BRSA

BANKING
REGULATION AND SUPERVISION
AGENCY

SUSTAINABLE BANKING STRATEGIC PLAN (2022-2025)

December 2021

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List of Abbreviations

BAT	:	The Banks Association of Turkey
BCBS	:	Basel Committee for Banking Supervision
BIST	:	Borsa İstanbul
BRSA	:	Banking Regulation and Supervision Agency
CBRT	:	The Central Bank of the Republic of Turkey
COP	:	Conferences of the Parties
CMB	:	Capital Markets Board
ESG	:	Environmental, Social & Governance
EU	:	European Union
FSB	:	Financial Stability Board
IFRS	:	International Financial Reporting Standards
INDC	:	Intended Nationally Determined Contribution
ISSB	:	International Sustainability Standards Board
KOSGEB	:	Small & Medium-sized Enterprises Development Organization of Turkey
NGFS	:	Network for Greening Financial System
SDG	:	Sustainable Development Goals
SME	:	Small & Medium-sized Enterprise
OECD	:	Organization for Economic Co-operation and Development
PBAT	:	Participation Banks Association of Turkey
TCFD	:	Task Force on Climate-related Financial Disclosures
TFCR	:	Task Force on Climate-related Financial Risks
TIM	:	Turkish Exporters' Assembly
TOBB	:	Union of Chambers and Commodity Exchanges of Turkey
UN	:	United Nations
USA	:	United States of America

Chairman's Foreword

It is an undeniable fact that our planet is under a serious threat due to climate change. We feel the effects of the climate change through natural disasters such as extreme weather conditions, large-scale forest fires, landslides and floods, which are now more frequent than ever. Scientists provide proofs for the global warming causing the climate change. If we do not reverse the current situation in the coming decades, it seems inevitable that we will face a climate crisis in which warming will become irreversible. Therefore, it is of utmost importance to correctly determine and swiftly implement policies on a global basis for stopping global warming. Most important issue here is to limit carbon emissions as the major cause of global warming. There is an urgent need to reduce emissions, and in particular carbon emissions, from existing production processes. With the Paris Agreement, almost all the countries in the world have committed to reduce the carbon emissions to zero in the next thirty years. This requires a very ambitious process of economic transformation, which has many difficulties in its implementation, but which is necessary. On the other hand, the “European Green Deal” published in 2019 and the Carbon Border Adjustment Mechanism, have made it necessary for the European Union member states and their trading partner countries to take various measures earlier. For example, the “Fit for 55 Package” issued in July 2021 sets forth carbon tax on import from 2026 onwards for carbon emissions above the limits set in cement, electricity, aluminum, iron and steel and fertilizer.

The commitments under Paris Agreement and the requirements under the European Green Deal demans extensive efforts including decarbonization of production processes as well as auditing, verification, reporting, taxation and financing of such activities. Undoubtedly, a major component of decarbonizing and greening process of the economy is financing activities. Efforts for green finance are increasing in the world. The primary reason is the significant amount of additional financing needed for green transformation investments. Financial markets should be mobilized to provide the necessary resources to tackle the climate crisis. Second, the transformative role of the financial sector and the banks can be used to accelerate the green transformation of the corporate sector. These two characteristics make green finance and banking critical in tackling climate change.

Turkish banking sector has engaged in sustainable banking activities for a long time in an effort to tackle climate change and other environmental and social issues. Paris Agreement accelerated the efforts in sustainable banking as well as in some other areas. The overall strategy and main steps of green transformation in Turkey were determined through the “Green Deal Action Plan” in July 2021. In the Action Plan, the BRSA was tasked with drafting the “Sustainable Banking Strategy Document”. The purpose of this document is to set forth the general strategy and policies required to help the Turkish banking sector in building a sustainable banking infrastructure. In this context, in the preparation of the strategy document, it was given importance to get the contribution of sector representatives by making close cooperation with the related parties, especially with the Banks Association of Turkey and the Participation Banks Association of Turkey.

The “Sustainable Banking Strategy Document” focuses on building a sustainable banking infrastructure and includes the methods and principles applicable for the sustainability efforts of the banks in line with international standards and practices. In other words, it defines the strategy for a prospective banking regulatory framework. The Strategy Document also focuses on approaches regarding the management of sustainability risks. Basic principles are defined to quantify, measure and analyze the “climate-related financial risks” classified as physical risks, transition risks and reputation risks of the Turkish banking sector. The policies set forth in the Strategy Document aim to develop sustainable banking activities while preserving the financial soundness of the sector. We expect that the steps to be taken in this context will also contribute to getting cost-effective resources from international markets for the green transformation of the real sector.

In this respect, I hope that the Sustainable Banking Strategy Document will be a useful instrument for the development of our country's economy, our banking sector and the struggle with the climate crisis.

Mehmet Ali Akben
Chairman

1. Environmental Analysis

1.1. Background

Mass production technologies that emerged with the Industrial Revolution, linear economy model based on resource consumption and the increasing population create accumulated effects on climate, natural resources and basic human needs.

Production and consumption based on fossil fuels such as coal and oil and the greenhouse gas emissions from the livestock sector led to a 1.1°C increase in the global temperature compared to pre-Industrial Revolution era[1]. This has chronic results including melting of glaciers, elevation of sea level and reduced biodiversity, as well as increased frequency and severity of **physical risks** like storms, floods, hails, lightning, drought and extreme cold or hot.

These results related with climate change, combined with other factors, such as consumption of natural resources, notably water, as well as the increase in pollution, have a significant impact on the economy and social life, and harm individuals and organizations. Especially, the impact on food, water and energy safety threatens social and political stability and cause international tensions. The cost of such natural disasters in 2018 is estimated to be at least USD 160 billion with a sharp increase as compared to the average of preceding 30 years, and half of this damage was reflected to the insurance sector [2].

Climate change and the deterioration of natural balance are the long-term results of carbon emission, pollution and other negative externalities, which are the results of manufacturing and consumption processes that are not directly included in the prices and therefore not priced. These issues that are caused by billions of economic units (real and legal persons) in various regions, producing and consuming at various levels and are very difficult to be coordinated can be qualified as the biggest collective action problem faced by the humanity.

"United Nations Framework Convention on Climate Change" opened to signature during the "Conference on Environment and Development" in Rio de Janerio, Brazil in 1992 and made effective in 1994 is the first inter-governmental framework agreement with provisions on global warming under the guidance of UN. The Convention admits the dangerous effects of human-related environmental pollution on the climate and aims at reducing the ratio of greenhouse gases in the atmosphere and minimize the negative effects of these gases. Within the scope of the Convention, countries were grouped in Annex-I and Annex-II. Countries in Annex-I are obliged to reduce or control greenhouse gas emissions and countries in Annex-II are obliged to offer financial support to the others. The Convention is the first inter-governmental environment agreement on climate change, but it is based on the good faith of the parties and its sanction power is weak.

After the Convention was made effective, the parties come together every year *(COP-Conferences of the Parties)* to evaluate the developments, and discuss new measures and strategies. The discussions on the Kyoto Protocol for preventing global warming and supporting the current agreement started at the third conference in 1997, deemed as the

[1] Intergovernmental Panel on Climate Change (IPCC): Climate Change 2021 The Physical Science Basis, 2021, p. SPM-5 (https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf)

[2] Münich RE: The Natural Disasters of 2018 in Figures, 2019 (https://www.munichre.com/topics-online/en/climate-change-and-natural-disasters/natural-disasters/the-natural-disasters-of-2018-in-figures.html)

most important conference on this subject matter. The Protocol was opened for signature in 1998, finalized in 1999 and made effective in 2005 after the signature of Russia in 2004. Kyoto Protocol introduces extensive measures to reduce the emissions of greenhouse gases, especially carbon dioxide. Annex-I countries which are obliged to reduce or control the emission of greenhouse gases as per United Nations Climate Change Frame Agreement are listed in Annex-B of the Protocol. Countries, which have signed the Protocol but not listed in Annex-B, are Non-Annex countries, and they are not under quantitative obligations regarding the reduction of greenhouse gas emissions.

It has been decided at the 18th Conference that the commitment period determined at the Kyoto Protocol shall be extended until 2020. Regarding post-2020, Paris Agreement discussed at the 21st Conference in 2015 in Paris and accepted as of 2016 is decided to be enforced.

Paris Agreement is a milestone in the sense that it is a binding agreement which requires countries to combat climate change and adapt to the effects of change. Long-term temperature objective of Paris Agreement is to limit the increase in average temperature to 2°C as compared to the pre-industry period and even make efforts to limit it to 1.5°C. In order to achieve this objective, the emission levels should be immediately reduced and greenhouse gases emitted to the atmosphere and kept by carbon sinks should be balanced until the second half of the 21st century. Furthermore, the objectives of the Agreement include increasing the capacity of the parties to adapt to the negative impacts of the climate change and providing "a coherent financial flow in the way to low greenhouse gas emissions and a climate-resistant development". A major element for achieving the objective of the Agreement is to create commitments by the countries to reduce emissions. All countries set forth the reduction committed as well as the basic strategies and policies to succeed.

Unlike United Nations Framework Convention on Climate Change, Paris Agreements is built on a system based on the contributions of all countries. In this sense, the Agreement is based on the principle of “common but differentiated responsibilities and relative capabilities” for all countries. The countries will make contributions to the struggle against climate change in line with their capabilities. The countries will issue national contribution declarations every 5 years on reduction, compliance, finance, technology transfer and capacity building in line with the principles of common but differentiated responsibilities and relative capabilities.

2015 was a year where a wider sustainable development perspective to include climate change has been exhibited and accepted on a global scale. The objectives of “2030 Sustainable Development Goals” (SDG) adopted by the United Nations in 2000 and built on “Millennium Development Goals”[3] accepted in 2015 include eliminating poverty, protecting the planet and ensuring that people live in peace and prosperity. The priorities of SDGs consisting of 17 goals and 169 targets include climate action, life in water and on land, responsible consumption and manufacturing, accessible and clean energy and sustainable cities.

Basic national strategies and policies to limit emissions include increasing the share of renewable energy generation and increasing energy efficiency, discouraging carbon emissions by pricing and adding them to the costs, taking reductive measures to limit emissions in manufacturing sector, transportation and agriculture, implementing efficient forestation and forest protection policies. Efficient adoption of these strategies requires a comprehensive economic transformation and change of perspective as well as huge investments and funds.

[3] https://www.tr.undp.org/content/turkey/tr/home/mdgoverview/millennium-development-goals.html

As explained in the Paris Agreement, a major mechanism to reduce emissions is the carbon trade market. The carbon price formed in the market based on the total carbon emission quota (supply) and the carbon emission required for manufacturing (demand) encourages innovation and transition to low-carbon and energy-efficient technologies and business models by manufacturers and provides additional funds for transition to a low-carbon economy. The carbon emissions are currently priced through such markets in the European Union as well as Canada, China, Japan, New Zealand, South Korea, Switzerland and USA[4].

The most significant initiative to realize the global objectives and approaches specified by the Paris Agreement in terms of economy and geography is the EU Green Deal announced by the European Union in 2019. The EU is reshaping its economic policies in an effort to reduce its carbon emissions by 55% as of 2030 and become carbon-neutral as of 2050. The "Carbon Border Adjustment Mechanism" will be developed to protect European manufacturers against the competition from countries where carbon is not priced or the cost of carbon emission is lower. This will impose additional costs for products imported to the EU based on the carbon component in the manufacturing process. The Carbon Border Adjustment Mechanism is an issue that closely concerns countries exporting to the EU.

Another milestone of EU's 2050 strategy is the "Fit for 55 Package" issued in 2021. The package has a number of regulations to align EU's climate, energy, land use, transportation and taxation policies with the 55% emission reduction rate target by 2030. It includes policy elements such as implementing emission trading in new industries, consolidating the current EU Emission Trade System, increasing the share of renewable energy sources, higher energy efficiency, faster adaption of low-emission transportation models and the required infrastructure and fuels, adaptation of tax policies to climate targets, measures to prevent carbon leakage and protecting and growing natural carbon sinks.

One of the most important of these policies is to gradually implement the Carbon Border Adjustment Mechanism with a certain transition period and limited scope. Companies importing products into EU in iron-steel, aluminum, fertilizer, cement and electricity industries will issue quarterly reports on the emissions of the manufacturing process as of 2023 and provide detailed information on direct and indirect emissions as well as the carbon price paid. After the transition period from 2023 to 2026, taxation will start based on emission reports.

It is seen that the measures and choices made to prevent or limit physical risks of or to adapt to the climate change can result with new, different and significant **transition risks** for individuals, households and companies. Typical examples include limitations and additional costs imposed on industries which make heavy use of fossil fuels, the fact that an important part of fossil fuel reserves will be idle and the pressure imposed by lower renewable energy costs and changes in consumer/investor preferences on companies and business segments which use older technologies and fossil fuels[5].

Despite the fact that the environment and climate change are priority issues within the frame of sustainability concept, environmental, social and governance aspects are also among the interwoven, closely related and integral aspects. Supporting disadvantaged segments of the

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[4] European Commission: International carbon market (https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market_en)

[5] Joaquín Bernal and José Antonio Ocampo: "Climate Change: Policies to Manage Its Macroeconomic and Financial Effects" 2020 UNDP Human Development Report Background Paper No. 2-2020, p.9 (http://hdr.undp.org/sites/default/files/2020_hdr_bp_ocampo_bernal.pdf)

society, solidifying diversity and inclusiveness, protecting minority rights, ensuring justice and equal opportunities and improving health and education are ever more important due to new problems which may be caused by the efforts to solve environmental problems. It is important that possible side effects of a fast transition to a low-carbon economy are minimized by policies and practices for social sustainability and good governance.

1.2. Financial Sector and Sustainability

Financial sector is in a critical position because it faces direct and indirect risks and opportunities arising from climate change and transition to a low carbon economy, as well as it is playing a guiding and encouraging role in transition as financier.

Climate-related direct physical risks faced by financial institutions typically include operational risks potentially causing damages to physical assets, and interruptions in service and supply chain. Indirect risks, on the other hand, include liquidity, credit, market and claim risks faced by financial institutions due to the risk exposures of clients and investors. That companies and consumers suffering losses intensively claim their savings and/or insurance compensations from financial institutions, NPL rises due to deterioration in repayment capacities of borrowers, and dramatic decreases in values of collaterals, stocks, debt instruments and commodities are among the most common indirect risks.

Transition to a sustainable and green economy also creates major opportunities for the financial sector. Foremost among such opportunities is the large amount of additional financing need arising from the investments necessary for the transition to a sustainable economy. According to the estimations by the OECD, attaining non-climate-related Sustainable Development Goals requires an annual investment of USD 6.3 trillion in energy, transportation, water and telecommunication until 2030. With the addition of investments on renewable energy for preventing climate change, annual investment gap reaches USD 6.9 trillion[6]. Comparing with the global infrastructure investment which is already at USD 3-4 trillion, additional fund requirement means a significant increase in demand for the financial sector.

In addition to the increased demand for financing, sustainability-themed international funds also provide major opportunities. Among them Green Climate Fund, which is the biggest finance source on global scale, established within the scope of the UN Framework Convention on Climate Change in 2010 and allocated to developing countries to help them finance the process of adapting to climate change, is noteworthy.

Furthermore, other opportunities that should be taken into account by the financial sector include new markets, tools and products such as the carbon emission market, additional fund and liquidity opportunities through specific products designed for social segments that are sensitive to environmental and social issues, and possible incentives to be provided by the public sector.

On the other hand, with potential impacts of sustainability-related risks and opportunities on financial institutions as well as economic and financial systems becoming more evident in recent years, remarkable international initiatives emerged to define, monitor, report, analyze and manage effectively such risks and opportunities.

[6] OECD: Investing in Climate, Investing in Growth, Paris, (Revised version 2019)

In this context, UN Principles for Responsible Investment, which were established by UN in 2006 as an international initiative, set forth basic principles in order to improve the global financial system. Also known as environmental, social and governance (ESG) principles, these contribute to the development of ecological financial tools.

Financial Stability Board (FSB) operating under the G20 platform is one of the major initiatives in this field. Based on the fact that financial markets need clear, comprehensive and high-quality data on climate change, "Task Force on Climate-Related Financial Disclosures" (TCFD) established by FSB in 2015 issued a Recommendations Report in 2017. The recommendations in the report envisage to generate climate change-related information that can be integrated into the conventional financial reporting systems by organizations operating in any sector and country. The recommendations structured on five pillars, namely governance, strategy, risk management, and metrics and targets, have constituted a major reference in establishing national and international standards, and have been already adopted by more than 2,700 institutions from 89 countries as of the end of 2021[7].

Another international entity, which has taken initiative to create more formal standards for sustainability reporting in line with the TCFD recommendations, is the International Financial Reporting Standards (IFRS) Foundation. In 2021, IFRS Foundation established the independent International Sustainability Standards Board (ISSB) to define the standards for meeting information requirements of investors in the field of sustainability. The Technical Readiness Working Group established to offer technical recommendations to ISSB has issued "General Requirements for Disclosure of Sustainability-related Financial Information Prototype" and "Climate-related Disclosure Prototype" in 2021. These prototypes do not constitute standards and aim at providing information to the market for the possible course to be taken.

One of the most inclusive and influential international initiatives on environmental and climate-related risks is the "Network for Greening the Financial System" (NGFS) established in 2018. Aiming to contribute to the management of environmental and climate-related risks in the financial sector, share best practices and mobilize the financial system for transition to a sustainable economy, the NFGS is comprised of 105 central banks and financial regulatory authorities from various countries, and 16 observers as of December 2021. NGFS operates through five workstreams on microprudential/supervision, macrofinancial, scaling up green finance, bridging the data gaps and research. Working recently on topics such as climate scenarios, practices of the financial institutions, effects of climate change on macroeconomic and financial stability and case studies on environmental risk analysis methods, NGFS operates as a leading platform for data sharing and cooperation in green finance field[8].

Another international initiative is "Task Force on Climate-related Financial Risks" (TFCR) established by the Basel Committee on Banking Supervision (BCBS) in 2020. TFCR works on climate-related financial risks on behalf of BCBS with the main tasks of stocktaking existing initiatives, producing analytical reports and developing effective supervisory practices to mitigate climate-related financial risks. Within this scope, TFCR works on detecting and eliminating the deficiencies concerning climate-related financial risks under Pillar 1 (minimum capital requirements), Pillar 2 (supervisory review) and Pillar 3 (market discipline). The TFCR

[7] TCFD: TCFD Supporters Around the World (https://www.fsb-tcfd.org/)

[8] https://www.ngfs.net/en

issued “Principles for the Effective Management and Supervision of Climate-related Financial Risks” as a consultative document in November 2021.

1.3. Developments and Current Situation in Turkey

The Turkish economy and finance system is heavily dependent on foreign energy resources and has secured a stable growth in the 20 years following the crisis in 2001. This has led to an increase in the use of fossil fuels, including high-emission local energy resources such as coal due to an increased demand by the industries creating high emissions and additional energy needs.

Although Turkey was not a signatory party of the Paris Agreement, it submitted the Intended Nationally Determined Contribution (INDC) to the UN Framework Convention Secretariat in September 30, 2015. In line with the policies and measures regarding energy, industry, transport, buildings and urban transformation, agriculture, waste and forestry, a reduction in GHG emissions up to 21% from the business as usual level by 2030 was foreseen[9]. Furthermore, Turkey signed the Paris Agreement with 175 other countries at the High-level Signature Ceremony in New York on April 22, 2016. Finally, Law on Approval of Paris Agreement was accepted by the Turkish Grand National Assembly on October 6, 2021.

Major progress has been made in recent years in Turkey on renewable energy, energy efficiency and waste management, and the share of renewable energy in installed capacity reached almost fifty percent[10]. However, for effective implementation of the plans and policies listed in the Turkey’s INDC, the existence of a financial sector that can effectively manage climate-related risks and opportunities and provide the necessary financing towards sustainable investments and projects at favorable terms is of critical importance.

In this process, particularly Turkish banking sector which aims to assess the risks and opportunities effectively, and by force of social responsibility and international integration, has created awareness, developed strategy and policies, built capacity and shown good practices on environmental and social sustainability since 2000s.

Major developments regarding sustainability in the Turkish banking sector are as follows:

- In 2014, the Banks Association of Turkey (BAT) issued “Sustainability Guidelines for the Banking Sector”. The Guidelines was updated in March 2021.
- In 2014, Borsa Istanbul (BIST) created the “BIST Sustainability Index”. The Index currently includes 9 banks with a total market share of nearly 63%.
- In 2016, Turkish banks issued the first green bond in compliance with international standards.

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[9] Intended National Contributions Declaration of Turkish Republic (2015) (https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Turkey%20First/The_INDC_of_TURKEY_v.15.19.30.pdf)

[10] Energy Market Regulatory Authority: Electricity Market Industry Report, September 2021 (https://www.epdk.gov.tr/Detay/Icerik/3-0-23/elektrikaylik-sektor-raporlar)

- In 2017, 8 UN Global Compact member banks signed the "*Global Compact Turkey – Declaration of Sustainable Finance*".
- Since 2017, 5 banks became supporters of the TCFD recommendations.
- Since 2020, 8 banks have made integrated reporting that includes both financial and sustainability perspectives.
- In 2021, the first "Climate Risks Report" was issued in line with the TCFD recommendations.
- In 2021, the banks issued sustainable subordinated lease certificates and partnership green lease certificates for the first time.

Banks' awareness on environmental and social risk management has enhanced, and many banks have started developing practices and building capacity. 15 banks with a total market share of 62% have established environmental and social risk assessment systems to evaluate risks based on projects and clients. Certain banks, especially large-scale banks, are carrying out analyses on the portfolio level such as scoring, heat maps, stress tests, and using case analysis, or striving to build the capacity required to do so.

Turkish banking sector faces climate-related physical risks particularly in relation to hydroelectricity, infrastructure of power distribution and transportation, agriculture, food sector and connected industries. Similarly, the sector is exposed to significant transition risks through fossil fuel-based energy production, cement, iron and steel, aluminum, fertilizer, transportation, construction and connected sectors.

In green finance, Turkish banking sector extends remarkable amount of loans for renewable energy, which is critical for the struggle against climate change. Total funds provided for renewable energy reached TL 200 billion (USD 22.6 billion) as of September 2021. This amount accounts for 4.9% of the total loans and 2.8% of total assets of the Turkish banking sector.

In parallel with the financing provided for sustainability, efforts are increasing to create necessary funds for this financing. These mainly include funds received for green projects from international finance institutions and multilateral development banks, and sustainability-related (green, social, etc.) bonds/sukuk issuances. For instance, total amount of issuances by the banking sector since 2016 reached USD 4 billion as of December 2021.

In general, it is difficult to state that the Turkish banking sector has a homogeneous structure in terms of awareness, capacity and practices in the sustainability field. In this context, Turkish banks can be classified under three groups according to their environmental and social sustainability capacities and activities.

The banks in the first group that are generally large-scaled and have close-relationships with international markets have institutional capacity and are considerably active in environmental and social sustainability. These banks, which have a total market share of 60%, are enable to build the required capacity thanks to their scales, and deem sustainability as a matter of reputation and an opportunity for getting international funds and making new investments.

The banks in the second group are medium and small-scaled banks with a total market share of 15%. Although these banks have a certain level of knowledge and awareness on environmental and social sustainability, they show a partial presence and generally limit their practices to the process of obtaining funds from international institutions. The banks in the third group, which are also mostly medium and small-scaled banks with a total market share of 25%, have not established institutional capacity yet and do not have any noteworthy activities in this area.

In addition to these efforts in the sector, the Banking Regulation and Supervision Agency also took some guiding and encouraging steps to increase awareness and knowledge, and develop institutional capacity on sustainability. Within this scope, BRSA:

- in 2015, became member of IFC “Sustainable Banking & Finance Network” (SBFN),
- in 2018, conducted the “Turkish Banking Sector Sustainability Survey”,
- in 2019, raised the loan-to-value (LTV) ratio to encourage loans for housings with high energy performance,
- in 2020, became member of Basel Committee's “Task Force on Climate-related Financial Risks” (TCFR),
- in 2021, issued the “Guideline on Loan Origination and Monitoring Processes” to clarify the expectations from the banks regarding the development of policies on climate risks and environmentally sustainable lending,
- In 2021, created the “Sustainable Banking Work Group,”
- In 2021, became member of the “Network for Greening the Financial System” (NGFS).

In addition, with the amendment made in the Corporate Governance Communiqué in 2020 by the Capital Markets Board, the "Sustainability Principles Compliance Framework" has been established and it has been made compulsory for publicly-listed companies to report whether they comply with these voluntary framework based on principle of "comply or explain". In this scope, 12 publicly-listed banks with a total sector share of 62% started reporting as of 2021.

2. Challenges and Need for Action

2.1. Barriers to Development

Despite the practices in the sector and the steps taken by the authorities, it is seen that sustainable finance in Turkey has not progressed in parallel with the level of development, diversity and deepness of the banking sector. The barriers to development can be grouped in two categories, as structural and institutional.

Structural barriers basically include macroeconomic uncertainties, low national savings and short-term funding structure of the banking sector. These challenges restrict the banks in establishing institutional capacity for sustainability, having access to long-term funds and therefore offering long-term funds required for sustainable investments.

The foremost institutional barrier is the lack of a green classification (taxonomy) for economic activities. The lack of a green classification prevents labeling of assets and liabilities as well as financial instruments in terms of greenness/sustainability, limits the capacity to generate consistent and reliable data, and makes assessments and policy design difficult.

Besides the taxonomy problem, there are no standardized reporting practices for sustainability in corporate sector, especially SMEs, and there is no data generation on carbon emissions. These deficiencies create a data gap for the financial sector and a major challenge in terms of risk management, funding and product development.

Another problem closely related with classification and transparency issues is the under-development of the verification practices. Lack of widespread, reliable (accredited) and accessible second-party opinion providers to verify the reportings made by the corporate and financial institutions in accordance with a national green taxonomy makes it difficult for green finance to operate and reduces the international comparability and recognition of the practices.

Non-existence of a carbon market in Turkey where carbon emissions are priced is one of the major problems. The fact that carbon cannot be priced makes it difficult to quantify externalities and creates the need to use prices formed in other countries under certain assumptions.

The difficulties in following and internalizing the advanced approaches and methodologies that are newly developing and taking shape at the global level in the field of risk management also constitute one of the important problems. It is important for both banks and authorities to establish the internal capacity required by such approaches and methodologies.

Finally, the absence of a regulatory and supervisory framework on sustainability prevents the formation of minimum standards in practices, increases uncertainty and information pollution, and may lead to greenwashing[11] practices.

2.2. Need for Action

Despite these briefly mentioned problems and difficulties, developing sustainable finance in Turkey has gained special importance and urgency.

Major reasons are as follows:

- Climate change-related physical risks becoming more and more apparent every day and transition risks caused by transition to a low-carbon economy have certain effects on corporate and financial sectors in Turkey. Besides physical risks whose effects on infrastructure, agriculture, hydroelectricity and power distribution systems are particularly visible, the transition risks also have the potential to create major problems. For instance, considering Turkey makes half of its exports to the EU, the carbon border adjustment mechanism which is envisaged by the "EU Green Deal" issued in 2019 and will be implemented starting from 2026 constitutes a major risk for the economy.
- Environmental, social and governance (ESG) criteria are increasingly being taken into account in global investment strategies, while compliance with the criteria facilitates access to funds and can have a positive impact on borrowing costs. For example, the size of investment funds taking into account the ESG criteria has tripled globally since 2015. It is expected that environmental and social sustainability criteria will become a prerequisite for access to finance in the very near future, and it will increasingly become more difficult for companies that do not have sufficient performance in this field to access finance in national and international markets.

[11] Misleading activities by a company or an organization to make the public believe that it is doing more to protect the environment than it actually does.

- A financial sector capable of effectively managing climate-related risks and opportunities and providing the necessary financing for sustainable investments and projects is of critical importance for accomplishing the commitments, plans and policies committed by Turkey under the Paris Agreement.
- Turkey is heavily foreign-dependent for traditional fossil-based energy resources, and oil and natural gas imports account for a major share in balance-of-payments deficit of Turkish economy. Recent fluctuations in the international prices of these energy resources creates a huge burden and a major risk for the national economy. Therefore, renewable energy and energy efficiency investments are of critical importance for the country's energy security and economic stability.

Having regard to all these reasons, the “Green Deal Action Plan” which was made effective with the Presidential Communiqué No. 2021/15 (Official Gazette 31543, July 16, 2021) and aims at developing an ecosystem to support the green finance (Target No: 3.2.) has foreseen that the BRSA sets forth a road map for developing sustainable banking (Action 3.2.5).

2.3. SWOT Analysis of the Turkish Banking Sector

Strengths

- Sound financial structure of the sector
- Strong prudential regulatory and supervisory framework
- Developed human resources and technology infrastructure
- Experience gained so far in the field of sustainability
- High level of integration with international markets

Weaknesses

- Short-term funding structure of the sector
- Deficiencies in definition and classification of green assets due to lack of taxonomy
- The need for appropriate, comparable and reliable data
- Non-existence of generally-accepted standards on regulation and supervision for sustainable finance
- Lack of analytical capacity on climate-related issues

Opportunities

- Additional investment and financing need for green transformation process
- New markets and financial instruments which will emerge during the transition process
- Foreign trade advantages of geographical proximity to EU
- Public and international funds to be allocated for the transition process
- Incentives from public sources that may be on the agenda

Threats

- Global macroeconomic uncertainties
- The possibility that the EU Green Deal and similar regulations implemented by other countries will enter into force faster than expected
- Failure to enter into force on time the legal regulations required for the reduction of greenhouse gas emissions
- Lack of adequate external financing at favorable terms for the de-carbonization of the real sector
- Possibility of deterioration in the asset quality of the banking sector due to high carbon taxes and production quotas

3. Looking Ahead

Having regard to the environmental analysis presented, the challenges and the need for action and the SWOT analysis, the sustainability vision for the Turkish banking sector, the mission of the Banking Regulation and Supervision Agency in this regard, and its goals and targets are determined as following:

3.1. Vision

Sustainable banking vision is a banking sector that effectively manages the environmental and social risks and opportunities including climate change, and provides the financing needed for the transition to a low-carbon economy on favorable terms.

3.2. Mission

The mission of the Banking Regulation and Supervision Agency in sustainable banking is to minimize the environmental and social risks that may threaten financial stability due to their effects on the banking sector, and to play a guiding, facilitating, encouraging and educational role for the sector in financing the transition to a low carbon economy.

3.3. Goals and Targets

In order to realize the sustainable banking vision, three strategic goals that are closely related and supporting each other should be focused on (Box):

One of the most important dimensions of sustainable finance is that the risks related to sustainability, especially climate change, can be understood, defined, analyzed, monitored and effectively managed by all parties. Effective management and supervision of the sustainability-related risks, both at individual banks and at the banking system level, will not only contribute to financial stability, but will also increase the banking sector's ability to provide sustainability-oriented financing. Based on this fact and in parallel with international trends, the first strategic goal of the sustainable banking strategy is defined as **effective management and supervision of climate-related financial risks.** In achieving this goal, creating the data infrastructure required for risk management, increasing the banks' risk management capacity and strengthening the supervision and monitoring framework are of critical importance.

Improving the financing needed for the transition to a sustainable economy constitutes the second strategic goal. Effectively financing the transition to a sustainable and low-carbon economy will also potentially support long-term economic and financial stability by reducing the risks faced by the corporate and financial sectors. In order to achieve this goal, it is aimed to promote sustainable finance through various mechanisms and to create a favorable environment for banks to access international funds for sustainability purposes more easily.

The multidimensional nature of the sustainability, which concerns many different disciplines and sectors, requires special efforts to ensure coordination among all relevant parties and to develop a close understanding and cooperation. For this reason, **the development of cooperation with the relevant parties** has been determined as the third strategic goal supporting the two aforementioned strategic goals. To that end, joint works in close cooperation with the relevant parties are planned to be conducted.

Box: Goals & Targets of Sustainable Banking Strategy

Goal 1 - Effective Management of Climate-related Financial Risks

Target 1.1. A data infrastructure with the required scope and quality will be created to analyze climate-related financial risks.
Target 1.2. The climate risk management capacity of banks will be increased.
Target 1.3. The auditing and supervision framework will be strengthened to ensure that the climate risks are effectively managed by the banks.

Goal 2 - Developing Sustainable Finance Flows

Target 2.1. Sustainable loans will be encouraged.
Target 2.2. A favorable environment will be created for banks to have easier access to international funds for sustainability purposes.
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Goal 3 – Improving Cooperation Between Relevant Parties on Sustainable Finance

Target 3.1. It will be ensured that the relevant parties conduct joint studies in the field of sustainability.

4. Action Plan (2022-2025)

The Sustainable Banking Action Plan (2022-2025) consists of 21 actions under 3 strategic goals and 6 targets (Annex).

The Action Plan covers the period from 2022 to 2025, in order to ensure that the banking sector achieves the necessary adaptation before 2026, an important transition date for Turkey's economic and financial system, when the carbon border adjustment mechanism will begin to create financial burden in accordance with the “EU Green Deal” and the “Fit for 55 Package”.

The actions will be carried out with the close cooperation and support of all parties. The dates included in the plan are the deadlines for the actions, and it is considered that it would be beneficial to initiate the said actions immediately, since they often require long-term planning, preparation and work.

The relevant authorities and the public will be informed regarding the works and developments achieved on a quarterly and yearly basis, respectively.

Considering the dynamic and very comprehensive nature of the sustainable finance, the Strategy and Action Plan can be updated, if necessary, within the 4-year period.

Annex: Sustainable Banking Action Plan (2022-2025)

Target	Action	Calendar[12]	Responsible / Coordinator Organization	Organizations to Collaborate With
Goal 1 - Effective Management of Climate-related Financial Risks				
Target 1.1. A data infrastructure with the required scope and quality will be created to analyze climate-related financial risks.	**Action 1.1.1.** Active participation in preparation of a national green taxonomy will be ensured.	December 2023	BRSA	Ministry of Environment, Urbanization and Climate Change, CBRT, CMB, BAT, PBAT
	Action 1.1.2. In order to analyze climate-related financial risks on the basis of each sector, sub-sector, location and firm, to the extent that it is appropriate and material, data requirements will be set forth.	December 2022	BRSA	BAT, PBAT
	Action 1.1.3. Works will be carried out in order for banks to obtain the sustainability principles compliance reports and verified data on carbon emission levels from loan customer firms.	December 2024	BAT, PBAT	Ministry of Environment, Urbanization and Climate Change, Ministry of Trade, TOBB, BRSA
	Action 1.1.4. Efforts will be made to ensure that banks take into account their existing data and make such data usable in climate risk analyzes under reasonable assumptions.	December 2022	BRSA	BAT, PBAT, CBRT

[12] As the completion dates for the preparation works towards the relevant and needed international standards and national regulations are not certain, the deadlines in the Action Plan have been determined as the completion dates as late as possible. Actions may be completed earlier depending on the creation of relevant preconditions.

Target 1.2. The banks' climate risk management capacity will be increased.	**Action 1.2.1.** It will be ensured that banks create infrastructure for corporate structuring, policy determination, risk analysis and reporting towards managing climate-related risks.	December 2023	BRSA	CBRT, CMB, BAT, PBAT
	Action 1.2.2. It will be ensured that banks establish risk management plans for the management of risks stemming from climate change, the elimination of data gaps, and the analysis of physical risks and transition risks.	December 2023	BRSA	BAT, PBAT
	Action 1.2.3. It will be ensured that the banks regularly asses and analyze the climate-related risks and opportunities they are facing.	December 2023	BRSA	BAT, PBAT
Target 1.3. The auditing and supervision framework will be strengthened to ensure that the climate risks are effectively managed by the banks.	**Action 1.3.1.** Active participation in international platforms and initiatives working on management of climate-related financial risks will be ensured.	December 2025	BRSA, CBRT	BAT, PBAT
	Action 1.3.2. Banking Data Transfer System will be reviewed and strengthened to include climate-related financial data.	December 2023	BRSA	CBRT, BAT, PBAT
	Action 1.3.3. Works will be carried out to obtain data on meteorological and environmental events, which may affect the asset quality and financial structure of the banks.	December 2023	BRSA	General Directorate of Meteorology, Ministry of Environment, Urbanization and Climate Change, BAT, PBAT
	Action 1.3.4. A stress test/scenario analysis infrastructure will be established within the BRSA and will be put into practice.	December 2025	BRSA	BAT, PBAT

Goal 2 – Developing Sustainable Finance Flows				
Target 2.1. Sustainable loans will be encouraged.	**Action 2.1.1.** Maintaining the effectiveness of the micro-prudential regulatory framework, incentive mechanisms for financing sustainability will be explored in line with international standards and trends.	December 2025	BRSA	Ministry of Treasury and Finance, CBRT,CMB, BAT, PBAT, BIST
	Action 2.1.2. Considering national and international regulations and standards, efforts will be made to standardize the policies implemented by banks to reduce activities with high greenhouse gas emissions.	December 2025	BRSA	Ministry of Environment, Urbanization and Climate Change, Ministry of Trade, CBRT, BAT, PBAT
	Action 2.1.3. The Opportunities for the development of social finance activities will be explored, and efforts will be made to increase social finance practices within the scope of participation finance system and participation fintechs.	December 2024	BRSA	Ministry of Family and Social Services, CMB, PBAT, BAT, BIST
	Action 2.1.4. Good practices developed by banks in the field of sustainable finance will be supported and efforts will be made to make them widespread throughout the sector.	December 2025	BAT, PBAT	BRSA, CBRT, CMB, BIST
Target 2.2. A favorable environment will be created for banks to have easier access	**Action 2.2.1.** The regulatory infrastructure will be strengthened to standardize and mainstream ESG practices in the banking sector in line with internationally accepted approaches.	December 2025	BRSA	Ministry of Treasury and Finance, Ministry of Environment, Urbanization and Climate Change, Ministry of Trade,

to international funds for sustainability purposes.				CBRT, CMB, BAT, PBAT, BIST
	Action 2.2.2. Efforts will be made to standardize second-party opinion services for verifying sustainability activities to prevent greenwashing activities.	December 2024	BRSA	Ministry of Treasury and Finance, Ministry of Environment, Urbanization and Climate Change, Ministry of Trade, CBRT, CMB, BAT, PBAT, BIST

Goal 3 – Improving Cooperation Between Relevant Parties on Sustainable Finance				
Target 3.1. It will be ensured that the relevant parties conduct joint studies in the field of sustainability.	**Action 3.1.1.** Working groups will be established to solve priority issues with the participation of the banking sector representatives.	June 2022	BAT, PBAT	BRSA, CBRT
	Action 3.1.2. Within the scope of the Green Deal Action Plan, communication and cooperation between the relevant public agencies and the banking sector will be strengthened.	December 2025	BAT, PBAT	Ministry of Treasury and Finance, Ministry of Environment, Urbanization and Climate Change, Ministry of Trade, BRSA, CBRT, CMB, BIST
	Action 3.1.3. Cooperation opportunities between the corporate sector chambers, stock exchanges and other associations and the banking sector will be increased.	December 2025	BAT, PBAT	Ministry of Trade, TOBB, TIM
	Action 3.1.4. Briefing activities for corporate sector firms and especially SMEs on the sustainable finance opportunities, conditions and challenges will be supported.	December 2025	BAT, PBAT	Ministry of Trade, TOBB, KOSGEB, TIM