



**SAARCFINANCE Symposium – May 3, 2023
Islamabad**



Climate Change and Green Financing: Initiatives & Outlook in South Asia

Country Paper

PAKISTAN

Table of Contents

1. Introduction	1
1.1 Climate Change Implications on the Financial System	4
1.2 Overview of the impacts of Climate Change in Pakistan.....	6
1.2.2 Pakistan Green House Gas emissions Profile.....	7
2. Green Initiatives of Pakistan	8
2.1 Government of Pakistan’s Green Initiatives	8
2.1.1 Initiatives by Alternative Energy Development Board.....	8
2.1.2 Initiatives by National Energy Efficiency and Conservation Authority	9
2.1.3 Initiatives by National Electric Power Regulatory Authority (NEPRA).....	10
2.2 Financial Regulators’ Green Initiatives.....	10
2.2.1 State Bank of Pakistan’s Green and Sustainable Initiatives	10
2.2.2 Securities & Exchange Commission of Pakistan Green Initiatives	13
3. Challenges for Greening the Financial System.....	14
4. Way forward for Scaling up Green Finance in Pakistan.....	14

1. Introduction

In recent times, climate change has become a significant threat to sustainable development. Its adverse impacts are widespread, pervasive, interconnected, and sometimes irreversible on water, agriculture and food security, human health, coastal zones and marine ecosystems.¹ Rising temperatures, more frequent and severe weather events are already affecting these systems and exacerbating their existing challenges. The World Economic Forum's Global Risk Report 2023 notes climate change as one of the most eminent long-term risks facing the world.² The report further avers that without significant policy change or clean investments, climate change will accelerate ecosystem collapse, threaten food supplies, intensify the impacts of natural disasters, and limit further climate risk mitigation progress.

Global efforts to combat climate change have taken various forms over the years. One of the most important initiatives is the establishment of United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The UNFCCC aims to promote international cooperation on climate change and facilitates the implementation of measures to reduce greenhouse gas emissions and adapt to the impacts of climate change. The Paris Agreement, which was adopted in 2015 under the UNFCCC, is a landmark agreement that sets a global framework for countries to take action to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C. As per Paris Agreement, individual countries have set targets and introduced multiple initiatives to reduce greenhouse gas emissions, including investing in renewable energy, improving energy efficiency, and promoting sustainable transportation.

In this context, green financing has emerged as a crucial means of driving climate change mitigation and adaptation efforts. According to the United Nations, an annual investment of USD \$ 3-5 trillion is required to turn the Sustainable Development Goals (SDGs) into achievable targets and meet climate objectives.³ Therefore, the international community has recognized the importance of green financing with initiatives such as the Green Climate Fund and Global Environment Facility.

1.1 Climate Change Implications on the Financial System

Apart from its impacts on the overall economy, climate change also raises substantial concerns to the financial system stability. These include disruptions from frequent occurrences of extreme weather events and the risks related to policy measures taken for transitioning to a low-carbon, net-zero economy. These impacts can have far-reaching effects throughout the financial system, affecting banks, businesses, and insurers etc. potentially leading to systemic risk. Climate change affects the financial system through two main channels;

- **Physical risks**- the damages caused by adverse climate related events to the assets of economic agents
- **Transition risks**- risks emanating from changes in the climate policy, technology, consumer and investor market sentiments because of transition to a low carbon and environmental friendly economy ⁴ (see **Box 1** for details of Physical risks and Transition risks)

¹ [Pakistan Country Programme Report - GCF \(2017\)](#)

² [Global Risks Report - World Economic Forum \(2023\)](#)

³ [Green Finance Frontiers in Pakistan - SDPI \(2023\)](#)

⁴ [Climate Change, Central Banks and Financial Risk – IMF F&D | DECEMBER 2019](#)

Regulatory policies aimed at reducing carbon emissions are likely to change behavior of organizations through changes in their production, sales, and profitability, subsequently affecting credit worthiness of firms. Empirical evidence suggests, *“high carbon footprints tend to have lower credit ratings and higher yield spreads, particularly located in a state with stringent regulatory enforcement.”*⁵

This can impact financial institutions that have lent to these firms, as they may be exposed to the risk of loan defaults and other financial issues. In the wake of recent climate catastrophes, a shift in consumers’ and investors’ preferences is being witnessed globally towards greener and climate-friendly products and services. In this context, firms that are seen as climate ‘laggards’ may see the future demand of their products diminish.

The extent of the risks that Financial Institutions (FIs) may face due to climate change is difficult to predict. However, it is certain that extreme weather events will occur more frequently and intensely, and average temperatures will rise, potentially decreasing the value of banks’ assets and income sources.⁶ Climate change risks can turn into conventional financial risk categories for FIs. The factors driving climate risk can elevate banks’ credit risk by affecting their borrowers and counterparts. Climate change can lead to a higher likelihood of loan defaults and non-payment, resulting in increased credit risk for banks. Additionally, climate change can also alter the value and prices of financial assets, leading to market risk. Moreover, climate change can also pose liquidity risk to banks by creating situations where there is a sudden and unexpected withdrawal of deposits, increase in funding costs, and discontinuing of credit or liquidity lines. If the banks are not well equipped to handle such situations, it could lead to systemic risk.

Operational risk is another potential area of concern for financial institutions due to climate change. Disruptions in the bank’s operations due to extreme weather events or other climate related factors could limit their ability to conduct business and meet their obligations.

Finally, climate change can also expose financial institutions to legal and reputational risks. As environmental concerns grow, there can be an increase in climate-related legal proceedings and a

Box 1: Brief Details of Physical Risks & Transition Risk

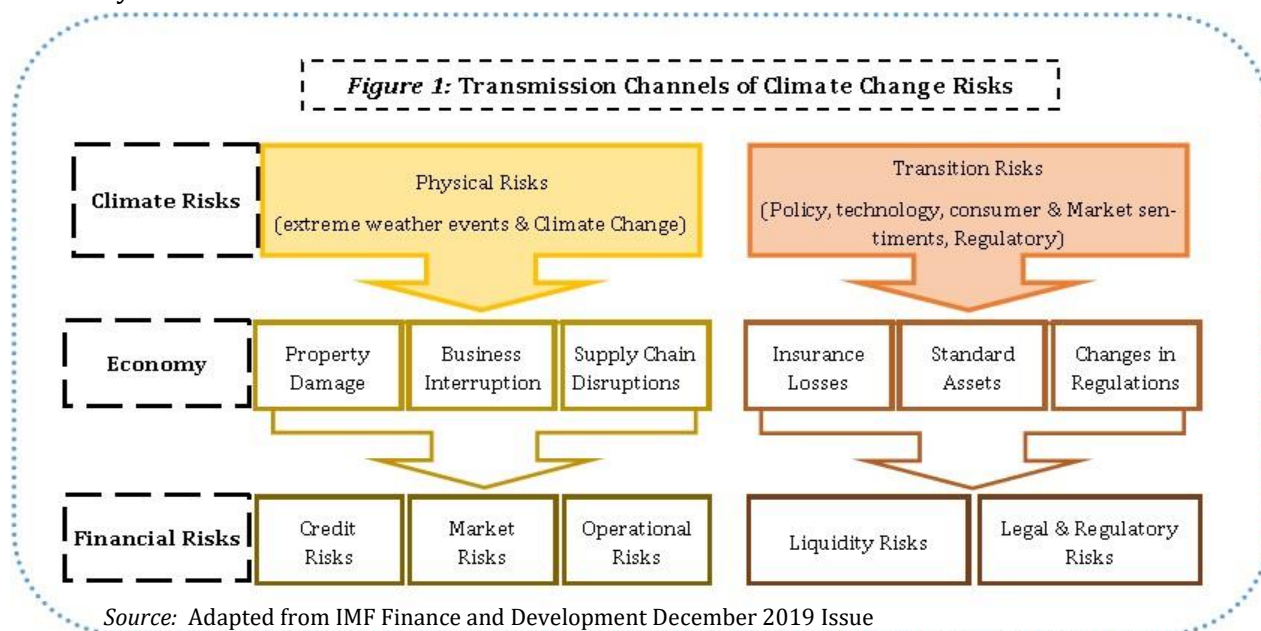
Physical Risks: Physical risks implies the damages to the assets of economic agents caused by adverse climate related weather events. This physical impairment may cascade into financial losses for the financial institutions. For example, extreme weather events such as hurricanes, floods, and other natural disasters can cause harm to property and infrastructure, leading to financial losses for businesses and individuals. Climate change events can decrease the value of the affected assets and hamper the borrower’s ability to repay – leading to loan defaults and other financial problems for banks and other lenders. Similarly, rising sea levels and other climate-related changes can also lead to defacement of coastal properties and other assets, which can have an impact on the value of real estate portfolios and other investments. These risks are exacerbated in case financial Institutions use the same assets as collateral to secure their exposures.

Transition Risks: Transition risks emanate from changes in policies and market sentiments owing to transition to a low carbon and environmental friendly economy. As a result of transition policies, the carbon intensive firms could see their earnings decline, businesses disrupted, and funding costs increased. For financial institutions, transition risks may affect their asset side, which could lead to losses on exposures against these carbon intensive firms.

⁵Seltzer, Lee and Starks, Laura T. and Zhu, Qifei, Climate Regulatory Risks and Corporate Bonds (April 20, 2022). Nanyang Business School Research Paper No. 20-05, FRB of New York Staff Report No. 1014, Available at SSRN: <https://ssrn.com/abstract=3563271>

⁶[Climate-related risk drivers and their transmission channels - Basel Committee on Banking Supervision \(2021\)](#)

push to divest from carbon-intensive industries.⁷ Financial institutions that are not aligned with these concerns could face significant reputational damage, leading to a decline in business and ultimately financial loss.







It is important to note that these transmission channels are not exhaustive and may vary depending on the specific industry or company. Additionally, some risks may be interconnected, and the impacts of climate change may manifest differently in different regions of the world.

1.2 Overview of the impacts of Climate Change in Pakistan

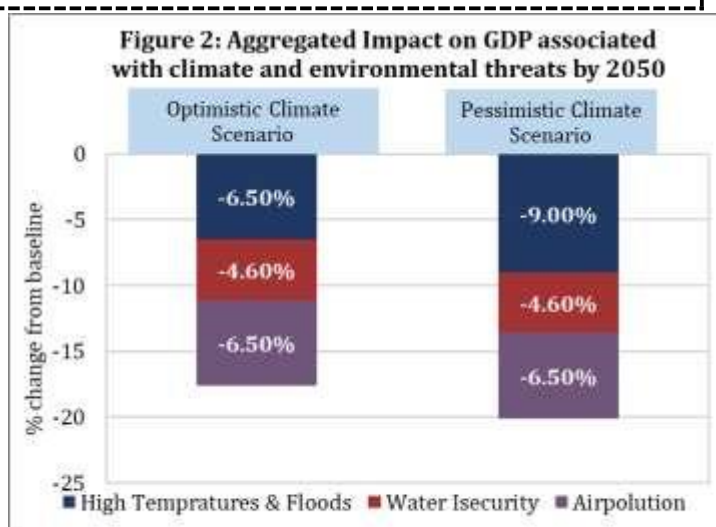
Climate change does have the potential to impact all countries around the globe. However, developing countries are much more vulnerable to climate change than the developed world due to lack of capacity and technical infrastructure to cope with extreme weather-related events. Pakistan, like other developing countries, has been a victim of a series of extreme weather-related catastrophes such as severe droughts (1998-2002), massive flooding (2010, 2020, and 2022), extreme heat waves (2015), heavy rainfalls (2020), land sliding and glacier melting (see **Box 2** for Key Climate Change Threats to Pakistan).

⁷ [Disinvestment and Stranded Assets in Low-carbon Transition - OECD \(2015\)](#)

Box – 2: Key Climate Change Threats to Pakistan

	Water Resources – Pakistan may face absolute water scarcity by 2025. Since independence, the availability of water in cubic meters per capita has decreased from 5,200 cubic meters per capita to 1,000 cubic meters per capita; depicting a decline of more than 400%.
	Agriculture and food security – Pakistan’s agriculture is highly vulnerable to climate change. With just a 1C rise in temperature, wheat yield in Pakistan is estimated to decline by 6-9%.
	Human Health - Changes in precipitation patterns due to the impact of climate change on water availability and quality has led to the spread of waterborne diseases such as Malaria, Dengue, Typhoid, and Cholera. An increase in the epidemic potential of 12-27% for malaria and 31-47 % for dengue is anticipated because of climate change in Pakistan.
	Coastal zones, terrestrial and marine ecosystems - Climate change will have a profound effect on the future distribution, productivity, and health of forests. The carbon sinks are degrading fast as Pakistan has a low forest cover (4.5%) with a high rate of deforestation of about 0.2-0.4% per annum.

These climate change related events have resulted in a heavy toll on both life and property and adversely affected the country’s economic growth. According to the Pakistan Economic Survey (2021), the total economic cost of Pakistan to climate change is estimated to range from US \$1.3 to US \$1.9 billion, which is equivalent to 0.5% to 0.7% of GDP.⁸ Further, the World Bank’s Country Climate and Development Report (CCDR) for Pakistan has estimated that the combined risks of extreme climate-related events, environmental degradation, and air pollution are expected to reduce Pakistan’s GDP by at least 18% to 20% by 2050 (Figure 2).



Source: World Bank Country Climate Development Report 2022

1.2.2 Pakistan Green House Gas emissions Profile

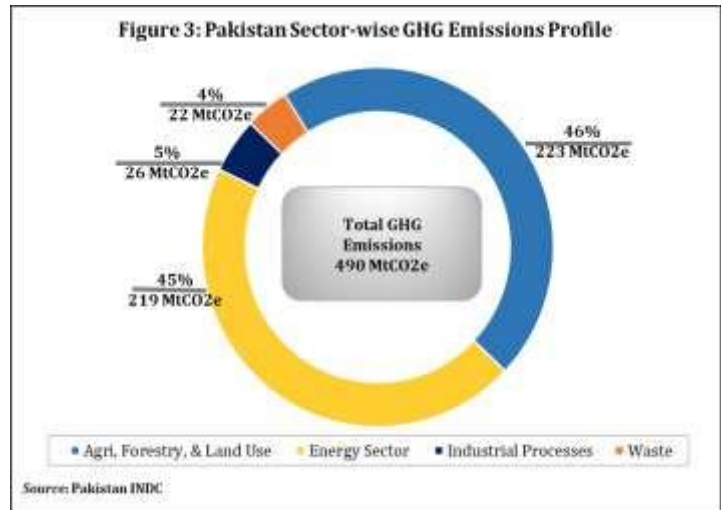
Greenhouse Gas (GHG) emissions are the major cause of climate change, as they trap and hold heat in the atmosphere. There is a consensus that human activities are responsible for the substantial increase in GHG emissions and the consequent rise in global temperatures. According to the report by Intergovernmental Panel on Climate Change (IPCC), the human induced warming has already reached about 1.0°C above pre-industrial levels, and at the current warming rate, it

⁸ Chapter 16 - Pakistan Economic Survey (2021)

is expected to reach the level of 1.5°C in around 2040.⁹ The escalating toll of climate change has prompted the global community to undertake collective efforts to combat climate change.

However, it is pertinent to note that Pakistan's contribution to the overall GHG emissions is only 0.9% of the global GHG emissions because of its topography and geography.

Despite minimal contribution, Pakistan has been ranked among the top 10 most vulnerable countries to the impacts of climate change.¹⁰ Pakistan's GHG emissions are concentrated in four sectors with (i) Agriculture, Forestry, and Land Use contributing 223.45, (ii) the energy sector 218.94 (iii) Industrial processes 25.76, and iv) waste 21.72 MtCO₂e equivalent, respectively **(Figure 3)**.¹¹



Despite the adverse impact of climate change, GHG emissions are likely to grow in the coming years due to rapid urbanization and increasing population growth leading to high-energy demand in the future among other things. In view of the foregoing, effective climate mitigation and adaptation strategies¹² are required to limit the growth of GHG emissions and ensure longterm sustainable development for Pakistan.

2. Green Initiatives of Pakistan

Cognizant to the impacts of climate change, Government and financial sector regulators in Pakistan have taken several green initiatives to address the challenges posed by climate change and promote sustainable development. These initiatives are aligned with the country's commitments under international agreements such as the Paris Agreement and the United Nations' Sustainable Development Goals (SDGs). The below section provides an overview of government and financial sector regulators' initiatives to reduce greenhouse gas emissions, enhance climate resilience, and promote sustainable development in the country.

2.1 Government of Pakistan's Green Initiatives

Government of Pakistan has been endeavoring to bring in transformational changes in power system in order to ensure affordability, sustainability, energy security and energy access for all. In this regard, Government is emphasizing on utilization of indigenous and environmentally clean energy generation resources. The promotion of alternative and renewable technologies is amongst the top priorities of the Government. Major Green initiatives of Government are given below:

2.1.1 Initiatives by Alternative Energy Development Board

Alternative Energy Development Board (AEDB) has been promoting and facilitating the development and deployment of alternative and renewable energy technologies in the country.

⁹ [FAQ Chapter 01 - IPCC Report](#)

¹⁰ [Germanwatch Climate Change Index \(2021\)](#)

¹¹ [Pakistan Updated INDC](#)

¹² Climate change mitigation strategies are designed to prevent or reduce the emissions of greenhouse gases that cause climate change, while climate adaptation strategies focus on building resilience to cope with the impacts of climate change.

The development of renewable energy based power generation projects is being pursued on Independent Power Producer (IPP) mode through private sector investors. A total of 51 alternate renewable energy (ARE) based projects of 2,634 MW cumulative capacity are currently operational that include;

- Thirty six (36) wind power projects of 1,835 MW
- Seven (07) solar projects of 30 MW
- Eight (08) sugar mill based bagasse co-generation projects of 259.1 MW

Due to concerted efforts, the share of ARE has already exceeded to 6% of the power generation mix, however; ARE promises a higher proportion of the national energy supply mix and can help ensure universal and affordable access to electricity in all regions of the country. For the same reason, Government has set the target of achieving 60% share of its generation capacity through indigenous clean energy technologies (ARE & hydro) by 2030 on the basis of outputs of Indicative Generation Capacity Expansion Plan (IGCEP).

- **Alternative & Renewable Energy (ARE) Policy:** The ARE policy (2019) aims at creating a conducive environment supported by a robust framework for the sustainable growth of ARE sector in Pakistan. This policy will also complement GOP's strategic objectives of energy security, affordability of electricity, availability for all, environmental protection, sustainable development, social equity and mitigation of climate change. The ARE policy is target oriented and sets a target of achieving 20% on-grid capacity from ARE technologies by 2025 and 30% capacity by 2030.
- **AEDB Certification Regulations:** AEDB provides certification of service providers/installers of renewable energy systems under AEDB Certification Regulations 2021. The objective of the regulations is to ensure a safe, secure and quality-assured supply of solar and wind energy generation projects, products and systems and installation and servicing thereof for small-scale industrial, agricultural, commercial and residential installations. The number of AEDB certified Installers has reached up to 278.
- **National Electricity Policy:** The National Electricity Policy (NEP) 2021 envisions to ensure universal access of electricity through a self-sustainable power sector, developed and premised on optimal utilization of indigenous resources; integrated planning approach; efficient, liquid and competitive market design; and affordable & environment friendly outcome for the consumers.
- **Fast Track Solar Initiatives:** Government of Pakistan is also pursuing the promotion and development of ARE technologies in the country with special emphasis on solar energy. In this regard, Government has approved the Framework Guidelines for Fast-Track Solar PV Initiatives 2022 for fast-track deployment of solar PV. These initiatives include substitution of imported fossil fuels with Solar PV energy, development of small solar projects upto 4MW capacity at feeder level, and solarization of public buildings across the country.

2.1.2 Initiatives by National Energy Efficiency and Conservation Authority

To steer Pakistan towards a culture of conservation and efficient use of energy resources to achieve sustainable development, National Energy Efficiency & Conservation Authority (NEECA) has developed National Energy Efficiency and Conservation (NEEC) Policy. The NEEC policy identifies mechanisms to ensure deep-rooted institutionalization, operationalization, and implementation of Energy Efficiency & Conservation (EE&C) in the country and consists of sectoral measures for Industry, Building, Transport, Energy (Power and Petroleum), and Agriculture sectors. The policy also informs, on the basis of techno-economic analysis, enforcement mechanisms required for adoption and compliance of EE&C regulatory measures along with precise guidelines for coordination with the provincial governments and regions.

NEECA is working on Conservation and efficient use of energy as it carries tremendous potential in the country. NEECA has developed strategic plan to save 3 million Tons of Oil Equivalent (MTOE) and reduce emissions by GHGs to the tune of 6.4 million tons of CO2 equivalent at an accelerated energy efficiency of 3.5% by 2023 through various Energy Efficiency and Conservation (EF&C) initiatives across five key sectors of the economy i.e. Building, Industry, Transport, Power and Agriculture.

2.1.3 Initiatives by National Electric Power Regulatory Authority (NEPRA)

A fair share of clean and renewable energy (RE) resource is essential for energy security, economic development and environmental sustainability as reliance on imported fuels has not only exacerbated the carbon emissions but also caused depletion of foreign reserves. NEPRA being the sole electricity regulator has taken significant steps to help achieve sustainable development for the country, which are provided as below:

- **Net Metering Regulations:** In order to maximize the utilization of ARE technologies, NEPRA announced Net Metering Regulations in 2015. These regulations provided the framework for implementing net-metering installations using solar and wind generation of up to 1 MW capacity. The first net-metering system of 1 MW capacity was installed at the National Assembly, Islamabad which opened the door for net-metering based systems in all parts of the country. By end December 2022, the number of net-metering based solar installations had reached up to 45,422 with a cumulative capacity of 767.80 MW. Further, net import-export of units through net-metering stood at 718,859,718 kWh in FY 2022 while 7,032 licenses of cumulative 243,43 MW were issued for net metering-based systems to the consumers in different DISCOS.
- **NEPRA Open Access Regulations 2022:** NEPRA is working towards implementation of Competitive Trading Bilateral Contract Market (CCM) to bring competition and freedom of choice in the power sector and gradually reduce electricity tariffs for consumers. In this regard, a rigorous regulatory framework has been developed to facilitate the induction of RE projects into the National Grid. NEPRA Open Access (Interconnection and Wheeling of Electric Power) Regulations 2022 allow any generator to apply for connection to network licensee across the country. CTBCM regime will help promote the business case of affordable energy thus will accelerate the share of RE in generation mix of the country.
- **Regulations for Micro-grid Licensing:** NEPRA has notified Regulations for Micro-grid Licensing in FY 2021-22 with a vision to give access to electricity to the remote, far-flung areas of the country.
- **Other Measures by NEPRA:** Other measures undertaken by NEPRA include:
 - A new chapter on regulatory framework for electric vehicle charging stations has been incorporated in Consumer Service Manual of DISCO.
 - NEPRA established Occupational Health, Safety & Environment (HSE) Department in 2020 with the vision of 'Power with Safety to ensure compliance with NEPRA Power Safety Code and applicable legal requirements by licensees.

2.2 Financial Regulators' Green Initiatives

2.2.1 State Bank of Pakistan's Green and Sustainable Initiatives

The role of financial industry in facilitating the establishment of a sound and sustainable economy cannot be overemphasized. In this context, the task of allocation of financial resources towards economic activities that can successfully balance the economic, environmental and social goals is of critical importance. To make the transition to a green economy, specific enabling conditions are required in Pakistan that can make green investments an attractive opportunity for investors

and businesses. Realizing this premise, State Bank of Pakistan (SBP) has been proactively promoting green banking. Being a responsible regulator of banking industry, SBP has undertaken developmental and regulatory initiatives under the umbrella of green banking. The following section highlights key green banking initiatives undertaken by SBP to support transition to green economy.

Regulatory Response: Green Banking Guidelines (GBGs)

To encourage financial institutions (FIs) to adopt green/sustainable banking practices, SBP issued Green Banking Guidelines in October 2017. The guidelines comprises of three main sections:

- i. **Environmental Risk Management Section** that encourages FIs to integrate environmental risk into their credit risk management systems for increasing financial stability through management and mitigation of environmental exposures of financing portfolios. This includes developing environmental due diligence checklists, environmental risk monitoring procedures, reporting and documentation of environmental risks arising from operations of a business.
- ii. **Green Business Facilitation Section** that encourages FIs to facilitate environmental friendly (green) businesses. This includes investment or financing for projects that promote energy and resource efficiency. This particular area has been designed to align the focus of the banking industry's investments with broader goals of SDGs.
- iii. **Own Impact Reduction Section** that encourages FIs to reduce their impact on the environment through conscious management of their consumption of energy and other resources. The activities under own impact reduction may include usage of paperless banking operations and services, convert their branches/offices and ATMs to renewable energy based electricity consumption etc.

In terms of progress, banks are in varying stages of the implementation of GBGs. All banks & DFIs have established Green Banking Office and nominated Chief Green Banking Managers (CGBMs) to coordinate green banking activities within the banks. Further, most of the banks and DFIs have formulated their Green Banking Policy duly approved by their Board of Directors. They have established their environmental risk management procedures to better evaluate and manage environmental and climate change risks. Some banks and DFI have established strategies for facilitation of green businesses by allocating funding resources to environmental friendly businesses. In addition, they have established annual own impact reduction targets that focuses on in-house energy and resource efficient practices.

Environmental & Social Risk Management Implementation Manual

To ensure compliance of minimum standards for environmental & social risk management in the financial sector under GBGs, SBP issued the ESRM Implementation Manual in November 2022. The purpose of the manual is to improve and update the GBGs based on international standards, particularly in the "Risk Management" area.

The Manual provides tools and procedures for FIs to strengthen their implementation of the Green Banking Guidelines. For instance:

- Along with environmental risk, the manual is also focusing on social and climatic risks, to align with international standards.
- The Environmental & Social (E&S) Due Diligence (ESDD) Checklists (i.e. one for SMEs & Corporate Financing while the other for Project Financing) in the Manual provides a robust, auto-generated quantitative risk rating system to reduce the subjectivity of a

qualitative risk assessment method listed in the Green Banking Guidelines. The checklists also incorporate guidance notes to assist the banks' staff in performing E&S due diligence

- The manual also includes Supervision Checklist to assist banks/DFIs in supervising compliance of E&S related issues in financing project
- The manual provides Green Banking Monitoring & Evaluation (M&E) Reporting Template for reporting of banks/DFIs' GBGs implementation progress (including ESRM activities) to SBP.

This measure is aimed at bringing considerable impact on the overall transition towards green economy and contribute to the Government's ongoing efforts to protect environment and combat climate change.

Banking on Equality Policy

In order to reduce the gender gap in financial inclusion and improve women's access to financial services, SBP has launched a gender mainstreaming policy titled "Banking on Equality" in September 2021. The policy has identified five pillars: improving gender diversity in financial institutions, developing women-centric products and services, women champions at access points, collecting gender-disaggregated data, and institutionalizing a Policy Forum on gender at SBP. The policy aims to achieve specific targets, such as having 20 million women owned active accounts by 2023, 20% of banks' workforce to be women by 2024, and 10% of branchless banking agents to be women by 2024. As of December 2022, there were 25.7 million active women-owned accounts against the target of 25.8 million active accounts for CY 2022. All banks have started implementing the policy and have developed board-approved plans to ensure compliance.

Market Development: SBP Financing Scheme for Renewable Energy

In order to promote energy generation through alternative/renewable energy sources to meet the growing electricity demand in the country, SBP issued Financing Scheme for Renewable Energy (RE Scheme) in 2016. The scheme was revised in July 2019 on the basis of feedback from relevant stakeholders. Shariah compliant version of the Scheme is also available.

Features of the RE Scheme: Under the scheme, financing is available for power generation of up-to 50 MWs at maximum 6% end-user rate, using alternative / renewable energy sources (i.e. solar, wind, hydro, biogas, bio-fuels, bagasse cogeneration, and geothermal as fuel). The scheme comprises of three (03) categories:

- Under Category I**, financing of up-to PKR 6 billion is available for prospective sponsors that are desirous of setting up renewable energy power projects, with capacity ranging from more than 1 MW up-to 50 MW, for generating electricity for own use or selling to national grid or combination of both. The maximum tenor of the loan is twelve (12) years including grace period of two (02) years.
- Under Category II**, financing of up-to PKR 400 million is available for borrowers (including domestic, agricultural, commercial & industrial), who are desirous of installing renewable energy projects/ solutions, with capacity ranging up-to 1 MW, for generation of electricity for own use and/ or selling to distribution companies under NEPRA's Net Metering Regulations. The maximum tenor of the loan is ten (10) years including grace period of three (03) months.
- Under Category III**, financing of up-to PKR 2 billion is available for renewable energy investment entities (RE-IEs) that are desirous of installing renewable energy

equipment, with capacity ranging up-to 5 MW, on lease basis, deferred payment sale or rental basis or selling of electricity to ultimate owners/ users. The maximum tenor of the loan is ten (10) years including grace period of six (06) months. This category provides an option of alternative investments in energy sector to the investors through establishment of RE-IEs to undertake solar & wind based projects.

Progress of the RE Scheme: The scheme has made remarkable progress by providing finance to more than 2,350 projects having the cumulative capacity of adding almost 1,660 MWs through renewable energy sources. The total amount outstanding under the RE scheme is 95 billion as on October 30, 2022.

Furthermore, **SBP enhanced the scope of one of its concessional refinance schemes of SMEs; Refinance scheme for modernization of SMEs**, in 2019 to include financing facility for upgradation of conventional brick kilns into modern zigzag technology based brick kilns.

2.2.2 Securities & Exchange Commission of Pakistan Green Initiatives

Securities and Exchange Commission of Pakistan (SECP) considers climate change and sustainability related issues as a priority in its regulatory agenda. SECP being a member of International Organization for Securities Commission (IOSCO) has endorsed IOSCO's statement welcoming the proposed standards on sustainability issued by International Sustainability Standards Board (ISSB). In addition, SECP is taking various steps to move the sustainability agenda forward and major among those steps are as follows;

- **Companies Act:** On the legislative front, Companies Act, 2017 requires the directors of listed companies to communicate to shareholders the impact of the company's business on the environment and a description of principle risks and uncertainties faced by the company.
- **Code of Corporate Governance Regulations:** SECP issued the Listed Companies (Code of Corporate Governance) Regulations, 2019 (CCG, 2019), which require boards to have an ESG policy regarding health, safety and responsible investment aspects in the company's business strategies that promote sustainability.
- **Green Bond Guidelines:** For the purpose of promoting sustainable development and combating the environmental challenges of climate change and environmental protection, SECP issued guidelines for issuance of green bonds in 2021, in line with international best practices. To qualify as a green bond, the proceeds of bonds must finance or refinance green projects or activities that bring energy efficiency, protect environment, utilize renewable energy, prevent and control pollution, wastewater and water treatment etc. The eligible projects under the green bond guidelines are also mapped to UN's Sustainable Development Goals.
- **Gender Bond Guidelines:** In order to promote gender equality, women empowerment and to uplift the low-income segment of the women, SECP issued Gender Bond Guidelines in 2021. To qualify as a gender bond, the proceeds shall be utilized to finance such projects that would address women's economic empowerment, gender equality in human development, women's resilience against risks & shocks including climate change and disaster impacts, projects that target narrowing gender disparities, socioeconomic advancement and empowerment through financing to women with low income etc.
- **Introduction of Green Products under Regulatory Sandbox:** In order to promote innovation and encourage startups, the Commission introduced Regulatory Sandbox in 2020. Under this initiative, three cohorts have been conducted for testing green insurance products

such as crop parametric takaful and mileage-based insurance¹³. These products can be instrumental in encouraging more green products and attract investors.

- **Environment, Social and Governance (ESG) Strategy:** To help move the ESG agenda forward, in June 2022, SECP issued a position paper i.e. ESG Regulatory Roadmap, to capture the growing interest of institutional investors in ESG-based investments and encourage ESG practices and reporting in Pakistan. The ESG regulatory roadmap by SECP is the first effort in providing the opportunity to all stakeholders to consider, review and adopt relevant disclosure practices.

3. Challenges for Greening the Financial System

- **Lack of Standardized Green Finance Definition:** One of the biggest challenges to financial institutions in scaling up their green financing is the absence of standard definition of green financing in Pakistan. The absence of standardized green finance definitions or defined green assets/ projects results into lack of reliability and comparability in the market.
- **Lack of Disclosures on Climate-related Financial Risks and Opportunities:** There is lack of disclosures on climate-related financial risks and opportunities in the financial industry. Such disclosures are important to promote transparency, which ultimately encourage businesses to identify, evaluate and address actual and potential climate change-related risks, leading to better investment decisions, protected assets, greater business continuity, improved reputation among stakeholders, and increased profits.
- **Lack of Capacity & Awareness:** Green financing, being relatively a new area, requires sufficient awareness and capacity to achieve the desired targets. The lack of awareness and capacity in financial institutions as well as their clients hinders the demand and supply of green financing.

4. Way forward for Scaling up Green Finance in Pakistan

Pakistan's financial needs with regards to tackling climate change remain highly elevated given the country's vulnerability to climate change. However, developing countries like Pakistan have limited resources. In this backdrop, the financial industry can play a vital role in creating incentives, accelerating financial flows towards green investments and filling the gap left by public sector due to resource constraints to finance green projects and initiatives. Accordingly, in the medium to long term, Pakistan intends to undertake following measures to scale up the green finance and to strengthen the financial system resilience to climate change:

- **Development of Green Taxonomy:** Absence of standard definition of green financing in Pakistan is considered one of the major bottlenecks for financial institutions in scaling up their green financing. State Bank of Pakistan, in collaboration with other relevant stakeholders will be developing national green taxonomy. The availability of green taxonomy can facilitate financial institutions in identification & financing of green projects and reporting of their green finance portfolios to relevant stakeholders. The taxonomy will also facilitate in the development of Green Bond Market and help in minimizing the possibility of greenwashing.
- **Climate-related Information Architecture and Disclosure Standards:** In order to assess climate risks, enable informed investment decisions, and facilitate growth of climate finance, it is imperative to develop and strengthen the information architecture around climate risks. The SBP's Green Banking Monitoring & Evaluation template is in line with internationally recognized disclosure standards such as TCFD and UN PRB. However, due to absence of a

¹³ Mileage based insurance is a usage-based insurance with the idea that the policyholder should pay the premium based on the miles they have driven.

green taxonomy, banks are reporting only on the qualitative indicators. Going forward, SBP intends to introduce quantitative indicators in order to measure the green performance of the banking industry. Once fully adopted, these disclosure standards will be standardized, comparable and consistent enabling Financial Institutions to assess the impact of climate change on their decision-making. This may also include a data repository to support the financial industry in locating data sources of climate risk management and other green and sustainable finance related research.

- **Solar PV Panels and Allied Equipment Manufacturing in Pakistan:** Government of Pakistan is encouraging local manufacturing of solar PV panels and allied equipment in Pakistan. In this regard, Engineering Development Board (EDB) is currently formulating a policy for solar PV panels and allied equipment manufacturing in Pakistan.
- **Innovative Green Financing Instruments:** Owing to the immense requirements of Pakistan in terms of climate change mitigation and adaptation, Pakistan needs to develop innovative financial instruments to attract much needed green finance in country. Several financing products are globally used in the financial industry to finance projects with environmental benefits. For instance, green bonds/sukuk, transition bonds, sustainability-linked bonds, green equity funds, green securitization, and green leasing are some of the options that may be considered for adoption. The incorporation of green bonds and green financing products as a standard practice in finance and its greater application and issuance will help Pakistan in executing its international commitments such as Paris Agreement and SDGs towards combating climate change by mobilizing capital required for environmental friendly projects such as renewable energy, energy efficiency, and sustainable transport.
- **Awareness and Capacity building:** Financial Institutions have been the backbone of Pakistan's economic growth and as the country transitions towards a sustainable and climate resilient economy, the financial industry is desired to take lead in this regard and accelerate green lending. However, in order to give focused attention to scaling up green finance, the financial industry needs to invest on capacity building and awareness raising. To this end, role of academia and research institutions cannot be over emphasized. The academia and research institutions can play a vital role in promoting green finance by conducting research, and developing innovative solutions to address the challenges of transitioning to a lowcarbon economy.
- **Investments in Climate-smart Agricultural Practices:** Considering the adverse implications of climate related weather events on Pakistan's agriculture sector, investments in climate smart agriculture is increasingly becoming important to ensure food security and sustainability. By adopting practices such as agroforestry, conservation agriculture, and integrated pest management, farmers can reduce their carbon footprint and mitigate the effects of climate change. In turn, this creates opportunities for investment in sustainable agriculture and related industries. Green finance can be used to fund research and development of climate-smart agricultural technologies, provide loans for farmers to transition to sustainable practices, and support the establishment of sustainable supply chains for agricultural products.

For a developing country like Pakistan, green finance represents a paradigm shift from business as usual approach. Green finance may not only support Pakistan's developmental objectives but also reduce its' vulnerability to the adverse impacts of climate change. Moreover, green finance can also be instrumental in enabling the financial industry to be effective towards implementation of SDGs Agenda 2030. However, the acquisition of green finance in Pakistan hinges upon overcoming the challenges associated with the development and implementation of green financing mechanisms. To this end, concerted and sustained efforts are required from all stakeholders to fully reap the benefits of green finance and use the same to the country's advantage.

~~*~*~*~*~*~*~*~*~*~*~*~*~*~*