

Bangkok Bank Berhad

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES REPORT 2024

Abbreviation

Terms	Definition
BBB / The Bank	Bangkok Bank Berhad
BBL	Bangkok Bank Public Company Limited
BNM	Bank Negara Malaysia
BOD	BBB Board of Directors
BPD	Budget and Planning Department
CEO	Chief Executive Officer
CRO	Chief Risk Officer
ESG	Environmental, Social and Governance
FMD	Facility Management Department
LCM	BBB Loan Committee
MANCO	BBB Management Committee
NPL	Non-Performing Loans
RMC	BBB Risk Management Committee
RMD	Risk Management Department
SME	Small, Medium Enterprise
TCFD	Task Force on Climate-Related Financial Disclosures

Table of Contents

1	Introduction	4
2	Governance	5
2.1	Board Oversight of Sustainability and Climate Related Matters	5
2.2	Management Responsibilities	6
2.3	Three Lines of Defense.....	6
2.4	Sustainability and Climate-Related Board Credentials	6
2.5	Sustainability and Climate-Related Training.....	6
2.6	Frequency of BOD meeting on climate-related issues	6
3	Strategy	7
3.1	Identification of Climate-Related Risks and Opportunities.....	7
3.2	Strategy and Risk Appetite on Climate Change-Related Risks and Sustainability Measures.....	8
4	Risk Management	10
4.1	Transmission of Climate-Related Risk to Existing Risk Types.....	10
4.2	Identification and Assessment of Climate-Related Risks.....	12
4.3	Integration and Management of Climate-Related Risks	13
4.3.1	General Underwriting Standards and Guidelines	13
4.3.2	High Transition Risk Sector Exposures	13
5	Metrics and Targets	15
5.1	Key Climate-related Metrics	15
5.2	Key Climate-related Targets	16

1 Introduction

Bangkok Bank Berhad (“BBB or The Bank”) has established the Climate Risk Management Policy on climate-related disclosures that promote credible and high-quality disclosures and mitigate the risks of greenwashing.

BBB’s financial disclosures on climate-related risks are aligned with the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (“TCFD”). This report provides insights into how BBB identify, assess and manage climate-related risks and opportunities.

The annual climate-related disclosures of BBB are published together with the annual financial statements.

The Bank’s climate-related disclosures shall separately address the following four thematic areas:

- Governance
- Strategy
- Risk Management
- Metrics and Targets

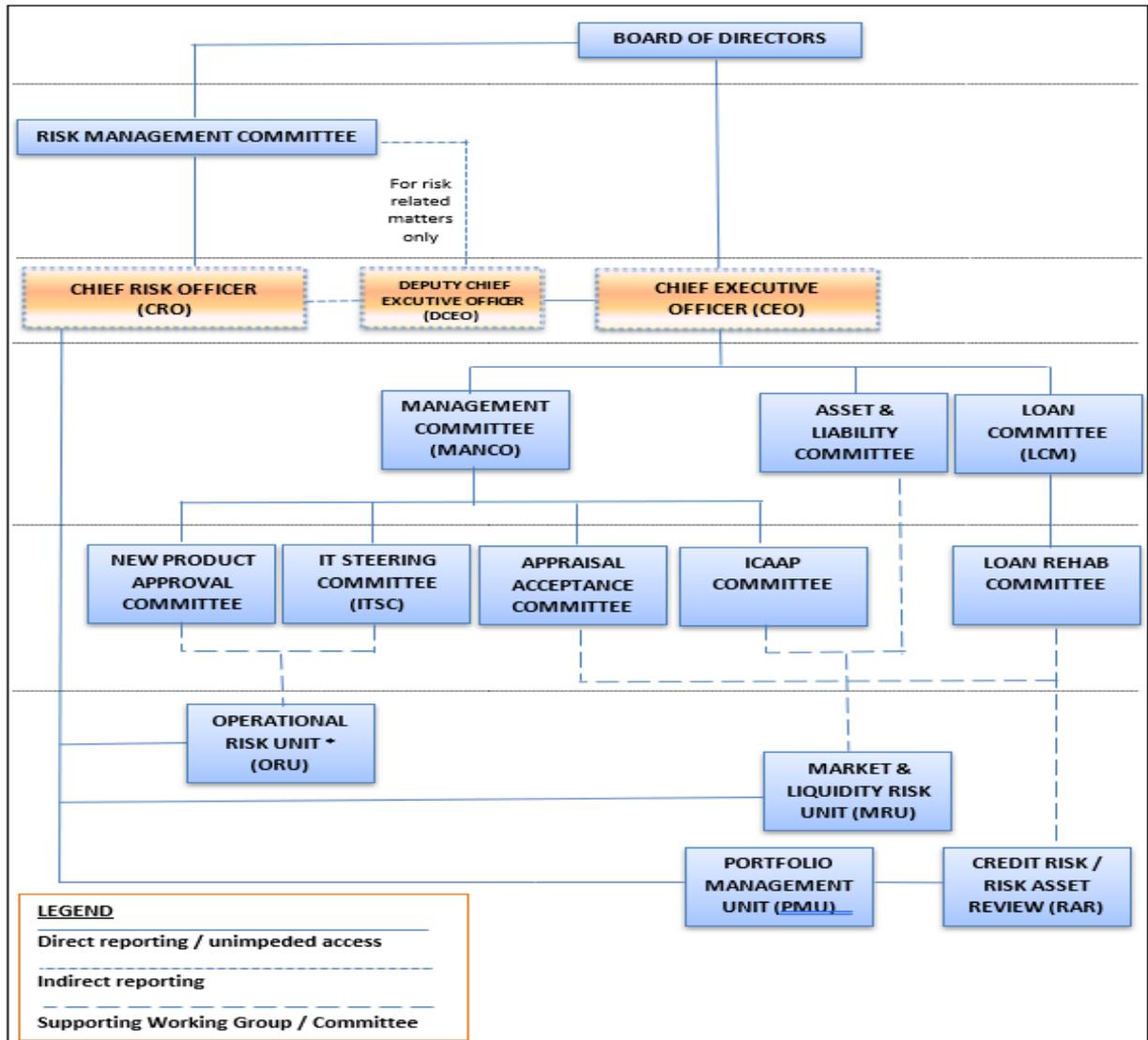
	Area	Description
1	Governance	BBB’s governance around climate-related risks and opportunities.
2	Strategy	Actual and potential impact of climate-related risks and opportunities on BBB’s business strategy and financial planning.
3	Risk Management	Processes used by BBB to identify, manage and assess climate-related risks.
4	Metrics and Targets	Metrics and targets used by BBB to assess and manage relevant climate-related risks and opportunities.

The objective of this report is to provide a summary of the various requirements, recommendations and guidelines that govern the preparation of the financial statements.

2 Governance

2.1 Board Oversight of Sustainability and Climate Related Matters

A robust governance structure is the foundational building block for BBB’s Environmental, Social and Governance (“ESG”) and climate-related risks strategy. The governance structure outlined below will be reviewed from time to time to ensure that it remains relevant and effective.



Note *: Includes Chief Information Security Officer (“CISO”) Team

Oversight of the Bank’s Strategic approach to climate change is led by the Board of Directors (“BOD”) through the Board Risk Management Committee (“BRMC”).

BRMC reviews and endorses BBB’s ESG and climate-related risk management policies for the BOD’s approval.

The board is ultimately responsible for the overall ESG and climate-related risks agenda. The BOD ensures that climate considerations are integrated into corporate strategy and risk management to safeguard long-term business resilience.

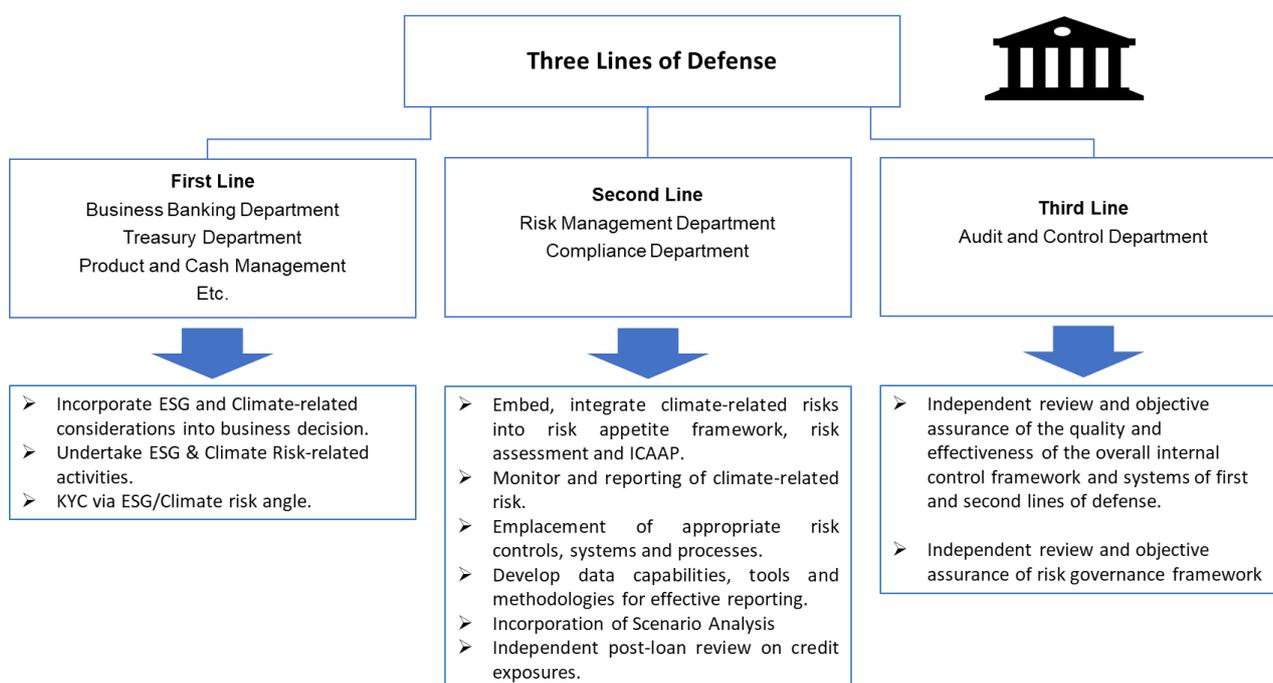
2.2 Management Responsibilities

Management Committee (“MANCO”) is responsible for decision making of BBB’s climate related risk appetite risk limits and thresholds, business strategy and disclosures.

An ESG Working Group has been set up to ensure sufficient consideration is given to the management of ESG and climate-related risks and opportunities and driving implementation of specific initiatives in alignment with BBB’s ESG and climate related goals.

2.3 Three Lines of Defense

The Bank has put in place the three lines of defense for its climate risk model as depicted below:



2.4 Sustainability and Climate-Related Board Credentials

Board members have attended courses related to sustainability and climate-related risks and continue to self-enrol for courses related to sustainability and climate-related risks.

2.5 Sustainability and Climate-Related Training

The Bank continuously enhance the knowledge of the Board, Management and relevant staff by providing the relevant ESG/Climate related training to equip them with the latest development on sustainability and climate-related matters.

2.6 Frequency of BOD meeting on climate-related issues

BOD meets at least 6 times a year. If there is any matters relating to climate-related matters and sustainability-linked topics, it will be tabled and discussed in BOD and RMC.

3 Strategy

3.1 Identification of Climate-Related Risks and Opportunities

Realizing the potential opportunities, risks and impacts from climate change through funding support provided to the business sector, the Bank aspires to offer credit to activities or businesses that create positive impacts on the environment and society. Moreover, the Bank supports the transition to a low-carbon society under Malaysia's roadmap as the Bank places importance on the reduction of GHG emissions from the Bank's direct activities and electricity consumption.

The Bank puts employees' readiness first to ensure that employees can provide useful advice to customers through the arrangement of knowledge training for employees in related functions on a continuous basis.

Assessment of opportunities related to environment and climate change

	Climate Opportunity	Implementable Measures	Targeted Outcome
1.	Resource Efficiency	- Efficient use of resources such as replacement with energy/water-saving equipment, campaigns to save energy and water, waste water treatment and reuse, garbage sorting and recycling.	-Reduction of operating costs of the Bank in the long run. -Support for customers to transition to low-carbon businesses. -Engagement and motivation for employees to conserve the environment and reduce greenhouse gas emissions at work and at home to make employees feel inclusive and proud of the Bank's environmental and climate efforts.
2.	Energy Source	- Use of equipment that reduces greenhouse gas emissions. - Instal solar rooftops as sources of clean energy to save electricity charges and reduce electricity consumption from transmission lines.	-Building positive image of the Bank related to environmental conservation and reduction of greenhouse gas emissions.
3.	Product and Service	-Develop products and services that support green businesses and activities. -Credit support for transition or reduction of greenhouse gases to mitigate impacts from climate change. -Adopt technology to promote easier access to financial services and broader customer coverage	-Support for customers to transition to low-carbon businesses. -Higher revenue and broader customer base of the Bank. -Knowledge sharing and support for customers to utilize carbon market for trading carbon credits and renewable energy.
4.	Market	-Extension of customer base to green businesses and businesses with technology that help with adaptation to climate change. -Support for carbon credit market and renewable energy to generate business opportunities for customers.	-Building of business partner networks to create business opportunities and enhance competitiveness of the Bank and our partners. -Risk diversification for the Bank's financial assets. -Accumulation of knowledge and understanding on sustainability and

			climate change to serve customers as a trusted partner. -Engagement with customers, employees and other sectors to drive toward greenhouse gas emission reduction goals at organization level and national level. -Building of good image of the Bank.
5.	Resilience	Adaptation to embrace impacts from climate change related to rules and regulations or technology and market demand.	-Maintenance of leader position on sustainability and trust building for stakeholders. -Market value enhancement of the Bank.

The Bank will adopt a phased approach in developing its business strategy and risk appetite framework, starting with more qualitative factors while developing capabilities for more robust quantification of risks and opportunities.

3.2 Strategy and Risk Appetite on Climate Change-Related Risks and Sustainability Measures

The Bank embeds climate-related risks into its risk appetite framework, including the potential long-term impact of these risks as drivers of existing types of material risks. These material risks shall be reflected in the Internal Capital Adequacy Assessment Process (ICAAP).

- The Bank shall manage climate-related risks in line with the risk appetite approved by the Board.
- The Bank shall clearly address climate-related risks within the risk appetite statement (RAS). When using the RAS to guide the implementation of ICAAP, the Bank shall consider material climate-related risks when assessing the internal capital adequacy over relevant time horizons.
- To support and monitor the RAS, the Bank shall develop appropriate risk metrics to manage climate-related risks, including risk limits and thresholds for management action.
- For example, the assessment of climate metrics such as GHG emissions under different climate scenarios and climate targets can be translated into financial impact using risk metrics. Risk metrics in turn are used to set limits when managing the share of financial exposure to transition risks and the concentration to climate-related risks within the risk appetite of the financial institution.

As the collection of climate-related data evolves, the Bank expect that the RAS will evolve alongside it accordingly in an iterative manner. The Bank will determine a suitable strategy and set metrics and targets for both our internal operations and financial support provided to customers to mitigate environmental and social impacts, as well as promoting adaptability to climate change. These will then be regularly monitored and periodically assessed and updated as necessary.

Climate Change Adaptation

The Bank implements important adaptation measures as follows:

- For branches and buildings located in flood-prone areas, the Bank equips those branches and buildings with flood protection solutions to prevent potential damages. The Bank also has a Business Continuity Plan for flood and non-life insurance covering losses from flood.
- To protect against power outages due to severe storms, the Bank makes sure that uninterruptible power supply (“UPS”) and backup electricity generators are in place.

4 Risk Management

4.1 Transmission of Climate-Related Risk to Existing Risk Types

The Bank is exposed to the following types of climate-related risks, accompanied with their respective definitions:

Transition Risks are risks that may affect asset values, competitiveness, financial positions and businesses of related sectors due to key factors including rules and policies related to climate from the government and counterparties in the supply chain, development of low-carbon technology to replace existing high-carbon technology, change in consumer behaviour and more attention from investors on environment and climate change.

Physical Risks are defined as risks that may cause damage to assets, businesses, agricultural products and people's well-being as a result of acute natural disasters such as storms, floods, heat waves and chronic climate change such as higher temperatures, higher sea levels and change in rainfall.

The Bank assesses risks and opportunities related to environment and climate change to understand how they will impact customers and the Bank, the mapping to existing risk types, as well as estimating timing of those risks classified as short-term ("ST"), medium-term ("MT") and long-term ("LT") as follows:

Climate-related Risk	Incident	Risk and Impact	Existing Risk Types	Time Horizon	
1.	Transition Risk				
1.1	Policy and Legal Risk	<ul style="list-style-type: none"> - Non-compliance with requirements from regulatory agencies or applicable laws on environment and climate change. - Tighter regulations and laws related to environment and climate change including reporting on greenhouse gas emissions, information disclosure on climate for organizations according to international standards, carbon tax and international trade measures. 	<ul style="list-style-type: none"> - Higher business expenses to improve operations or be prepared under imposed requirements and laws such as additional investments. - Potential fines and reputational damage resulted from non-compliance with requirements and laws. - Risks and impacts on financial positions and business performance of customers which may affect quality of assets and values of collaterals of the Bank including debt payment ability of customers. 	 Credit Risk Market Risk Reputation Risk	ST - LT
1.2	Technology Risk	<ul style="list-style-type: none"> - Development of technology with low greenhouse gas emissions such as renewable energy technology, Carbon Capture, Utilization and Storage (CCU), energy storage technology and energy efficiency management technology to replace traditional technology with high 	<ul style="list-style-type: none"> - Customers using technology with high greenhouse gas emissions may lose market shares to competitors using technology with low greenhouse gas emissions. - Transition of business models to low carbon emissions can potentially be uncertain and incur high costs. Customers who invest in new technology may face higher R&D costs and high capital expenditure which 	Regulatory Risk 	MT - LT

		<p>greenhouse gas emissions.</p> <ul style="list-style-type: none"> - Failure in investment in new technology with low greenhouse gas emissions. 	<p>can lead to losses in case of failure.</p> <ul style="list-style-type: none"> - Risks and impacts on financial positions and business performance of customers which may affect quality of assets and values of collaterals of the Bank. 	 Credit Risk Market Risk Reputation Risk Regulatory Risk 	
1.3	Market Preference	<ul style="list-style-type: none"> - Behaviors in using products and services that are concerned with impacts on the environment and climate change; for example, discontinuance of certain types of products such as single use plastic and use of products with green labels despite higher costs. 	<ul style="list-style-type: none"> - Changing consumer behaviors and needs may negatively affect performance of customers which can affect quality of assets and values of collaterals of the Bank. 		ST - LT
1.4	Reputation Risk	<ul style="list-style-type: none"> - Higher expectations from various stakeholders to ensure that the Bank conducts business with environmental and social responsibility and plays a role in mitigating risks and impacts from climate change especially businesses that have potential to make a severe impact on the environment or the society or emit high volume of greenhouse gases. - Expectations for the Bank to be a financial intermediary that is involved in the mitigation of risks and impacts related to the environment and climate change. 	<ul style="list-style-type: none"> - Businesses that are unable to meet expectations of stakeholders may lead to negative impacts on sales revenue of products and services, ability to access funds (from lower weighting on equity or debt instruments of investors) including organization image and ability to attract and retain talent especially new generations. - Impacts on financial positions and performance of customers resulted from reputational damage which may affect quality of assets and values of collaterals of the Bank. 		MT - LT
2. Physical Risk					
2.1	Acute	<ul style="list-style-type: none"> - Acute natural disasters such as storms, floods, and heat waves. 	<ul style="list-style-type: none"> - Impact on assets of businesses, manufacturing of products and service offering, transportation and supply chain disruption. - Higher expenses from business and service improvements, maintenance of assets and remedies for customers and employees including higher insurance expenses. - Lower value of assets and collaterals from assets located in the areas with high risk of natural disasters. - Impacts on financial positions and performance of customers which may affect quality of assets and values of collaterals of the Bank. 	 Credit Risk Operational Risk Liquidity Risk 	ST - LT
2.2	Chronic	<ul style="list-style-type: none"> - Chronic natural disasters such as increase in temperature, higher sea level and change in rainfall. 			LT

Note:

Definition of time frame for environmental and climate-change risks and impacts analysis:

- Short term (ST) = 1-3 years
- Medium term (MT) = 3-10 years
- Long term (LT) = 10+ years

The mapping between climate-related risks and existing risk types is guided by the Joint Committee on Climate Change's Task Force on Climate-Related Financial Disclosures Application Guide for Malaysian Financial Institutions issued on 29 June 2022.

4.2 Identification and Assessment of Climate-Related Risks

Climate-Risk Type	Existing Risk Type	Risk Tools and Methodology	Next Steps	Time Horizon
Transition Risk	Credit Risk Market Risk	Established: <ul style="list-style-type: none"> • Transition risk mapping of the loan and bond portfolio based on: <ol style="list-style-type: none"> i. Top-down analysis guided by Standard & Poor's Environmental, Social and Governance Risk Atlas. ii. Bottom-up analysis guided by CCPT ratings. • Climate Risk Appetite Statement and Risk Threshold Monitoring for sectors with high Transition Risk. • Lending Guide incorporation of ESG Risk as part of Sectoral Assessment and placement criteria. • Enhanced General Underwriting Standards and Guidelines with additional ESG standards. 	<ul style="list-style-type: none"> • To enhance understanding of the loan and bond portfolio's transition risk profile with Scope 3 GHG emission data. 	ST
	Reputation Risk	Established: <ul style="list-style-type: none"> • Climate Risk Appetite Statement. 	<ul style="list-style-type: none"> • On-going review and refinement to existing controls. 	On-going
	Regulatory Risk	<ul style="list-style-type: none"> • Gap analysis on applicable regulatory requirements against relevant internal processes/procedures. 	<ul style="list-style-type: none"> • On-going review and refinement to existing controls. 	On-going
Physical Risk	Credit Risk	To develop: <ul style="list-style-type: none"> • Internal methodology to identify borrowers susceptible to physical risk. 	<ul style="list-style-type: none"> • To obtain detailed national flood data from the Department of Irrigation and Drainage. • Perform climate scenario analysis and stress testing as guided by BNM requirements. 	ST
	Operational Risk	Established: <ul style="list-style-type: none"> • Business impact analysis considering flood risk as part of Business Continuity Management (BCM). 	<ul style="list-style-type: none"> • On-going review of existing operational controls for effectiveness in managing physical risk. 	On-going
	Liquidity Risk	To develop: <ul style="list-style-type: none"> • Identification of climate events that may heighten customer vulnerability to physical risk. • Analysis of customer behavioural response to these climate events. 	<ul style="list-style-type: none"> • On-going research and engagement with industry to gain deeper understanding on customer behavioural response to climate events. 	MT

4.3 Integration and Management of Climate-Related Risks

4.3.1 General Underwriting Standards and Guidelines

Environmental, Social and Governance (ESG) risks and impacts of every credit application is embedded in the credit on-boarding process for new-to-bank customers, annual reviews and requests for additional financing to existing borrowers.

There are certain ESG requirements that must be met as per the Bank's General Underwriting Standards, failing which the credit application will be rejected. Otherwise, the merits of exceptions to the Bank's General Underwriting Standards and Guidelines will be assessed and deliberated at the appropriate approval level.

4.3.2 High Transition Risk Sector Exposures

In November 2021, the World Wildlife Fund (WWF) and the Boston Consulting Group (BCG) issued a joint study "**Securing Our Future: Net Zero Pathways For Malaysia**" that measured the degree of ESG risk exposure by sector in Malaysia based on Standard & Poor's (S&P) ESG Risk Atlas 2019. BBB used the information from the study as a starting point to understand the basis for transition risk on a sectoral basis (a top-down analysis) and to map BBB's loan portfolio's using Bank Negara Malaysia's Climate Change and Principle-based Taxonomy (CCPT) ratings (a bottom-up analysis) against the WWF and BCG study to provide an understanding of the loan portfolio's transition risk profile.

BBB used the Standard & Poor's ESG Risk Atlas (S&P Risk Atlas) to understand the basis for transition risk on a sectoral basis (a top-down analysis) and to map BBB's loan portfolio's using Bank Negara Malaysia's Climate Change and Principle-based Taxonomy (CCPT) ratings (a bottom-up analysis) against the S&P Risk Atlas to provide an understanding of the loan portfolio's transition risk profile.

The S&P Risk Atlas has six environmental risk categories, with Level 1 having the least amount of environmental impact and transition risk, to Level 6 with the most amount of environmental impact and transition risk.

The CCPT ratings assess each borrower at the transaction level (GP1 and GP2) and at the overall business level (GP3 and GP4). Depending on the combination of the various Guiding Principles (GPs), the borrower can then be classified as Climate Supporting (C1), Transitioning (C2 or C3) or Climate Watchlist (C4, C5a or C5b).

This top-down and bottom-up analysis is then used to identify sectoral concentration of exposures with high transition risk. These sectoral concentrations are the main focus of BBB's preliminary strategy and risk appetite in supporting our customers efforts to reduce GHG emissions.

As per our Climate Risk Appetite Statement, BBB monitors and controls borrowers that are both a Level 6 in the S&P Risk Atlas and are categorized under Climate Watchlist (C4, C5a or C5b) in the CCPT ratings. As 2024¹, BBB's High Transition Risk Sector Exposures were as follows:

Sectors	Exposure against BBB's Total Gross Financing (%)
Metals (smelting) & Mining	2.2
Oil & Gas (upstream)	0.0
Power generation (coal)	0.0

Additionally, as an additional risk monitoring threshold, BBB also monitors and controls borrowers that is both a Level 5 in the S&P Risk Atlas and is categorized under Climate Watchlist (C4, C5a or C5b) in the CCPT ratings. As at 2024, these exposures were as follows:

Sectors	Exposure against BBB's Total Gross Financing (%)
Agribusiness	7.9
Refining & Marketing	1.8
Chemicals	3.7

The Bank is monitoring transition risk and building our capacity to monitor physical risk. If obvious risks emerge, we will set more rigid risk appetite or risk monitoring thresholds as appropriate.

¹ As at 30 November 2024

5 Metrics and Targets

5.1 Key Climate-related Metrics

Definition of Scope 1, Scope 2 and Scope 3

	Definition
Scope 1	Direct GHG emissions that occur from sources that are controlled or owned by an organization and its operational process (e.g., emissions associated with fuel combustion, vehicles etc)
Scope 2	Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organization's GHG inventory because they are a result of the organization's energy use.
Scope 3	<p>These are Scope 3 emissions which are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain.</p> <p>Scope 3 emissions include all sources not within an organization's scope 1 and 2 boundary. The scope 3 emissions for one organization are the scope 1 and 2 emissions of another organization.</p> <p>Scope 3 emissions, also referred as value chain emissions, often represent the majority of an organization's total GHG emissions.</p>

The Bank will disclose the following as per table below

Scope 1	Scope 2	Scope 3
Fuel consumption of company owned vehicles	Electricity consumption	Business related travel Waste generated

The table below indicates the Bank's Scope 1, Scope 2 and Scope 3 carbon emissions

	Emissions Source	Emissions (tCO ₂ e)		
		2022	2023	2024
Scope 1 (Direct Emission)	Fuel consumption from non-renewable energy (e.g. petrol used by company cars)	8.86	7.99	8.30
Scope 2 (Indirect Emission)	Electricity consumption	0.87	0.87	0.97
Scope 3 (Other Indirect Emission)	Air business travel, waste, paper used	22.56	28.66	18.24

Notes

1. Data for Scope 1 is based on fuel consumption used in company owned vehicles and generator sets.
2. Data for Scope 2 is based on purchased electricity consumed by the Bank.
3. Data for Scope 3 is based on air business travel by employees of the Bank and waste for the Bank.

The Bank sorts and manages each type of waste as follows:

1. General waste will be weighed on a daily basis at the end of the day and disposed accordingly.
2. Non-hazardous waste includes drinks cans, plastic cups, plastic bottles, glass bottles, used papers and paper boxes will be recycled. Recyclable waste will be weighed on upon disposal. Recycled waste, used papers and paper boxes will be stored at a designated location. These items will be sold to a recycling company and will go through the recycling process to be reused.
3. Electronic waste such as electronic products or appliances that are damaged or have passed their service lives. The Bank regularly examines devices and electronic appliances to ensure their efficiency. Obsolete electronics beyond repair or reuse are separated and sent to the recycling facilities of external companies with expertise in e-waste disposal.

5.2 Key Climate-related Targets

ESG-related key performance indicators had been embedded for governance and reporting related responsibilities in department dealing with CCPT assessment and climate risk data reporting.

Managing and reporting the environmental footprint of the Bank's operations presents the opportunity to track and drive our initiatives for continued improvements, as depicted below:

Type of energy/waste	Indicator	2024 Target	2024 Performance (based on 12-month result)
Electricity (kW)	Reduction of energy used	7.5% decrease compared to 2020 (base year)	4% increase compared to 2020 (base year)
Petrol (Litre)	Reduction of direct and indirect greenhouse gas emissions (Scope 1 and Scope 2)	7.5% decrease compared to 2020 (base year)	19% increase compared to 2020 (base year)
Air travel (km)	Reduction of greenhouse gas emissions from air travel for business purposes	6% decrease compare to 2022 ² (base year)	38% decrease compared to 2022 (base year)
General waste (kg)	Reduction of general waste	5% decrease compare to 2023 ¹ (base year)	9% decrease compared to 2023 (base year)
Recycled waste (kg)	Increase the proportion of recycled waste	8% increase compare to 2020 (base year)	14% decrease compared to 2020 (base year)

¹ Data collection of general waste only available from September 2022 onwards.

² Base year 2022 was used due to Post Covid

In terms of financed emissions, the Bank targets to limit financed emissions in two carbon-intensive sectors, namely Oil and Gas (upstream) and power generation (coal).