



2023

SUSTAINABILITY REPORT



CONTENTS



Governor's Foreword

Climate change is an all-encompassing and complex threat to the Philippines. We are facing stronger typhoons, heavier rainfall, higher temperatures and rising sea levels. These will have increasingly devastating effects on our people and our economy.

At the Bangko Sentral ng Pilipinas, our mission is to maintain price stability, a strong financial system, and a safe and efficient payments and settlements system that are conducive to an inclusive and sustainable growth of the economy. This mission will be increasingly challenged by climate change itself and the responses to it, whether initiated locally or abroad. We need to manage these risks to our mandates and support the country's climate agenda in areas in which we are well positioned to do so.

A climate-resilient economy and financial stability are mutually reinforcing outcomes. The BSP is thus committed to



supporting the collective effort to unlock finance for adaptation measures that need to be implemented by the public sector, private enterprises and households.

We are taking action.

Last year, the BSP published its first sustainability report. It discussed the initiatives and accomplishments under the Sustainable Central Banking Program which set in motion BSP's climate response.

This second report builds upon the 2022 edition. It presents what we have done in 2023 and in the first half of 2024. Such activities and accomplishments have informed the following strategic thrusts for our priorities moving forward:

1. Managing climate and environment-related risks to price and financial stability – our efforts at better understanding and managing the impacts of climate change and nature loss on our mandates, and promoting effective risk management in our supervised entities;
2. Mobilizing green finance – our market development efforts to unlock and scale climate resilience and adaptation financing for all; and
3. Implementing sustainability in own operations – our efforts at deepening sustainability in our investments, internal processes, facilities and culture, just as we expect of our supervised financial institutions.

This report also explains the refined strategic intent and impetus for our

climate response. We are pursuing a sustainability agenda that is inclusive and grounded on the country's special climate risks. This implies two work streams: managing unintended exclusionary effects of our climate action; and promoting green finance to the benefit of the most vulnerable sectors, including small businesses and farming communities.

Our sustainability journey is still unfolding. We have created a dedicated unit to ensure this journey takes us in the right direction.

Our sustainability work benefits from our collaboration with our central bank peers, government agencies, and the broader development community.

By sharing our thinking and progress on climate response, we hope to engage the public and our stakeholders as partners toward a more climate-resilient and sustainable financial sector and economy.

We are pursuing a sustainability agenda that is inclusive and grounded on the country's special climate risks.



ELI M. REMOLONA, JR.
Governor
Bangko Sentral ng Pilipinas



Children power through after the devastating effects of Super Typhoon Odette (International name "Rai") in Lapu-Lapu City, Cebu, Philippines. Photo by [Carl Kho](#) via Unsplash.



CLIMATE CHANGE NATURE LOSS

IN THE PHILIPPINES

The Philippines is extremely vulnerable to the devastating impacts of **climate change**.

It is estimated that damages from climate change could impact 7.6% of the country's total GDP by 2030, rising to 13.6% by 2040.¹ The costs to the Filipino people are real; in 2023 alone, the Philippines incurred PHP24.49 billion in damages due to natural extreme events and disasters which affected 3.5 million families.²

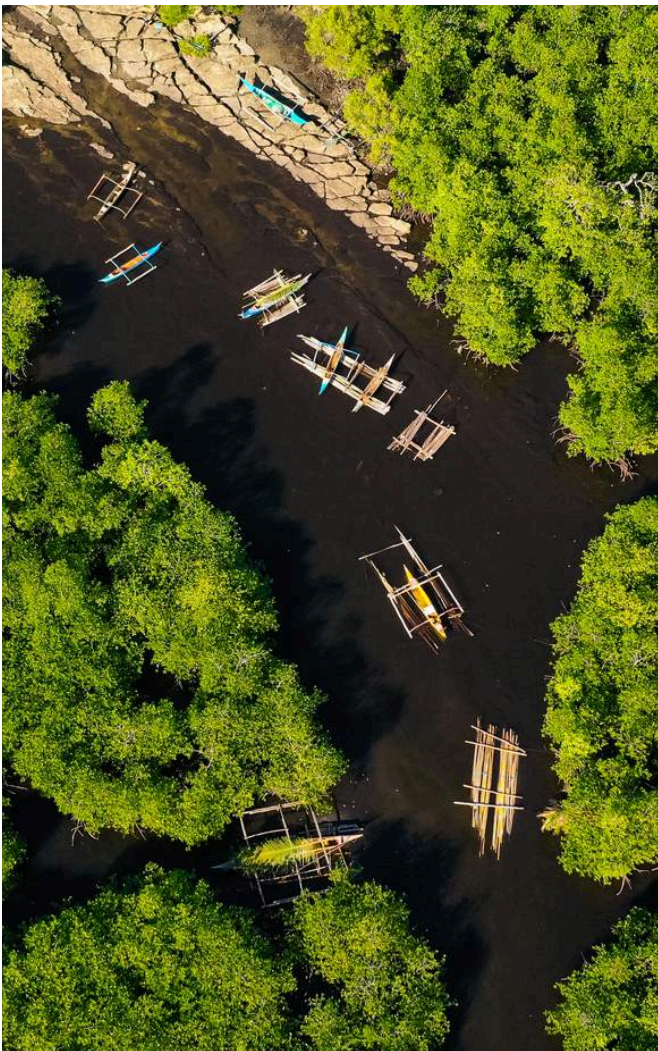
Apart from costly business disruptions, disaster recovery and rebuilding, climate change disproportionately affects the country's vulnerable groups exacerbating inequality.

The climate impact cuts across sectors and thus creates a vicious cycle of vulnerability. The interdependencies in the ecosystem exacerbate the effects of climate change. For example, water scarcity triggered by drought may lead to lower agricultural output, which then results in income loss for farmers and reduced food supply for consumers. Lack of water access may also hamper sanitation and cause a variety of diseases.

¹ World Bank Group (2022). [Philippines Country Climate and Development Report](#). This report has been referred to as well in the 2022 BSP Sustainability Report.

² Philippines Statistics Authority (2024). [Compendium of Philippine Environment Statistics Component 4: Extreme Events and Disasters](#).

Like climate change, nature loss and environmental degradation will have **far-reaching consequences.**



The country's biodiversity³ and natural ecosystems (e.g., coral reefs, forests, mangroves) not only provide livelihoods in key local industries (e.g., agriculture, fisheries and tourism) but also protect communities from climate hazards and help mitigate climate change.⁴ However, these ecosystems have been heavily exploited and degraded due to both climatic-impact drivers and human activities, putting the communities that depend on them for livelihood and protection at risk.

³ The Philippines is one of the 18 mega-biodiverse countries of the world, containing two-thirds of the earth's biodiversity and between 70% and 80% of the world's plant and animal species.

(Source: [Philippines - Country Profile by the Convention on Biological Diversity, a part of the UNEP](#))

⁴ Climate Change Commission and Department of Environment and Natural Resources (2023). [National Adaptation Plan of the Philippines 2023-2050](#).

Climatic-impact drivers

The 2023-2050 National Adaptation Plan of the Philippines identified four climatic-impact drivers that will cause significant adverse potential impacts to the country if the world continues on its current development path and the Intergovernmental Panel on Climate Change (IPCC) 'worst-case' scenario, SSP5-8.5, becomes a reality:

A close-up photograph of parched, brown soil with deep, irregular cracks running across the surface, illustrating the effects of drought.


Increased temperature and droughts

A photograph of a turbulent ocean surface with white-capped waves crashing, representing sea level rise and extreme weather events.

Sea level rise and extreme sea levels

A high-speed, close-up photograph of rain falling, creating a dense spray of water droplets and bubbles, symbolizing extreme precipitation.

Extreme precipitation

A photograph of dark, heavy, and swirling storm clouds, likely representing tropical cyclones or severe weather patterns.

Wind patterns and tropical cyclones



The potential consequences of the four climatic-impact drivers, as outlined in the 2023-2050 National Adaptation Plan, are as follows:⁵

- **Increased temperatures and drought:** The number of Filipinos potentially impacted by extreme heat (i.e., at heat indices greater than 42°C), is projected to reach up to 11 million by 2030 and may increase to 74 million by 2050. A heat index above 42 degrees is classified as ‘Danger’, where heat cramps, exhaustion and heat stroke are likely to be experienced with continued exposure. Moreover, productivity loss due to heat stress may reach up to PHP466 billion within the 2030 decade and soar to PHP870 billion within the 2050 decade. This equates to 3% and 5% GDP in 2030 and 2050, respectively, with outdoor sectors such as Agriculture and Construction being the most affected. Furthermore, drought substantially affects biodiversity, leading to diseases, mortality of plants and animals, and other devastating effects, including coral bleaching.
- **Sea level rise and extreme sea levels:** The rate of sea level rise is expected to exceed the global average, possibly doubling by 2060. Approximately 150,000 Filipinos could face permanent displacement due to sea-level rise by 2040, leading to potential economic losses of PHP18 billion. The rise in sea levels will also affect natural systems, resulting in impacts like mangrove degradation, coral reef bleaching and saltwater intrusion. Additionally, extreme sea levels (acute, temporary, and short-term increases in sea levels such as storm surge, astronomical tides, waves, and swash) may intensify, potentially rising by 35% within the 2030 decade. This could result in up to 2 million Filipinos being impacted, with PHP80 billion at stake from extreme sea levels.
- **Extreme precipitation:** Rainfall patterns are expected to become more extreme, leading to intensified rainfall throughout the year, especially in the eastern sections of the country. Within the 2030 decade, up to 4.8 million Filipinos could be affected by pluvial flooding (flooding resulting from excessive rainfall) and an additional 250,000 impacted by fluvial flooding (flooding from overflowing rivers and water streams). Additionally, there are potential economic losses of PHP274 billion from pluvial flooding and PHP13 billion from fluvial flooding due to extreme precipitation. A significant 18% of those vulnerable to pluvial flooding belong to lower income groups, potentially lacking the capacity to adequately address these challenges.
- **Wind patterns and tropical cyclones:** While the frequency of tropical cyclones might decrease in a warmer world, their intensity will significantly increase. The average maximum wind speed of typhoons and super typhoons is expected to rise by 29% within the 2030 decade and 33% within the 2050 decade. Approximately six million Filipinos could experience more than one tropical cyclone occurrence with maximum winds exceeding 118 km/h (typhoon and/or super typhoon), leading to estimated infrastructure damages of about PHP83 billion and PHP78 billion in 2030 and 2050, respectively.

⁵ Climate Change Commission and Department of Environment and Natural Resources (2023). National Adaptation Plan of the Philippines 2023-2050.

The country's climate change policy documents call for coordinated, government-wide effort to achieve climate resilience anchored on adaptation strategy with mitigation as co-benefit.



Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climate and its effects in order to moderate potential damages or to benefit from opportunities.

Mitigation in the context of climate change, refers to human intervention to address anthropogenic emissions by sources and removals by sinks of all GHG, including ozone-depleting substances and their substitutes.⁶

⁶ Republic Act No. 9729 or the Climate Change Act of 2009

In 2021, the Philippines submitted its Nationally Determined Contribution (NDC) pursuant to the Paris Agreement. The commitment is to reduce projected greenhouse gas (GHG) emissions by 75% from 2020 to 2030 and to peak its emissions by 2030 in the context of accelerating a just transition⁷ of its sectors into a green economy.

The NDC commitment reflects both unconditional and conditional GHG reduction targets of 2.71% and 72.29%, respectively, for agriculture, waste, industries and industrial processes, transport, and energy. The conditional target is contingent upon external funding support for the country.⁸

The PH Climate Change Agenda Policy Documents



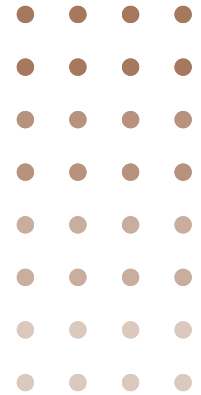
⁷ The International Labour Organization defines just transition as “greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.” (Source: <https://www.ilo.org/resource/other/climate-change-and-financing-just-transition>)

⁸ Republic of the Philippines’ Nationally Determined Contribution as communicated to the United Nations Framework Convention on Climate Change (Source: <https://unfccc.int/sites/default/files/NDC/2022-06/Philippines%20-%20NDC.pdf>)

In line with its adaptation-focused climate strategy, the country has developed a National Adaptation Plan (NAP) setting out adaption priorities across 8 key sectors and 5 thematic cross-cutting strategies:



The NAP intends to facilitate mid- to long-term adaptation planning and provide guidance for effective public spending, access to multilateral funding, and private capital support.



The cost of inaction in the 2030 decade is estimated to be PHP645 billion per year across these eight sectors.

Failing to proactively address the challenges posed by climate change places not only the well-being of Filipinos at risk but also poses a substantial economic burden for the nation.

THE CLIMATE CHANGE IMPERATIVE

Mt. Pinatubo in Botolan, Zambales, Philippines.
Photo by [Ivan Torres](#) via Unsplash.



THE CASE FOR CLIMATE ACTION FROM THE BSP

Climate change is said to be the defining issue of our time; its impacts are far-reaching and unprecedented – the scale and magnitude of which will depend on actions taken across the world today and in the coming years.

While much of the responsibilities in setting and achieving the country's climate agenda rest with the national and local government, the BSP views climate change and nature loss as a strategic matter because: 1) they pose material risks to financial and price stability; and 2) the country's response to these risks necessitate mobilizing sustainable finance which the BSP can strategically support in line with its mandates.

Climate change and nature loss pose material risks to BSP's price and financial stability mandates.⁹

The impacts of climate change on the financial sector have two channels: the physical and the transition risks.¹⁰ Physical risks refer to the potential damage and losses from climate related events, such as floods and droughts (extreme weather events) and rising sea levels and temperatures (slow onset events). Transition risks emanate from the climate response-driven shifts in government policies, technologies,

consumer preferences, and investor sentiment. Transition risks can be transmitted internationally through financial markets and trade.¹¹ Financial institutions may incur destabilizing losses in terms of defaults and impaired asset values from exposure to sectors/industries vulnerable to physical and transition risks. Such losses could constrain their ability to provide credit to the real economy.

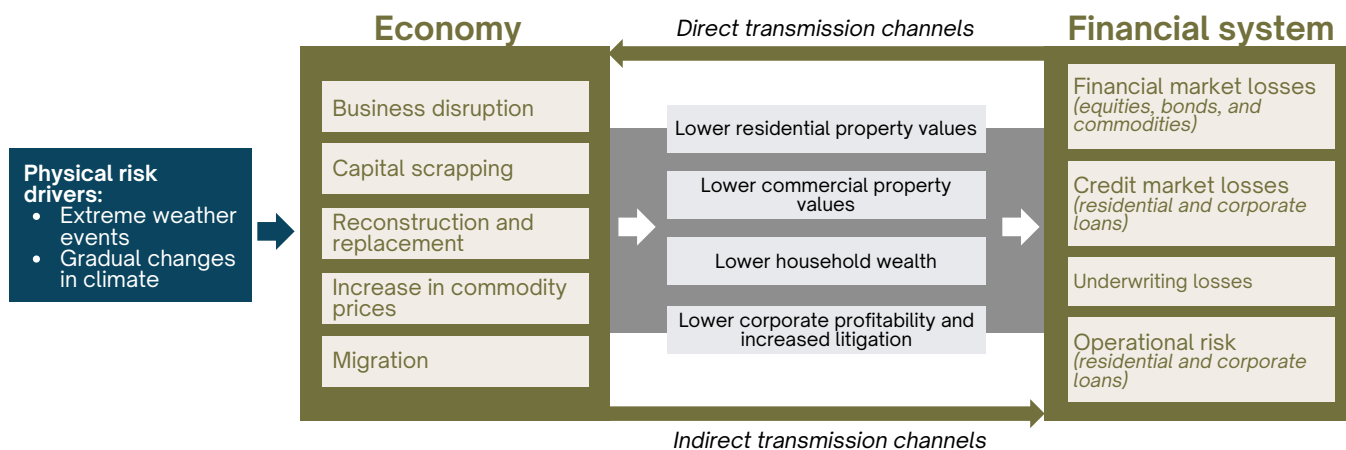
⁹ The 2022 BSP Sustainability Report highlighted the NGFS members' call for collective action to raise the bar in ensuring the financial system's resilience against climate and environment-related risks. In that report, the BSP acknowledged that the pursuit of sustainability objectives is important in achieving price and financial stability.

¹⁰ International Monetary Fund (2019). [Climate Change and Financial Risk](#).

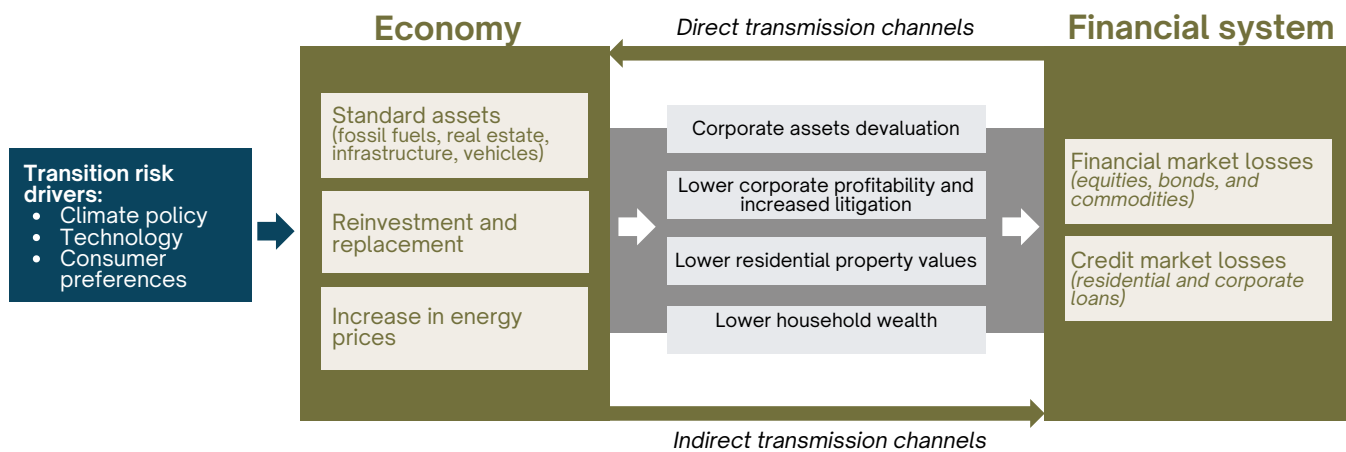
¹¹ Reserve Bank of Australia (2023). [Climate Change and Financial Risk](#).



Financial contagion (market losses, credit tightening) feeding back to the economy



Financial contagion (market losses, credit tightening) feeding back to the economy



Source: Network for Greening the Financial System



Lake Pinatubo in Botolan, Zambales, Philippines.
Photo by [Sharmaine Monticalbo](#) via Unsplash.

That climate change is a material source of risks in the financial system is now widely recognized. In 2024, the Basel Committee on Banking Supervision (BCBS) updated its core principles incorporating, among others, climate risks.¹² The Core Principles are the de facto minimum standards for the sound prudential regulation and supervision of banks and banking systems. They inform supervisory rules and regulations adopted by regulators around the world, including the BSP.

On price stability, climate change could influence supply and demand side conditions, create supply shocks which affect inflation dynamics and expectation formation. Climate impacts could also impair transmission channels of the monetary policy on the financing condition of economic actors. As the financial system is at the core of the transmission mechanism, pressures on banks' balance sheets due to climate-related risks will constrain their ability to

provide credit to the economy.¹³

Climate change may pose these challenges for BSP: 1) disentangling temporary vs. permanent shocks and changes in inflation; 2) assessing impact on monetary policy transmission; 3) unpredictability of shocks resulting in communication and credibility challenges; and 4) assessing policy space and actual policy stance.¹⁴

While earlier global initiatives have focused on climate change, nature loss and the broader environmental risks are steadily gaining recognition as equally relevant risks for financial stability. NGFS notes that climate-related financial risks are strongly interconnected with the broader environmental-related financial risks. Nature loss is particularly relevant in the Philippines given dependence on ecosystem services of many of our industries, including agriculture and tourism.

Nature-related financial risks refer to the risks of negative effects on economies, individual financial institutions and financial systems that result from: i. the degradation of nature, including its biodiversity, and the loss of ecosystem services that flow from it (i.e., physical risks); or ii. the misalignment of economic actors with actions aimed at protecting, restoring, and/or reducing negative impacts on nature (i.e., transition risks).¹⁵

¹² Bank for International Settlements (2024). [International supervisory community meets to discuss challenges ahead for global bank supervision and regulation](#).

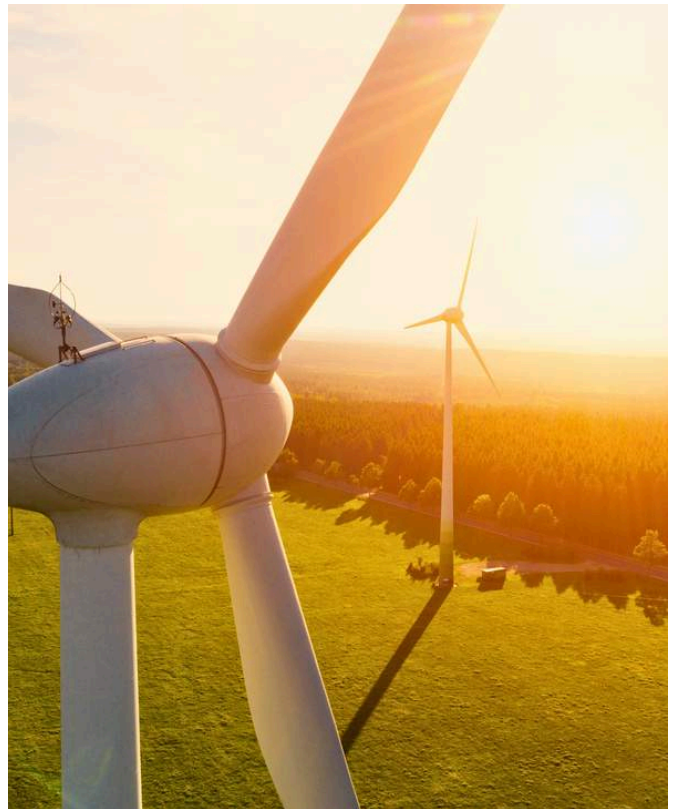
¹³ Abenoja et al. (2022). [Climate Change and Monetary Policy: Some Preliminary Thoughts](#), BSP Economic Newsletter No. 22-03. This paper was featured in the 2022 BSP Sustainability Report.

¹⁴ Network for Greening the Financial System (2020). [Climate Change and Monetary Policy Initial Takeaways](#).

¹⁵ Network for Greening the Financial System (2023). [Nature-related Financial Risks: A Conceptual Framework to guide Action by Central Banks and Supervisors](#).

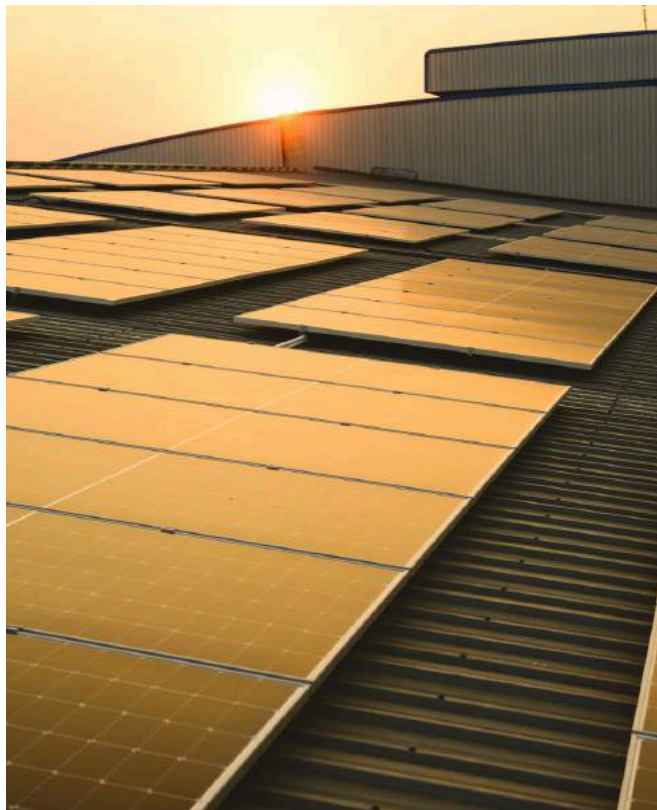
The BSP, with its regulatory and advocacy levers, is strategically positioned to support the unlocking of green and sustainable finance.

Climate adaptation and green transition entails huge investment to support measures to be undertaken across the economy – whether by the government, enterprises or household. According to the Department of Energy, up to PHP31 trillion in renewable energy investment by 2040 is needed to drive the country’s clean energy transition.¹⁶



¹⁶ Letis, B. (2024, June 4). [Philippines eyeing P31 trillion clean energy investment by 2040](https://www.philstar.com/business/2024/06/04/philippines-eyeing-p31-trillion-clean-energy-investment-by-2040), Philstar.com.

While the public sector will be a crucial funding source for climate measures, the private sector should inevitably find viable investment opportunities in this field. Global adaptation market is estimated to hit USD2 trillion annually by 2026.¹⁷ Investment opportunities go beyond public infrastructure; enterprises will need financing for, among others, weather resistant facilities, climate smart agriculture practices, and green technologies, and innovating business models.¹⁸



Climate action from households and enterprises require financing which banks and other financial institutions will need to support. The financial sector's green financing has yet to fully take off. The BSP, other regulators and government agencies need to support the scaling of innovative green finance. This entails addressing market and institutional barriers.

¹⁷ United Nations Environment Programme (UNEP, 2023). [Climate Adaptation Target Setting](#).

¹⁸ Ibid.

REFINING BSP'S CLIMATE NATURE RESPONSE

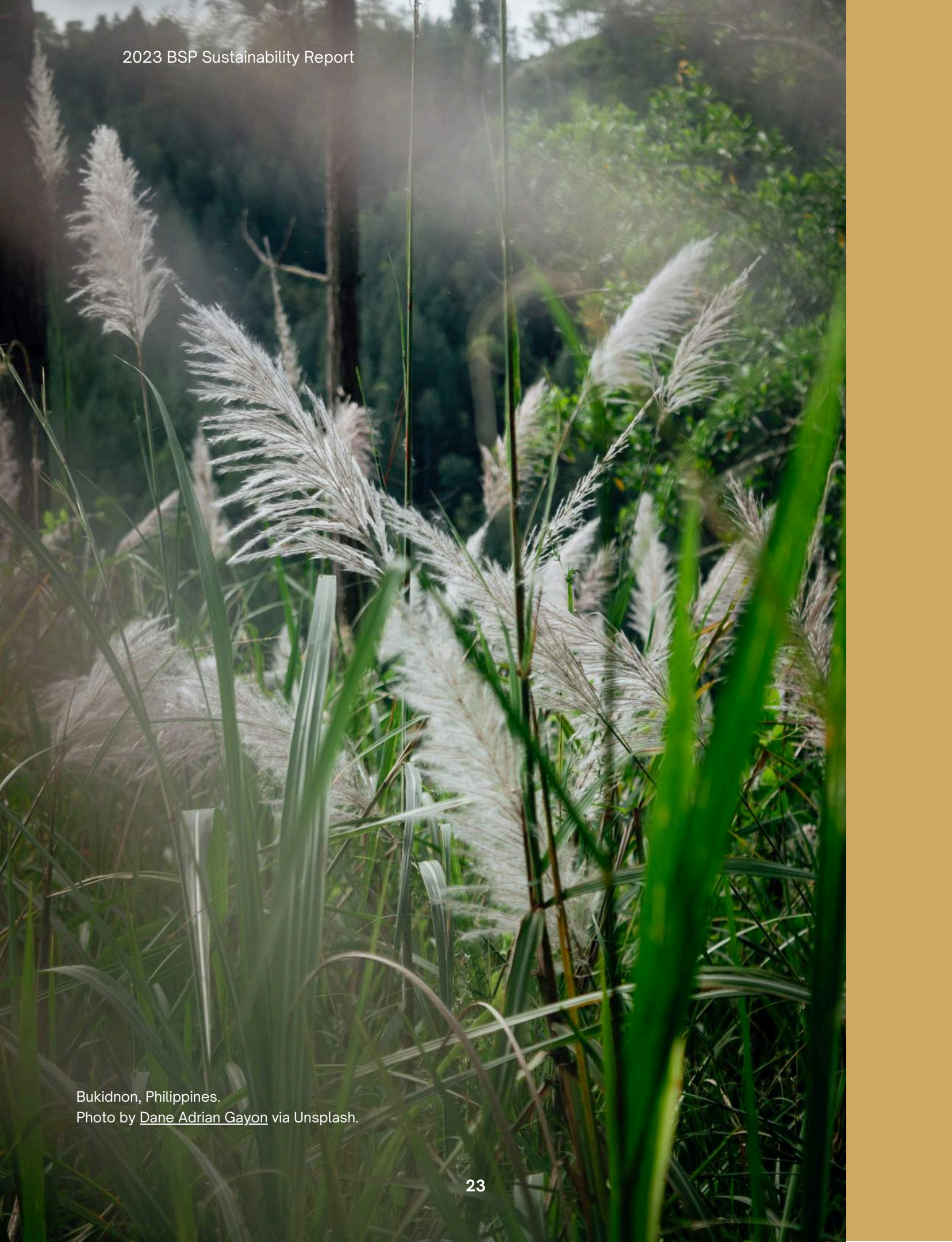


In 2019, the BSP launched the Sustainable Central Banking (SCB) Program to champion sustainability in the financial sector. The BSP is sharpening the strategic intent of this sustainability agenda with the aim of making it deliberately inclusive. This means that we will endeavor to promote positive outcomes for all, most importantly the vulnerable sectors including small businesses and agricultural communities.





Polomoldok, South Cotabato, Philippines.
Photo by [Julienne M.](#) via Unsplash.



Bukidnon, Philippines.
Photo by [Dane Adrian Gayon](#) via Unsplash.

An inclusive approach, in the context of our climate response, entails two things:

1.

Managing the unintended exclusionary effects of policy and regulatory responses to climate change

Sustainability standards and regulatory requirements are being introduced as part of a coordinated global response to mitigating and managing the impacts of climate change and nature loss. However, if not thoughtfully contextualized, they could lead to certain market segments becoming unduly disadvantaged in financing access.

The associated costs of environmental, social, and governance (ESG) due diligence, certification and verification could disproportionately affect smaller businesses and projects, as well as the

smaller financial institutions that do not have the scale and capacity to seamlessly integrate ESG practices.¹⁹

Due to increased reputational or investor pressures, financial institutions may retrench from serving businesses and sectors that are unable to transition to green (which may not necessarily be out of choice but due to lack of resources), including those in their value chains.

These are some potential challenges and limitations that need to be factored in the design and implementation approach of our regulations and market development strategies.

¹⁹ Consultative Group to Assist the Poor (2023). [Climate Adaptation, Resilience, and Financial Inclusion: A New Agenda](#).

2.

Scaling finance for climate adaptation

While mitigation and adaptation are both necessary climate responses, financing adaptation is particularly critical for a highly vulnerable emerging economy like the Philippines. This is adequately reflected in the country's climate strategy and NDC commitment.

However, global adaptation finance gap is widening. According to a 2023 report from the United Nations Environment Programme, the global adaptation finance gap now stands between USD194 billion and USD366 billion per year.²⁰ The Climate Policy Initiative (CPI) pointed that funds are significantly skewed toward mitigation, receiving 91% of the total global climate finance in 2021/2022. CPI further noted that 98% of adaptation

financing came from public actors.²¹

Financial institutions may find adaptation and transition projects riskier than mitigation projects, given unclear financial returns and perceived vulnerability of project location or beneficiaries.²²

These statistics highlight and warrant a more deliberate support for mobilizing adaptation financing. Underfunding adaptation finance undermines the resilience of the economy and the vulnerable sectors, exacerbating financial exclusion. Increased climate vulnerability of the economy could lead to economic shocks which have serious implications for financial stability.

²⁰ UNEP (2023). [Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate investment and planning on climate adaptation leaves world exposed.](#)

²¹ Climate Policy Initiative (2023). [Global Landscape of Climate Finance 2023.](#)

²² World Resources Institute (2022). [Adaptation Finance: 11 Key Questions, Answered.](#)



A fisherman in Lake Sebu, South Cotabato, Philippines.
Photo by [Mubarak Tahir](#) via Unsplash.

THE INCLUSIVE SUSTAINABILITY AGENDA

Our refined climate
and nature response



Balatero Port in Puerto Galera, Oriental Mindoro, Philippines.
Photo by [Jules Bassoleil](#) via Unsplash.

The goal of BSP's inclusive sustainability agenda is to promote a climate-resilient financial system that facilitates inclusive adaptation and just transition. Toward this, BSP endeavors to drive the following desired outcomes:

1.

Climate and nature-related risks and opportunities are internalized by the financial sector and mainstreamed in our supervised entities' risk management, strategy, and governance practices

2.

Climate and nature considerations are incorporated in the conduct of monetary policy, demonstrating proactive stance in managing their potential impacts on price stability.

3.

Financing solutions for adaptation and green transition are used by households, businesses and communities, especially the most vulnerable, empowering them as active partners in building climate resilience.

4.

Sustainability is deeply ingrained in BSP's culture and operations, as a way of 'leading by doing'



Mangroves in Palawan, Philippines.
Photo by Aris Leoven from Studio Philippines.

To achieve the desired outcomes, the BSP will pursue priorities across three strategic themes as follows:

1.

Managing climate and environment-related risks to price and financial stability.

We will deepen our understanding of the impacts of climate change and nature loss on price and financial stability so we can develop timely and appropriate policy response. We will steer our supervised financial institutions toward effectively managing their climate change and environment-related financial risks.

This entails undertaking deeper and wider research on climate and nature-related impacts and implications on our mandates; developing models and analytical tools; and issuing regulatory expectations and guidance.

Given the complexity and novelty of these risks, our work in this area benefits from our participation in and engagements with global and regional forums that serve as capacity building platforms for policymakers and regulators.

2.

Mobilizing green finance.

We will support the development of a green finance market to unlock appropriate financing solutions, particularly for climate adaptation of vulnerable households, businesses and communities. Apart from regulatory initiatives, this entails working closely with stakeholders in government and private sector to address market gaps and develop enablers for a thriving green finance ecosystem. Such will cover initiatives on sustainable finance taxonomy aligned with the country's priorities; climate and ESG information infrastructure; proofs of concept for de-risking and innovative finance solutions; cohesive national strategies and policies for adaptation and transition finance; and market-wide capacity building.

3.

Implementing sustainability in own operations.

In line with our championing sustainability in the financial system, we will adopt to the extent feasible applicable sustainability standards and principles on, for instance, responsible investment, risk management, and climate-related disclosures. This entails, among others, setting and reporting targets and progress on our climate action (e.g., GHG emission reduction). To further promote a culture of sustainability in the organization, we will institutionalize employee education and engagement programs on nature-positive way of living and doing business.



These themes represent BSP's broad courses of action that builds on the earlier issued 11-point strategy under the SCB program, which contemplated the roles of BSP as an enabler, mobilizer, and doer.

WHAT WE HAVE DONE SO FAR





Under the Sustainable Central Banking program, the BSP has undertaken initiatives to promote sustainability in the financial system and in its own operations. These initiatives have informed the three strategic themes of BSP's efforts moving forward under the inclusive sustainability agenda.



On Managing the Climate and Environment-Related Risks To Price And Financial Stability

Monetary policy review and macroeconomic assessments

The BSP's Advisory Committee and Monetary Board have been integrating climate and environment-related factors in the review of monetary policy and assessment of the inflation outlook as well as the risks to inflation. This entails reviewing available methods and conducting research studies that integrate climate and environment-related factors into macroeconomic models and monetary policy analysis. For instance, the BSP published the study on the "Macroeconomic Effects of Temperature shocks in the Philippines: Evidence from Impulse Responses by Local Projections" in June 2023. The results indicate that, on the average, the short-run marginal impact of a 1-degree Celsius increase in the Philippines' annual mean temperature reduces aggregate output growth by 0.37 percentage point (ppt) and leads to a 0.46 ppt increase in inflation in the short run.

Modeling and analytical tools will be reinforced to incorporate relevant climate and environment-related factors in these assessments. To support this initiative, the BSP has been conducting capacity-building programs to improve employees' knowledge and skills in integrating climate-related risks into economic and financial frameworks (see the section on Capacity Building and Knowledge Sharing for more details).

Macroeconomic effects of temperature shocks in the Philippines: evidence from impulse responses by local projections

This study is the first in the country to quantify the contemporaneous and long-term effects of rising temperature or temperature shocks on i) output growth and other channels of economic activity such as crop production, livestock, fishing, manufacturing, services, real investment, and labor productivity; and ii) inflation.

On output growth and channels of economic activity

The study showed that, on average, temperature shocks in the form of a 1-degree increase in the annual mean temperature generally leads to a 0.37 percentage point (ppt) decline in economic activity. This supports the widely held view on the negative effect of temperature on output in countries with hot weather.

Looking at sectoral output, the manufacturing and services sectors are negatively affected by an increase in mean temperature, with the manufacturing sector experiencing a more pronounced decline. In terms of crop production, rising temperature has varying impact on different crops. While temperature shocks have negative effect on palay and corn, it has a positive impact on mango production as mangoes prefer warm temperatures and light amount of rainfall during fruit development stage. This finding highlights the need for a policy environment that encourages financial institutions to adopt a nuanced approach in assessing the impact of climate change. Such an approach would enable the development of financial products tailored to support climate adaptation efforts.

The study found that temperature shocks have an insignificant impact on livestock, fishing, real investment, and labor productivity in heat-exposed industries.



On inflation

The study revealed that, on average, temperature shocks generally lead to a 0.46 ppt increase in inflation in the short run. On a disaggregated level, the inflationary impact of temperature shocks on food prices is deeper in magnitude and long-lasting in period at 0.79 ppt, persistent until eight (8) years after the shock, vis-à-vis the effect on non-food prices, which is rather small at 0.31 ppt and transitory up to two (2) years only.

Policy implications

The study underscored the need for the central bank to be intentional in managing impact of climate change on price and financial stability. It provided insights on assumptions that need to be incorporated in inflation forecasting and scenario exercises relating to temperature shocks. Moreover, the study raised the need for a more holistic approach by the national government in promoting a climate-resilient agriculture sector to ensure food security. It also supports BSP's call for timely implementation of non-monetary measures in the face of supply side constraints, particularly on food.

Systemic risk assessments

Climate considerations are incorporated in the implementation of the BSP Systemic Risk Crisis Management (SRCM) framework.²³ The Financial Stability Reports and Systemic Risk Reviews presented quarterly to the BSP Board-level Financial Stability Policy Committee (FSPC) and the inter-agency Financial Stability Coordination Council (FSCC) has included discussions on, for instance, the stability implications of the country's reliance on imported fossil fuels with limited domestic substitutes.

Mitigating risks involves mapping out vulnerabilities within the system. Channels of contagion from both the financial and non-financial sectors can be analyzed using network models to map scenarios related to climate change risks. The BSP is continuously building its capacity to do such modelling and conduct impact assessments of different scenarios, recognizing their importance in a market landscape that is continually evolving due to climate change and the global and domestic sustainability agenda.

For instance, a detailed analysis by the BSP's Office of Systemic Risk Management examined the impact of oil price volatility amid geopolitical and transition risks on financial stability through the corporate sector. The analysis focused on key factors such as rising costs, supply constraints, and potential economic slowdowns. The assessment revealed direct spillover effects on energy-dependent firms, and the ensuing potential systemic risks were outlined using network models.

²³ See the SRCM Framework:

https://www.bsp.gov.ph/Media_And_Research/SystemicRiskCrisisManagementFramework/Systemic_Risk_Crisis_Management_Framework.pdf

Prudential supervision

Financial institutions have long been familiar with the impacts of extreme weather events on their operations, their clients, and the communities they serve. Extreme weather events are just one type of the many triggers for climate, environmental, and social risks that could disrupt the operations of financial institutions, affect their financial soundness, and constrain their ability to support economic activities.

Since April 2020, the BSP has issued a series of sustainability-related regulations to promote effective management of climate, environmental, and social risks considering that such risks pose significant threats to the safety and soundness of financial institutions. These sustainability-related regulations are governed by the same overarching risk management principles applied to common risk exposures of BSP-supervised financial institutions (BSFIs) in the areas of governance, controls, and disclosures, among others. The BSP subscribes to the idea that effective management of risks could also unlock opportunities for financing sustainable projects and activities. This is in recognition of the critical role of the financial sector in supporting the country's financing requirements for economic growth. Important elements of the supervisory approach to promote

effective management of climate and environment-related risks are the disclosure mechanism and scenario analysis and stress testing:

Sustainability disclosures

Following the institutionalized process governing the adoption of the International Financial Reporting Standards (IFRS) at the national level, the Professional Regulatory Board of Accountancy announced in April 2024 the adoption of the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures (International Sustainability Standards Board [ISSB] standards) as part of the Philippine Accounting Standards. The Philippine Sustainability Reporting Committee (PSRC) is tasked to evaluate the ISSB Standards for local use and to issue local interpretation and guidance. The PSRC rolled out a stakeholder outreach survey to gather feedback and insights relevant to the development of the jurisdictional roadmap and implementing regulations on the adoption of the ISSB standards that will be issued by the financial sector regulators (i.e., BSP, Securities and Exchange Commission [SEC] and Insurance Commission [IC]). The BSP's future work in this space includes the

enhancement of existing disclosure requirements, which would be done in collaboration with other financial sector regulators under the FSF.

Scenario analysis, stress testing, and data collection

Banks are required to conduct climate scenarios and stress-testing to better understand and manage climate and environmental risks. To better equip banks in this requirement, the BSP will develop climate risk stress testing guidelines in collaboration with the industry.

The BSP will also enhance prudential reports that could facilitate identification and collection of relevant data and surveillance of emerging risks/trends arising from climate change and other environment and social factors. This includes enhancement of the branch-level prudential reports to generate granular data that could be used to understand the loan profile of banks per province and region as well as assess the vulnerability of the banking system to climate physical risks and natural hazards.



Sustainability-related Regulations

The BSP has issued the following regulations to integrate sustainability considerations in banks' operations:

- a. **Circular No. 1085 or the Sustainable Finance Framework issued in April 2020** - This provides broad supervisory expectations on the integration of sustainability principles in the corporate and risk governance frameworks as well as in the business strategies and operations of banks.
- b. **Circular No. 1128 or the Environmental and Social Risk Management Framework issued in October 2021** – This requires the integration of environmental and social (E&S) risk factors in the credit and operational risk management systems of banks.
- c. **Circular No. 1149 or the Guidelines on the Integration of Sustainability Principles in Investment Activities of Banks in August 2022** - This covers banks' investments in debt and equity securities that are lodged in the banking book. Banks should consider their sustainability strategic objectives and risk appetite in their investment activities as well as ensure that such investment does not contribute to sectors considered to have harmful effects to the environment or society.
- d. **Memorandum No. M-2022-042 dated 29 September 2022 or the Guidance on the Implementation of the Environmental and Social Risk Management (ESRM) System** - This informs banks on the initial steps or approaches that may be considered in developing an ESRM System. It likewise describes the BSP's minimum expectations as embodied in the issued Circulars and provides information and reference to publications of the Network for Greening the Financial System and the Basel Committee on Banking Supervision, among others, to support the development of an ESRM System.



Additionally, the BSP issued regulations to unlock financing for sustainability projects:

e. Agriculture, Fisheries and Rural Development Financing Enhancement Act of 2022

as implemented by Circular No. 1159 – This recognizes sustainable finance as one of the eligible modes of compliance with the mandatory credit to agriculture, fisheries, and rural development. Relatedly, the BSP issued Circular No. 1174 to capture information on loans or investments to finance sustainable projects or activities, and issuances of sustainable finance instruments.

f. Circular No. 1185 dated 13 December 2023 or Grant of Additional Single Borrower’s Limit for Financing Eligible Projects and Zero Percent Reserve Requirement Rate Against Sustainable Bonds – This provides additional measures to incentivize banks to extend loans or finance investments for green or sustainable projects or activities, including transitional activities. These take in the form of extra lending capability and reduced reserve requirement rate on sustainable bonds issued by banks.

g. Circular No. 1187 or the Philippine Sustainable Finance Taxonomy Guidelines issued in February 2024 – This adopts the Philippine Sustainable Finance Taxonomy Guidelines which was developed under the auspices of the Financial Sector Forum. The taxonomy serves as a tool to classify whether an economic activity is environmentally and socially sustainable and guides different stakeholders in making informed financing decisions.

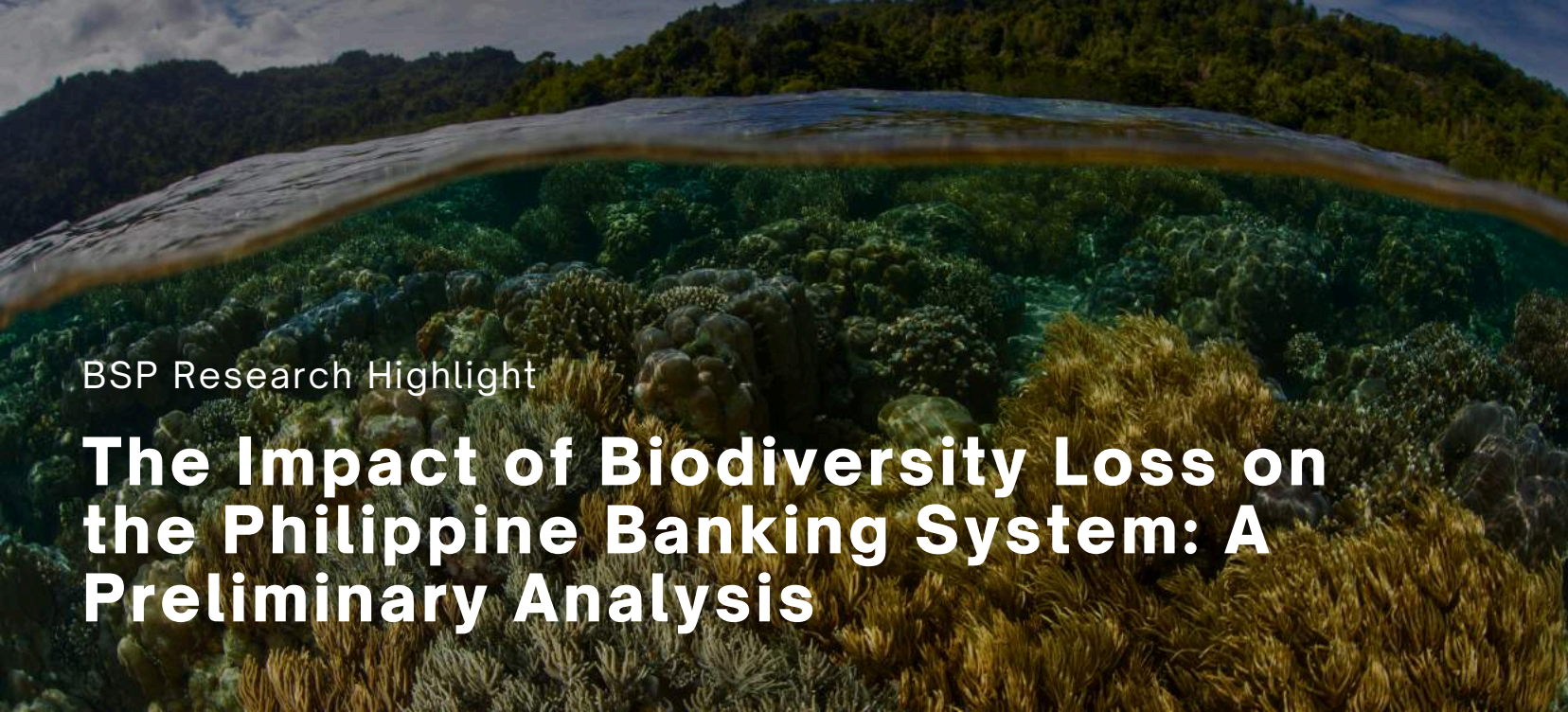


Climate and nature research agenda

The BSP is pursuing a research agenda to: 1) further investigate how climate change will affect the economy and the financial system; and 2) explore its further integration in monetary policy, supervisory and prudential frameworks.

To date, the BSP has published the following research papers and notes related to climate change:

- Macroeconomic effects of temperature shocks in the Philippines: evidence from impulse responses by local projections by J. Armas, R. Asi, D. Mandap, and G. Moral (2024)
- The Impact of Biodiversity Loss on the Philippine Banking System: A Preliminary Analysis by V. Bayangos, F. Cacnio, R. Cruz, J. Hallig, and N. Lomibao (2023)
- Climate Change and Monetary Policy: Some Preliminary Thoughts by Z. Abenoja, L. Ganapin, J. Armas, R. Asi, and D. Mandap (2022)
- Impact of Extreme Weather Episodes on the Philippine Banking Sector: Evidence Using Branch-Level Supervisory Data by V. Bayangos, R. Cachuela, and F. Del Prado (2020)



BSP Research Highlight

The Impact of Biodiversity Loss on the Philippine Banking System: A Preliminary Analysis

Risks to the financial system from biodiversity loss can arise from macroeconomic factors such as supply chain disruptions, productivity changes in the agriculture sector, shifting demand, and increased costs. These risks can translate into various financial risks for banks, including credit risk, underwriting risk, market risk, operational risk, and liquidity risk. For instance, by financing clients engaged in biodiversity-dependent economic activities, lending institutions are exposed to both direct and indirect risks associated with biodiversity loss.

The BSP conducted a study to assess the initial impact of biodiversity loss on bank-level outstanding credit and its overall effect on the capital adequacy ratio of banks through a stylized bank solvency stress test. The study revealed that the impact of biodiversity loss on the banking system is modest. Specifically, the study found that biodiversity depletion reduces the bank capital ratio by less than 1 percentage point. At this rate, banks would maintain Capital Adequacy Ratios above the BSP and Bank for International Settlements thresholds of 10% and 8%, respectively.

Despite the study indicating a modest impact of biodiversity loss on financial stability, the findings highlight the need for more granular data and improved methodologies to better assess the economic and financial impacts of nature loss. With enhanced data, other potential risk channels, such as market risk, can be evaluated, and the indirect impacts on supply chains can be estimated more accurately.

Country Progress Recognition in Sustainable Finance

I. Sustainable Banking and Finance Network (SBFN) Measurement Framework

The SBFN 2024 Global Progress Brief²⁴ – released on 16 April 2024 – offers a comprehensive benchmarking of sustainable finance trends and initiatives across 66 member countries. It highlights key achievements, innovations and opportunities across Emerging Markets and Developing Economies (EMDEs), in line with the SBFN Measurement Framework, covering three pillars of sustainable finance:

- **ESG Integration Pillar** - evaluates national and regional frameworks and practices to manage ESG risks in the financial sector.
- **Climate- and Nature-related Risk Management Pillar** - measures the adoption and implementation of frameworks by the financial sector to contribute to national and international efforts to manage climate- and nature-related risks, and to support the commitments made under the Paris Agreement.
- **Financing Sustainability Pillar** - evaluates policies and tools in place from regulatory and voluntary efforts to promote capital flows toward climate, social, green economy, and sustainability goals.

The Philippines advanced in the SBFN Overall Progress Matrix from 2022 to 2023, moving from the “Developing” to the “Advancing” sub-stage under the “Implementation” stage.

The Philippines also made progress under each pillar:

- ESG integration: moved from “Advancing” to the “Consolidating” sub-stage
- Climate and Nature-related Risk Management: moved from “Formulating” to “Advancing”
- Financing Sustainability: moved from “Developing” to the “Advancing” substage

²⁴ SBFN (2024). Global Progress Brief 2024.



| Preparation | | Implementation | | Maturing | |
|---|--|--|--|---|---|
| Commitment | Formulating | Developing | Advancing | Consolidating | Mainstream behavioral changes |
| Announced formal commitment and took initial steps to achieve progress on sustainable finance | Formal initiative in progress to develop a national roadmap, framework, or policy on sustainable finance | <p>Formally launched first national roadmap, framework, policy, or regulation</p> <p>Formal taskforce or dedicated unit leading efforts</p> <p>Conducted assessment, awareness raising, and/or capacity-building</p> | <p>Implementation tools and initiatives in place, such as guidelines, reporting templates, training, online tools, and supervisory instructions</p> <p>National framework encompasses multiple parts of the financial system and expectations from the sector in line with global standards and best practices</p> <p>Financial institutions required or encouraged to report on their implementation</p> <p>Financial institutions started reporting on implementation of said policies</p> | <p>Comprehensive set of national initiatives and frameworks on sustainable finance in place and covers all parts of the financial system</p> <p>National frameworks aligned with international good practice across all three pillars</p> <p>Actions are undertaken to supervise or monitor implementation of frameworks</p> <p>Consistent and comparable implementation data being collected by regulator as part of supervision</p> | <p>Established ecosystem of aligned and integrated sustainable finance initiatives in all parts of the financial system</p> <p>Financial institutions required or encouraged to report publicly their implementation of sustainable finance across risk and opportunity</p> <p>Regulator or association has multi-year data on implementation by financial institutions</p> |

II. World Wide Fund for Nature (WWF) Sustainable Financial Regulations and Central Bank Activities (SUSREG) Framework

Launched by the WWF in 2021, the SUSREG Framework supports central banks, financial regulators, and supervisors in strengthening the financial system's capability to withstand climate, environmental and social risks, while allowing the mobilization of capital towards the transition to a low-carbon, resilient and sustainable economy.

Based on the WWF 2023 SUSREG Report,²⁵ 67% of all assessed countries issued regulations or supervisory expectations on sustainable banking in 2023. This marks a notable 5% increase from the 62% level in 2022.

The three pillars of the WWF SUSREG assessment are:

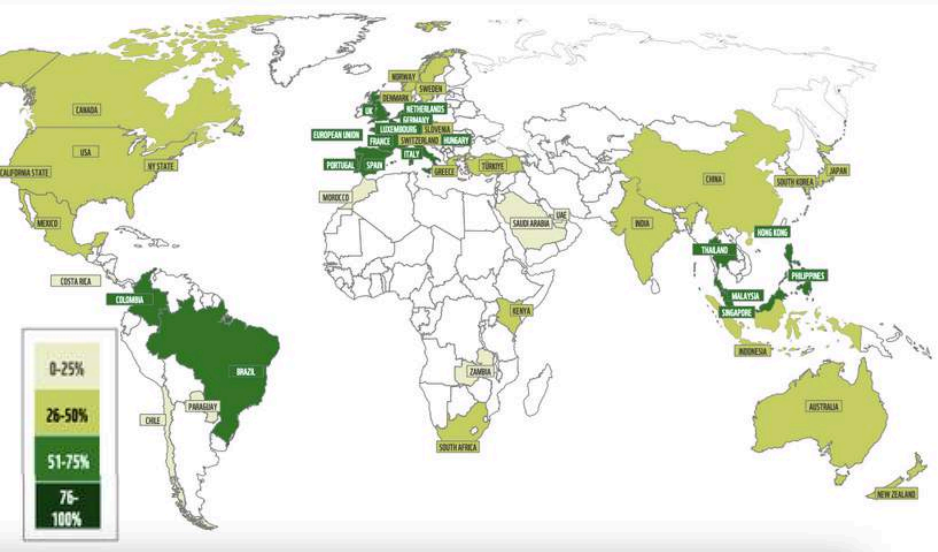
- **Banking and Insurance Supervision Pillar** - assesses the maturity of supervisory expectation in using various tools and measures to ensure safety and soundness of covered financial institutions with regard to climate, environmental, and social risks.
- **Central Banking Pillar** - assesses the measures that central banks take to address climate, environmental and social risks in keeping with their key mandate of ensuring price stability.
- **Enabling Environment Pillar** - assesses the maturity of the environment enabling the financial sector to fully support the transition to a low-carbon, resilient and sustainable economy. Some of the measures may be outside the remit of central banks or financial supervisors.

²⁵ WWF (2023). 2023 SUSREG Annual Report - An Assessment of Sustainable Financial Regulations and Central Bank Activities.



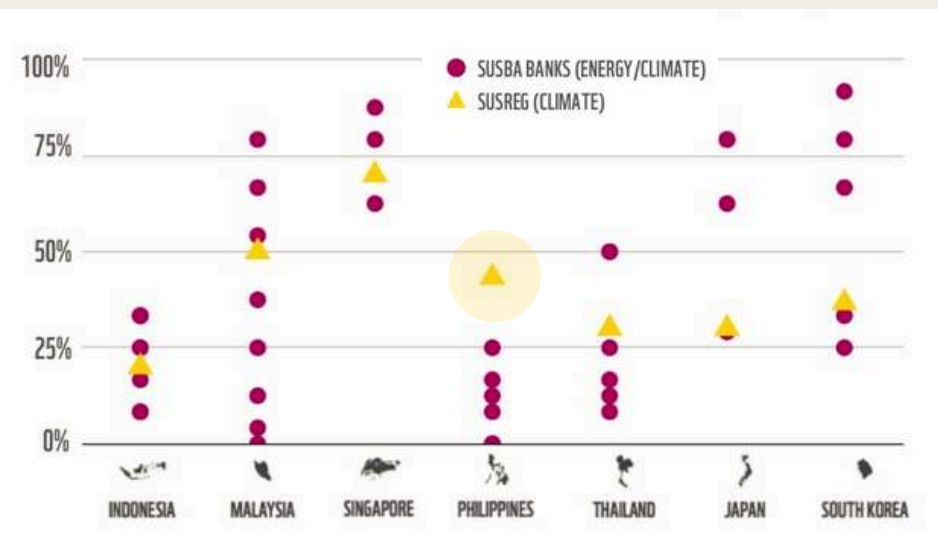
The Philippines, in particular, demonstrated significant progress in integrating climate-related risks into banking supervision. In 2023, the country met between 51-75% of the SUSREG assessment criteria, compared to less than 50% compliance in the previous year (see diagrams below).

2023 SUSREG Assessment



Source: [2023 SUSREG Annual Report](#)

2022 SUSREG Assessment



Source: [Green Central Banking](#)

Capacity building and knowledge sharing

To enhance its capacity to integrate climate-related risks into economic and financial frameworks, the BSP has initiated several training and development programs. In December 2023, the BSP and the South East Asian Central Banks (SEACEN) Research and Training Centre collaborated to hold the workshop on Macroeconomic Modelling and Policy Implication of Climate-Related Issues, as part of the BSP's efforts to build staff capacity with an aim to develop a macroeconomic model that will integrate climate risk into its macroeconomic and financial modelling to best inform monetary policymaking. In particular, the workshop covered (1) The Science and Economics of Climate Change; (2) Climate risks for the financial sector; (3) Climate Scenario analysis for central banks; and (4) Macroeconomic and financial models for climate change.

In January 2024, the BSP hosted the International Workshop on “Nature, Macroeconomy, and Finance” which was a joint initiative with the London School of Economics and Political Science-Grantham Research Institute on Climate Change and the Environment, the World Wide Fund for Nature, and the International Network for Sustainable Financial Policy Insights, Research, and

Exchange (INSPIRE). The workshop gathered researchers, policymakers, regulators, and representatives from the academe, multilateral agencies, and financial institutions to discuss the dynamics, dependencies, and impact of nature on ecosystem services, opportunities, and financial risks.

In February 2024, the BSP together with the Asian Development Bank, and the Global Institute for Macroprudential Modelling (GIMM) held a hands-on workshop on macroprudential modelling. Gathering participants from local and international agencies, the workshop was tailored for middle-level officers, technical staff, and policymakers involved in macroeconomic modelling, macroprudential modelling, and financial stability analysis. They ran simulations on (1) the impact of macroprudential policy instruments; and (2) top-down stress-testing scenarios with real-financial sector consistency. Part of the modelling exercises was a scenario analysis of climate-related risks. Moreover, this area of the workshop focused on the challenges in understanding and modelling these climate-related risks.

The BSP also actively participates in regional dialogues on climate risks through the Financial Stability Board - Regional Consultative Group for Asia.

Additionally, the BSP benefits from regular engagements with counterpart foreign regulators through its memberships in the Network for Greening the Financial System (NGFS), Sustainable Banking and Finance Network (SBFN), Alliance for Financial Inclusion – Inclusive Green Finance Working Group, and the ASEAN Taxonomy Board – Working Group, among others. Moreover, the BSP is intensifying efforts to guide supervised financial institutions in managing environmental and social risks and to promote the financing of sustainable projects through regular engagements with industry associations and the conduct of workshops in collaboration with development partners. The BSP is also building the capacity of bank supervisors to strengthen proportionate application of regulations.



International Network Engagements

Network for Greening the Financial System (NGFS)

The NGFS is a group of more than 130 central banks and supervisors that are collaborating to integrate environment and climate risk management in the financial sector and to mobilize financing in support of the transition toward a sustainable economy.

The BSP became a plenary member of the NGFS in July 2020 and since then has actively participated in its various workstreams covering supervision, monetary policy, scenario design and analysis, net zero for central banks, and nature-related risks. Consequently, information and insights from the NGFS has been instrumental in guiding the BSP's policies and initiatives toward sustainability. For instance, NGFS publications are explicitly referenced in BSP Memorandum No. M-2022-042 or the Guidance on the Implementation of the Environmental and Social Risk Management System.

The BSP, as represented by the Deputy Governor, Financial Supervision Sector, was featured in the NGFS “In Conversation With” publication last September 2023.²⁶

Starting 1 January 2024, the BSP became an additional member of the NGFS Steering Committee on a two-year term.

Sustainable Banking and Finance Network (SBFN)

In 2013, the BSP together with the Department of Environment and Natural Resources joined the SBFN, which is a voluntary global community of policymakers and industry players from emerging markets with a thrust to advance sustainable finance for national development, financial market deepening, and stability. The SBFN mobilizes information, resources, and practical support for its members to design and implement national initiatives that promote sustainable finance at national, regional, and global levels.

²⁶ See: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_icw_questions_bsp_final.pdf



The BSP joined the network to enhance its understanding of ESG risk management across the financial sector and to increase capital flows to activities with positive environmental and social impacts, including climate change mitigation and adaptation.

In January 2024, the BSP accepted the invitation to co-chair together with the Federation of Brazilian Banks and the Kenya Banker Association the newly created Inclusive Sustainable Finance (ISF) Task Force of the SBFN. The task force was established to document ISF definitions, strategies, and best practices from an emerging markets perspective, providing SBFN members with practical guidance on enabling the ISF market. The SBFN has three other working groups, namely: (1) measurement working group, (2) sustainable finance instruments working group, and (3) data and disclosure working group.

Alliance for Financial Inclusion (AFI) - Inclusive Green Finance Working Group (IGFWG)

AFI is a member-led alliance of central banks and financial regulators working to accelerate financial inclusion. BSP has been a member of AFI since its inception in 2008. In 2019, the AFI launched the IGFWG as a peer-to-peer platform dedicated to developing green financial inclusion policy solutions with a focus on communities most vulnerable to climate change. In response to the increasing interest from the AFI network, member institutions have committed to work together and collaborate with partners in identifying, understanding and implementing inclusive green finance policy solutions.

The working group addresses areas such as green credit risk guarantees, digital financial services in support of IGF, climate change and sustainability, and IGF data. In 2023, the working group issued the Environmental and Social Risk Management Guidelines, which outline common approaches to implementing environmental and social risk management in the banking sector and provide procedural considerations for regulators to issue such guidelines.

On Mobilizing Green Finance

Regulatory incentives

The BSP has provided additional incentives to accelerate the financing of green or sustainable projects, including transition activities aligned with the targets under the Philippine Development Plan and other strategy documents of the National Government. The incentives are in the form of an increased single borrower's limit (SBL) and the gradual reduction of reserve requirement rate against sustainable bonds issued by banks.²⁷ These incentives are time-bound and would be effective for two (2) years, subject to review.

- **Temporary increase in the single borrower's limit of banks by 15% to extend loans or finance investments for eligible green or sustainable projects or activities, including transitional activities.** To be considered eligible, such projects or activities must meet any of the principles or eligible categories of projects as laid out in the (1) 2022 Strategic Investment Priority Plan on

Green Ecosystems, Health and Food Security; (2) Republic of the Philippines Sustainable Finance Framework; (3) Philippine Sustainable Finance Guiding Principles; (4) ASEAN Taxonomy for Sustainable Finance; or the (5) implementing regulations for the Philippine Sustainable Finance Taxonomy Guidelines.

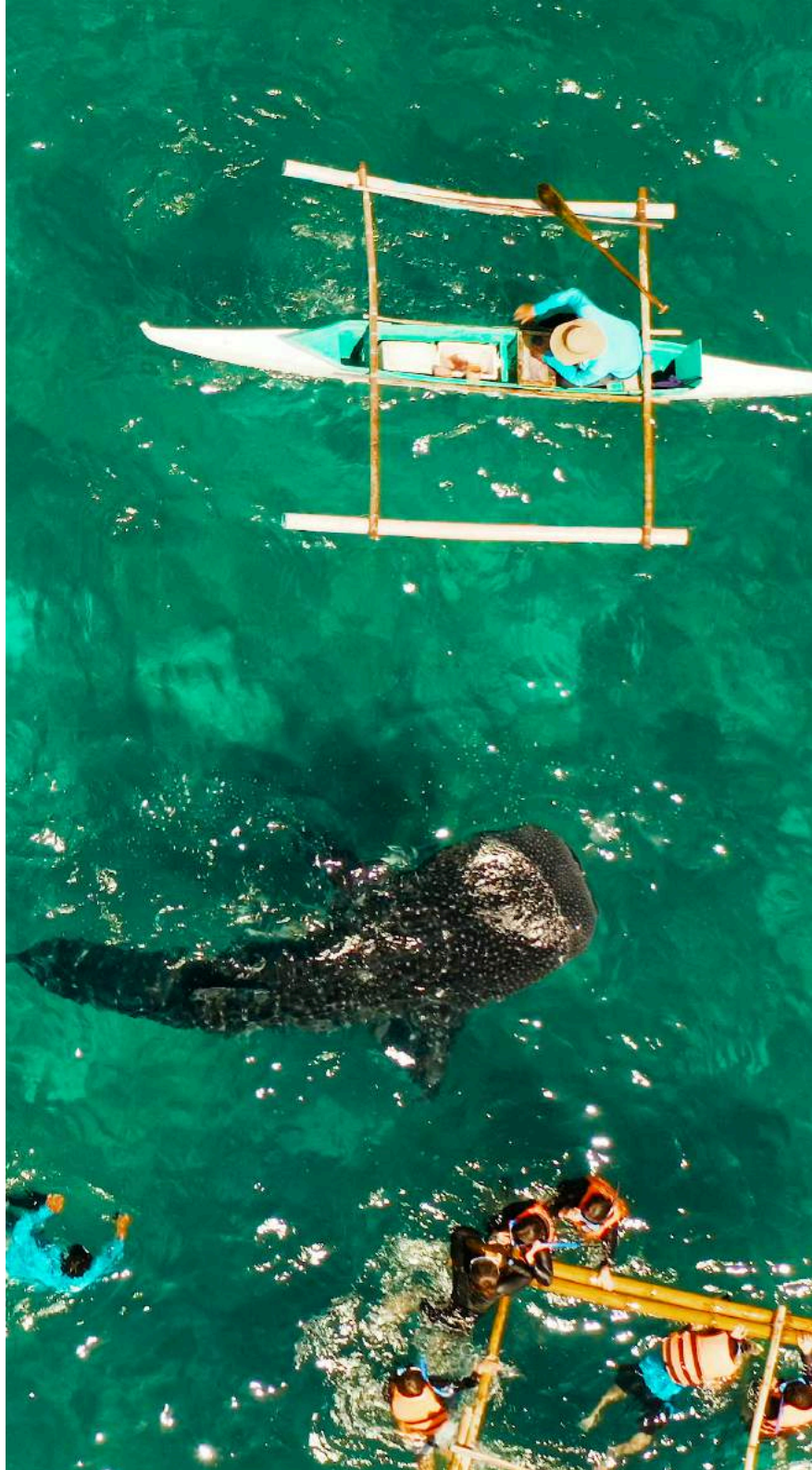
- **Gradual reduction of reserve requirement rate (RRR) against sustainable bonds issued by banks.** The applicable RRR for new and existing bond issuances will be gradually reduced from the current 3% to 0%, as follows: (1) a 200-basis point reduction in the first year from effectivity of the policy (i.e., 6 January 2024); and (2) an additional 100-basis point reduction in the succeeding year for another 12 months. For 2024, the applicable RRR is 1% for new and existing sustainable bond issuances.

²⁷ Issued under Circular No. 1185 dated 13 December 2023

Apart from compliance with the appropriate regulations of the SEC, the issuing banks are expected to comply with the disclosure requirements in the Sustainable Finance Framework and not engage in greenwashing.

The BSP will also explore other viable regulatory incentives to promote financing for adaptation and transition, with due consideration to moral hazard concerns and legality. Such incentives may include relaxing certain regulations on BSP's normal credit operations for refinanced green loans of banks.

Moving forward, the BSP will be issuing guidelines for sustainability-themed unit investment trust funds (UITFs) by trust entities (TEs), which could help in broadening the range of sustainable finance instruments for retail and institutional investors.

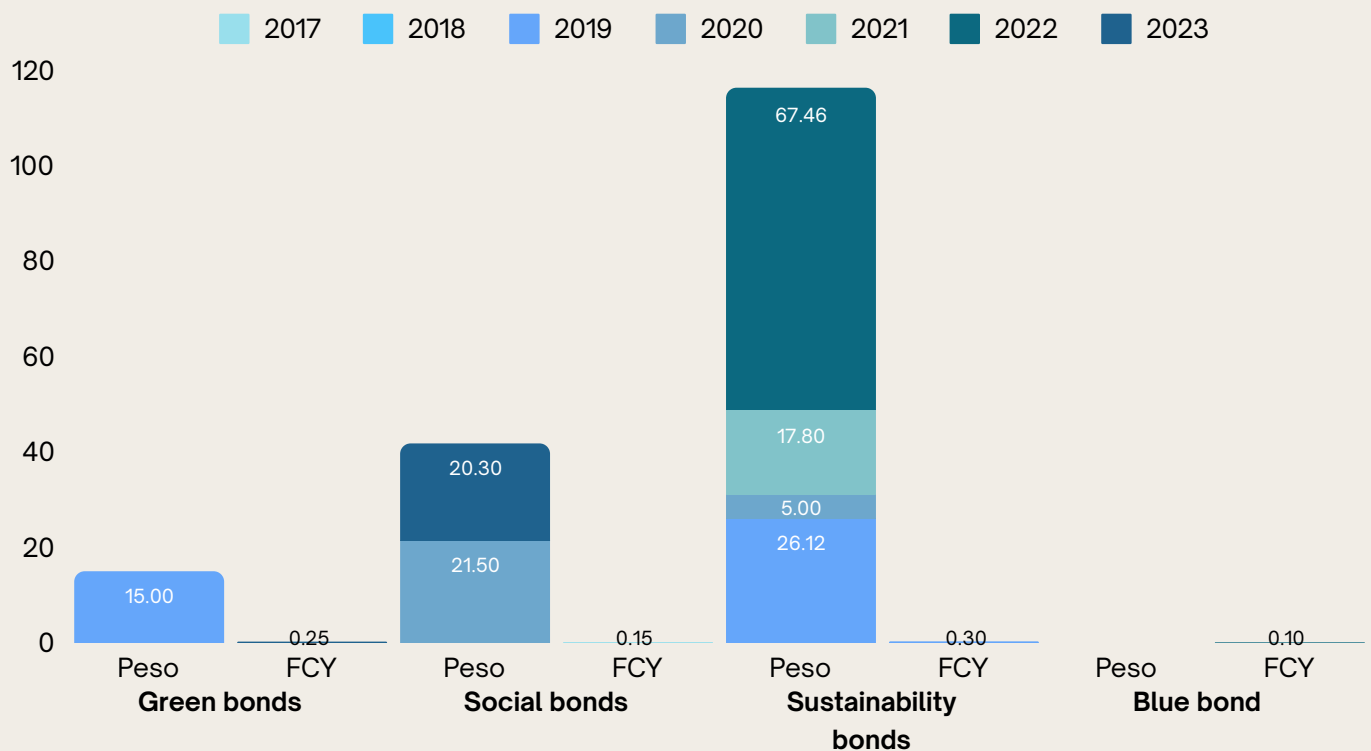


Greenwashing refers to the deceptive marketing used to persuade the public that an organization's products, aims, and policies are environmentally friendly. It also covers the dissemination of misleading information, whether intentional or not, regarding a company's environmental strategies, goals, motivations, and actions that can induce false positive perception of a company's E&S performance.

Sustainable bonds issuances in the Philippines

From 2017 to 2023, seven Philippine banks have issued PHP173.2 billion peso-denominated and USD1.5 billion foreign-currency denominated green, social, sustainability and blue bonds (collectively ‘sustainable bonds’).²⁸ These include the PHP49.3 billion-worth of social bonds issued by two banks to finance or refinance the needs of eligible MSMEs, and the USD100 million-worth of blue bonds issued by a bank in May 2022.

Banks Sustainable Bonds Issuance by Type and Currency
(Amount in Billions)



²⁸ Green bonds are debt instruments whose proceeds will be used for the financing of environmental or climate-related projects. Social bonds are debt instruments where the proceeds will be exclusively applied to finance or refinance new and/or existing eligible social projects. Sustainability bonds are debt instruments whose proceeds will be used to support projects that have components of both environmental and social-related projects. Blue bonds are debt instruments issued by governments, development banks, or other entities to raise capital from impact investors to finance marine and ocean-based projects that have positive environmental, economic, and climate benefits.



17

No. of issuers by industry

7

Banking

2

Electrical
utilities

2

Real estate

2

Renewable
energy

1

Consumer
services

1

Supranational

1

National
government

1

Water utilities

In the first semester of 2024, the total amount of peso-denominated sustainable bonds has increased to PHP236.5 billion owing to the issuance of an ASEAN-labelled sustainability bond by a universal bank. Meanwhile, the total amount of foreign currency-denominated sustainable bonds as of the same period has gone up to USD1.6 billion on account of a social bond issuance by a thrift bank, the proceeds of which will be directed to women from low- or lower-middle-income groups.

The total reserves generated from sustainable bonds issued by banks amounted to PHP1.0 billion as of 31 March 2024. With the regulatory incentive provided by BSP (i.e., 200-basis point reduction in RRR for sustainable bonds), an estimate of PHP2.0 billion has been freed up to the system, which may then be reallocated to finance eligible and sustainable activities.

The appetite for the issuance of sustainable bonds is seen to be sustained considering the preliminary results of the 2023 Banking Sector Outlook Survey (BSOS).²⁹ The survey revealed that the interest of respondent banks to finance sustainable projects or activities in the next two years (i.e., 2024-2025) improved to 90.3 percent in 2023 from 79.3 percent recorded in 2021. Nonetheless, respondent banks have highlighted some challenges, such as those related to capacity and bankability of sustainable projects.

Aside from banks, there are 10 other sustainable bond issuers including the National Government. The total ASEAN labelled green, social, and sustainability bonds issued amounted to USD49.14 billion, of which USD12.85 billion or 26% were issued by Philippine companies as of 31 March 2024

The National Government has issued sovereign sustainability bonds from 2022 to 2023, totaling USD 3.55 billion (including a JPY 70.1 billion issuance, equivalent

²⁹ The BSOS is a forward-looking report and executive digest of the sentiments of the presidents, chief executive officers, and country managers of banks related to their growth outlook and risk assessments, business performance strategies, and insights on regulation and supervision within a two-year horizon. This also serves as a tool to validate the assessment of bank supervisors and forms part of the BSP's surveillance toolkit to promote the sustained resilience of the banking system.



to USD550 million) to fund eligible activities and projects aligned with the ROP Sustainable Finance Framework.³⁰ An external and independent review³¹ affirmed that the bonds issued were aligned with the International Capital Market Association Green and Social Bond Principles

The National Government has utilized the proceeds from the bond issuances to finance projects that support employment generation, access to education and healthcare, COVID-19 expenditures, sustainable management of living and natural resources, renewable energy, and climate change adaptation.³²

Sustainability Bonds

Cumulative USD 3.55 Billion or PHP 195.64 Billion*



*Average March 2022 to February 2023 FX date from BSP, 1USD:55.1099PHP
Source: ROP Sustainability Bond Allocation and Impact Report

³⁰ Issued by the Department of Finance

³¹ DNV Business Assurance Singapore Pte. Ltd. conducted the review of the issued bonds.

³² Department of Finance (2023). [PH publishes Sustainability Bond Allocation and Impact Report, underscores role of sustainable finance in achieving SDGs.](#)



A view of the Mayon Volcano from Camalig, Albay, Philippines. Photo by [Junel Mugar](#) via Unsplash.

Taxonomy

With the huge investment needed to achieve the country's climate change adaptation and mitigation targets, the accelerated mobilization of funds should involve not only banks but also other players in the sustainable finance ecosystem including the capital market participants, the insurance sector, multilateral development agencies, and other players providing ancillary services. Transparency and clarity in the identification of green or sustainable projects are important in attracting both domestic and foreign investors. Toward this end, the BSP, Securities and Exchange Commission (SEC), and Insurance Commission (IC) under the auspices of the Financial Sector Forum (FSF) developed the Philippine Sustainable Finance Taxonomy Guidelines (SFTG) and released the same in February 2024.

A taxonomy serves as a common reference for classifying an activity based on environmental and social impact. This can be used by a range of stakeholders, including financial institutions, business entities and public sector for aligning business and investment decisions with sustainability objectives. It can also be used to support policymaking (e.g., designing incentives), data collection, and other green finance market

development initiatives. Further, taxonomies promote transparency for classifying investments, thereby reinforcing investor confidence and accelerating sustainable financing in the country.

BSP issued Circular No. 1187 dated 21 February 2024 requiring banks to use the SFTG when extending credit, making investment decisions, and designing sustainable finance products, among others. The issuance of the taxonomy will be complemented by enhancements in the information architecture of the sustainable finance ecosystem.

The SFTG is largely patterned after the ASEAN Taxonomy for Sustainable Finance-Foundation Framework and incorporates the unique circumstances of the country. The objectives and the activities identified are aligned with the National Government's strategy documents for accelerating climate action and strengthening disaster resilience (i.e., Philippine Development Plan, Nationally Determined Contributions, National Adaptation Plan, and the Sustainable Finance Framework of the Republic of the Philippines).

The BSP provides an observation period prior to the full implementation of the SFTG. During this period, the BSP will pilot test with volunteer banks their

assessment of economic activities. The primary goal of this exercise is to build the understanding and capacity of banks and BSP supervisors in using the taxonomy. This stage may also facilitate the development of use cases and related reporting tools for monitoring the alignment of banks' loan and investment portfolios with the SFTG.

The SFTG is a dynamic, living document. It will be regularly reviewed and updated by the financial sector regulators, in coordination with relevant government agencies and other stakeholders, to reflect latest developments in sustainable finance and in the Government policies and targets. The BSP will also explore other applications of taxonomy as a green finance market development tool.



Salient points of the Sustainable Finance Taxonomy Guidelines (SFTG)

The SFTG is a classification tool that provides a structured way of identifying if an economic activity is considered environmentally and socially sustainable.

Consistent with the ASEAN Taxonomy-Foundation Framework, the SFTG follows a principles-based approach that provides minimum guiding questions and decision trees. This facilitates the “traffic light” classification of activities into the following:

- **Green** – activities that contribute to either adaptation or mitigation objectives as well as comply with the prescribed essential criteria (i.e., Do No Significant Harm [DNSH] and Minimum Social Safeguards [MSS]);
- **Amber** – activities that are in transition to address an actual or potential harm done to another climate change objective, or in just transition to low-carbon strategy; and activities that are considered “enablers” of climate change objectives; or
- **Red** – activities that are not aligned with the SFTG parameters, particularly the DNSH and MSS criteria, but may still be eligible for traditional financing.

The SFTG provides a simplified approach for the assessment of MSMEs’ activities for sustainable financing. This intends to reduce or eliminate any unintended consequences affecting MSMEs and enables them to actively participate in sustainable financing.

Green Force

Market development will necessitate coordinated interventions across the government to address the multi-faceted enablers and barriers. Toward this end, the BSP has been engaging the relevant agencies through the Interagency Technical Working Group for Sustainable Finance (better known as the Green Force).

The Green Force is a government coordination body for sustainable finance, of which the BSP is a member. It is tasked to develop a framework for determining the country's sustainable investment needs and carry out strategies to mobilize funding from public and private sector sources. The Green Force convened in 2023 on the implementation of the Sustainable Finance Roadmap and its Guiding Principles.³³ The said roadmap details action plans to drive financing for the country's transition toward a low-carbon and climate-resilient economy.³⁴ It also met in March 2024 on the newly published Taxonomy, the publication timeline of the National Adaptation Plan, and the Public Private Partnership Code of the Philippines.



³³ Department of Finance (2023). DOF reconvenes Green Force, discusses next steps on Sustainable Finance Roadmap.

³⁴ See: <https://www.bsp.gov.ph/Regulations/Issuances/2022/CL-2022-011.pdf>



On Implementing sustainability in own operations

Reserve Management

The management of the BSP's international reserves, including its responsible investments, follows a top-down approach. The Monetary Board approves the investment policy and strategic asset allocation and sets the risk tolerance for the overall foreign exchange reserves. The Investment Management Committee (IMC)³⁵ approves the investment guidelines and parameters as well as oversees and provides direction and recommendations on the management of the reserves. The Financial Markets (FM) oversees the day-to-day management of the BSP reserves and is tasked to operationalize the IMC-approved strategies, develop tactical strategies, and report portfolio activities and performance, among others.

³⁵ Composed of the Governor; Deputy Governors of Monetary and Economics Sector, Financial Supervision Sector, and Corporate Services Sector; and head of Financial Markets.

On 27 July 2023, the BSP signed the United Nations-supported Principles for Responsible Investment (PRI), demonstrating its commitment to responsible investment, consistent with its fiduciary duties. BSP endeavors to further improve integrating sustainability factors in its investment process and benchmark against other central bank PRI signatories. The FM established an internal Responsible Investment (RI) Committee³⁶ to develop RI policies for the integration of ESG considerations in reserve management. This will include efforts to increase investments in sustainable assets, calculate the carbon emissions and ESG score profile of the reserve portfolio, and enhance internal capacity in sustainable investment practices.

Sustainability Assets

The BSP invests in green bonds through its internally- and externally-managed portfolios, although amounts remain quite modest. Investments include the BISIP Asian Bond Fund 2, which now includes green bonds in its Pan-Asia Bond Index Fund effective 31 March 2022 following the support of the Executives' Meeting of East Asia-Pacific Central Banks (of which BSP is a member) to promote green bonds in the region.

³⁶ Composed of the head of FM and the heads of key departments/units within FM: Reserves Management Department I, Reserves Management Department II, Domestic Market Operations Department, Market Research and Surveillance Department, Investment Risk and Analytics Department, Financial Services Department, and Operational and Regulatory Risk Management Staff.

Externally-managed Portfolios

The BSP monitors the ESG integration practices of its external fund managers (EFMs). It expects EFMs to implement and continually enhance their ESG integration frameworks, reflecting a long-term commitment to sustainable investment practices. EFMs are also expected to continue addressing common challenges such as data quality and the lack of global standards, while also utilizing tools like proprietary ESG scores and structured engagement strategies to ensure effective ESG integration across investment processes.

Investment Risk Management

In the area of risk management, the BSP has incorporated climate scenarios in its stress testing analysis for the reserves focusing on forward-looking transition-based forecasts such as the Network for Greening the Financial System (NGFS) scenarios. The BSP also conducted a preliminary computation for the carbon footprint of the BSP's international reserves, following the methodology shared by the World Bank, which is based on the greenhouse gas accounting and reporting standards set by the Partnership for Carbon Accounting Financials, and is in line with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).





Camiguin Island, Philippines.
Photo by [Aaron Madulara](#) via Unsplash.

Enterprise Risk Management

In 2023, the BSP implemented its enhanced Enterprise Risk Management (ERM) framework, which integrates sustainability and ESG-related risks into the risk management framework and processes of the Bank. ESG-related risks are now part of the BSP risk universe and are covered comprehensively in the risk management framework, which adopts both top-down and bottom-up approaches for identifying, prioritizing, assessing, treating, reporting, and monitoring risks. In managing ESG risks, the BSP has been mindful of physical risks to its operations and compliance to ESG standards.

To manage physical risks, the BSP assessed the vulnerability of all BSP facilities and infrastructures around the Philippines to geologic and hydro-meteorological hazards. The study identified the potential impact of these hazards on the BSP's operations and financial condition. The recommendations arising from the study will be implemented by various BSP offices to improve the Bank's overall resiliency.

A Technical Working Group was created on 18 October 2023 to support the operationalization of the BSP's Operational Tactical Crisis Management Team.



This Team will support the bankwide Crisis Management Team composed of senior leaders in handling operational crisis that may impair or affect lives and property, BSP reputation, and/or disrupt business operations brought about by various natural (including climate change-related) and man-made disasters. To further enhance the BSP's resiliency, tools such as the Business Impact Analysis and Risk and Control Self-Assessment were introduced across the various BSP departments and offices.

In adhering to ESG standards, the BSP uses a Compliance Management System (CMS) that provides an integrated system

of processes, tools, internal controls, and functions to ensure adherence to compliance obligations, including compliance with sustainability and environmental requirements.

Implementing the CMS helps mitigate the negative impact of BSP operations on the environment and promotes supply chain sustainability by ensuring compliance with relevant laws, rules, regulations, and standards.

One of the standards that the BSP consistently adheres to is ISO 14001:2015 which provides a framework for designing and implementing an environmental management system (EMS).



By being ISO 14001 certified, the BSP ensures proactive measures to minimize the adverse environmental impact of its operations, comply with the relevant legal requirements, and achieve environmental objectives that encompass air quality, water quality, groundwater protection, oil spill prevention, environmentally harmful materials, waste management and pollution control, and hazardous waste management. To maintain its ISO certification, the Risk and Compliance Office conducts an annual independent assessment of the BSP EMS implementation in the Head Office and select BSP regional offices and branches.



Currency Management

Currency production

Since April 2022, the BSP has been issuing polymer banknotes in line with its efforts to promote cost effectiveness, durability, security, and sustainability in currency production. This issuance, conducted as part of a circulation trial, seeks to validate whether the benefits of polymer banknotes as reported by other polymer banknote-issuing authorities in other countries can be realized in the Philippines. Beyond their extended lifespan, which promises long-term reduction in production costs, polymer banknotes also boast a smaller carbon footprint, requiring less water and energy during production. A study commissioned by the BSP, conducted by the De La Salle University – Center for Sustainable Development Research, revealed that the 1000-Piso polymer banknote exhibits a 38.4% lower carbon footprint compared to its paper counterpart.

Furthermore, the sustainability of polymer banknotes is enhanced by their recyclability at the end of their circulation life. Many polymer-issuing nations, including Australia, Mexico, the United Kingdom, and New Zealand, practice the recycling of polymer banknotes. According to another BSP-commissioned study, conducted by the University of the

Philippines through the UP National Engineering Center, discarded polymer banknotes can be recycled into densified polymer plastics, which can then serve as raw materials for the production of new plastic products. Recycling demonetized polymer banknotes provides an eco-friendly solution for creating new plastic materials which is a significant step toward reducing environmental impacts and promoting a circular economy. The study also reported that the technology for processing waste polymer banknotes is already being utilized by the plastic manufacturing and recycling industry in the Philippines.

Currency recirculation

The BSP promotes currency recirculation, which offers numerous ecological benefits. In 2023, the Cash Service Alliance (CSA) program³⁷ facilitated recirculation of PHP338.7 billion or 403.1 million pieces of fit currencies among authorized agent banks (AABs) nationwide. Instead of being deposited back to the BSP, 20% of the total value or 14% of the total volume of banknote requirements of AABs were sourced through the CSA. This significantly reduced the need for deposits and withdrawals to and from the BSP, promoting a more sustainable currency management system. This shift toward currency recirculation has markedly decreased the reliance on chemicals and the energy-intensive machinery typically used in the production, processing, and transportation of new and fit-for-circulation currencies.



³⁷ In 2020, the BSP launched the Cash Service Alliance (CSA) to enable all banks to enter into a mutually beneficial agreement to service requirements for fit Philippine currency of other banks from their available currency holdings.



Currency retirement

All banknotes that fall under the category of counterfeit, unfit, mutilated, and demonetized (CUMD), undergo an online and offline shredding process³⁸ through high-capacity shredding machines. In Greater Manila Area, high denomination banknotes (i.e., 200-, 500-, and 1,000-piso) are shredded online through the Automated Banknotes Processing Machines (ABPMs) and subsequently briquetted using the Shred Extraction Briquetting System (SEBS) to avoid inhalation of harmful particulates. The Currency Disintegration System (CDS) of the BSP Greater Manila Regional Office is responsible for the offline shredding of low denomination banknotes, i.e., 100-, 50-, and 20-piso banknotes. Verification rejects from the ABPMs are also shredded using the CDS.

Online shredding refers to the use of sorting machines that automatically identify and shred CUMD banknotes. Offline shredding refers to the use of shredding machines that unconditionally shred bundles of banknotes.
(Source:<https://www.royaldutchkusters.com/blog/the-difference-between-offline-and-online-banknote-destruction>)

In 2023, the BSP Greater Manila Regional Office retired/shredded a total 1,144,037,180 pieces of CUMD banknotes equivalent to PHP380,646,902,040. Likewise, a total of 1,263,251.90 kilograms of briquetted banknotes was properly disposed and re-used as an alternative fuel source.

The disposal of briquetted unfit banknotes and defaced coins in Metro Manila is done through public auction following BSP disposal standards, through the Security Plant Complex Disposal Committee (SPC-DC). Buyers of briquetted banknotes and other non-briquetted security wastes are required to submit an Environmental Compliance Certificate (ECC) issued by the Department of Environment and Natural Resources (DENR), and to use such waste materials exclusively as an alternative fuel source for a biomass gasification facility.

For regional offices and branches outside the Greater Manila Area, a total of 1,172,610 pieces of CUMD banknotes were retired/shredded. The resulting waste materials were either disposed to sanitary landfills following health and safety guidelines of the respective local governments or donated to manufacturing facilities to serve as alternative fuel.

For CUMD coins, the BSP uses a Low-

Capacity Coin Defacement Machine (LC-CDM) prior to disposal to prevent the risk of recirculation and maintain the integrity of the Philippine currency. Similar to banknotes disposal, buyers of defaced coins are also required to submit ECC requirements. In 2023, the BSP defaced a total of 23,773,898 pieces of CUMD coins equivalent to PHP13,687,000.00 or an approximate weight of 144,568.85 kilograms/ 144.57 metric tons. The sale of the defaced coins generated a total PHP13,687,000.00 income for the BSP.

The Coin Defacement activity highlights the most cost-effective manner of achieving the BSP's objective of promptly and properly defacing its holdings of CUMD coins prior to disposal, to prevent the risk of its recirculation. Furthermore, the contracts entered into by the BSP with third-party suppliers for the sale and processing of retired currency as alternative fuel (shredded banknotes and security paper waste) or for smelting/recycling (defaced coins), ensures a sustainable approach throughout all stages of the currency life cycle. This also falls in line with the DENR's mission to achieve a "low-carbon economy through sustainable management of natural resources," and allows the BSP to fully deliver on its responsibility to withdraw unfit currency in circulation and replace these with clean new currency, in line with the BSP Clean Note and Coin Policy.



Coin Deposit Machine

The Philippine coins are a vital component of the nation's monetary system. Coins are used to purchase goods and services that are of lesser value. These are also being used as change in the purchase of high-value commodities.

Based on ASEAN average, the coins per capita was estimated at 50 pieces in 2005. In the Philippines, this was placed at 121 by the BSP, which is 142% higher than the ASEAN standard during the same year. As of 31 December 2023, coins per capita in the Philippines increased to 358.

Even as the nation has significantly more coins per person than the ASEAN average, coin withdrawals continue to rise. The "artificial shortage" brought on by the coins' non-recirculation is a significant factor in the ongoing demand for coins. Instead of redistributing the coins on the market, the public usually keeps them in jars, drawers, and piggy banks. Coins with smaller denominations, especially the 10-, 5-, and 1-sentimo coins, are often regarded to have no value and are sometimes either thrown away outright or left idle at home and kept in coin jars or other containers. As the BSP consistently fulfills the growing demand for new coins, our environment is being compromised.

Thus, the BSP launched the Coin Deposit Machine (CoDM) Project, which promotes efficient coin recirculation. This initiative substantially minimizes the environmental impact of increasing coin demand by conserving natural resources, reducing energy consumption, minimizing waste and greenhouse gas emissions, and fostering a culture of recycling.

Since its launch, the CoDM Project has made significant progress toward providing Filipinos an innovative infrastructure to utilize the value of their idle coins. As of 31 December 2023, a total of PHP350.1 million or 105.7 million pieces have been collected from the CoDMs wherein verified fit coins are subsequently re-circulated.

Gold Sourcing and Processing

Under its Gold Sourcing Policy, the BSP exclusively engages with gold-supplying counterparties that have integrated ESG principles in their core operations including compliance with environmental and labor regulations, proper handling of hazardous chemicals, and proactive engagement with local communities to ensure ethical land acquisition and protection of vulnerable populations among other considerations. To evaluate compliance with these ESG criteria, the BSP conducts risk identification and assessment prior to establishing business relationships and accepting gold from potential counterparties.

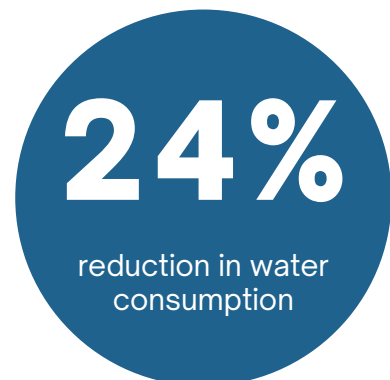
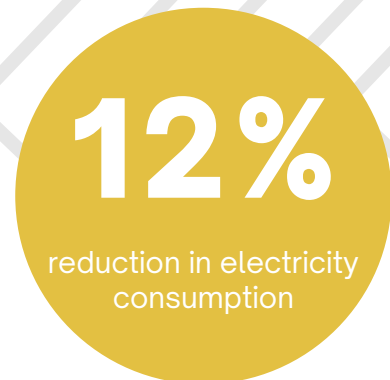
An independent assessment of compliance to responsible gold sourcing guidelines is also conducted in relation to BSP's gold buying operations to evaluate the effectiveness of the gold supply chain due diligence processes and systems in meeting the objectives of the Responsible Gold Guidance (RGG) by the London Bullion Market Association. The RGG outlines the appropriate gold supply chain due diligence policies and governance structures to oversee the prevention and mitigation of risks or adverse ESG impacts in the refiner's gold supply chain.

Relatedly, the BSP as the exclusive manufacturer of presidential medals and state decorations has adopted sustainable practices in gold-plating, which conventionally involves cyanide-based electroplating. Toward this end, the BSP entered into a Memorandum of Agreement with the Department of Science and Technology's Metals Industry Research and Development Center (DOST-MIRDC) for a limited manufacturing and use of a cyanide-free gold plating solution for experimentation and testing for the purpose of medal production and possible technology transfer. With the proven success of the conducted experimentation and testing that confirmed the viability of the DOST-developed cyanide-free electroplating process, steps are now being taken for the execution of a Technology Licensing Agreement with DOST which will pave the way for the full adoption of this alternative gold plating technique for a safer and greener production process of presidential medals, state decorations and commemorative coins.

Reduction in Electricity and Water Consumption, and Waste Generation at the BSP Head Office in 2023*

Building and Facilities

The BSP is in the process of obtaining the Building for Ecologically Responsive Design Excellence (BERDE) certification³⁹ for its head office facilities. The BERDE program espouses green building principles that goes beyond existing national laws and regulations. To govern the certification process and ensure the alignment of BSP practices to recognized standards for green building principles, a BERDE compliance committee comprised of BSP officers and personnel from the Facilities Management and Engineering Department was formed. Once achieved, the BERDE certification will attest to the various initiatives undertaken at the BSP Head Office (HO) to provide a safe, healthy, environment-friendly, and reliable work environment for BSP staff and stakeholders.



**using 2019 as base year*

³⁹ BERDE is the recognized green building certification in the Philippines by the World Green Building Council.





Among the areas that the BERDE certification considers are green practices around energy and water consumption, and waste generation.

- In 2023, the BSP HO reduced its electricity consumption by 12% and water consumption by 24% from the baseline year of 2019, exceeding the 10% target communicated to all employees. Energy conservation initiatives include installation of energy-efficient equipment and devices (e.g., LED lamps, lighting sensors and new chillers) and effective management of utilities including optimization of Heating, Ventilation, and Air Conditioning (HVAC) systems. Water conservation initiatives on the other hand include modernization of restrooms and implementation of sustainable landscape practices.
- The BSP also surpassed its target of 20% waste reduction in 2023 as it reduced its waste by 38% from the baseline year of 2019. Initiatives include the issuance of guidelines on handling deconstruction waste and managing construction activity pollution. The attainment of the target was also heavily dependent on shaping employees' awareness and behavior around waste management.

Similar sustainability initiatives have been implemented or planned at the BSP

Security Plant Complex (SPC). In the pipeline of initiatives are energy efficiency programs such as the upgrading of HVAC equipment, development of energy management procedures, and the integration of a Building Automation System (BAS) aimed to augment energy savings by optimizing the operation of building systems through data-driven monitoring and efficient systems control. Additionally, the SPC is also exploring the use of alternative sources of water (e.g. rainwater, air-conditioning condensate water, and groundwater) to reduce risks associated with having a single water source.

The BSP regional offices and branches likewise have implemented energy, water, and waste management programs. These include the installation of energy-efficient equipment, the use of rainwater harvesting facility, and the implementation of energy and water-saving practices. To minimize waste in day-to-day currency management transactions with Authorized Agent Banks (AABs), recycling measures are in place. Deposit bags, both plastic and canvas, are immediately returned to AABs for reuse. In 2023, a total of 2,997 plastic bags and 107,400 canvas bags were returned to AABs. Additionally, rubber bands collected from banknote deposits were reissued to AABs, amounting to a total of 1.140 kilograms.

Green Procurement

The BSP, being a large consumer, is cognizant of the environmental impact of the products and services it purchases. Hence, the BSP has made conscious efforts to use energy efficient and eco-friendly items in its operations, in line with the Green Public Procurement Roadmap of the Government Procurement Policy Board (GPPB) and relevant issuances from the Department of Environment and Natural Resources, Department of Energy, and Department of Health. BSP also adopts environmentally relevant technical specifications for both common- and non-common use supplies and equipment. With the issuance by the GPPB of a resolution⁴⁰ approving the adoption of broad product categories for non-common use items in relation to sustainable consumption, the BSP, while not among the identified pilot government agencies to implement the said resolution, can benchmark and expand its green specifications/criteria in the relevant product categories.

The BSP continues to improve its green procurement through the following programs:

- Capacity Building of procurement officers, end-users, and suppliers to deepen their insights on the principles and practices of green procurement;
- Institution of “green criteria and/or specifications” in the BSP Manual of Standard Specifications; and
- Collaboration and coordination with internal and external stakeholders to strengthen sustainability efforts of the BSP considering that “green procurement” requires a multi-faceted and coordinated approach.

⁴⁰ GPPB Resolution No. 19-2023 dated 30 November 2023: Approval of the Adoption of the Broad Product Categories with Specific Items or Products for Pilot Implementation in Relation to the Scaling of Sustainable Consumption and Product Project. This covers broad product categories for non-CSE items or products included in the scaling of the Sustainable Consumption and Production Project.

Climate-related Disclosures

The BSP aims to align its climate-related disclosures with the recommendations of the NGFS based on global standards. These disclosure standards serve as guide for the BSP to deepen integration of climate and sustainability considerations in its own operations. The maiden sustainability report published in 2022 was BSP's initial foray to aligning its reporting on sustainability efforts in line with the recommendations of the TCFD. While some are already in place, the BSP will develop more disclosure elements in line with the standards, particularly on risk management, targets and metrics. In line with this, BSP will establish, monitor and publish its emissions profile and targets based on the GHG protocol.



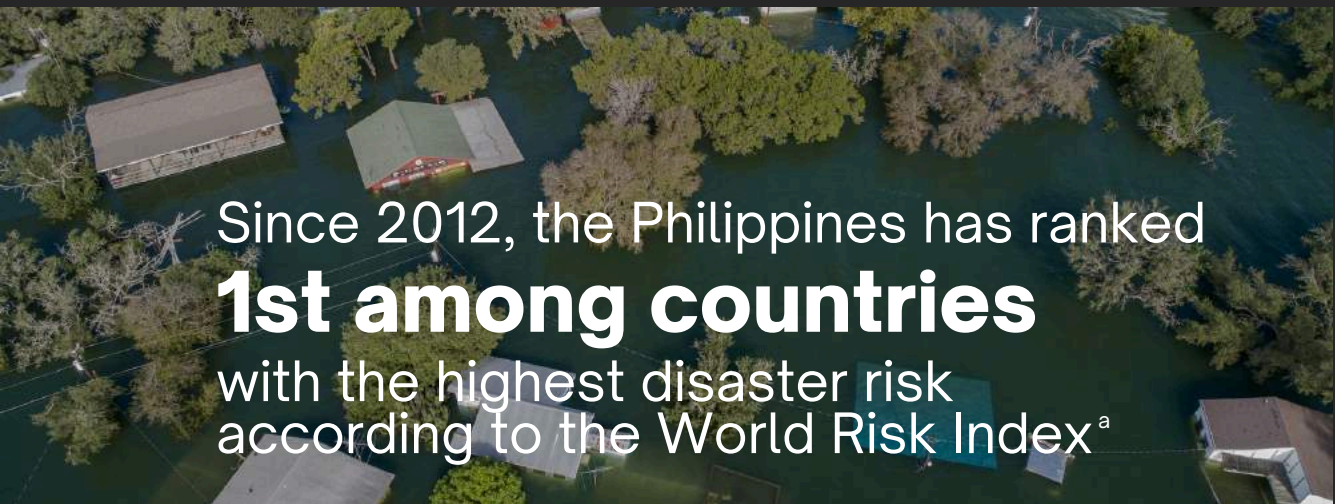
⁴¹ The NGFS released in June 2024 the second edition of the Guide on Climate-Related Disclosure for Central Banks. The guide is based on the work done by the TCFD. Moving forward, the NGFS will prepare recommendations in consideration of the ongoing work of the Taskforce on Nature-related Financial Disclosures and the International Sustainability Standards Board on unified global sustainability reporting rules.



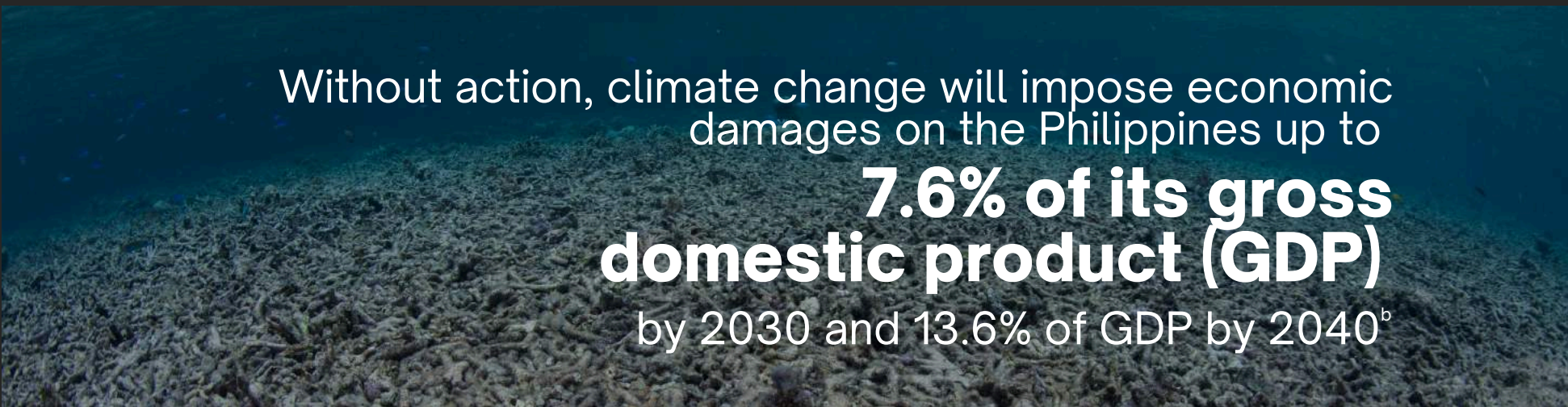


QUICK STATS

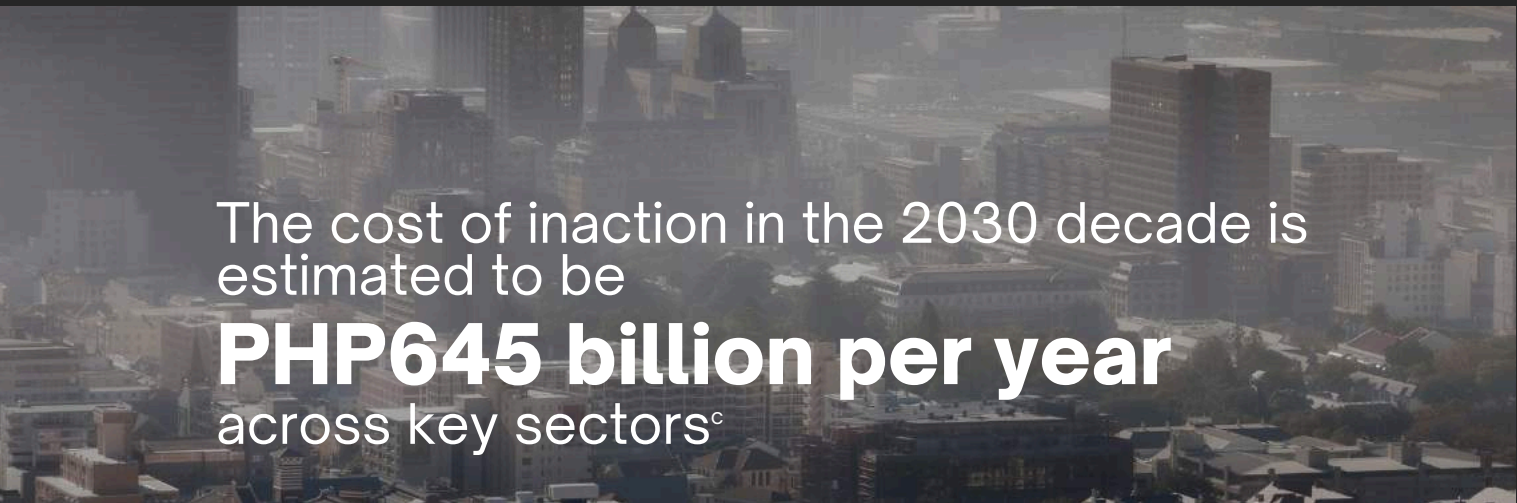
Climate change impact



Since 2012, the Philippines has ranked **1st among countries** with the highest disaster risk according to the World Risk Index^a



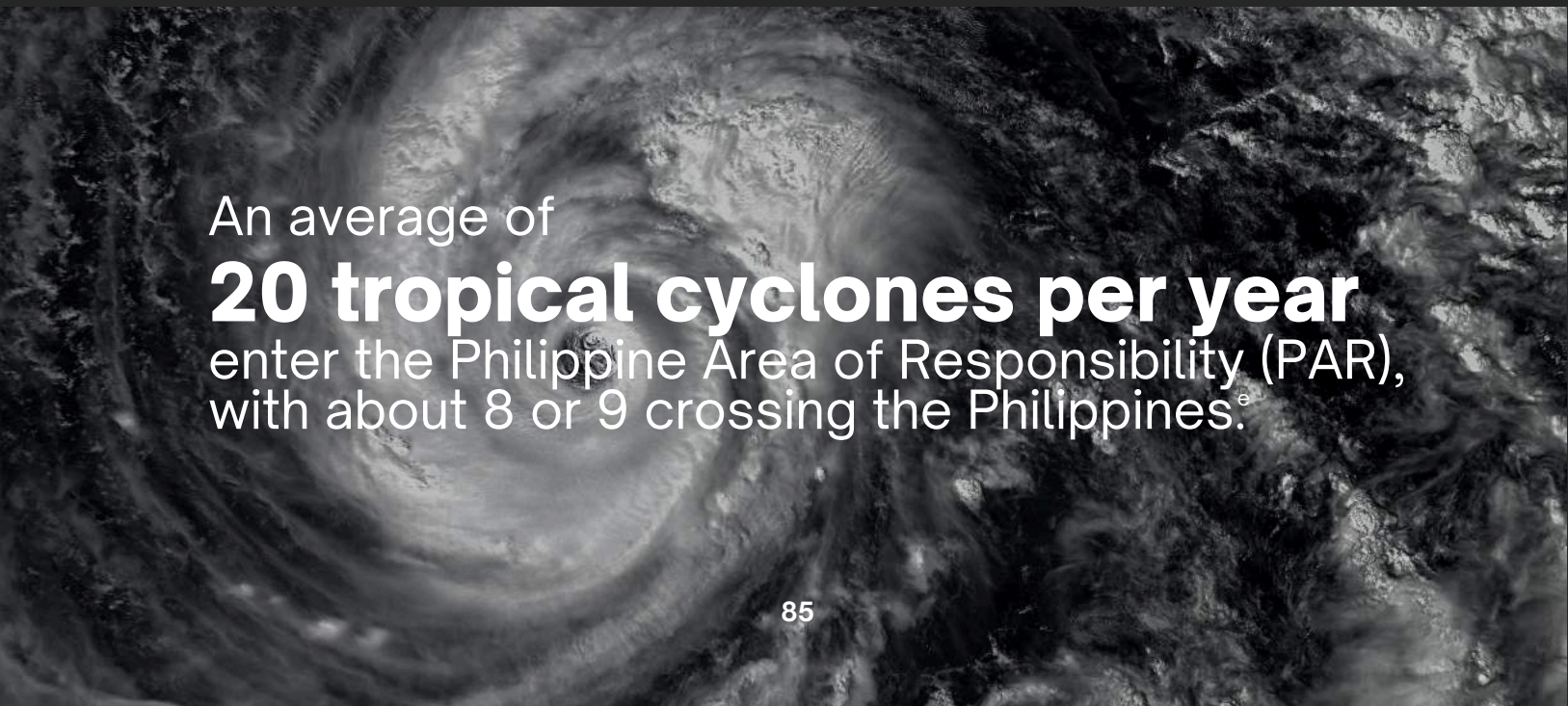
Without action, climate change will impose economic damages on the Philippines up to **7.6% of its gross domestic product (GDP)** by 2030 and 13.6% of GDP by 2040^b



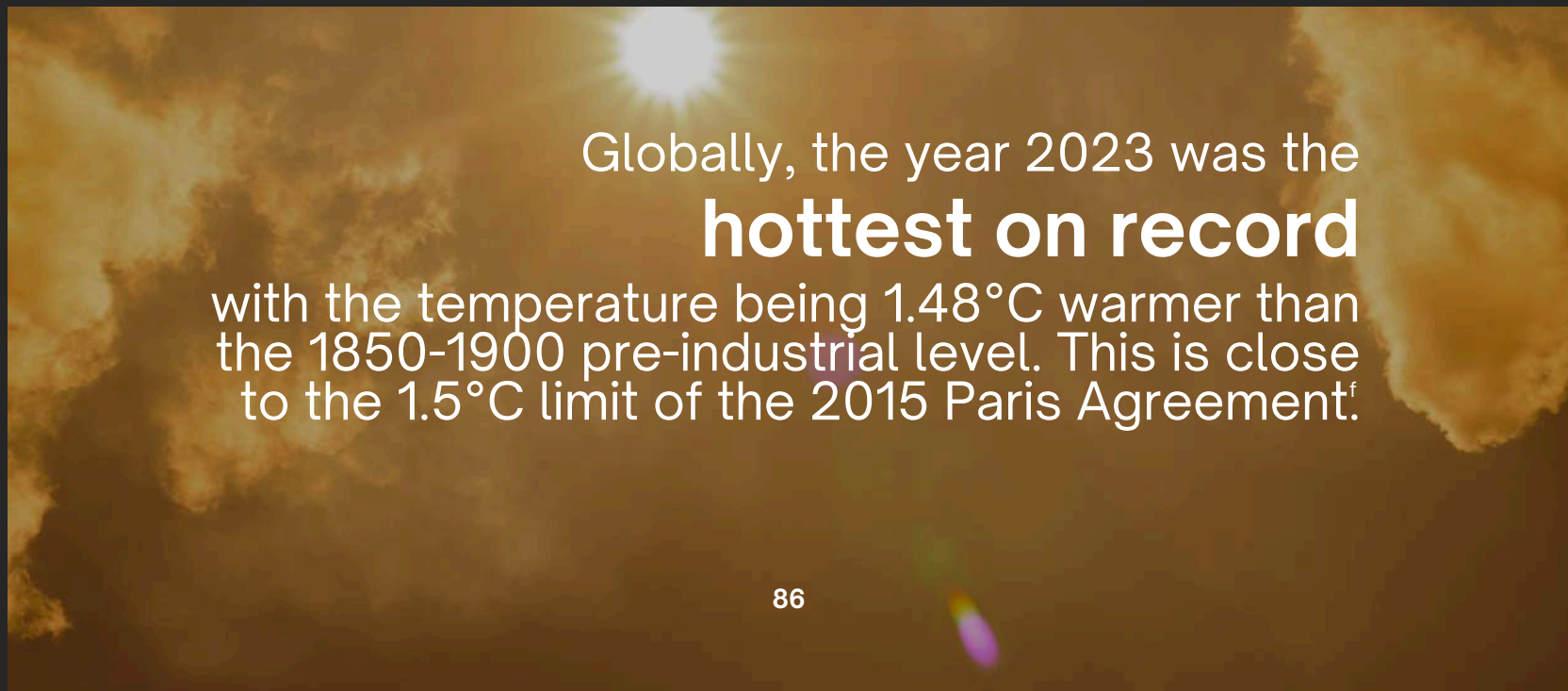
The cost of inaction in the 2030 decade is estimated to be **PHP645 billion per year** across key sectors^c



In 2023, the Philippines incurred **PHP24.4 billion in damages** due to natural extreme events and disasters, mostly in infrastructure and agriculture^d



An average of **20 tropical cyclones per year** enter the Philippine Area of Responsibility (PAR), with about 8 or 9 crossing the Philippines.^e



Globally, the year 2023 was the **hottest on record** with the temperature being 1.48°C warmer than the 1850-1900 pre-industrial level. This is close to the 1.5°C limit of the 2015 Paris Agreement.^f

Adaptation

The global adaptation finance gap is widening and now stands **between USD194 billion and USD366 billion per year.**^g

About **98% of tracked global adaptation financing** came from the public sector.^h

Mitigation

Global climate finance continues to be channeled primarily to mitigation, which received **91% of the total** in 2021/2022.ⁱ

The Philippines emitted an average of **1.98 metric tons of carbon dioxide equivalent per capita**

in 2020, way below the global average of four metric tons per capita.^j

The Philippines commits to a projected greenhouse gas (GHG) **emissions reduction and avoidance of 75%** of which 2.71% is unconditional and 72.29% is conditional, for the period 2020 to 2030. This is reflected in the country's Nationally Determined Contribution (NDC).^k

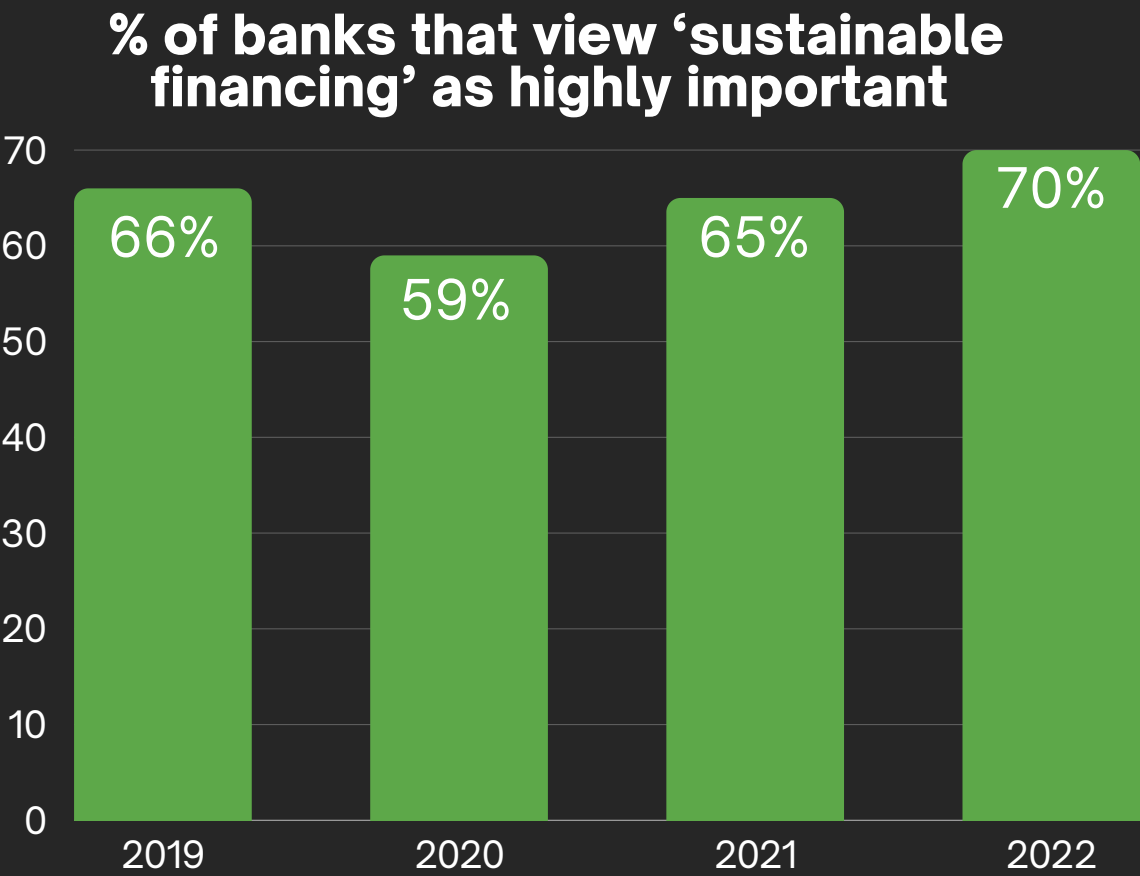
The Philippines requires about **PHP4.1 trillion in investments** to implement the NDC 2020-2030, predominantly for the energy and transport sectors.^l

Sustainable finance

An estimated **USD168 billion climate investment opportunity** in greening the energy, agriculture, manufacturing, and transportation sectors and building climate-smart cities could generate **3 million new direct jobs** in the Philippines between 2020 and 2030.^m



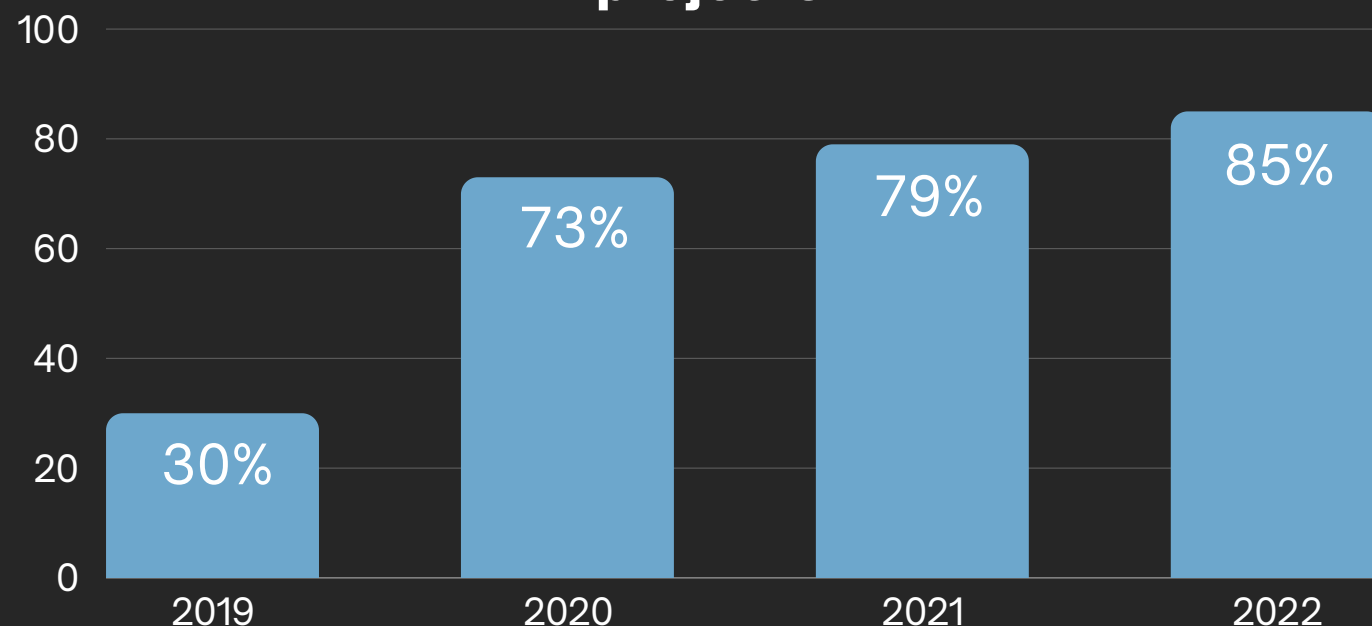
About **70% of Philippine banks view sustainable financing as highly important** and **85% plan on financing sustainable projects;** issuing green, social, and sustainability bonds, and granting sustainable loans.ⁿ



Banks have consistently viewed sustainable finance as highly important, with 66% of survey respondents in 2019 and 70% in 2022 indicating it is highly important.

Source: BSP Banking Sector Outlook Survey

% of banks that plan to finance sustainable projects



Source: BSP Banking Sector Outlook Survey

This positive perception has been reflected in the growing interest of banks in offering sustainable finance products. While only 30% of banks in 2019 planned to finance sustainable projects, this figure surged to 85% by 2022.

Among those banks with plans of being involved in sustainable finance, most expressed willingness to finance projects in support of agriculture, solar power, transportation, and water supply management and treatment.ⁿ

The majority of banks indicated the lack of expertise or skills as the primary barrier to pursuing sustainable financing. This was followed by the lack of demand for such projects and financial products.ⁿ

Based on an ad hoc BSP survey, around

75% of respondent universal and commercial banks have financed or approved loans supporting green or sustainable projects totaling

PHP830 billion and USD14 million

as of end-June 2022, representing approximately

7% of the Philippine banking system's total loan portfolio.^o

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