Indicators (FSIs)*. International Monetary Fund. European Department (Series). <https://data.imf.org/?sk=51B096FA-2CD2-40C2-8D09-0699CC1764DA>

Monasterolo, I. (2020). Climate change and the financial system. *Annual Review of Resource Economics*, 12, 299–320. <https://doi.org/10.1146/annurev-resource-110119-031134>

NGFS. (2019). *A call for action - Climate change as a source of financial risk (Issue April)*. Network for Greening the Financial System. [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_first\\_comprehensive\\_report\\_-\\_17042019\\_0.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_first_comprehensive_report_-_17042019_0.pdf)

NGFS (2020). *Guide for supervisors - Integrating climate-related and environmental risks into prudential supervision*. Network for Greening the Financial System Technical document, May. (link)

NGFS. (2021a). *NGFS Climate Scenarios for Central Banks and Supervisors: Vol. June*. Network for Greening the Financial System. [https://www.ngfs.net/sites/default/files/medias/documents/820184\\_ngfs\\_scenarios\\_final\\_version\\_v6.pdf](https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf)

NGFS. (2021b). *Progress report on bridging data gaps (Issue May)*.

Republic of Albania. (2016). *Intended Nationally Determined Contribution (INDC) of the Republic of Albania following decision 1/CP.19 and decision 1/CP.20*.

Republic of Albania. (2021). *Albania Revised NDC*. UNFCCC. <https://www4.unfccc.int/sites/ndcstaging/Pages/Party.aspx?party=ALB&prototype=1>

Topalli, & Monnin (2023). *Climate Risks in Albania and their Relevance to the Central Bank*. SUERF Policy Brief, No 541. [https://www.suerf.org/docx/fcae2be3a60e8d453ec372274f39ad13c\\_63117\\_suerf.pdf](https://www.suerf.org/docx/fcae2be3a60e8d453ec372274f39ad13c_63117_suerf.pdf)

UNDP. (2021). *UNDP helps Albania meet obligations deriving from Paris Climate Change Accord*. United Nations Development Programme. <https://www.al.undp.org/content/albania/en/home/presscenter/pressreleases/2019/undp-helps-albania-meet-obligations-deriving-from-paris-climate-.html>

ECB sets deadlines for banks to deal with climate risks (europa.eu)

Supervisory assessment of institutions' climate-related and environmental risks disclosures (europa.eu)

## ANNEXE 1

### INTERNATIONAL INITIATIVES

The current landmark international initiatives and agreements for fighting against climate change and the adaptation towards a world with higher temperatures (Kyoto Protocol, UN 2030 Agenda and Sustainable Development Goals and Paris Climate Agreement, etc.) and a pathway towards low-carbon and climate-resilient development.

Key moments in the global climate conversation

- 1987 – the Montreal Protocol
- 1992 – The establishment of the United Nations Framework Convention on Climate Change (UNFCCC) at the Earth Summit, held in Rio de Janeiro (Brazil), entered into force on 1994
- 2000 – United Nations Millennium Summit in New York
- 2005 – The Kyoto Protocol operationalizing the UNFCCC entered into force
- Stern, N (2006), 'The Economics of Climate Change: The Stern Review', Cambridge University Press, Cambridge
- 2009 - The first green bond listed on the London Stock Exchange by the World Bank
- 2010 - COP10, Convention on Biodiversity in Nagoya
- 2012 - The Green Investment Bank was established, becoming the world's first such institution
- 2012 - Rio+20 Summit – UN Conference on Sustainable Development (UNCSD)
- 2015 - Mark Carney delivers his "Breaking the tragedy of the horizon" speech at Lloyd's of London and spearheads the establishment of the Task Force for Climate-related Financial Disclosures (TCFD) as Chair of the Financial Stability Board.
- 2015 (December) - 196 Parties (195 states and the European Union) adopted the Paris Agreement to set a goal of limiting global warming to well below 2 degrees Celsius (°C) above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above preindustrial levels. The Agreement also recognized that climate change represents an urgent and potentially irreversible threat to human societies and the planet, and that deep reductions in global greenhouse gas (GHG) emissions will be required in order to achieve this goal. It also aims to make financial flows consistent with a pathway towards low GHG emissions and climate-resilient development.
- 2015 - UN Environment (2015). The Financial System We Need: Aligning

the Financial System With Sustainable Development. [www.unepinquiry.org/wp-content/uploads/2015/11/The\\_Financial\\_System\\_We\\_Need\\_EN.pdf](http://www.unepinquiry.org/wp-content/uploads/2015/11/The_Financial_System_We_Need_EN.pdf)

- 2018 - Network for Greening the Financial System (2018). First meeting of the Central Banks and Supervisors Network for Greening the Financial System (NGFS) on January 24<sup>th</sup> in Paris.
- 2018 – The EU Action Plan on Financing Sustainable Growth
- 2019 – New guidelines on corporate climate-related information reporting, as a supplement to the existing guidelines on non-financial reporting (the non-financial reporting Directive – 2014/95/EU), which remain applicable.
- 2021 – The Updated EU sustainable finance strategy

## EU FRAMEWORK

The EU Sustainable Finance Action Plan was launched by the European Commission in May 2018<sup>24</sup> as part of the EU's response to the Paris Climate Agreement. Its three building blocks are:

- EU 'taxonomy' of sustainable activities,
- EU sustainability disclosure regime for non-financial and financial companies, and
- Set of investment tools (including benchmarks, standards and labels).

Since 2018, the EU sustainable finance strategy has been updated, completing the work started under the 2018 Action Plan on Financing Sustainable Growth. The evolved context identifies four main areas where additional actions are needed:

- Financing the transition of the real economy towards sustainability (extending the EU Taxonomy framework)
- Towards a more inclusive sustainable finance framework (SMEs financial access, digital technologies, insurance, social investments, green budgeting and risk-sharing)
- Strengthening financial sector's resilience and contribution to sustainability (combatting greenwashing, improving disclosure and transparency)
- Fostering global ambition

By the end of 2023, the Commission will report on this strategy's implementation while supporting actively its Member States.

Regarding the Eurosystem, in February 2021, it has agreed on a common stance for climate change-related sustainable investments in non-monetary policy portfolios. Aiming to start climate-related disclosures within two years.

<sup>24</sup> *Communication from the Commission 'Action Plan: Financing Sustainable Growth', COM(2018) 97 final, 8.3.2018*