CENTRAL BANK OF ARMENIA

CENTRAL BANK OF ARMENIA

NATIONAL SUSTAINABLE FINANCE ROADMAP OF ARMENIA

October 2023

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ABBREVIATIONS AND ACRONYMS

ACRA	Accounting and Corporate Authority (Armenian Credit Rating Agency)
BUR	Biennial Update Report
CBA	Central Bank of Armenia
CEPA	Comprehensive Enhanced Partnership Agreement (between EU and Armenia)
CIS	Commonwealth of Independent States
COP21	21st Conference of the Parties of the UN Framework Convention on Climate Change
CSRD	Corporate Sustainability Reporting Directive
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
EDB	Eurasian Development Bank
EE	Energy Efficiency
EEU	Eurasian Economic Union
EIMC	Environmental Impact Monitoring Centre of the Ministry of Nature Protection
ESG	Environmental, Social and Governance
ESMA	European Securities and Markets Authority
ESRE	Energy Saving and Renewable Energy
ESRM	Environmental and Social Risk Management
EU	European Union
FMPs	Financial Market Participants
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GEFF	Green Economy Finance Facility (EBRD-related)
GHG	Greenhouse Gasses
GoA	Government of Armenia
GBSSS	Green, Blue, Social, Sustainable, and Sustainability-Linked
ICT	Information and Communications Technology
INDCs	Intended Nationally Determined Contributions
MoE	Ministry of Economy
MRV	Measurement, Reporting and Verification
MW	Megawatt
NC	National Communication
NDCs	Nationally Determined Contributions of a Country
NGFS	Network for Greening the Financial System
PRI	Principles of Responsible Investment
RCP	Representative Concentration Pathway

RES	Renewable Energy Sources
RoA	Republic of Armenia
SASB	Sustainability Accounting Standards Board
SDGs	UN Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation
SLBs	Sustainability Linked Bonds
SLLs	Sustainability Linked Loans
SMEs	Small and Medium-sized Enterprises
TA	Technical Assistance
TCFD	Task Force on Climate-Related Financial Disclosure
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USD	US Dollar
VNR	Voluntary National Review
WHO	World Health Organization

ACKNOWLEDGEMENT

The National Sustainable Finance Roadmap of Armenia is an output of the Central Bank of Armenia implemented with the assistance of the European Union under the EU4Energy Initiative. The contents are the sole responsibility of the Central Bank of Armenia and can in no way be taken to reflect the official opinion of the European Union.[1]

The Roadmap was developed by Deloitte Luxembourg in close cooperation and consultations with members of the Green for Growth Fund Technical Assistance Facility (GGF TAF). The CBA would like to acknowledge and show appreciation for the active participation and contribution in developing this document by the following individuals: Marjan Stojiljkovic (Deloitte), Hussein Anooshah (Deloitte) and Mariam Guniava (GGF TAF).

[1] Part 1 of the document does not represent CBA's perspective or analysis of the current state of sustainable finance in Armenia but is rather based on research undertaken in collaboration with the Deloitte.

FOREWORD

Martin Galstyan – Governor of the Central Bank of Armenia

The environmental damage caused by resource-intensive and polluting growth trajectory, which we have pursued since the beginning of the Industrial Revolution, is undeniable.

While beneficial outcomes such as increased productivity, wealth, and improved living standards for society have been apparent, the economic system built around fossil fuels has caused toxic emissions, contributing to climate change and detrimental effects on human health.

Pollution, the depletion of natural resources, and climate change are imposing substantial economic barriers, which have not been considered or adequately tackled in global development strategies before.

There is a growing awareness that the risks of inaction are considerable, and that a new development model can unlock great opportunities across the globe. Armenia's sustainability vision is outlined in several core documents, and it lays out ambitious goals related to economic growth, energy diversification, ecological balance and social stability.

These sustainability aspirations have the potential to deliver strong social, environmental and economic outcomes, which will also contribute to the delivery of the Sustainable Development Goals (SDGs) highlighted in the UN 2030 Agenda.

Thus, sustainable finance has a key role to play in supporting Armenia's economic growth while helping to reduce pressures on the environment and strengthening social and governance factors.

While the momentum from commercial banks has been highly encouraging, there is a growing realization that the entire financial system will need to join the effort to help the country pivot towards a new sustainable growth trajectory.

To realize this ambition, Armenia has embarked on developing a sustainable finance roadmap through an inclusive, multi-stakeholder process. The roadmap frames and clarifies current developments, and draws on relevant international experience from the growing number of countries, which are scaling up sustainable finance across continents.

The call for sustainable finance framework stems in part from a gap between funding required for sustainable development and funding currently available. While the gap is considerable, estimating the magnitude of the sustainable funding shortfall is complicated.

Challenges include taxonomy, methodology and data issues. Going forward, the shift towards sustainability will necessitate continued availability of capital for this purpose, resulting in the demand for systemic solutions to medium- to long-term capital needs.

Barriers to scaling sustainable finance can be grouped into both financial and sustainability-related segments. Financial barriers relate to interest rates and medium- to long-term funding, challenges in access to finance and scarce alternatives to commercial bank lending. Sustainability-related barriers refer to poor awareness on sustainable finance, rudimentary sustainability finance policy framework, limited capacity within the public and private sector actors, and lack of policy alignment.

Proactively, the CBA has embarked on the development of this Sustainable Finance Roadmap, which encompasses the next steps in addressing sustainability in the financial sector. The Roadmap provides a blueprint of the CBA's expectations and planned actions regarding the incorporation of environmental, climate, social and governance risks by Financial Market Participants into their core processes to ensure Armenia's climate resilience and sustainable pathway for economic growth. This Roadmap is an evolving document undergoing adjustments to correspond to the changing enabling context in Armenia and internationally.

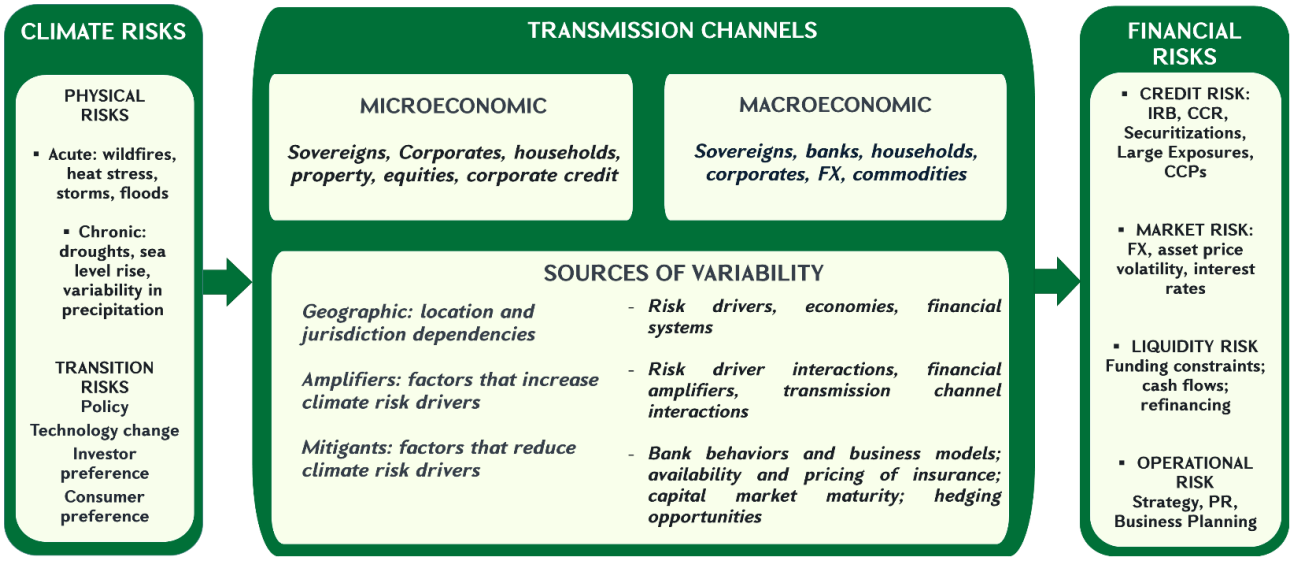
The CBA has committed to fully internalise this vision and strongly encourages financial market participants to actively engage in this journey.

Part 1: CLIMATE RISKS EXACERBATE SUSTAINABILITY CHALLENGES AND FINANCIAL RISKS

There is a dual relationship between sustainable development and climate change. On the one hand, climate change influences key natural and human living conditions and thereby also the basis for social and economic development. On the other hand, society's priorities on sustainable development influence both the GHG emissions that are causing climate change and the vulnerability. Climate variability and change, climate policy responses, and associated socio-economic development will affect the ability of countries to achieve sustainable development goals. Conversely, the pursuit of those goals will in turn affect the opportunities for, and success of, climate policies.[2]

FMPs and supervisors alike are fine-tuning approaches to assessing and managing sustainability risks putting particular emphasis on climate risks. The long-term nature and complexity of many environmental and climate-related risks are difficult to capture and have often been ignored in financial and economic decision making. Businesses and financial market participants must reconcile short-term monetary gains and long-term exposure to climate risks as early action is less costly than later adaptation to environmental and climate-related risks. Climate change and the response to it by the public sector and society have led to the identification of new sources of risks and opportunities.

Figure 1: Climate-related Risks, Opportunities, and Financial Impact



Source: BIS 2021

<u>Physical risks</u> are the risks arising from the physical impacts related to climate change and other environmental issues. They affect human livelihoods, socioeconomic development, economic activities, companies, and natural and physical capital. Physical risks are considered either chronic, such as changing precipitation patterns, or acute, such as flash floods. Such physical risks can directly impair financial values as assets can be destroyed and business operations may be disrupted.

<u>Transition risks</u> are derived from the transition to a low-carbon and more environmentally sustainable economy. Depending on shifts in regulations, technological advancements, and market sentiments, transition risks can abruptly affect a business, reduce the attractiveness of an investment, or change the competitive landscape in an economic sector.

<u>Opportunities</u> are also created in the transition to a low-carbon and more environmentally sustainable economy. An effective response to both physical and transition risks requires

[2] Intergovernmental Panel on Climate Change

businesses to seize new opportunities that reduce climate vulnerabilities and drive long-term value creation. This could be through changes in business models or the adoption of clean technologies to support decarbonization pathways. Such changes can help businesses stand out and differentiate them from their competitors and realize savings from improvement in resource efficiency, renewable energy sources, products and services, sustainable capital markets and resilience.

Climate-related risks can impact the real economy and financial sector through microeconomic or macroeconomic[3] transmission channels. According to the BIS,

- *Microeconomic transmission channels* include the causal chains by which climate risk drivers affect borrowers, potentially resulting in climate-related financial risk to FMPs and to the financial system. This includes the direct effects on FMPs themselves, arising from impacts on their operations and liquidity.
- *Macroeconomic transmission channels* are the mechanisms by which climate risk drivers affect macroeconomic factors such as, labour productivity and economic growth, and how these, in turn, may have an impact on FMPs through an effect on the economy in which FMPs operate. Macroeconomic transmission channels also capture the effects on macroeconomic market variables such as risk-free interest rates, inflation, commodities and foreign exchange rates.

To preserve financial stability, it is necessary to coordinate actions on how to address climate risks in financial decision making. There is broad agreement that, while climate risks have distinctive elements, they can be reflected through the traditional financial risk categories. Reports from a range of supervisory authorities further suggest that the existing Basel risk categories could also be used to reflect climate-related risks.[4] The NGFS has acknowledged that climate change poses a serious threat to financial stability and has issued a “call for action” for central banks and supervisors to develop their microprudential and macroprudential tools to address climate risks.

There is also a role for financial sector supervisors to help encourage low-carbon financing initiatives where impediments or data gaps are identified. Central banks are governed by mandates and authority granted to them by law. This varies across jurisdictions. In some of these jurisdictions, central banks can intervene directly to scale up green finance as part of their efforts to advance the sustainability agenda. Some policy interventions that have been pursued include national green growth strategies or frameworks that support ESG investments; government guarantee schemes for lending directed towards green technology investments; public support schemes for clean energy investments; green finance roadmaps or action plans; sustainable finance product frameworks, among others.

[3] BCBS: Climate related risk drivers and their transmission channels (2021)
[4] Ibid.

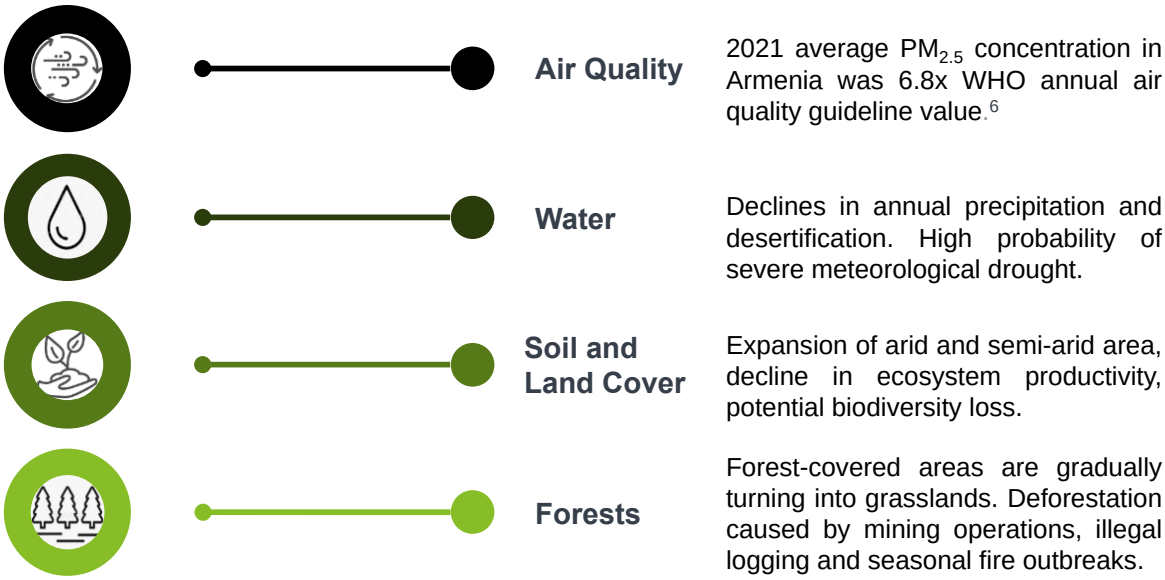
Part 2: REVIEW OF THE STATE OF SUSTAINABLE FINANCE IN ARMENIA

2.1 Environment, Climate Change, and the Economy

Climate change is already affecting Armenia, with an annual temperature increase higher than the global average and a significant decrease in precipitation. Armenia's NC4 (2020) reports that it experienced an average temperature rise of 1.23°C between 1929 and 2016 while a 10% reduction in average annual precipitation volume was documented over the period 1935-2012. BUR3 (2021) reports that during the period from 1990 to 2019 the deviation of the average annual temperature from the baseline period (1961-1991) was 0.9°C on average. In 2019, a deviation of 1.5°C from the annual average temperature from 1961 to 1990 was recorded.

IPCC projections suggest Armenia could experience warming at levels significantly above the global average, with potential warming of 4.7°C by the 2090s, under the highest emissions pathway (RCP8.5). In addition, precipitation has become more irregular across different parts of Armenia, with the northeast and central regions becoming more arid while the southern and north-western regions face higher precipitation. Increased drought risks, floods and landslide hazards, the reduction of the total arable land and the yield of staple crops will be driving significant changes in ecosystem composition, dryland expansion, water availability and food production. Under a global emissions scenario without mitigation, per capita GDP of Armenia would be 11% lower by the end of this century.[5]

Figure 2: Implications of climate change in Armenia



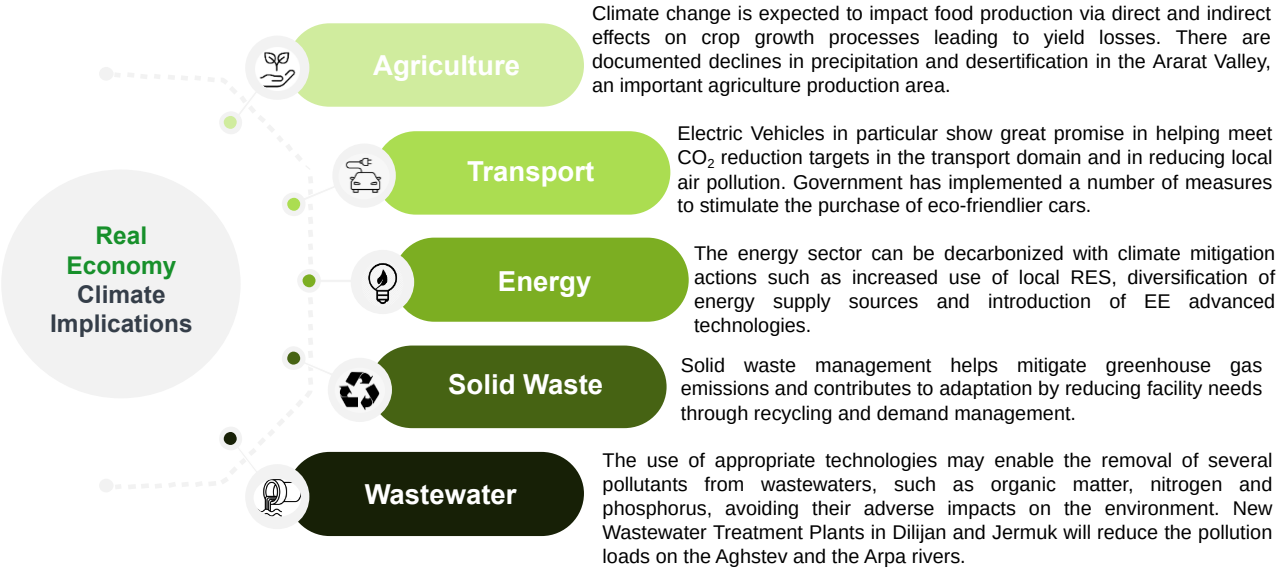
Source: Third Biennial Update Report (BUR3) in 2021

In response, Armenia has adopted a series of climate change mitigation and adaptation targets in its government program and codified them in legislation (decree N 610-L)[7]. To achieve these targets, a mix of policies shall be contemplated such as environmental taxes, investment for transitioning to cleaner energy systems, retrofitting of buildings and other measures to promote energy efficiency, a coherent regulatory framework (e.g., to avoid cross subsidization), improved water and waste management systems, and other adaptation measures outlined in the

[5] Kahn and others (2021), Long-Term Macroeconomic Effects of Climate Change: A Cross-Country Analysis. Energy Economics.
[6] https://www.epa.gov/pm-pollution/particulate-matter-pm-basics. The PM (particulate matter, often called particle pollution) is the term that describes the mixture of solid particles and liquid droplets found in the air. Most particles get in the atmosphere emitted from power plants, industries and automobiles. $PM_{2.5}$ represents the quantity of fine inhalable particles with diameters that are usually 2.5 micrometers and smaller.
[7] https://www.arlis.am/DocumentView.aspx?docID=151985

government program. The success of these efforts will also depend on the adequacy of international financial, technological, and capacity-building support.[8]

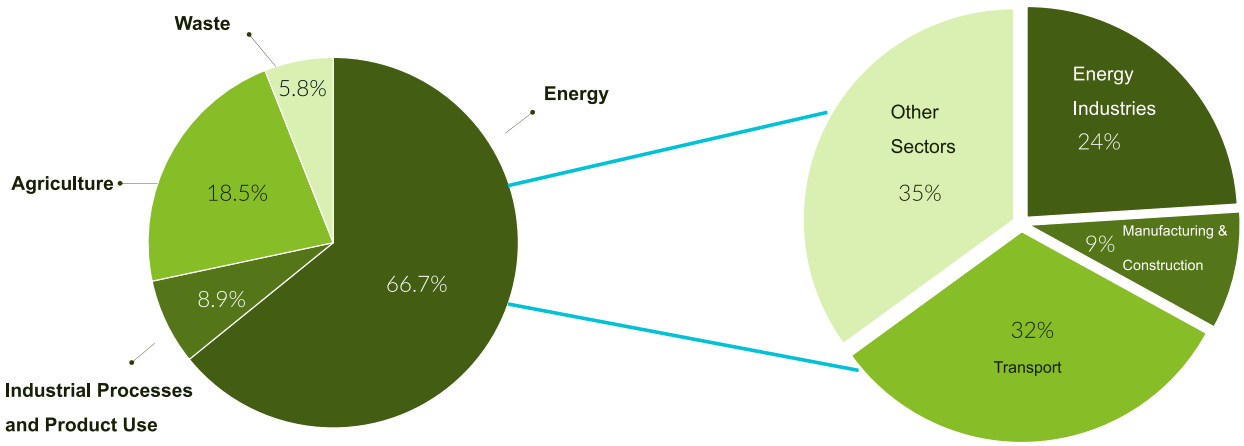
Figure 3: Real economy climate implications



Source: Developed for this Report

Furthermore, Armenia is committed to substantially decreasing GHG emissions in line with Paris Agreement as indicated by its updated Nationally Determined Contributions (NDCs). In its updated NDC 2021-2030, Armenia sets the economy-wide GHG emission reduction target of 40% by 2030 compared with the base year 1990. The main sectors included in its mitigation strategy are energy, industrial processes and product use, agriculture, waste, and forestry. The energy sector includes electricity generation, natural gas consumption for households and building heating needs, as well as transport.

Figure 4: GHG emissions by sector in 2017, CO_2-eq[9]



Source: Third Biennial Update Report (BUR3) in 2021

2.2 Financial Risks resulting from Sustainability Challenges

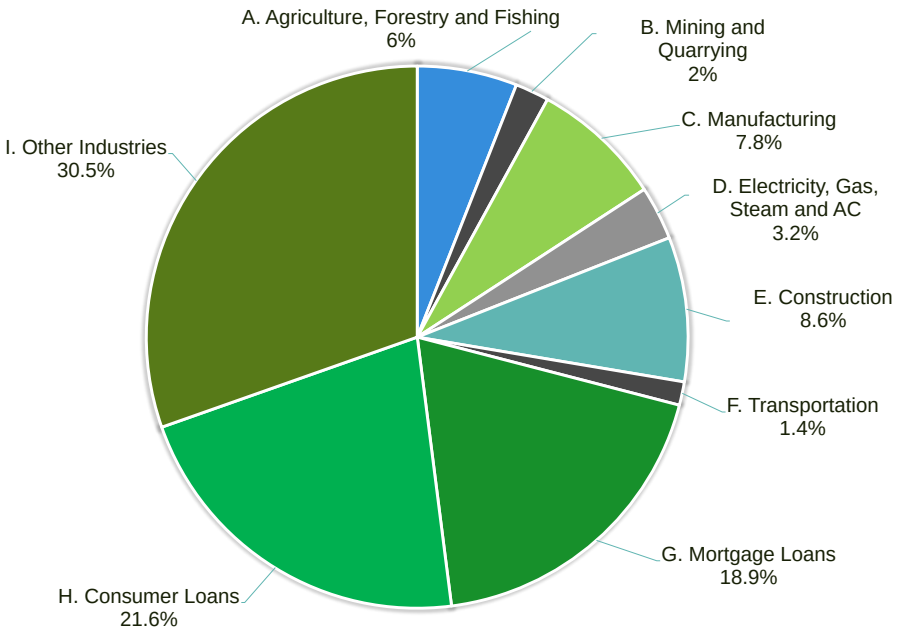
Armenia's most prevalent physical climate risks, varying in degree based on topography, are heatwaves, drought, extreme precipitation, floods, and landslides. These will have significant impacts on Armenia's natural resources, such as, water, soil, and land cover. As a result, the economic sectors most vulnerable to physical climate risks are predominately agriculture, energy

[8] IMF Article IV Consultation December 2021
[9] CO_2 equivalent, abbreviated as CO_2-eq is a metric measure used to compare the emissions from various greenhouse gases based on their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential (source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Carbon_dioxide_equivalent).

infrastructure, water management, older inefficient buildings in climate vulnerable locations, and construction with design features that do not include adaptation measures. Buildings, designed to be managed over several decades, are particularly exposed to evolving climate hazards, in particular, extreme hazards: heat waves, floods, intense rainfall, and storms.

Sectors most vulnerable to transition risks are those which contribute the most to total GHG emissions and/or maintain the highest GHG intensity levels. In Armenia, transition risks from legal, regulatory, policy, technology, and consumer behaviour changes will predominately impact the energy sector, particularly given the low penetration of renewables and dependency on natural gas. The buildings and construction sectors are also exposed to transition risk given the older, inefficient design and HVAC systems of building stock and emissions profile of buildings materials. Transport is exposed due to low penetration of non-fossil fuel dependent passenger and commercial vehicles. Mining is energy intensive, and excavating lands often results in significant impacts on the environment.

Figure 5: Loan Book exposures by Sector (as of June 2022)



Source: CBA

Approximately 29% of the banking sector loan book is allocated to climate vulnerable sectors.[10] An additional approx. 19% is allocated to mortgages where underlying assets are buildings or housing that may be exposed to physical risks. According to the International Energy Agency (IEA), only 6% of Armenia's total building stock is in "good" condition; 64% is "fair"; and 30% is "poor"[11]. Around 75% of the Multi-Apartment Buildings (MABs) were built during the Soviet era between 1951 and 1990 and lack proper insulation[12]. *A critical element of the Sustainable Finance Roadmap entails a sequence of activities to arrive at detailed assessments of climate-related and other ESG risks in the financial sector.*

Central banks and financial supervisors globally are responding to sustainable finance trends, including consideration of climate-related risks among FMPs. This has led to the establishment of the Network for Greening the Financial System (NGFS) as a coalition of central banks and supervisors from around the world to promote the transition to a more sustainable global financial system. The Central Bank of Armenia (the CBA) is a member of NGFS and actively collaborates and participates in exchange of knowledge and sharing of best practices on how to integrate climate and environmental risk into financial decision-making.

[10] Based on the sectoral analysis of CBA's banking sector statistical data, the climate-related physical or transition risks are associated with agriculture, forestry and fishing (6%), mining and quarrying (2%), manufacturing (8%), electricity, gas, steam and AC (3.2%), construction (8.6% and transportation (1.4%) Loan Book exposures.
[11] UNECE 2015
[12] HFH 2020

In 2021 the CBA also became a member of the International Financial Corporation's Sustainable Banking and Finance Platform (SBFN). SBFN is a voluntary community of financial sector regulators, central banks, ministries of finance, ministries of environment, and industry associations from emerging markets committed to advancing sustainable finance for national development priorities, financial market deepening, and stability.

Like Armenia, all jurisdictions are contending with sustainability challenges and potential risks to the economy and financial system. A growing number of monetary and financial authorities are starting to consider how to integrate climate and other environmental considerations into their policy frameworks and best ways to encourage financial institutions to incorporate environmental, social and management practices.

2.3 Building a Climate-resilient and Green Economy

Armenia is committed to the green transformation of its economy. Based on the national policies and international treaties' obligations, the investments and reforms supporting Armenia's transition to green economy address the following **key domains**:

Figure 6: Key domains of the greening transformation

1. Resource efficiency and clean production
2. Sustainable planning, management, use and reuse of drinking and irrigation water resources
3. Development of sustainable and efficient agriculture and forestry
4. Energy saving and improvement of energy efficiency
5. Development of power sector and green transition to low-carbon energy development
6. Waste management (Solid Waste and Wastewater)
7. Transition to Smart and Green multi-modal Transportation
8. Sustainable, energy efficient urban development
9. Service sector, smart solutions, big data, data storage

Source: Developed for this Report

The green transformation aims to combat climate change while addressing wider sustainability challenges in line with the 2030 Agenda and Sustainable Development Goals (SDGs). In order to achieve the SDGs, the Government of Armenia initiated the development of over 30 sectoral strategies, as well as the comprehensive Armenia Transformation Strategy 2020-2050. All these are necessary initiatives addressing the 5Ps of sustainable development: People, Planet, Prosperity, Peace, and Partnership. Several national documents underpin Armenia's sustainable development trajectory:

Figure 7: National strategies

01 **First INDC and Paris Agreement:** According to the first INDC submitted in 2015 to the UNFCC, followed by ratification of Paris Agreement in 2017, Armenia is committed to pursuing economy-wide climate mitigation measures.

02 **Updated NDC (2021-2030)** aims to double renewables in energy generation. Five key components are geared towards transition: sustainable energy production, industrial processes, agriculture, waste and forestry.

03 **Armenia's Transformation Strategy 2020-2050** targets ambitious SDGs based on three interrelated elements of sustainable development: economic growth, social cohesion and protection of the environment.

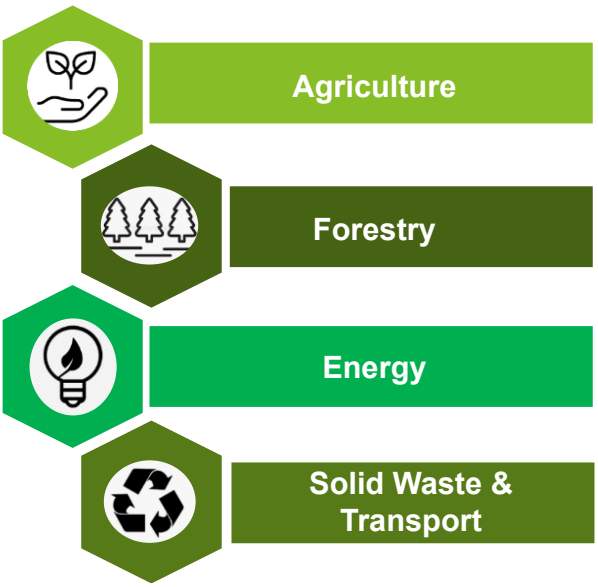
04 **Armenia-EU Comprehensive and Enhanced Partnership Agreement (CEPA)** comprises of several processes and reforms covering 2030 Agenda, through its framework of SDG-aligned targets and indicators.

05 **The 2021-2026 Government Program** emphasizes the Sustainable Development and Green Economy focusing on decarbonization of economy and gradual phase-out from fossil fuels.

06 **Importance of energy efficiency and sustainable energy development** is emphasized through number of national strategies - ESRE, NEEAPs, and Energy Sector Development Strategy up to 2040.

Sectoral strategies and policies also integrate sustainability considerations:

Figure 8: Sectoral "green" strategies



Agriculture strategy (2020-2030) emphasizes promotion of digital agriculture, improved irrigation systems, fertilizer management, and organic farming.

Draft National Forestry Programme (2021) targets an increase of forest cover to 12.9% of the territory of Armenia by 2030. Deforestation is tackled though National Forest Policy and Forest Sector Development Program.

Energy Sector Development Strategic Programme (2021 Strategy) is setting the path for the sector's transition through 2040 through maximum use of the country's potential for renewable energy and energy efficiency.

The new strategies for the fields of municipal solid waste management, transportation and trade are currently **under development**.

A priority of the 2021–26 Government Program is environmental protection.[13] Environmental protection will focus on increasing the country's resilience to climate change through adaptation and mitigation policies. Priorities include efficient use of water resources, such as water management of Lake Sevan; improving waste management; sustainable forest management and specially protected nature areas; biodiversity and biosafety, ensuring a gradual reduction and limitation of the use of disposable polyethylene products; reviewing the threshold for taxation of metallic minerals; harmonization of environmental legislation with the instructions of the Armenia-EU Comprehensive Extended Partnership Agreement, and ongoing cooperation with international organizations operating in this field.

Within the infrastructure development priorities, two sectors have particular environmental sustainability focus:

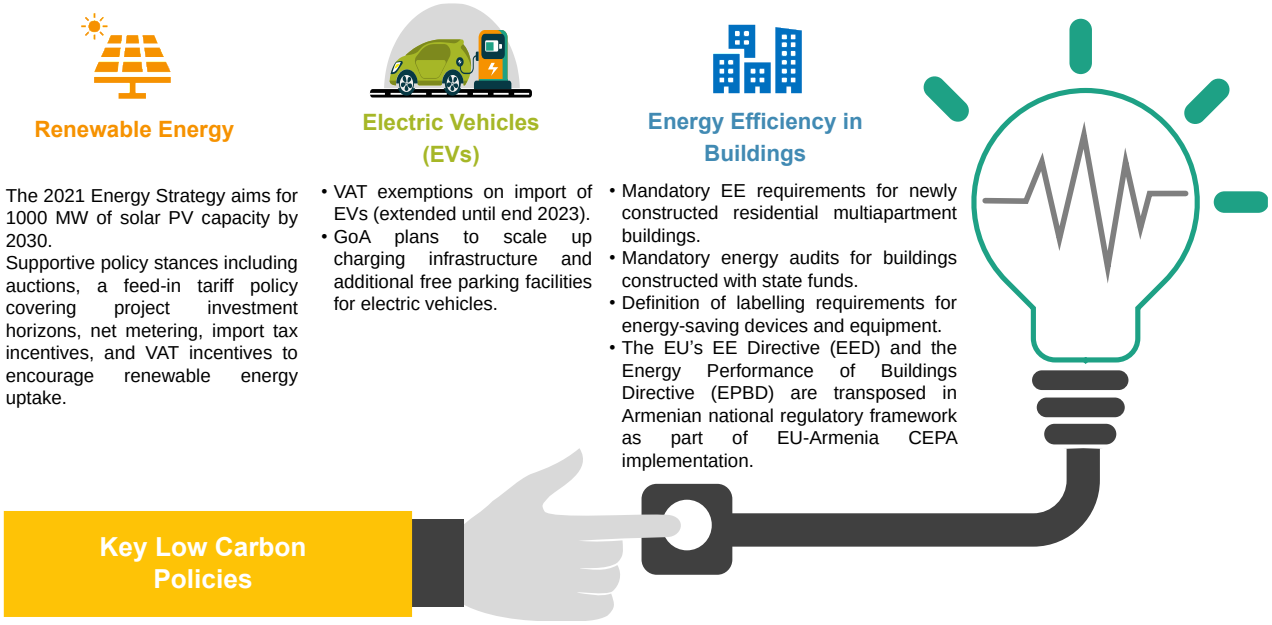
- **Water management:** The goal is to improve water supply (including for drinking and irrigation) and drainage management through reforms which include: i) reconstruction of the emergency sections of "Arpa-Sevan" tunnel; ii) building reservoirs; iii) promoting the use of water-saving irrigation systems; iv) implementing 10 priority anti-flood programs; and v) carrying out the restoration of water supply and drainage systems in 11 cities and 41 rural settlements, and rehabilitating of distribution networks.
- **Energy independence and security.** The overall goal is to ensure a reliable and high-quality supply of electricity and gas to consumers, including from renewables. Policy measures include a gradual liberalization of the electricity market; modernization of the second power unit of the Armenian NPP by 2026 (and for another 10 years through additional investment) and construction of a new nuclear power unit; increasing the share of solar energy production to 15 percent by 2030; promotion of energy efficiency measures under the requirements of the Armenia-EU Comprehensive Extended Partnership Agreement; and implementation of knowledge-based and smart energy sector programs.

Decarbonising the power sector means reducing its carbon intensity: that is, reducing the emissions per unit of electricity generated. The electric power sector is often regarded as the "easiest" sector to decarbonize, compared with highly diffuse sectors such as transportation, because of the large number of solutions available and the relative ease of transitioning a relatively limited number of generally centralized assets.

[13] Source: 2021-2026 Programme of the Government of the Republic of Armenia.

Armenia has made decarbonization of the power sector a key driver of low carbon development.

Figure 9: Low Carbon Development Highlights in Armenia



Source: IEA; EBRD; www.EU4climate.EU

2.4 Financing Sustainable Development in Armenia

Sustainable finance aims at integrating Environmental, Social and Governance (ESG) criteria into financial decision making and supporting sustainable economic growth. It also aims at increasing financial actors' awareness and transparency about the need to mitigate and manage ESG risks, considering the longer-term nature of such risks and the uncertainty on their valuation and pricing.[14]

Environmental considerations include climate change mitigation and adaptation, as well as the environment more broadly, for instance the preservation of biodiversity, pollution prevention and the circular economy.

Social considerations refer to issues of inequality, inclusiveness, labour relations, investment in human capital and communities, as well as human rights issues.

Governance considerations of public and private institutions include governance-related factors that play a fundamental role in ensuring the inclusion of social and environmental considerations in the decision-making process, such as management structures, employee relations, executive remuneration (e.g., linking executive pay to ESG goals), and others.

Credit markets and capital markets are critical sources of funding to help close SDG financing gaps and mobilize capital for sustainable development. Over the past few years innovative financial instruments have been developed to accelerate the achievement of SDGs including green, blue, social, sustainable, and sustainability linked (GBSSS) loans and bonds, largely the domain of advanced markets, are making inroads and attracting interests from investors for emerging markets.

Ambition levels under Armenia's updated NDC should continue to drive demand for sustainable finance. According to the OECD[15] Armenia would need to invest at least USD 5.7 billion for mitigation and adaptation measures. The largest share of investments is foreseen in mitigation activities – around USD 4.7 billion to achieve its climate action targets by 2030. The planned actions

[14] As defined by the European Banking Authority
[15] https://www.eu4environment.org/app/uploads/2021/04/Report-Assessment-of-Investment-Needs-for-Climate-Action-in-Armenia-up-to-2030.pdf

are mainly in energy, transport, agriculture and waste management sectors. Noteworthy objectives of the updated NDCs include:

- To reduce greenhouse gas emissions by 40 percent by 2030 compared to 1990 levels;
- To double renewable energy sources in total energy production by 2030;
- To build a green economy that will be compatible with Armenia's social and economic sustainable development goals (SDGs); and
- Within the framework of increased transparency and accountability, to follow the progress of fulfilling the country's obligations under the Paris Agreement.

However, building a market for sustainable investments in Armenia will require sufficient scale, liquidity, transparency, and diversification to attract domestic and international investors. This scale is needed to finance a broad set of private and public-sector activities in support of the SDGs and NDCs.

To date, sustainable financing in Armenia has been mainly supported through special programs initiated by IFIs and donor institutions. According to UNDP[16], only 3.2% of the Armenian State Budget in the period 2017-2019 was spent on climate. Commercial FIs are largely dependent on support from IFIs through different facilities and complemented by technical assistance. Facilities are typically concessional. IFIs have provided the largest share of adaptation finance through grants, while concessional loans, blended and other instruments have gone towards mitigation activities. **Armenia is already widely connected to the international community** via leading organizations in the area of sustainable finance including IFIs, MDBs, and various networks such as the Sustainable Banking and Finance Network. Engagement with these partnerships should further expand potential cooperation and collaboration initiatives around financial programs, technical assistance programs and capacity building programs across stakeholders nationally to catalyse sustainable activity.

[16] http://www.nature-ic.am/Content/announcements/12717/CPEIR_Armenia_ENG.pdf

Part 3: SUSTAINABLE FINANCE ROADMAP

3.1 Objectives of the Roadmap

The Sustainable Finance Roadmap (Roadmap) is a framework outlining the long-term strategic direction to enable or accelerate Armenia's ability to deliver on its climate and sustainable development goals, while enhancing the financial sector's competitiveness and economic resilience. It is specifically developed to support sustainability alignment of commercial banks, credit institutions, insurance companies, asset managers including pension fund managers operating on Armenian market (jointly referred to as "Financial Market Participants" or FMPs).

The Roadmap is aligned with CBA's mission, vision, and values.

MISSION, VISION, VALUES

MISSION

To be a reliable partner in a rapidly changing world, contribute to national prosperity by ensuring price and financial stability.

On the way to fulfilling our mission, we have a clear idea of Armenia's challenges. Our perception of well-being includes stable economic growth, sustainable development, financial security, and improvement of the standards of living by promoting competitiveness of an individual who is able to achieve the goals of multifaceted development and the creation of greater good.

VISION

To be a leading central bank based on cutting edge research and innovative solutions.

On the way to realizing our vision, we are driven by the desire to be an all-encompassing, respectable partner, an attractive institution for talents. To achieve this, we ensure the transparency and accountability of our activities, versatile cooperation within the country and with partners abroad, and create opportunities for full-fledged professional growth and realization of the potential of free-thinking, motivated and close-knit people.

VALUES

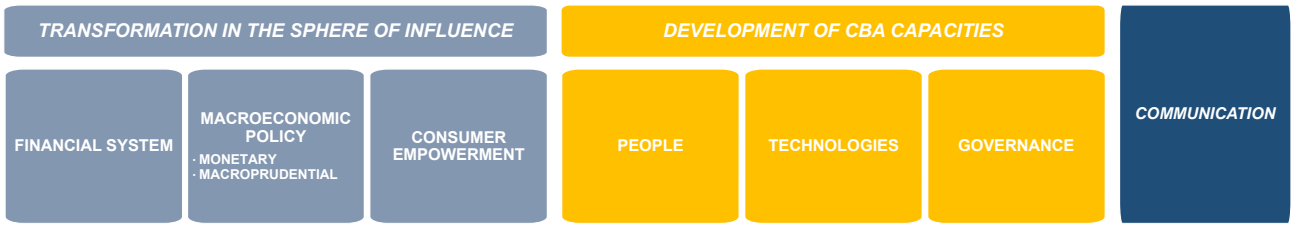
Excellence
We strive for excellence through cutting-edge research, analysis, external and internal cooperation, and innovation in all areas of our business.

Integrity
We present our goals in an open, effective way, and we are accountable for our actions.

Respect
We respect each other and succeed by appreciating the value of diversity of people and ideas.

Source: the CBA Strategy 2021

Furthermore, the Roadmap, guided by strategic priorities, outlines the CBA's pathway to integrate sustainability considerations into financial sector decision-making and support the development of sustainable finance products.



Source: CBA 2021 Strategy

Indeed, it is through these lens that the CBA has developed pillars, initiatives, and actions that provide a credible, predictable and stable supervisory and regulatory framework through which sustainability can flourish across the financial system and the wider economy of Armenia.

The Roadmap addresses the evolving nature of environmental concerns, especially those induced by climate change, as well as social and governance concerns. In this regard, the CBA will continue to study and monitor national, regional, and international developments, standards, policies, and regulations that may be adopted or adapted to the Armenian context.

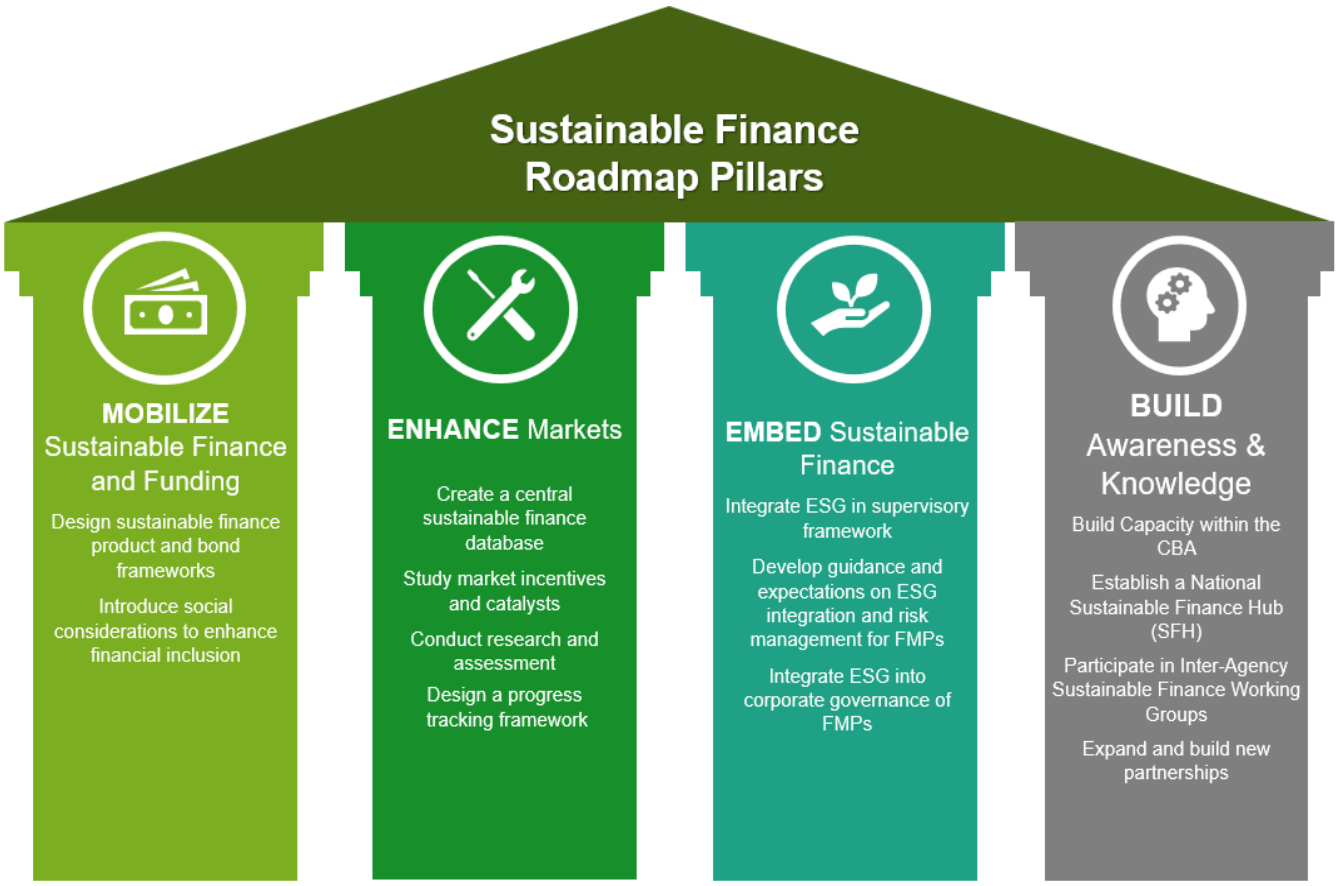
The Roadmap pillars, initiatives, and actions seek to:

- **Raise** awareness of sustainability risks and opportunities in Armenia and build capacity within the CBA and among financial market participants.
- **Facilitate** the flow of capital to industries and activities aligned with low-carbon ambitions of Armenia in a risk-based, market-oriented and sustainable manner.
- **Enhance** knowledge transfer, reduce information asymmetries, instil market confidence, and strengthen the enabling environment for sustainable finance.
- **Guide** FMPs in embedding ESG principles in their business decisions.

3.2 Roadmap Pillars and Initiatives

Four interlinked Pillars of Mobilize, Enhance, Embed and Build sustainable finance have been developed to capture the main initiatives that are needed to achieve the objectives of this Roadmap.

Figure 10: Pillars of Armenia's Sustainable Finance Roadmap



Source: Developed for this Report

3.3 MOBILIZE Sustainable Finance and Funding

The **MOBILIZE sustainable finance and funding** pillar and associated activities aim to facilitate the flow of capital to industries and activities aligned with low-carbon ambitions of Armenia in a risk-based, market-oriented and sustainable manner. This also includes embracing regulatory interventions that mobilize new or reallocate existing finance to bridge the financing gap for a country's climate and environmental objectives in socially inclusive manner.

Design Sustainable Financial Products and Bond Frameworks

A sustainable finance product and bond framework is interlinked with the taxonomy. For proper, impactful and transparent labelling of financial products, such as loans, bonds, funds, and

other instruments utilized by financial market participants, it is required to have clear and transparent standard and policy framework in place. The EU Sustainable Finance Disclosure Regulation (SFDR), for instance, provides guidance on what type of instruments can be considered "light" or "dark" green based on the EU Taxonomy alignment and other criteria. SFDR also mandates the consideration of sustainability factors in investment decision making and reporting of sustainability indicators. Some market-led initiatives such as the Loan Market Association (LMA) and International Capital Markets Association (ICMA) have green, social, sustainability, and sustainability-linked (GSSS) product frameworks.

Green, Blue, Social, Sustainability and Sustainability-linked (GBSSS) loans and bonds represent a new asset class that can help fill the sustainable development financing gap. At the same time, the size of this market remains limited in emerging markets like Armenia. A sustainable finance product framework can facilitate investor sustainability preferences and market development. The potential benefits from a sustainable finance product framework also include[17]:

- **Provide an additional source of financing for SDG related projects**: GBSSS bonds can allow issuers, including Armenian FMPs, to diversify their sources of funding and provide an alternative to conventional financing which can often be more expensive;
- **Enable long term financing**: Long-term green infrastructure projects require longer term financing and are therefore more compatible with bonds issuance. These bonds are attractive for institutional investors, such as insurance companies and pension funds seeking to match long dated libility cash flows[18] which would lead to decarbonization of investment portfolios. Borrowers will also benefit from the reduction in refinancing risk for projects;
- **Facilitate the transition of traditional brown sectors**: Sustainability Linked Loans (SLLs) and Sustainability Linked Bonds (SLBs) provide the necessary forward-looking dimension to the transition, with interest rates or coupons explicitly linked to the company's ability to achieve various climate change targets or SDGs. SLLs and SLBs do tend to however be more prone to greenwashing risks;
- **Help mitigate climate change risks in emerging markets**: As climate change effects are becoming more tangible, investors are likely to become increasingly concerned of lending to vulnerable countries. Green bonds can also provide an opportunity to the Armenian government to mitigate climate change risks and avoid a potential erosion of sovereign credit ratings.

Change catalysts for sustainable finance markets include a common language, issuer safeguards, governance and guidelines. These types of enabling market objectives boost investors' confidence and minimize the risks of "sustainability-washing".[19] The LMA and the ICMA principles offer a coherent and market-accepted approach as do the elements of the EU financial product sustainability regulations.

The CBA will undertake an analysis of various measures and regulations to support the creation and uptake of sustainable financial products and capital markets in parallel with taxonomy development. The CBA will examine the applicability and relevance of various sustainable finance product frameworks and labelling schemes that may be adapted to the Armenian context. These will include the EU taxonomy, SFDR, CSRD, a selection of country specific approaches, and market-led initiatives. The objective of this analysis is to support the realization of national priorities, whilst ensuring rules do not create unnecessary barriers to or transaction costs for cross-border sustainable capital flows. Laying down clear definitions, regulations and principles would help market participants better understand the sustainable finance market. In doing so, the financial sector could leverage investor enthusiasm and increase issuance of sustainable debt both domestically and internationally by corporates and potentially the Government of Armenia.

Any decision on potential actions and measures relating to sustainable financial products will also be based on consultations among market participants in Armenia in order to assess, among others, the range of potential issuers (including especially the identification of industries,

[17] Ibid
[18] CBI 2021
[19] OECD: Scaling up Green, Social, Sustainability and Sustainability-linked Bond Issuances in Developing Countries

project types, and optimal issuer size, etc.) and the appetite of investors for various sustainable and sustainability-linked financial products.

Introduce Social Considerations to Enhance Financial Inclusion

Ensuring financial inclusion is one of the components of environmental, social and governance considerations, and the Central Bank of Armenia, in turn, should take this issue into account and take concrete steps to provide new opportunities for growth.

The **CBA will commit the efforts to assure adherence to social considerations in its financial regulatory capacity** by adopting concrete policy priorities to enhance financial inclusion. **Recognizing the necessity of supportive regulatory framework, creating incentives for funding and investment, enhancing accountability and supporting innovation are priorities that CBA will consider in its regulatory function**, similar to other sustainable finance and governance activities within the Roadmap. Such an ex-ante approach through policy enhancements will help people, firms and regions fulfil their potential and enhance financial inclusion

As part of this priority, the CBA will support the establishment of the Inclusive Green Finance policies which recognize the role of financial inclusion in building resilience to climate change impacts and enable small-scale mitigation among the most vulnerable societal groups - this is the key message from the Alliance for Financial Inclusion (AFI) side event at the 2022 United Nations Climate Change Conference (COP27).

3.4 ENHANCE Markets

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Create a Central Sustainable Finance Database

Sustainable finance information and data are essential for making informed decisions, creating effective policies and developing accurate predictions. As such, sustainable finance data must be accurate, reliable, relevant, complete and timely in order to effectively use them for sustainable market transformation purpose (i.e., for aligning proposed incentives, measuring results, and proper valuation of assets). Resultingly, tracking sustainable finance flows will help reduce information gaps, mismanagement of data and information and will promote transparency in the sustainable ecosystem. Indeed, capturing the requisite information will enable further innovation in the financial sector.

Currently, Armenia does not have a shared data collection mechanism that tracks sustainable finance flows coming from both the public and private sectors. However, there are database systems that can be leveraged including sectoral loan distribution figures based on sector codes as well as international partners that have past, current and future sustainable finance programs in the country.

Given the importance of creating the Central Sustainable Finance Database, the CBA should undertake steps in this area. But at the same time, it is considered appropriate that the Database is created not from the side of the CBA itself, but from the side of the financial system.

The Database, in turn, will aim to collect and use relevant data and information only regarding the financial system.

Study Market Incentives and Catalysts

A variety of measures and incentives will be studied and may be contemplated in the future. Such incentives focus on ensuring green integrity of financial products and underlying assets, reducing costs for compliance and assurance, and other measures. Examples include use and reporting of funding of assets under sustainable product labels, or stricter reporting regulations for non-sustainable investing. There may also be tax or other fiscal incentives for participating in government-sponsored instruments. These have the potential to enhance the demand side (the

investor benefits from the incentive) or the supply side (the issuer benefits from the incentive) of sustainable finance products.

Conduct Research and Assessment

When designing policies, regulations or other types of financial sector rules, the CBA will strive to make well-informed and evaluated decision to determine their likely impacts before their formal engagement and application. Research directed at understanding the state of play of the national financial system will help the CBA to inform itself of effects of its policies, challenges as well as opportunities for further supervisory and regulatory enhancements of country's dynamic financial market incorporating latest international experience and best-practices.

Assessment of the impact of existing regulatory framework and potential (future) interventions will provide crucial information to internal staff and broad decision-makers on whether and how to adjust regulatory interventions to achieve intended policy goals. It will allow the CBA to examine the impacts and consequences of a range of alternative options, as well as to make an informed decision to not intervene in markets where the costs of doing so outweigh the benefits.

Design a Progress Tracking Framework

A national progress tracking framework leveraging the national Sustainable Finance Information Database will support evidence-based policymaking. Sustainable finance data will be utilized to enhance the policy response mechanisms and recalibrate strategies. For this purpose, the CBA may consider using the Sustainable Banking Network and Finance (SBFN) Measurement Framework[20] or another analytical platform as a basis to design a national measurement and reporting framework based on the specific activities and intended timelines of the roadmap.

Four key questions that need to be addressed in the measurement and reporting framework are:

1) Identification of key performance indicators (KPIs)
2) The organizations that should be responsible for measuring and reporting;
3) Identification and prioritization of stakeholders that shall be reported to, for what purpose, and what level of transparency;
4) Frequency of measuring and reporting.

3.5 EMBED Sustainable Finance

The **EMBED Sustainable Finance** pillar and associated activities target establishment of the CBA's own agenda for adopting a robust supervisory framework to consider and incorporate climate-related and environmental risks, as well as guide FMPs in taking account of ESG risks and factors in carrying on their activities, by requiring them to disclose how environmentally sustainable their activities and investments are.

Integrate ESG in Supervisory Framework

The integration of ESG in Supervisory Framework aims to develop a robust supervisory response to addressing climate-related and environmental risks by integrating the considerations of these risks into the different components of the CBA's supervisory function and supporting such integration through structural capacity-building on the institutional level. To fully integrate such risks into supervisory practice, the CBA will dedicate required time and resources invested in accordance with the institutional-wide strategic plan with actions that complement and reinforce each other.

The integration of sustainability risks in the supervision framework will follow a gradual and sequential approach. Addressing climate-related and environmental risks will be a priority. In this respect, CBA will undertake the following activities:

[20] Established in 2012, SBFN is a voluntary community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance. It is the first global network of its kind focused on sustainable finance at the market level. IFC is SBN's Secretariat and technical partner, assisting members to share knowledge and access capacity building that helps them design and implement national sustainable finance initiatives.

(i) Conduct studies on the impact of climate-related and environmental risks on the domestic economy and players, including the financial system;

(ii) Develop and adopt a strategic plan for the integration of climate-related and environmental risks into supervisory responsibilities, including establishment of internal governance structure and operating model, and institution-wide awareness-raising and capacity-building;

(iii) Update of a supervisory rating system to account for climate and environmental risks;

(iv) Setting clear supervisory expectations, tools, and guidelines for climate-related and environmental risk assessment and management ("Guidance and expectation on ESG integration");

(v) Formally embed climate-related and environmental risks in individual components of supervisory frameworks and tools;

(vi) Promote close collaboration and cooperation among FMPs, relevant ministries, supervisors in the region and internationally, and other government/multilateral agencies to ensure that the physical and transition risks arising from climate change are well managed;

(vii) Publicly report on the financial supervisory/regulatory authority's governance, strategy, and risk management arrangements in relation to climate risk.

(viii) Take additional steps that may be relevant for addressing sustainability risks.

Insights from the climate-related and environmental risk impacts on the domestic economy and the financial system, as well as national and international policy developments, will shape the level and pace of the CBA's adoption of the relevant supervisory and institutional actions.

Supervisory expectations will be reflected in Pillar 3 of the Basel framework which seeks to promote market discipline through regulatory disclosure requirements. In this respect, the CBA will be requiring disclosures of sustainability policies and KPIs on a "comply or explain" basis. The CBA will also begin developing guidelines for FMPs to adequately identify, monitor and manage material climate-related and environmental financial risks as part of their assessments of FMPs' risk appetite and risk management frameworks.

The CBA will also consider the requirements regarding the use of external reviews and information service providers, such as credit rating agencies, benchmarks and auditors, and establish them for use by the FMPs. Additionally, implementation of measures to prevent, detect and sanction greenwashing and the misuse of funds used through sustainable or green-labelled instruments will be defined, all within the responsibility to set clear supervisory expectations.

In its final step, the CBA will discuss evidence and define expectations for prudential treatment of "green" or "brown" exposures. The rationale for this sequencing is the need to 1) understand FMPs' current business mix from a sustainability perspective, 2) measure and assess the adequacy of FMPs' business models with regards to key markets served, ESG risk assessment and transition plans, 3) conduct scenario analysis, and later 4) define an appropriate prudential treatment.

Develop Guidance and Expectations on ESG Integration and Risk Management for FMPs

CBA's supervisory guidance is a key component of the supervisory response. By setting clear supervisory expectations in relation to FMPs' response to climate-related and environmental risks, the CBA will drive FMPs to action and enhance their approaches to ESG incorporation into risk management framework.

There is a growing global convergence among public and private financial institutions on climate and wider ESG risk management standards, including EU Taxonomy's "Do No Significant Harm" and "Minimum Social Safeguards" [21], the IFC's "Performance Standards"[22], the "Equator

21 https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en
22 IFC Performance Standards and supporting guidance, including the World Bank Group environmental, health and safety (EHS) guidelines www.ifc.org/sustainability and www.ifc.org/performancestandards

Principles"[23] and EBRD's "Environmental and Social Risk Management Manual"[24]. The CBA will work on mapping methods and approaches undertaken by Armenian financial institutions and those endorsed by international bodies to identify potential gaps and recommend or mandate certain frameworks.

The CBA's supervisory guidance will focus on several key areas (or a combination thereof) – governance, strategy, risk management, scenario analysis and stress testing, and disclosure:

- **Governance**: the CBA will expect an FMP's management board to understand and assess the financial risks from climate-related and environmental risks that affect its long-term business model, and to be able to address and oversee these risks within the firm's overall business strategy and risk appetite. Furthermore, the CBA will expect to see evidence of how the supervised institutions monitor and manage financial risks from climate change in line with their risk appetite statements. The risk appetite statement should include the risk exposure limits and thresholds for the financial risks that the supervised institution is willing to bear.

  Next, the CBA will expect to see clearly identified individual roles and responsibilities for climate-related and environmental risk management within supervised institutions. The CBA will expect to see evidence that the supervised institution's board of directors (alternatively supervisory board or another designation for individuals responsible for making strategic decision and providing guidance to the management team) and its relevant sub-committees exercise effective oversight of risk management and control functions. Further, the CBA will expect the board to ensure that adequate resources, sufficient skills, and expertise are devoted to managing financial risks from climate-related and environmental risks.

- **Strategy**: An FMP's approach to risk management should demonstrate an understanding of the distinctive elements of financial risks stemming from climate change and a sufficiently long-term view of the financial risks that can arise beyond standard business planning horizons (of 3 – 5 years). The results from climate-related and environmental scenario and sensitivity analyses should be used to inform strategic orientation and procedural aspects impacting future business model viability.

- **Risk Management**: The CBA will expect FMPs to address financial risks from climate-related and environmental changes through their existing risk management frameworks, in line with their board-approved risk appetite. In a manner proportionate to their business, FMPs should identify, measure, monitor, manage, and report on their exposure to these risks. FMPs should be able to evidence this approach in their written risk management policies, management information, and board risk reports. This includes, where appropriate, updating existing risk management policies.

- **Stress Testing and Scenario Analysis**: Subsequently, the CBA will develop a dedicated climate change stress test and applicable scenarios with clear guidance for commercial banks. Building off the work conducted by the NGFS and ECB on stress tests, the CBA will (i) explore the impact of climate change and the transition to a low-carbon economy on supervised banks' strategies and the resilience of their business models; (ii) identify and assess relevant climate-related risk drivers affecting individual banks or the banking system as a whole; (iii) facilitate information sharing, identify common data and methodological gaps and limitations in climate-related risk management; and (iv) inform the adequacy of supervised banks' risk management frameworks, including their risk mitigation options.

- **Disclosures:** FMPs have existing requirements to disclose information on material risks within their Pillar 3 disclosures (as required under Capital Requirements Regulation (575/2013) (CRR) and Solvency II). In addition to meeting these existing disclosure requirements, FMPs should demonstrate transparency by disclosing how climate-related and environmental financial risks are integrated into governance and risk management processes, including the process by which the institution has assessed whether these risks are considered material or principal risks. The CBA will examine adjustments to the Pillar 3

23 https://equator-principles.com/about-the-equator-principles/
24 https://www.ebrd.com/who-we-are/our-values/environmental-emanual-risk.html

policy framework to reflect ESG risks in prudential disclosures. Governance codes are the cornerstone for ESG and are viewed by stakeholders as an indication on how lenders and managers are applying fundamental ESG principles in strategy making and risk management.

Consequently, the CBA will introduce consistent and comparable sustainability and climate-related reporting requirements. Internationally accepted reporting standards, such as those under development by the IFRS International Sustainability Board (ISSB), will serve as a benchmark for Armenia's reporting framework. The CBA may eventually require more granular and specific information for supervisory or regulatory purposes to support sustainability risk monitoring and analysis and to inform potential regulatory policy actions.

Insufficient availability and inadequate quality of climate data are some of the main challenges for authorities in the development of supervisory and regulatory approaches to climate-related risks. Sufficiently granular data is needed to identify exposures and understand the impacts of climate-related risks. Sector exposures, while helpful and indicative of transition risks, do not tell the full story. Geospatial analysis is needed to better capture top-down physical risk exposures in addition to information on physical risk safeguards at the asset level. Reporting of sustainable activities and carbon-related metrics such as GHG emissions are needed to derive robust transition risk analysis.

The CBA will gradually expand regulatory returns to include more granular and specific climate-related data from FMPs while adhering to the principle of proportionality, considering the nature, size and risk profile of the financial institutions.

Technical guidelines and policy actions on the treatment of climate-related and environmental risks will be based on the data. Policy actions will be based on careful analysis of available data and surveys on FMPs' capacities to capture and report decision-useful data, metrics and information. These are to include guidelines on embedding ESG in their business decisions, including corporate governance codes, along with reporting templates, climate risk disclosure frameworks, as well as key performance indicators (KPIs).

The CBA expects the FMPs' response to financial risks from climate-related and environmental risks to be proportionate to the nature, scale and complexity of their impacted financial operations. The end objective is to ensure ESG risks are properly integrated in decision-making, and that material risks are managed effectively. An emphasis will be on the identification and treatment of climate risks given their importance in Armenia and globally. The CBA will seek a harmonized approach while applying the principal of proportionality on ESG risk aspects. As FMP's expertise develops, the CBA will expect the FMP's approach to managing the financial risks from climate change to mature over time.

Equally, it is expected that over time the CBA will move from setting high-level expectations to a more prescriptive requirements of prudential regulation. The CBA intends to embed the measurement and monitoring of these expectations into its existing supervisory framework. Supporting this, the CBA will pay particular attention to raising awareness among FMPs through supervisory engagement or roundtables.

Integrate ESG into Corporate Governance of FMPs

Considering the importance of FMPs' role in steering the necessary transformation of the Armenian real economy towards higher levels of sustainability, **the CBA will actively encourage FMPs' governance enhancements to reflect climate-related and environmental risks and opportunities.** Considering the importance, but also cognisant of the challenges the transformation entails, the CBA aims to support FMPs to define, develop and adopt effective corporate management systems for climate-related accountability and responsibility, which, in some cases, may be part of the wider sustainability agenda. This may include, inter alia, establishing guidelines, developing tools and producing manuals reflecting best practices in setting accountability mechanism for climate-related business performance, or for adopting climate-related strategy, risk policy and financial planning that allows for adoption of corporate governance measures in FMP's value chain.

Supporting actions and material developed will be further promoted through the work of the National Sustainable Finance Hub.

Consequently, the CBA intends to integrate ESG considerations in the Supervisory Review and Evaluation Process (SREP), including business model analysis and an assessment of the internal governance and controls related to climate-related and environmental risks.

3.6 BUILD Awareness and Knowledge

The **Build awareness, capacity and knowledge** pillar and association activities target awareness-raising, capacity-enhancement and knowledge building on sustainability risks and opportunities in Armenia, with the focus on establishing dialogue mechanisms and knowledge sharing platforms for better inter-agency coordination, as well as with Armenian FMPs. The key activity within the pillar is continued enhancement of CBA's internal capacities to effectively enact, manage and monitor supervisory functions in support of Armenian financial sector transformation towards sustainable finance.

Build Capacity within the CBA

The importance of sustainability within supervision frameworks necessitates dedicated capacity within financial sector supervisors. In line with this, the CBA is dedicating resources to further build and strengthen internal capacity for embedding sustainability in supervision. This also includes building adequate internal capacity to coordinate and lead the implementation of this Roadmap and its constituent pillars and actions (such as liaising with the National Sustainable Finance Hub and the Green Armenia Platform, and overseeing the Sustainable Finance Information Database). Dedicated capacity within the CBA will undertake various relevant measures, including:

- Facilitate external and internal stakeholder awareness-raising and upskilling, including by developing guidelines and analytical tools.
- Provide strategic advice to the CBA Board on all matters related to the CBA's work on sustainable finance, climate-related and environmental risks.
- Steer, coordinate, support and streamline internal work on sustainability issues, as well as the CBA's input to relevant international forums.
- Elaborate the further development of this Roadmap, as well as supervisory policies, actions, regulations and tools in sustainable finance.
- Facilitate the CBA's participation in the Network for Greening the Financial System (NGFS) and other international and regional associations, networks or fora.

Establish a National Sustainable Finance Hub

Realizing Armenia's sustainable development ambitions requires a cohesive and comprehensive orchestration of initiatives across the Pillars. This involves shared commitments across FMPs and their clients, smart policies and regulation, an informed populace, and a risk-based approach to steer capital flows towards sustainable economic pathways. Investment resolve alone is inefficient. Indeed, our understanding of sustainability risks, in particular, physical and transition impacts of climate change, requires access to sustainable finance skills, talent and tools. Awareness of the various sustainability challenges is essential for the financial sector.

FMPs must upgrade existing skillsets across divisions and business lines in the areas of ESG risk management, quantitative and qualitative analysis and baseline technical knowledge. For example, internal auditors are increasingly expected to have a basic understanding of sustainability reporting and ESG risks, however, they tend to lack the expertise to be an effective third line of defence for this subject matter.[25] Organizations may also lack the knowledge to articulate missing

[25] Source: Deloitte: Taking the lead in sustainable finance, https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/industries/ca-industries-financialservices-taking-the-lead-in-sustainable-finance-EN-AODA.pdf

skillsets, particularly in relation to climate change and applications to scenario analysis, stress testing, risk management, strategy development, product frameworks, and other areas.

Given the importance of establishment of the National Sustainable Finance Hub, the CBA should undertake the steps to address these needs. Jointly with other stakeholders, the CBA will play a supporting role via the Hub in bridging the capacity gaps by organizing and facilitating workshops and trainings in these and related areas. The Hub reinforces the Roadmap Pillars and interlinkages of activities across the Pillars.

In addition to workshops and trainings, the Hub will contribute to research supporting the development, testing, and demonstration of sustainable finance policies. The research will underpin sector guidance, work towards analysing, validating, and calibrating ongoing initiatives and policies and promote practical solutions to channel capital towards an inclusive, net-zero and resilient economy.

The Hub would convene key public and private sector stakeholders to identify and promote innovative solutions that support the development and growth of sustainable finance in line with Armenia's climate and environmental ambitions and objectives. The results of the dialogue would provide input and recommendations to the CBA and national ministries with a focus on practical acceleration of the sustainable finance agenda at a policy, regulatory and market level.

The Hub could also assist and promote relationships between domestic and international financial institutions to develop practical and scalable solutions to the barriers to climate alignment and the wider sustainable finance agenda. Cooperation will be sought with private sector, government agencies and international organizations in the upcoming years.

Participate in Inter-Agency Sustainable Finance Working Groups

To support further collaboration and coordination between the CBA and other Armenian public sector agencies or authorities, the CBA will foster inter-agency dialogue through participating and collaborating in various Sustainable Finance Working Groups (i.e., the Green Armenia Platform). These collaboration platforms will be used to pursue active exchange, collaboration, coordination, knowledge development and distribution activities between different agencies. The mandate, participants, format, and frequency of working group meetings will be structured to reflect current and upcoming sustainable finance topics of relevance to the Armenian financial sector and country's international obligations.

Expand and Build New Partnerships

Additional partnerships or new models of partnerships can be explored to strengthen international cooperation on Armenia's sustainable development objectives and goals. These would include the design of new programs with existing partners such as international financial institutions (IFIs) and development finance institutions (DFIs) but also seek meaningful memberships in organizations like Coalition of Finance Ministers for Climate Action (Helsinki Principles) and Mainstreaming Climate Action in Financial Institutions Initiative, as well as deepening cooperation within organizations such as Sustainable Banking and Finance Network[26] (SBFN), the International network of Financial Centres for Sustainability[27] (FC4S), and Network of Central Banks and Supervisors for Greening the Financial System[28] (NGFS), official supporter of the TCFD.

Furthermore, partnerships can play a critical role in bringing to light and staying abreast of our evolving understanding of environmental risks. The area of biodiversity and potential for natural capital solutions could be strengthened through partnerships with leading global partnership and networks aimed at promoting biodiversity conservation and natural capital, among which are Alliance for Zero Extinction (AZE), Global Partnership on Business and Biodiversity (GPBB), Global Environment Facility (GEF) and others

[26] https://www.sbfnetwork.org/
[27] https://www.fc4s.org/
[28] https://www.ngfs.net/en

3.7 Action Plan under the Roadmap

Table 1: Summary of Proposed Actions under the Roadmap

	Initiative	2023	2024	2025	2026	2026 - beyond
MOBILIZE Sustainable Finance & Funding Actions	Design Sustainable Finance Product and Bond Frameworks					
	Introduce Social Considerations to Enhance Financial Inclusion					
ENHANCE Markets Actions	Create a Central Sustainable Finance Database					
	Study Market Incentives and Catalysts					
	Conduct Research and Assessment					
	Design a Progress Tracking Framework					
EMBED Sustainable Finance Actions	Integrate ESG in the Supervision Framework					
	Develop Guidance and Expectations on ESG integration and risk management for FMPs					
	Integration of ESG into corporate governance of FMPs					
BUILD Awareness and Knowledge Actions	Build Capacity within the CBA					
	Establish a National Sustainable Finance Hub (SFH)					
	Participate in Inter-Agency Sustainable Finance Working Groups					
	Expand and Building New Partnerships					