Climate Report

For the year ended 31 December 2024

CCB 中国建设银行(新西兰)
China Construction Bank (New Zealand)

Contents

Glossary

Term	Definition
ALCO	Asset and Liability Committee
BARC	Board Audit, Risk and Compliance Committee
Board	CCB NZL Board of Directors
CC	Credit Committee
CCB or CCBG	China Construction Bank Corporation
CCB NZB	China Construction Bank Corporation New Zealand Branch
CCB NZBG or CCB NZ or the Bank	China Construction Bank Corporation New Zealand Banking Group
CCB NZL	China Construction Bank (New Zealand) Limited
CCC	Climate Change Commission
CRO	Chief Risk Officer
ELT	Executive leadership team
GHG	Green House Gas
ICAAP	Internal Capital Adequacy Assessment Process
ICCC	CCB NZBG Internal Controls and Compliance Committee
NGFS	Network for Greening the Financial System
NZBA	New Zealand Banking Association
PCAF	Partnership for Carbon Accounting Financials
RAS	Risk Appetite Statement
RBNZ	Reserve Bank of New Zealand
RCP	Representative Concentration Pathways
RMC	CCB NZBG Risk Management Committee
SBTi	Science Based Targets intitiative
TCFD	Task Force on Climate-Related Financial Disclosures
XRB	External Reporting Board
Green Lending	Green Lending definition under the CCB Group methodologies
CRE	Climate Reporting Entity
tCO2e	Tonnes of carbon dioxide equivalent

Cover image: Lion Rock, Piha, New Zealand

Statement of Compliance

This Climate Report is for China Construction Bank New Zealand Banking Group for the year ended 31 December 2024 and complies with the three Aotearoa New Zealand Climate Standards (NZ CS):

- *NZ CS 1:* Climate-related Disclosures
- *NZ CS 2:* Adoption of Aotearoa New Zealand Climate Standards
- *NZ CS 3:* General Requirements for Climate-related Disclosures

NZ CS Adoption Provisions

The Bank has elected to use the following adoption provisions[1], as permissible under NZ CS 2 Adoption of Aotearoa New Zealand Climate Standards in preparing the Climate Report:

- *Adoption Provision 4:* Scope 3 GHG emissions
- *Adoption Provision 5:* Comparatives for Scope 3 GHG emissions
- *Adoption Provision 6:* Comparative for metrics
- *Adoption Provision 7:* Analysis of trends
- *Adoption Provision 8:* Scope 3 GHG emissions assurance

This Climate Report is approved and signed on behalf of the Board of Directors by:

Mr. Jinliang Zhang

CHAIRMAN & EXECUTIVE DIRECTOR

Dated: 26 March 2025

Mr. Yi Zhang

VICE CHAIRMAN & EXECUTIVE DIRECTOR

Dated: 26 March 2025

1 Refer to Appendix A5 for a summary of adoption provisions used, and the Bank's rationale for adopting them.

China Construction Bank NZ Banking Group's position on climate change

CCB NZBG recognises the potential compounding effects climate-related risks may pose to the financial system and CCB NZBG's other risks. CCB NZBG is committed to understanding and applying a risk–based approach to the management of the risks and opportunities associated with climate change.

CCB NZBG's climate risk appetite is designed therefore to ensure that it can effectively manage and mitigate climate-related risks while balancing the needs of its key stakeholders. This includes having clear processes to identify and assess the physical, transition and other climate-related risks across its business activities. Additionally, the Bank embraces the opportunity to work with its customers in this area to deliver better customer outcomes.

Our approach to managing climate risk is outlined alongside our strategy for other key business risks in our Risk Appetite Statement (RAS). This commits us to addressing climate change by:

- better understanding and mitigating the risks and impacts of climate change on CCB NZBG
- applying a risk-based approach to the management of climate-related risks and opportunities
- seeking to increase the resilience of our business to climate change
- reducing our own operational footprint (excluding financed emissions)

Operationally, we are committed to prudently managing our operational carbon footprint and the respective reduction targets, and developing frameworks and building capability to measure and manage our financed emissions in our credit portfolio. Since 2021, we have offset residual operational emissions to be carbon neutral through the Toitū Envirocare Net Carbonzero programme. The purchases to offset the remaining unavoidable emissions take place in the new financial year, upon the finalisation of the Bank's previous years operational emissions figures. The Bank has yet to purchase the necessary carbon credits to offset its unavoidable emissions for 2024, but is fully intending to do so upon the finalisation of its operational emission reporting and audit process.

In our lending business, we are committed to:

- properly understanding the climate-related risks prior to providing credit to any high climate risk customers[2]
- being prudent in managing our exposures to high-risk[3] locations
- being explicit about the sectors that the Bank will not actively target, and high climate risk sectors that the Bank has no/limited risk appetite for (e.g. coal mining)

We seek to better understand and improve the resilience of our business to climate change risks, including by:

- investing in improving awareness and building capabilities around climate-related risks
- periodically conducting climate change scenario analysis to better understand the risks and opportunities at a credit portfolio and a Bank level
- investing in tools and data and continuing to enhance the measurement, management and reporting of our climate risk exposures across CCB NZBG
- on-going strengthening and integration of climate risk management into our business practices, policies and procedures

Transparency of climate-related disclosures is an imperative and CCB NZBG firmly sees the benefit this delivers, including:

- providing the incentives for better identification and management of climate-related risks
- facilitation of more effective pricing mechanisms for climate-related risk

[2] High climate risk customers include, but are not restricted to, customers in high energy consumption sectors (e.g. metal, cement/concrete product manufacturing) and/or high emission sectors (e.g. electricity, gas, water and waste services)

[3] A property is considered high risk if the expected mean damage ratio is greater than 20% as modelled in the RMS Moody's dataset refer in Appendix A1.

Huka Falls, Taupo, New Zealand

01 About this report

- **About this report**
- **Progress summary**

01. About this report

As a Climate Reporting Entity (CRE) under the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021, CCB NZBG is required to make annual climate-related disclosures. This is the second climate report for CCB NZBG. In 2023, the Bank started its formal journey of outlining its strategic approach to manage its climate-related risks and opportunities in its first Climate Report.

This report is based on the three New Zealand climate-related disclosure standards (NZCS[4]) issued by the XRB, and follows the following structure:

- **Governance** – how CCB NZBG governs climate-related risks and opportunities.
- **Strategy** – the actual and potential impacts of climate-related risks and opportunities on CCB NZBG's business, strategy and financial planning.
- **Risk Management** – the processes used by CCB NZBG to identify, assess and manage climate-related risks.
- **Metrics and Targets** – the metrics and targets used by CCB NZBG to assess and manage relevant climate-related risks and opportunities.

As the content of this report shows, CCB NZBG is in the process of integrating climate change risks and opportunities into its day-to-day business and operations. The progress update in this section summarises our progress to date. We aim to strengthen the quality of our disclosures in years to come, and to further develop the capability and expertise to disclose in line with the standards developed by the XRB. We see this as an iterative process as best practice will continue to evolve.

In May 2022, CCB NZL[5] became the first Chinese bank in New Zealand to become a Toitū Net Carbonzero Certified Organisation. External assurance has been obtained on CCB NZL's operational emissions calculation through our certification under that programme. Toitū Envirocare has provided reasonable assurance over the Bank's category 1 and 2 emissions, and limited assurance for the emissions in the remaining categories for the reporting years 2021 to 2023. In 2025, EY provided a reasonable assurance opinion over our Scope 1 and 2 location-based emissions and a limited assurance conclusion over reported Scope 3 operational GHG emissions for 2024 (see Table 15). An independent assurance report is provided by EY in Appendix A6.

Selective highlights

In April 2024, the CCB NZ Chief Risk Officer and Head of Finance hosted a bankwide session to share perspectives and insights into the relevance of climate-related risks to the financial sector, the evolving landscape, and the Bank's progress and commitments in navigating through the risk and opportunities in this area.

[4] The design of NZCS was broadly based on the TCFD framework. International Financial Reporting Standards (IFRS) announced at the 26th United Nations Climate Change Conference (COP 26), the formation of the Internationally Sustainability Standards Board (ISSB), into which TCFD will converge. The convergence was completed in 2023, with the issuance of ISSB IFRS S1 and S2.

[5] Measured for CCB NZL but represents the emission for CCB NZ Banking Group given the interconnected operating model between CCB NZL and CCB NZB

Progress Summary

Our emissions

Certified Toitū Envirocare
Net carbonzero
since 2022

Achieved Scope 1 & 2 Operational emission target
2 years in advance
due to the expedited transition to renewable electricity

The switch to renewable electricity resulted in
87% reduction
in scope 2 operational emission using market-based approach

Reduction in
all categories
of operational emission (excl. financed emissions) other than in
Air Travel

Exploration to better utilise virtual meeting technologies, but
Air Travel
remains a necessity, and the most appropriate channel for some situations

Financed emissions at
0.0527
KtCO2e/ $m lent

Managing climate risk

Climate risk section incorporated into our
Board Quarterly Report

Modelled physical risk across security-backed portfolio
97.50%
of our Residential portfolio, &
95.46%
of our Non-residential portfolio

Current Climate-related Impacts
Minimal

Completed scenario analysis on key sectors, covering
96.48%
of our lending portfolio

Climate skills and Culture uplift:
Board Deep-dive & **Bank-wide training session**

Financed emissions data quality remains
Stable & within appetite
at 4.27

Supporting a green economy

Green loan[6] balance across CCB NZBG (NZD):
$975m (+ 53.7% YoY)
Of which **$226m** *provided by CCB NZL*

Sustainability linked loans (NZD), additional to the Green Loan categorised exposure:
$536m
(+10.5% YoY)

[6] As measured using the Green Lending definition under the CCB Group methodologies

02 Governance

- Governance of Climate-Related Risk at the CCB Group level
  - Main Board
  - Board of Supervisors
  - Management
  - Implementation of Environment-Related Strategies
- CCB's approach to governance in New Zealand
  - CCB New Zealand Limited
    - Board governance
    - Management responsibilities
  - Board and Management climate capability
  - Executive remuneration

02. Governance

It is CCB's vision to strive to become a world-leading sustainable development bank. As such it has continued to strengthen its governance and delivered the necessary operating model to intensify its effort to manage and explore climate-related risks and opportunities. In May 2021, CCB became a supporter of the TCFD. This demonstrated CCB's commitment to continuously improve its governance and disclosure quality of environmental and climate-related information according to the common TCFD information disclosure framework, so as to better align itself with the information disclosure systems of international financial enterprises and investment institutions and enhance capital markets' and rating agencies' understanding and recognition of CCB's efforts in ESG and green finance.

Governance of Climate-Related Risk at the CCB Group level

CCBG Board of Directors

Board of Directors and Strategy Development Committee

The Board of Directors of the Bank assumes the ultimate responsibility for the formulation and implementation of the Group's overall environment strategies and goals. It defines strategic objectives, key tasks, Management priorities, establishes governance structures related to environment and climate, and reviews and decides on product innovation and development strategies and corresponding risk management policies; and it oversees and evaluates the implementation results of environmental and climate strategies, provides guidance on identification and assessment of environmental and climate risks, periodically reviews relevant targets and the progress toward fulfilling them, listens to the reports of its special committees and Management on the management of environmental and climate-related matters, and provides guidance on disclosure of relevant information.

The Strategy Development Committee of the Board of Directors assists the Board of Directors in formulating ESG strategic goals and takes into full account ESG related factors in each strategic objective.

Related Party Transaction, Social Responsibility and Consumer Protection Committee of the Board of Directors

The Related Party Transaction, Social Responsibility and Consumer Protection Committee of the Board of Directors advances the overall ESG work of the Bank, drafts relevant strategies, policies and objectives on ESG, social responsibility, and green finance, etc., and regularly supervises the progress of related work. It organises and holds seminars on environmental and climate risk management, environmental target setting and ESG information disclosure, analyses and assesses ESG development and the current status of the Bank's work, and puts forward constructive suggestions. It periodically reviews the reports on the implementation of green finance work, provides oversight over the development of credit and non-credit green finance operations, and follows up on the progress of Management's work on social responsibility performance and strengthening environmental and climate data systems.

Risk Management Committee of the Board of Directors

The Risk Management Committee of the Board of Directors oversees the management of climate-related risks and opportunities, supervises the implementation of the environmental and climate risk reporting mechanism, and facilitates the integration of climate change risk elements into the overall risk management system. It provides oversight over the risk appetite statement, and promotes the integration of environmental, climate and biodiversity risks into the Group's risk appetite. It regularly reviews environmental and climate risk analysis reports, studies the situation of environmental and climate risk management and the next steps, guides the management to optimise the industry credit policies, promotes the high-quality development of green finance, and strengthens the credit control of high energy-consuming and high-emission industries. It continuously follows up on the quantification of risks of ESG-related elements, promotes the organic integration of ESG elements and client credit rating system, and improves the stress test related to climate risk.

CCBG Board of Supervisors

The Board of Supervisors performs its supervisory duties, oversees the performance of ESG-related and green finance-related strategy responsibilities of the Board of Directors and the Management. It continues to focus on the implementation and promotion of ESG strategy. The Board of Supervisors provides oversight over the progress of ESG work and gives supervision suggestions on strengthening top-level design, consolidating basic management, and improving capacity building.

02. Governance

CCBG Management

The Management of the Bank actively implements the strategic plans of the Board of Directors, formulates and facilitates the Head Office departments, domestic and overseas branches and subsidiaries to carry out environment-related objectives and key tasks, and helps improve the Group's capacity for sustainability management.

- Green Finance Committee: Chaired by the president of the Bank, the Green Finance Committee advances the development of green finance across the Bank in a coordinated manner, studies and decides on major matters in the process of advancing green finance business, and plans and deploys the key directions and measures for the development of green finance of the Bank. In 2023, the Committee held the annual work meeting, at which, it conveyed the major policies of the Central CPC Committee and the State Council on green finance and the guiding principles of relevant meetings, discussed management priorities relating to green finance, urged the implementation of key initiatives related to the green finance strategies, and promoted steady development of green finance business.
- ESG Promotion Committee: Chaired by the president of the Bank, the ESG Promotion Committee has three working groups of environment, social responsibility, and information disclosure and investor relations, as well as 35 member departments (institutions), which, with orderly division of responsibilities, advance ESG work in a coordinated manner. In 2023, the committee held the annual work meeting at which it systematically summed up the achievements in ESG work in the year, studied and analysed the key issues and difficulties in the management of ESG and climate risks and opportunities, and continued to support the building of the Group's ESG talent team, enhanced the understanding and knowledge of ESG concepts, and continuously improved ESG management level.
- Risk Management and Internal Control Management Committee: The Risk Management and Internal Control Management Committee is chaired by the president of the Bank. It includes ESG related risks such as environmental and climate risks, compliance risk, operational risk and reputational risk into the comprehensive risk management system, periodically holds meetings to follow work progress, and makes arrangements for important matters.

Implementation of Environment-Related Strategies

The Bank has established a clear Group-wide structure to coordinate and promote the development of green initiatives. Relevant departments are tasked with the implementation and advancement of specific environmental-related work (e.g. to promote environmental-related corporate business, retail business, capital market business, risk management, disclosure, public affairs, and carbon footprint management etc.), and to integrate green development requirements into the Bank’s daily operations and management. All CCB local and offshore entities continue to focus on the development of more green finance products and services based on each entity’s strategic focus and competitive advantage.

02. Governance

CCB's approach to governance in New Zealand

In addition to CCB Group governance, CCB NZBG's governance of climate-related risks involves the CCB NZL Board, NZ Banking Group senior management and the wider organisation. The chart below reflects the Bank's current approach to governing climate risk alongside its other key risks.

CCB New Zealand Limited

Figure 1: CCB NZL Risk Governance Structure

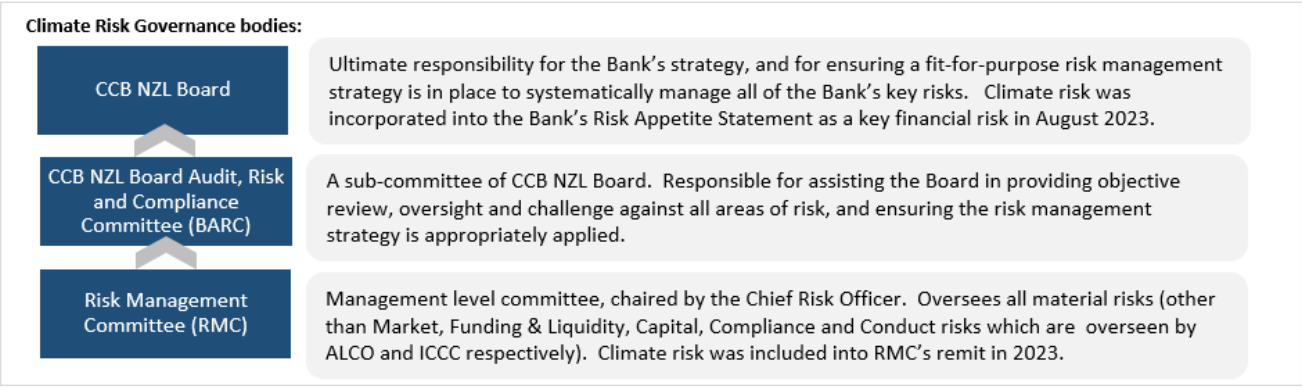


Figure 2: CCB NZL key governance structure for climate-related risks and opportunities

Board governance

The Board is ultimately responsible for overseeing the Bank's strategic direction, ensuring good governance and compliance, managing risks, and holding the Bank accountable for long-term and sustainable financial and operational performance. As such, it has the ultimate responsibility for ensuring the Bank has cohesive systems and processes in place to monitor and adequately control its material risks.

The Board is assisted by the BARC in fulfilling its oversight responsibilities to set the Bank's risk management strategy and risk appetite and ensure the integrity and effectiveness of the Bank's controls frameworks, reporting systems and internal audit standards.

The Bank's risk management strategies, approaches and boundaries are articulated in its Risk Management Framework (RMF) and Risk Appetite Statement (RAS). The RMF provides guidance on the risk architecture, whilst the RAS is used to inform the boundaries for all the key frameworks.

02. Governance

As climate-related risk has become more prevalent in the general operating environment, the Board has increased discussions with Management on various elements thereof. In August 2023, climate risk was formally incorporated as a key financial risk in the Bank's RAS with it being managed to the same level of cadence and discipline alongside its other material risks. This led to the designation of BARC and the Executive level Risk Management Committee (RMC) as the respective Board and Executive level governing bodies to oversee the management of climate-related risks and opportunities for the Bank. In 2024, a new standing section was introduced in the quarterly CRO report, replacing the quarterly memos previously provided through the Climate Disclosure workstream, to provide regular updates to the two committees on the Bank's key climate-related risk management developments and performance.

Management responsibilities

The BARC is supported by the RMC. RMC is a management committee that meets quarterly, and is responsible for overseeing material financial and non-financial risks across the Bank, including climate-related risk. RMC is chaired by the CCB NZL CRO, and attended by the senior management team and key risk representatives. RMC receives quarterly risk updates on key and emerging risk and regulatory matters that fall under its charter, which includes updates on climate-related risks.

Supporting governance: BARC is also supported by two other management-level sub-committees (Internal Controls and Compliance Committee (ICCC) and Asset and Liability Committee (ALCO)). Chaired by the Head of Compliance and the Chief Executive Officer respectively, and attended by the senior management team and key subject matter experts, these forums provide additional considerations of climate-related risks and opportunities where applicable to the respective areas of oversight under these committees.

BARC/Board are provided with quarterly updates on the key matters relating to climate-related risks reported to these committees, including providing opinions and approvals on key decisions supported by these committees. Additionally, the Bank has introduced an annual climate risk 'Deepdive' into its Board's and Management meeting cadence from 2024. The Deepdive provides an overview on climate risk in the Bank's portfolio, key internal and external developments (incl. in climate-risk disclosure), progress in advancing our climate-related business and risk strategy, and the current and future areas of focus.

The Bank also has processes and requirements to carry out Climate and Environment Assessment Processes prior to providing credit to any deemed high climate risk customers. Additionally, climate assessments are also required as part of the regular credit rating reviews for designated industry sectors. The Credit Committee (CC) oversees and provides oversight of these requirements and ensures climate-related credit risk considerations are appropriately applied at the transactional level.

CCB NZ Branch

Figure 3: CCB NZB Risk Governance Structure

02. Governance

The governance of climate-related risk for CCB NZB follows the same approach as for CCB NZL. The Executive level committees are responsible for providing oversight in ensuring good governance and risk management practices to achieve long-term sustainable financial and operational performance, in line with CCB Group's strategic direction. Climate risk was formally incorporated into the NZ Banking Group Risk Appetite Statement as a key financial risk in August 2023. With the exception of CCB NZL's Board's involvement mentioned in the previous section, the management responsibilities and the governing bodies mentioned above (the RMC, ICCC, ALCO and the Credit Committee) remain largely similar across both CCB NZL and CCB NZB.

Board and Management climate capability

The Board is becoming increasingly involved in directing the Bank's response to climate-related issues and therefore needs to ensure that it has the necessary skill set to discharge those responsibilities. In the 2022 and 2023 financial years, the BARC, as the primary body responsible for assisting the Board with oversight and governance of the Bank's material risks, received formal quarterly presentations from Bank management on the evolving climate-related landscape. In 2024, climate-related risk was incorporated into the quarterly CRO update to RMC and BARC. The Bank will continue to assess and address any necessary awareness raising and upskilling of its Board, Management team and the wider organisation in respect to climate-related risk as part of its capability building considerations.

Highlights

Annual Climate Risk Deepdive incorporated into Board meeting cadence

Executive remuneration

Climate risk was incorporated as a key financial risk in the Bank's RAS in 2023, and embedded into Board quarterly reports. Progress on the management of climate risk and opportunities is currently measured by compliance with the spirit of the RAS and the furthering of CCB Green Financing Strategy. The achievement of GHG-related performance metrics is not currently incorporated into the management team's remuneration considerations. The management team progress on Green Financing, on the other hand, is currently captured in the Bank's scorecard, and is a determinant in the Bank's credit risk management performance (representing 6% of the overall credit risk management score).

03 Strategy

- Our climate strategy
- Scenario analysis for CCB NZBG
- Climate-related risks and opportunities analysis
- Key strategic considerations
- Physical risk modelling
- Additional considerations on transition risk (impacting residential home loan borrowers)
- Opportunities (incl. the green finance focus areas)

03. Strategy

Our climate strategy

CCB NZBG recognises the potential compounding effect climate-related risks may pose to the financial system and CCB NZBG's other risks. As a responsible financial institution, CCB NZBG is committed to **understanding** and **applying a risk-based approach** to the management of the risks and opportunities associated with climate change. CCB NZBG's climate risk appetite is designed to ensure that it can effectively manage and mitigate climate-related risks while balancing the needs of its key stakeholders. This includes having clear processes to **identify and assess the physical, transition and other climate-related risks** across its business activities.

In this section, the Bank outlines the scenario analysis it has undertaken, the risks and opportunities identified, the anticipated impacts, and how the Bank will position itself as the global and domestic economy transitions towards a low-emissions, climate resilient future state. These are used to test the resiliency of the Bank's business model and strategy.The diagram below summarises where the impacts of climate risks, opportunities and financial impacts manifest themselves.

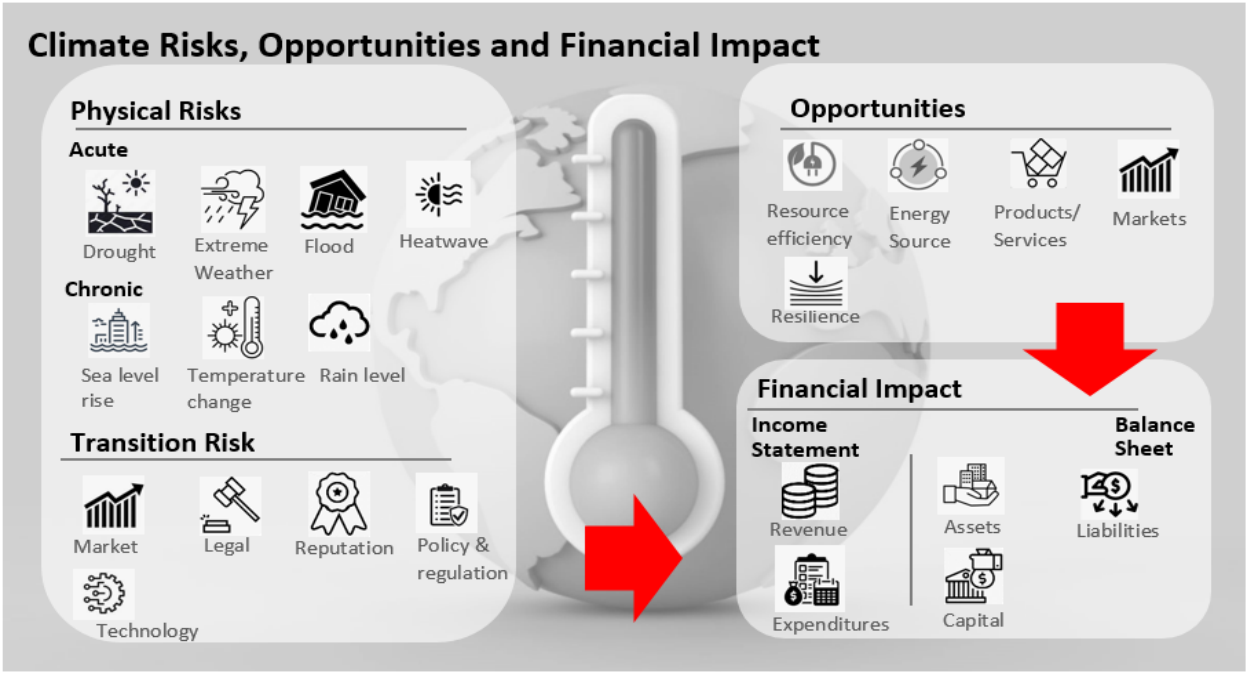


Figure 4: The impacts of climate risks, opportunities and financial impacts

- **Climate risks** are divided into **physical** and **transition** risk. These risks can impact a business's ability to operate effectively:
  - Physical risks are manifested through the increased frequency and severity of **acute** weather events, or longer-term **chronic** shifts in climate patterns.
  - Transition risks are a result of uncertainty created by a shift towards a more sustainable, low-emission economy, and include changes to regulatory landscape, consumer preferences, investor expectations etc.
- **Opportunities** present themselves in areas that drive improved resiliency, resource efficiencies, cost savings, new products and services developments, access to new markets etc.
- The **financial impacts** are manifested through changes in revenue/expenditure and assets/liabilities, which have further implications on a business's health and ability to deliver on its strategy and meet its obligations.

Scenario Analysis for CCB NZBG

NZBA-commissioned Climate Scenario Narratives for the Banking Sector

03. Strategy

CCB NZBG has utilised the common sets of NZBA-commissioned banking sectorial narratives, developed alongside its banking peers with EY in 2023, as the basis of its scenario analysis. Given the longer term nature of this risk, it is expected that the key assumptions and conclusions stated in the narratives remain appropriate for 2024.

The sectorial narratives are intended to improve the comparability and consistency of climate-related risk disclosures in the banking sector, ultimately enabling primary users to be able to compare findings more readily. The final outputs of that report include:

- A common set of scenario narratives and horizons to be used in climate-related risk assessment and disclosures
- A high-level set of climate-related risks that banks should consider as part of their risk assessment with risks identified based on input from project stakeholders
- Organisational actions for climate disclosures on governance, strategy, risk management, and metrics and targets

Three scenario narratives and four time horizons were developed in the narrative to promote alignment of climate-related scenario analysis and risk disclosures across New Zealand's banking sector. Tables 1 and 2 below provide an overview of the dimensions for each of the three scenario narratives and the time horizons selected by the NZBA members. The alignment of the scenarios to the chosen scenario dimensions was done in accordance with the XRB's guidance on sector-level scenario analysis (External Reporting Board, 2022).

	Scenario dimensions		
Category	**Orderly 1.5°C**	**Too Little Too Late >2°C**	**Hothouse >3°C**
Global climate & socio-economic parameters	IPCC SSP1-1.9	IPCC SSP2-4.5	IPCC SSP5-8.5
Global energy and emission pathway parameters	NGFS Net Zero 2050 IEA Net Zero Emissions by 2050 (NZE)	NGFS Nationally Determined Contributions (NDC's) IEA Announced Pledges (APS)	NGFS Current Policies IEA Stated Policies (STEPS)
New Zealand-specific climate parameters	NIWA RCP2.6	NIWA RCP4.5	NIWA RCP8.5
New Zealand-specific transition pathway parameters	CCC 'Tailwinds'	CCC 'Headwinds'	CCC 'Current Policy Reference'

Table 1: Scenario dimensions chosen by New Zealand's banking sector, and relevant international and domestic scenarios.

	Immediate term	Short term	Medium term	Long term
Time horizon	3 years	10 years	30 years	50+ years
Year relative to 2022	2025	2030	2050	2080+
Rationale for selection	Aligned with stress-testing time horizons Aligned with average mortgage re-pricing time horizons Provides a current state assessment	Aligned with interim emissions reduction targets Broadly aligned with average maturity profile of business loans	Aligned with international emissions reduction targets Aligned with international banking sector climate scenario guidance documents	Aligned with further materialisation of physical risks, especially important to agriculture, property and segments of the energy sector due to the reliance on hydropower

Table 2: Time horizons chosen by New Zealand's banking sector

03. Strategy

	Key scenario dimensions		
	Orderly (1.5°C)	**Too Little Too Late (>2°C)**	**Hot House (>3°C)**
Scenario overview	• A future where collective, co-ordinated action is taken towards a low-carbon global economy, with steady and constant societal changes related to technology, policy and behaviour to support the transition to a lower emissions economy. • Changes are accompanied by increasing carbon price that incentivises low-carbon behaviour change. ***[Outcome]*** *Actions prevent the worst predicted impacts but the long-term chronic physical impacts still likely to occur, although to a less severe extent.*	• Scenario describes a misaligned and delayed transition to a low carbon economy between New Zealand and the rest of the world, with: • **Short-term:** New Zealand being a first mover on the transition to a low emissions economy, introducing policies that bring about net zero emissions by 2050, and imited action globally • **Medium-term:** Global efforts begin to align and may even exceed those in New Zealand. Large increases in carbon prices may drive a rapid improvement in low emissions technology efficacy and uptake. **[*Outcome]*** *Despite medium term effort, the changes come too late to prevent wide-ranging acute and chronic physical climate impacts.*	• Scenario represents a worst-case emissions trajectory with minimal ambition to transition towards a low carbon economy. • Despite widespread increase in severe weather events, and associated destabilisation of social, political and economic structures, low demand for carbon alternatives continues to slow the rate of development and uptake of emissions saving technology. ***[Outcome]*** *Continued/ unabated expansion of emissions intensive industries exacerbating natural biophysical mechanisms that moderate global temperature, pushing them beyond operating thresholds, into a state of unprecedented climate volatility.*

Table3: Interplay between the transition-physical risk trade-offs under the three scenarios.

CCB NZBG Scenario Analysis

The common sets of climate change scenario narratives developed with the NZBA were used by the Bank to identify and understand its climate change risk and opportunities, and test how the business strategy may need to be adapted against a series of plausible, but hypothetical events. Refer to appendix A6 for further details on how the sectorial narratives were incorporated into CCB NZBG's scenario analysis.

Whilst quantitative output (including modelling) can be an input or a component of a climate-related scenario or scenario analysis, the Bank recognises the more exploratory nature of the scenario analysis, and the difficulties and complexities for some of the drivers to be accurately reflected in a single quantitative model. As such, the Bank's scenario analysis was completed through a series of internal assessments with its management teams and Board. A high level overview of the key considerations are summarised in this section.

Current Risks and Impacts

At an **organisation level**, the banking industry in general is exposed to different type of physical and transition risks (e.g. on their offices, branches and ATM networks etc.). These risks are, and have remained, relatively contained for CCB NZ, given the Bank's small footprint and an operating model that is not reliant on a branch network. Key considerations around potential climate-related risks at an organisation-level are considered alongside the Bank's day-to-day and contingency planning and are not further elaborated on in this report.

The key focus of the Bank's analysis is on the risks and opportunities in the Bank's lending business (i.e. the **credit level**).

This is consistent with the observations in the Deloitte 2024 CxO Sustainability Report, in which the New Zealand financial services industry shares a unique risk profile in so far as their operational risk exposure is defined by their customers' level of exposure to physical and transition risk.

CCB NZBG does not consider that it has experienced material physical impacts to its portfolio (both at the organisational and credit level) as a result of any climate-related events in 2024. There was no large weather event in 2024. Neither the Bank, nor its customers, were materially impacted by the 2023 large weather events, and there are no lingering matters from those events that are still being worked through. Additionally, the Bank is of the view that key mitigants are in place (e.g. the Bank's insurance and equity requirements for borrowers, the Bank's own insurance practices etc.) and remain appropriate in reducing and mitigating any material climate-related impacts that may have eventuated in 2024.

03. Strategy

Transition risk: The Bank has not yet experienced any material adverse or positive credit and operations impacts from the transition to a low emissions economy.

Medium and longer term impacts

The charts below provide an overview of the physical and transition risk levels over time for each of the three scenarios. These high-level climate-related risks were identified for the banking sector to support an increased understanding of physical and transition risks that may materialise over time, for each of the scenario narratives. Physical and transition risk determinations over the short, medium, and long-term are based on the general themes in the NIWA and Climate Change Commission scenarios, literature reviews and stakeholder feedback.

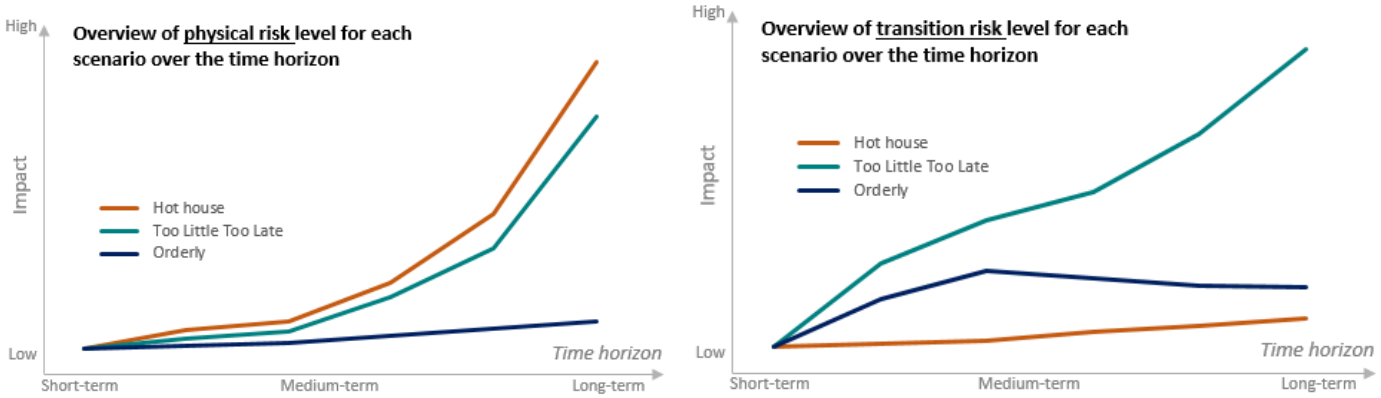


Figure 5: Physical and transition risk trade-offs

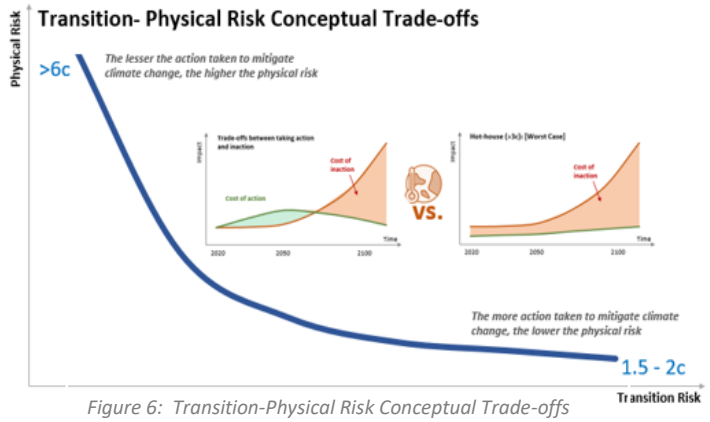


Figure 6: Transition-Physical Risk Conceptual Trade-offs

There is an inverse global relationship between the physical and transition risks of climate change. Taking aggressive action now involves significant short-term transition risks (rises in taxes or cost-of-living, job losses in high-polluting industries, adjustments in government spending etc.), but may have long-term benefits of substantially reducing more catastrophic physical risks in the future. On the other hand, not taking action in the short term may help contain transition risk in the short term but result in significant irreversible physical impacts down the track. *[Source: TCFD ADOPTION: BUY NOW OR PAY LATER; APRA Summerhayes, 2020]*

The Bank remains of the view that its medium and longer term climate-related risk is defined by its customers' level of exposure to physical and transition risk, rather through its own operations, given the rationale provided in the last chapter.

Credit impact

Non-residential exposures: The Bank has considered potential risks and opportunities tradeoffs against each of the five priority sectors referenced in the *NZBA Climate Scenarios Narratives for the Banking Sector* against the three scenarios (namely the Transport and Shipping, Energy, Manufacturing, Construction & Property and Agriculture sectors). For the purpose of this analysis, the risks and opportunities considerations on the residential home loan portfolios was considered alongside the property sector. Refer to Appendix A1 for the detailed summary of the risks and opportunities considerations.

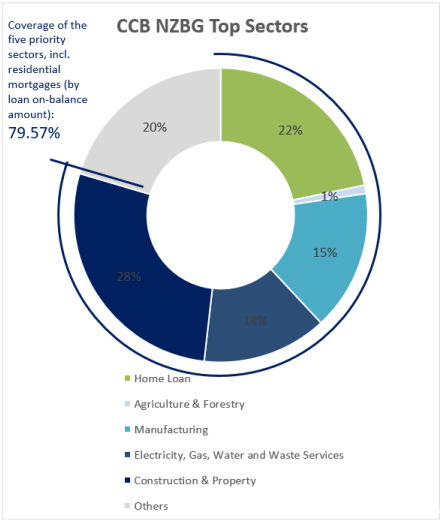


Figure 7: CCB NZBG Top Sectors Analysis

03. Strategy

The Bank's analysis shows that the maturity profile of the non-residential exposures is markedly short at an average of less than 2 years, with 90% having a tenor of less than 3 years (see Figure 8). The short maturity tenor profile in the non-residential portfolio allows the Bank to more easily manage the climate risk profile within that portfolio through the more timely pivoting and readjustment of its business strategy. Conversely, climate risk may bring on strategic challenges in growth volume and direction, particularly given the shorter tenor profile. The Bank will continue to explore this trade-off between managing the potential impacts from climate risk within its credit portfolio and the strategic challenges brought on by future operating conditions, business landscape and evolving appetite.

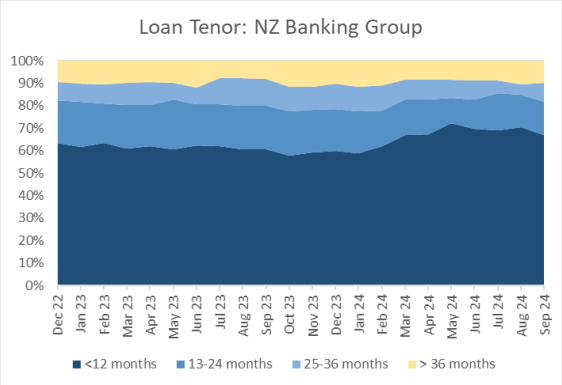


Figure 8: CCB NZBG Loan Tenor

In addition, with the commencement of the mandatory climate reporting regime, information (e.g. the sectoral climate scenario on a number of industries, including industries that the Bank has material credit exposures to) are becoming more readily available and some of this information has been taken into consideration in the shaping of our assumptions, appetite, strategy and action plan.

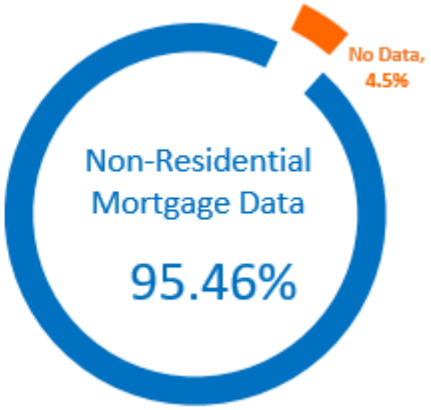
Property-backed Non-residential Lending Portfolio: key findings

Projection based on RCP8.5 scenario (the worst case: 'Too Little Too Late' scenario)

Year	Low Risk	Moderate Risk	High Risk
2024 (current)	99.84%	0.15%	0.01%
2030	99.84%	0.15%	0.01%
2050	99.83%	0.15%	0.02%
2080	99.79%	0.15%	0.06%

% of property modelled: 95.46%

Figure 9: CCB NZBG Non-residential lending portfolio



Physical risk: The Bank has completed physical risk modelling on 95.46% of its non-residential (real-estate backed) portfolio using RMS Moody's data (EFP and Climate Conditioning Flood Data ~ Refer to Appendix A1 for an overview of the methodology). A property is considered high risk if the expected mean damage ratio is greater than 20% as modelled in the RMS Moody's dataset. The analysis based on an RCP of 8.5 (which reflects the worst case "Too little too late" scenario) showed no high risk property currently and into the near future. The % of high risk property increases to 0.02% and 0.09% respectively in 2050 and 2080. The current and projected numbers are consistently lower than the internal threshold of not having more than 5% of the Bank's non-residential mortgage portfolio in high risk locations.

Residential exposures:

The Bank is of the view that the predominant climate-related risk in the residential mortgage portfolio stems from the physical risk of the collaterised securities.

The Bank has completed physical risk modelling on 97.50% of its residential (real-estate backed) portfolio using RMS Moody's data (EFP and Climate Conditioning Flood Data ~ Refer to Appendix A1 for an overview of the methodology). The analysis based on an RCP of 8.5 (which reflects the worst case "Too little too late" scenario) showed only 0.6% of the Bank's residential mortgage portfolio was in the high risk locations across all time horizons up to the year 2080. The current and projected numbers are consistently lower than the internal threshold of not having more than 5% of the Bank's residential mortgage portfolio in the high risk locations.

03. Strategy

This level of risk is considered manageable and within appetite particularly when key mitigants like the Bank's insurance and equity requirements for borrowers are taken into consideration.

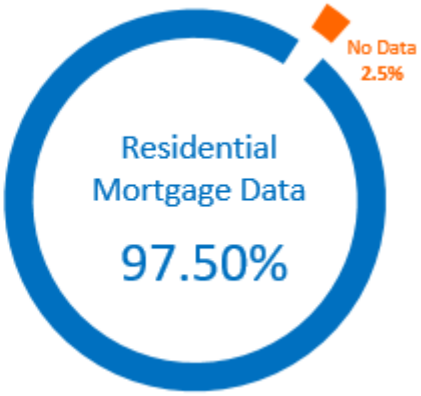
Residential Lending Portfolio: key findings

Projection based on RCP8.5 scenario (the worst case: 'Too Little Too Late' scenario)

Year	Low Risk	Moderate Risk	High Risk
2024 (current)	98.91%	0.41%	0.68%
2030	98.91%	0.41%	0.68%
2050	98.91%	0.41%	0.68%
2080	98.91%	0.38%	0.71%

% of property modelled: 97.50%

Figure 10: CCB NZBG Residential lending portfolio



Overall conclusion: Given its current profile and strategic direction, CCB NZBG does not expect climate-related risk to increase outside of its risk appetite in the modelled horizon. The Bank will continue to explore this tradeoff between managing the potential impacts from climate risk within its credit portfolio and the strategic challenges brought on by future operating conditions, business landscape and evolving appetite.

Selective highlights

In 2024, CCB NZ became the Mandated Lead Arranger in funding the construction of Kōwhai Park, a 168MWp solar farm located at Christchurch International Airport.

This was going to be the largest solar farm being built in New Zealand at the time, with plans for it to become a platform for generating green energy at scale, including the onsite generation of green hydrogen and sustainable aviation fuel (SAFs).

03. Strategy

Opportunities

CCB NZL is a subsidiary of China Construction Bank (CCBG) and a stand-alone registered bank in New Zealand, and together with CCB NZ Branch, make commitments that are specific to own operations. As part of the wider CCBG, we also adopt CCBG positions and contribute towards CCBG's actions where they are appropriate to the Aotearoa New Zealand context.

Some of the ways we are channelling our capital investment in pursuit of better understanding, exploration, and management of our climate risks and opportunities are:

- the emphasis on the development of green finance opportunities
- participation in transactions that drive positive climate actions for our customers (e.g. sustainability-linked loans)
- the drive to improve internal awareness and capabilities around climate-related risks
- sponsorship, partnership and involvement in conferences and business forums (e.g. business matchmaking conferences that explore green opportunities and solutions between our NZ customers and the other offshore markets the Bank operates in)
- investment in tools and data to better inform the Bank's climate risks and finance emission profiles
- the measurement and reduction of our carbon footprint through the Toitū Envirocare carbonzero programme
- the incorporation of climate risk considerations (e.g. scenario analysis and ICAAP stress test etc.) into the Bank's strategy setting

Green Finance

CCB continues to place a strong emphasis on the development of green finance opportunities. CCB has identified the following as key focus areas of its Green Finance strategy (refer to Table 4 on page 21). CCB NZBG is excited to play a part in supporting this strategy. A breakdown of the green lending is summarised in the diagrams to the right. Given the nature of the business involved (which tends to be of larger scale and complexity), the exposures are currently predominantly booked on the CCB NZB balance sheet. However, it is worth noting that the green loans booked in CCB NZL as a proportion of CCB NZBG has increased in recent years (22% in 2024 vs 14% in 2023).

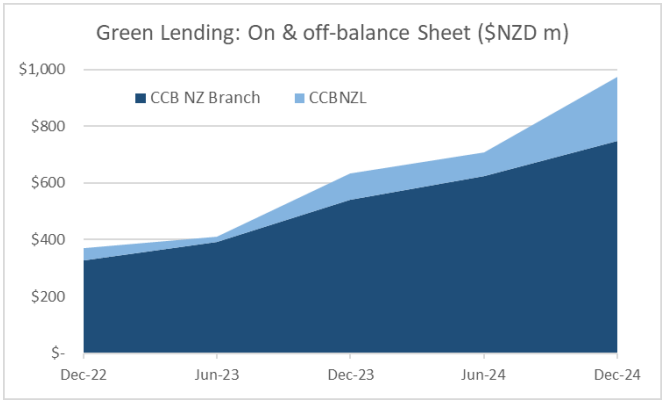
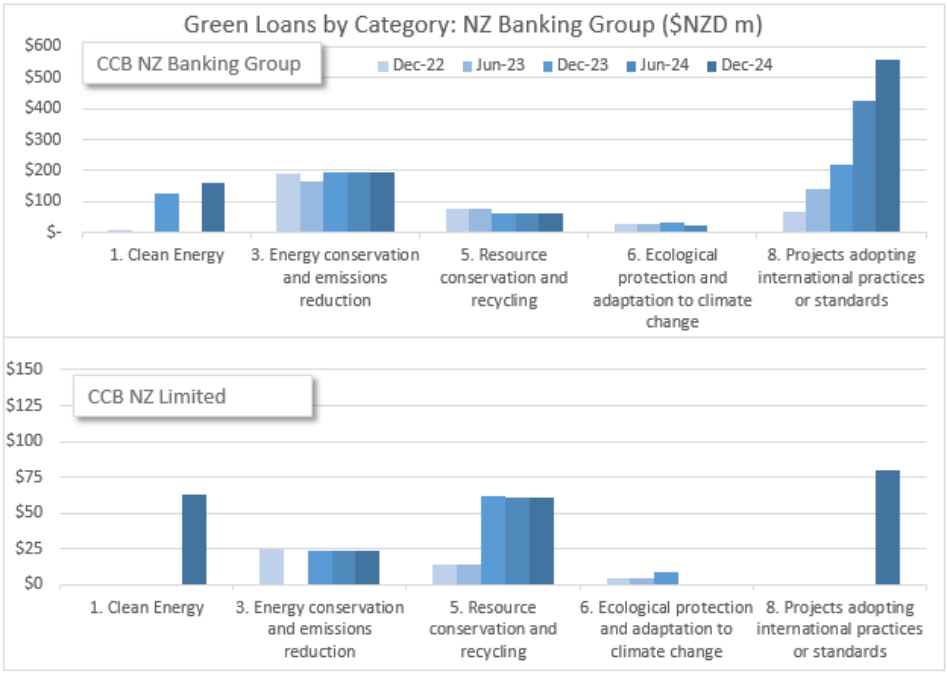


Figure 11a: Green lending on & off balance sheet



Highlights

+ 53.7%

YoY increase in Green Lending Balances

Figure 11b: Green lending analysis for CCB NZ Banking Group and CCB NZBG

03. Strategy

Areas of focus & potential areas of opportunities		
1. Clean energy • Wind power generation • Solar photovoltaic power generation • Smart power grid and energy Internet • Distributed energy • Solar heat utilization • Hydropower generation • Biomass energy projects • Clean energy promotion projects • Utilization of other new energy sources	**2. Clean transport** • Railway transport • Urban rail transit • urban and rural road transport - public passenger transport • Waterway transport • Clean fuel oil • New energy vehicles • Internet applications in transport • Transport-related environmental protection projects	**3. Energy conservation and emissions reduction** • Industrial energy conservation • Sustainable buildings • Energy management centres • Construction of energy-efficient urban and rural infrastructures • Reduction of discharge of pollutants • Prevention and control of occupational diseases
4. Energy conservation and environmental protection services • Energy conservation services • Environmental protection services • Water conservation services • Circular economy (resource recycling) services	**5. Resource conservation and recycling** • Water conservation and unconventional water source utilization • Redevelopment and integrated utilization of tailings and associated ores • Industrial solid waste, waste gas and waste fluid recycling and reuse • Recycling, processing and reuse of renewable resources • Remanufacturing of mechanical and electrical products • Biomass resource recovery and utilization	**6. Ecological protection and adaptation to climate change** • Natural ecological protection and protective development of tourism resources • Eco-friendly farming, animal husbandry and fishery • Forestry development • Disaster/emergency prevention and control
7. Pollution prevention and control • Pollution prevention and control • Environmental rehabilitation projects • Clean utilization of coal	**8. Projects adopting international practices or standards** • Projects adopting international practices or standards	**9. Energy-efficient and Low-carbon parks** • Energy-efficient and Low-carbon parks

Table 4: CCB NZBG Green Finance Areas of Focus

04 Risk Management

- **Overview**
- **Identification and assessment of climate-related risks**
- **Management of climate-related risks**

04. Risk Management

Overview

In 2023, CCB NZBG incorporated climate-related risk into its existing risk management framework to ensure the risk is given the appropriate focus, and ensuring it is managed to the same level of cadence and discipline alongside its other material risks. In 2024, the Bank has embedded climate-related risk into the CRO report, with quarterly presentation to the Board.

CCB NZL

The BARC and the Executive level RMC were designated as the two governing bodies to oversee the management of climate-related risks and opportunities for the Bank. Future consideration may be given to establishing separate dedicated climate risk oversight bodies when warranted by the scale and complexity of the Bank's operations.

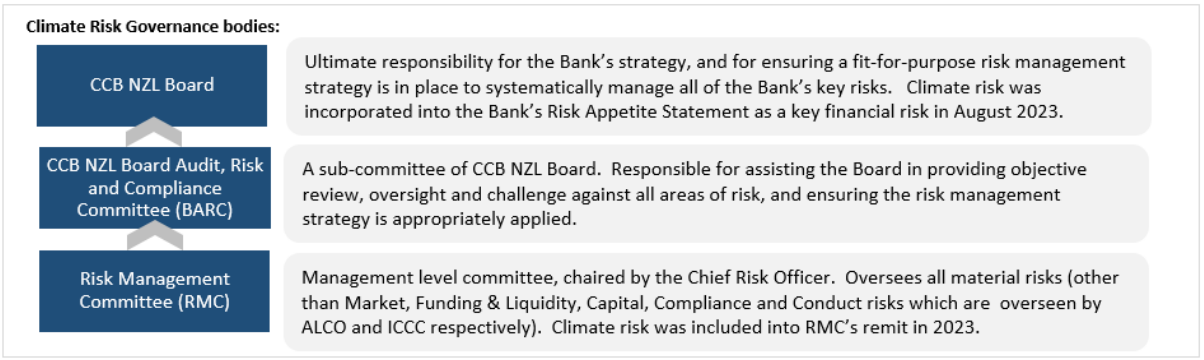


Figure12 (same as Figure 1): CCB NZL key governance structure for climate-related risks and opportunities

CCB NZB

The governance of climate-related risk for CCB NZB follows the same approach as for CCB NZL. The Executive level committees are responsible for providing oversight in ensuring good governance and risk management practices to achieve long-term sustainable financial and operational performance, in line with CCB's strategic direction. With the exception of CCB NZL's Board involvement mentioned in the previous section, the management responsibilities and the governing bodies mentioned above (the RMC, ICCC, ALCO and the Credit Committee) remains largely similar across both CCB NZL and CCB NZB.

The diagram below illustrates the key components of how the strategic and risk appetite considerations are integrated into CCB NZBG's identification, assessment and management of climate risk.

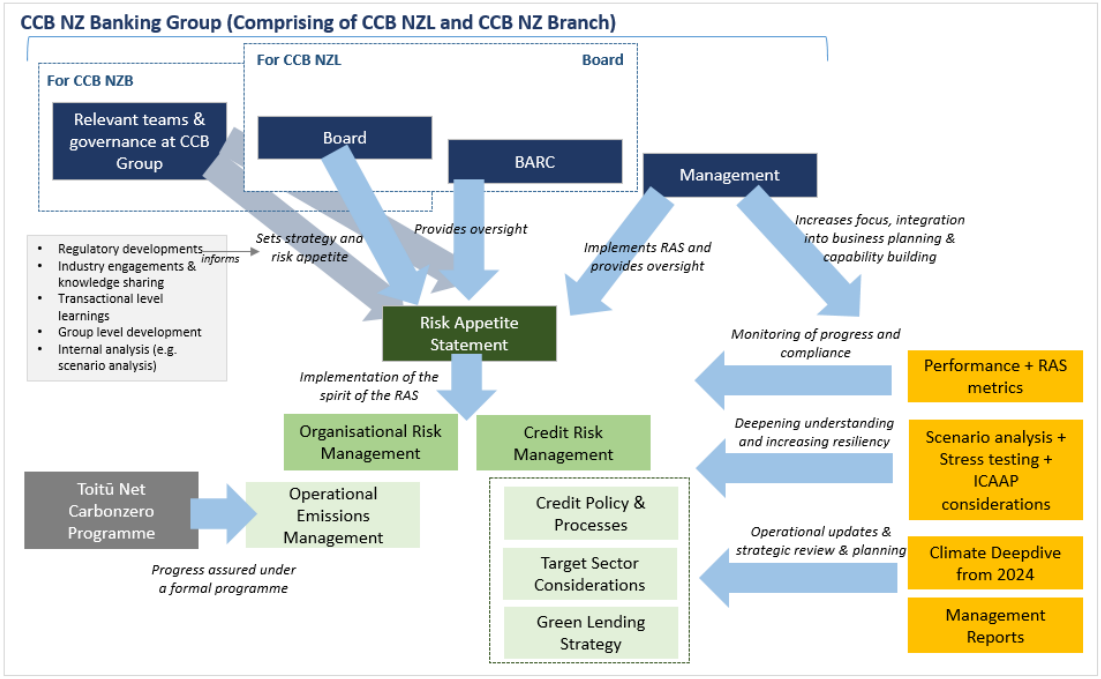


Figure13: CCB NZBG Climate Risk Management Overview

04. Risk Management

Identification and assessment of climate-related risks

i. Regulatory developments

CCB NZBG proactively scans the horizon to ensure it stays on top of its regulatory obligations and emerging risks. This helps inform key developments and the prioritisation of appropriate actions in identifying and managing risks. The horizon-scanning outputs are regular updates at Board and Management forums, and form a key basis of the Bank's risk operating rhythm.

CCB NZBG is committed to staying apprised of regulatory changes and evolving industry practices related to climate risk management.

ii. Industry engagements & knowledge sharing

CCB NZBG engages with the relevant industry and regulatory bodies to remain informed about climate risk standards and guidance. Ongoing dialogue with these key stakeholders, as well as our internal review processes, helps evolve our understanding of climate risks and in determining the appropriate responses.

iii. Transactional level trends and observations

The Bank has processes to assess climate and environmental risks prior to providing credit to any high climate risk customers. Additional processes are also in place to reassess the risk in the lifecycle of those relationships. Key trends of emerging risk factors picked up from these processes helps inform any required adjustments to the Bank's strategy. This iterative process allows for continuous improvement, enabling the Bank to refine its approach, optimise resource allocation, and adapt to changing market conditions.

iv. Group level development

CCB NZBG has the ability to tap into its parent company's established systems, technologies, and market intelligence in regards to the work around climate-related risks. CCB is a supporter of the TCFD framework and was the first major Chinese Bank to produce TCFD climate reports (in 2021). CCB NZBG is linked in with the wider CCB operations when it comes to exploring green opportunities, with key initiatives like MatchPlus (a CCB business matchmaking initiative) being used to create cross border green opportunities for its customers.

v. Internal analysis

The Bank has taken steps to build up its internal capability to better collate and integrate climate risk data-points into its risk management toolkit. In 2023, the Bank procured climate data (on physical risk on its collaterals, emission data etc.) from third party vendors to supplement its internal data and to deliver more timely and forward looking climate risk insights.

Management of climate-related risks

i. Risk Appetite Statement

The RAS is part of the Risk Management Framework (RMF), which sets out CCB NZBG's approach to management of all material risk classes across CCB NZBG, including appropriate internal capabilities, resources, risk and control and assurance activities. The RAS is intended to be used as guidance to ensure that CCB NZBG's strategic decisions, priorities and risk settings meet customer needs, while maintaining strong risk management and performance disciplines in line with the strategic direction. In August 2023, CCB NZBG incorporated climate-related risk into its RAS to ensure the risk is given the appropriate focus and that it is managed to the same level of cadence and discipline alongside its other material risks.

ii. Credit processes, target sector considerations and green lending strategy

Since September 2021, the Bank has implemented processes and requirements to carry out Climate and Environment Assessment Processes prior to providing credit to any high climate risk customers. Additionally, climate assessments are also required as part of the regular credit rating review for designated industry sectors. Trends and observations from the credit processes are used to inform and help refine the Bank's risk management approaches, including its management of climate risk.

iii. Setting metrics and tracking

The risk appetite metrics reflect the Board's expectations, and provide specific parameters within which the Bank must operate. A risk appetite limit represents the maximum level of risk that the Board is willing to accept for the specific metric. A number of new risk appetite metrics have been adopted. A selection of risk appetite metrics are also included in the metrics and targets section of this report. This is an iterative process. More specific quantification and appetite setting will be considered once the necessary data becomes available.

iv. Deep dive and management report

Since 2021, the Bank has undertaken regular research and analysis into a number of climate-related topics, as it builds up its internal capability to improve its understanding and resilience in this area. With the increased maturity and the incorporation of climate-related risk into its RAS, future analysis will be covered in a more structured risk management cadence, including regular updates in key management reports and more comprehensive deep dives that critically analyse the Bank's performance and resilience at a strategic level.

v. Scenario analysis, stress testing and ICAAP considerations

Stress testing is a critical component of a robust risk management framework that helps identify and quantify potential risk and assess the Bank's resilience under stressed scenarios. The stress test results and learnings are shared with the Board, and are used to inform any potential necessary actions and help shape business direction and decisions.

With the increasing number of extreme weather events (as experienced in New Zealand at the start of 2023), the Bank has started incorporating these more acute climate risk factors into CCB NZL's risk modelling. The Bank incorporated a large weather event scenario into its 2023 CCB NZL's ICAAP to assess the quantum of the flow-on impacts, and the Bank's ability to weather such an event. Whilst all analysis to date pointed to the absence of any immediate and/or drastic climate risk impact both at the organisational and the credit level, the Bank is intending to build further capability to better model out its climate risk, particularly over a lengthened horizon and with the increase in scale and complexity of the business.

In contrast to previous years' stress tests, the Bank has undertaken a reverse stress test in 2024 as part of RBNZ's industry-wide initiative. This requires banks to identify and model the most plausible scenario that causes a breach in a regulatory minimum capital ratio within 3 years, before mitigating actions. Given the minimum current and expected climate-related impact mentioned above, the Bank has not included climate risk in its 2024 stress test scenarios.

Scenario analysis is a strategic tool where the Bank considers and constructs plausible pathways (instead of forecasts) leading to different future scenarios, and analyses how resilient its current business model and strategy would be if it was placed within those scenarios. It is similar to a stress test in many respects (and are used to supplement the considerations behind), and in the context of planning around climate-related risk, provides an exploratory approach for considering significant uncertainties, and the scale and speed that physical and transitional climate-related impacts are likely to play out in the future. In 2022, CCB NZBG utilised the common sets of narratives developed alongside its banking peers as the basis of its scenario analysis. The work to compile the narratives was commissioned by the NZBA on behalf of its members, and developed by EY.

05 Metrics & targets

- **Climate risk metrics and targets**
- **Operational emissions: FY24 progress**
- **Financed GHG emissions**

05. Metrics & targets

Climate risk metrics and targets

Initiatives Grouping	Metrics	Target setting (where applicable)	2022	2023	2024	Comments
Reducing emissions in our operations*	Reduce total scope 1 and scope 2 market-based GHG emissions	18%, from the 2021 base year to 13.73 tCO2e by FY2026	27.54 tCO2e	20.85 tCO2e	8.55 tCO2e	Target set in consultation with Toitū Envirocare. Target achieved 2 years in advance, with the full switch to renewable electricity sources being a key driver.
** Measured for CCB NZL but represents the emission for CCB NZ Banking Group given the interconnected operating model between CCB NZL and CCB NZB*	Source renewable electricity equivalent to meet 100% of our electricity needs	*100%*	0%	25%	100%	The Bank has expedited the switch to renewable renewable electricity sources, and has successfully migrated 100% of its network in 2024.
	Maintain Toitū Envirocare net carbonzero certification	*Maintain certification*	Certified	Certified	Certified	Certified in May 2022. The first Chinese bank in New Zealand to become a Toitū Net Carbonzero Certified Organisation
Culture & capability	Board training/discussion sessions on climate risk	*No threshold*	4 sessions	4 sessions	4 sessions	
	Frontline & management training/ discussion sessions on climate risk	*No threshold*	N/A	5 sessions	5 sessions	
	Climate deep dive to RMC and Board (from FY 2024)	*At least annually*	N/A	N/A	Completed	
Managing climate risk	Lending exposure to business clients in coal mining	*No threshold*	$0	$0	$0	
	Maintain % of residential mortgage portfolio in high risk location (based on available data)	*<5%*	N/A	0.62%	0.70%	
	Maintain % of non-residential mortgage portfolio in high risk location (based on available data)	*<5%*	N/A	0.24%	0.00%	
	Quality of financed emission reporting. Measured by GHG emissions data quality score. Target score as per PCAF definition (5 being the least, and 1 the best)	*< 4.50*	N/A	4.24	4.13	
Supporting green initiatives	Green lending[7] (measured at CCB NZ Banking Group level)	*No threshold*	$370m	$634m	$975m	As measured using the Green Lending definition under the CCB methodologies
	Sustainability Linked Loans	*No threshold*	N/A	$485m	$536m	Note: Data not captured in comparable formats in 2022

Table 5: Climate Risk Metrics and Targets

[7] A change in methodology resulted in the lack of comparability between 2022 and 2023. 2022 figures excluded undrawn balances, whilst 2023 figures include both on-balance sheet drawn exposures and off-balance sheet undrawn exposures.

05. Metrics & targets

Summary: Total emissions

Similar to the emissions profile of other banking industry peers in New Zealand, financed emissions are the most significant source of emissions associated with the Bank's business activities, well exceeding its direct operational emissions.

	(tCO2e)		% of total emissions	
Emissions Type	**2023**	**2024**	**2023**	**2024**
Direct Operational Emissions (Scope 1,2, and 3 excluding financed emissions)	164.18	250.07	0.09%	0.13%
Financed Emissions (Scope 3)	184,856.68	190,804.45	99.91%	99.87%

Table 6: CCB NZBG Total emission trend

Further detail on the Bank's direct operational emissions and financed emissions are provided in the sections below.

Direct Operational emissions (excluding financed emissions)

CCB NZL was certified Toitū Net Carbonzero in May 2022. CCB NZL was the first Chinese bank in New Zealand to become a Toitū Net Carbonzero Certified Organisation, which demonstrates our efforts to set a positive example in the banking industry and help facilitate New Zealand's transition to a low carbon economy. This is also in line with the robust long-term Green Finance Strategy implemented by CCB which stands at the forefront in promoting sustainable finance. The bank's operational emisisons, whilst measured against CCB NZL, represents the emission for CCB NZ Banking Group given the interconnected operating model between CCB NZL and CCB NZB. Details on methodologies, key assumptions and limitations on the calculations of operational emissions (excluding financed emissions) are included in Appendix A3.

Scopes (ISO 14064-1:2006)	Emission (tCO2e)			
	2021	2022	2023	2024
Scope 1 *(incl. Category 1: Direct emissions / ISO 14064-1:2006)*	2.05	6.14	7.68	6.59
Scope 2 (Location based approach) *(incl. Category 2: Indirect emissions from imported energy / ISO 14064-1:2006)*	17.40	21.38	13.01	12.84[8]
***Scope 2 (Market based approach[8])**: used for target setting purposes, but is not assured for FY2024*	*17.40*	*21.38*	*13.01*	*1.96*
Scope 3 *(limited scope for FY2024, incl. Category 3,4,5,6: Indirect emissions from transportation, products used by the organisation, use of products from the organisation, other sources / ISO 14064-1:2006)*	28.90	51.66	143.49	230.64
Total	48.35	79.18	164.18	250.07

Table 7: Operational Emission Scope 1 & 2

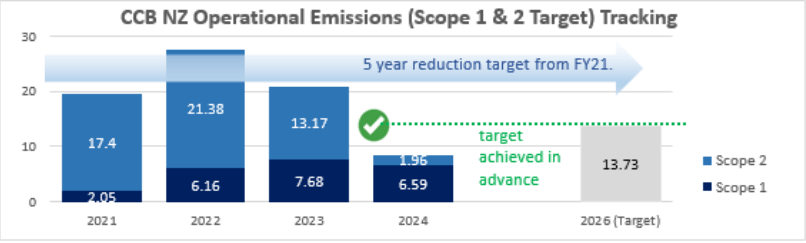


Figure 14: Operational Emission Progress (2021-2024)

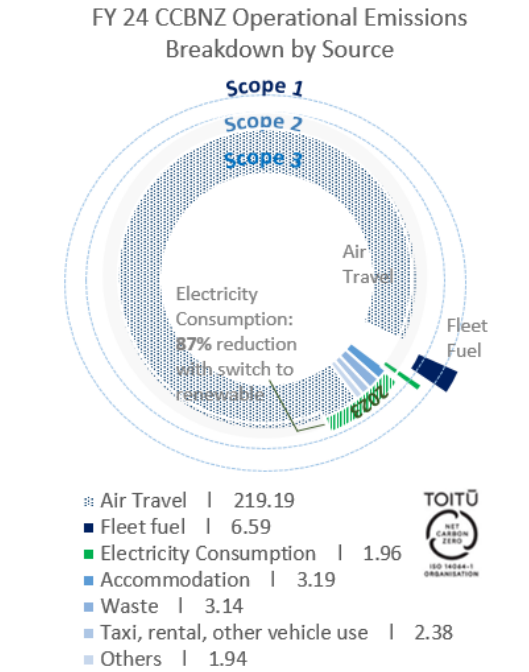


Figure 15: Operational Emission Breakdown

The accomplishment of the Toitū Net Carbonzero Organisation Certification represents the Bank's commitment to positively contribute to the sustainability of the environment through:

- actively measuring, managing and reducing the carbon footprint in accordance with the requirements; and
- fully offsetting the remaining operational emissions with high-quality carbon credits sourced from sustainable projects in New Zealand and China. Refer to Appendix A3 for a summary of the sources of carbon credit purchased, which outlines the full offset of the remaining unavoidable direct operational emissions (excluding financed

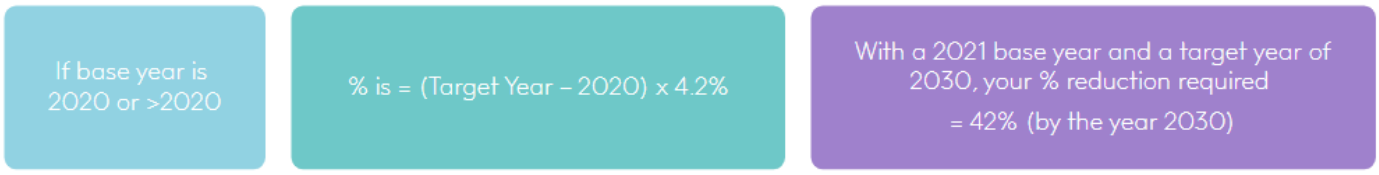
[8] *The Scope 2 emission estimated using the market-based approach is calculated using the same Toitu platform, but is not in the assurance scope for FY2024.*

emissions) since 2022. The purchases to offset the remaining unavoidable emissions take place in the new financial year, upon the finalisation of the Bank's previous years operational emissions figures. The Bank has yet to purchase the necessary carbon credits to offset its unavoidable emissions for 2024, but is fully intending to do so upon the finalisation of its operational emission reporting and audit process.

The Bank is committed to managing and reducing its emissions in accordance with the programme requirements, which includes setting forth the reduction targets in line with the Paris Agreement for continuously reducing the carbon footprints and achieving the strategic goal of being carbon neutral in its operations. The first phase of the Banks's reduction plan focused on the emissions from sources that the Bank owns or has direct control over (Scope1) and emissions that the Bank incurs indirectly from the energy it purchased (Scope 2). The Bank's Scope 3 emissions are currently captured on the more readily available sources, with further work underway to start reporting on the remaining sources from 2025.

The Bank has set an absolute target to reduce its Scope 1 and Scope 2 emissions (as measured using the market-based approach) by 18%, from the 2021 base year, by 2026. Absolute targets are aimed at reducing GHG emissions by a set amount, as opposed to intensity targets which are normalised metrics that set an organisation's emissions target relative to an economic or operational variable. The target is set with reference to average historical expense activities data from 2019 to 2021. For clarity, the Bank is required to disclose its Scope 2 emissions using a location-based approach. The target setting under the Toitu accreditation programme is however set using a market based approach. The location-based approach reflects the average emissions intensity of grids on which the energy consumption occurs, whilst the market-based approach reflects emissions from the electricity that companies have purposefully chosen. The Scope 2 emission estimation using the market-based approach is calculated using the same Toitu platform, but is not in the assurance scope for FY2024.

It is important to note that whilst the Bank's target is reviewed against the science-based ambition[10] levels as part of the Toitū Net Carbonzero certification programme, it is not considered officially validated by the Science Based Targets intiative (SBTi), as the Bank has not made a submission to the SBTi separately for the targets to be validated and reviewed. Additionally, targets are considered 'science aligned' if the below ambition is met.



The Bank's current target mentioned above is set to 2026. Using this methodology, this translates to a reduction target of 21% by 2026 if it were to be considered in line with the science-based level. For comparison, the Bank has reduced its Scope 1 and 2 (using market-based approach) emissions by 44% by 2024. The Bank will review its targets in the future to align with the 1.5C pathway for Scope 1,2,3.

The reduction in our Scope 1 and 2 operational emissions has seen the Bank achieving its 2026 operational emission target two years in advance. All categories of the Bank's operational emissions (excluding financed emissions), other than the emissions from air travel, have reduced in 2024. The most significant reduction is from switching the Bank's full network onto renewable electricity, which saw an 87% reduction in our Scope 2 emission.

Emission from air travel has increased in 2024 from the increased numbers of business trips, predominantly to China, for business development and internal conferences. The Bank will continue to explore better utilisation of virtual meeting technologies, but air travel remains a necessity and the most appropriate channel in some situations.

[10] Ambition levels are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement of limiting global warming to well below 2c above pre-industrial levels and pursuing efforts to limit warming to 1.5c.

05. Metrics & targets

The assurance over the Bank's 2024 operational emissions is carried out by EY, with the assurance report provided in Apprendix A6. Toitū Envirocare will conduct the verification and certification for 2024 reported operational emissions after the publication of this report.

Financed GHG emissions

Financed emissions are indirect greenhouse gas emissions attributed to the Bank's lending activity. These emissions are categorised by the GHG Protocol as Scope 3, Category 15: Investments. The Aotearoa New Zealand Climate-related Disclosures Standards require reporting entities to report on all material Scope 3 emissions, including financed emissions. Financed emissions can be calculated in two main ways:

1) at the portfolio level (for the entire portfolio); or
2) the sector level (for sectors where significant emissions from investments arise).

Financed emissions are the most significant source of emissions associated with the Bank's business activities, well exceeding its direct operational emissions. The Bank continued to report financed GHG emission for 2024, but applied Adoption Provision 8 for assurance.

Emission methodologies overview

In 2024, CCB NZBG continued to partner with third party vendors, Generate Zero and Data Insight, to begin modelling the financed emissions in its business lending portfolio, covering and reporting absolute Scope 1 and 2 financed emissions associated with lending to the top three asset classes in its portfolio, namely:

- Residential mortgage loans
- Commercial real estate loans
- Business lending

Whilst not a member of PCAF (Partnership for Carbon Accounting Financials), CCB NZBG references the PCAF(2022) second edition to calculate its financed emissions. PCAF is a global partnership of financial institutions who have come together to develop and implement a harmonised approach to assessment and disclosure of GHG emissions associated with loans and investments, and is recommended by TCFD. Additionally, PCAF is a contributing body to the International Sustainability Standards Board (ISSB).

It is however key to note that the PCAF standards require the disclosure of Scope 3 emissions on financed emissions from 2025. **The model employed by the Bank is only limited to calculating Scope 1 and 2 for financed emissions. Financed emissions are measured in accordance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard which does not require borrower's Scope 3 emissions to be included.**

The high level PCAF methodologies used to calculate the GHG emissions of these sectors are as follows:

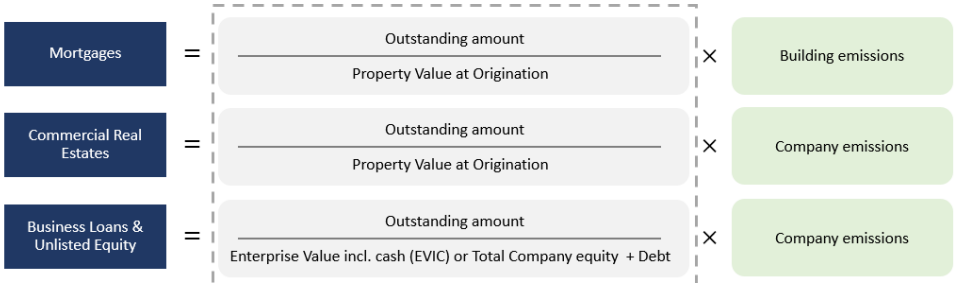


Figure16: Calculation method for financed emissions

PCAF's methodologies are dependent on the asset class of the lending, and the level of client-specific emissions and financial data available. Key considerations for the banking sector when accounting for financed emissions are:

- Data quality and reliance on sector-level emission factors: Data quality is a major limitation for organisations wanting to calculate their financed emissions, as client-specific data is often not easily accessible. PCAF endorses the use of certain sector-level emissions factors. However, these emission factors are calculated at a global level, leading to potential impact on their accuracy due to New Zealand's unique emissions profile and a

large proportional use of renewable electricity. Consequently, the use of these global emissions factors may skew calculations of financed emissions. To date, there are no publicly available sources of revenue-based, sector-level emission factors for New Zealand, however organisations might choose to develop emission factors based on Stats NZ's publicly available data.

- Embedding financed emissions into internal systems: Embedding financed emissions data into internal systems will be pivotal to enable organisations to more accurately monitor year on year change in their total financed emissions, and to support more accurate calculations. Organisations should consider carefully how to best support the capture, storage and extraction of client-specific emissions and financial data within its systems.
- Due to the complexity of the accounting approaches, required data sources and the range of impacted stakeholders, strong governance is key to developing robust financed emissions accounting processes, ensuring clear accountability of financed emissions calculations, and minimising risk of calculation errors and misinterpretation of data.

We calculate the combined financed emissions across these three asset classes to be around 190.8ktCO2e. The first two asset classes, Residential Mortgages and Commercial Real Estate, represent around 38.34% of the Bank's exposure by drawn amount but only account for 1.23% of the Bank's financed emissions. Conversely, the two sectors with the highest emissions intensity, Agriculture, forestry and fishing and Mining, account for 10.46% of the Bank's financed emissions but only represent 1.81% of the Bank's exposure by drawn amount.

Asset Class	FY23					FY24				
	Scope 1 and 2 Financed Emissions (tCO2e)	% CCB NZL Scope 1 and 2 Financed Emissions	Emissions Intensity (tCO2e/$m Lent)	% of CCB NZL Lending (on-balance $)	PCAF Data Quality Score	Scope 1 and 2 Financed Emissions (tCO2e)	% CCB NZL Scope 1 and 2 Financed Emissions	Emissions Intensity (tCO2e/$m Lent)	% of CCB NZL Lending (on-balance $)	PCAF Data Quality Score
1. Residential Mortgages	**494**	**0.27%**	**0.625**	21.58%	**4.00**	**551**	**0.29%**	**0.654**	22.67%	**4.03**
2. Commercial Real Estate	**1,190**	**0.64%**	**2.165**	15.00%	**4.50**	**1,794**	**0.94%**	**3.081**	15.67%	**4.77**
3. Business Lending	**183,171**	**99.09%**	**78.82**	**63.42%**	**4.26**	**188,459**	**98.77%**	**82.28**	**61.66%**	**4.22**
3.1 Agriculture, forestry, and fishing	13,798	7.46%	282	1.33%	4.00	12,549	6.58%	333	1.02%	4.00
3.2 Mining	6,623	3.58%	167	1.08%	4.00	7,401	3.88%	250	0.80%	4.00
3.3 Manufacturing	35,302	19.10%	74	13.07%	4.00	43,628	22.87%	70	16.73%	4.00
3.4 Electricity, gas, water, and waste services	118,222	63.95%	272	11.84%	4.46	112,456	58.94%	204	14.88%	4.32
3.5 Construction	5,256	2.84%	14	10.10%	4.30	7,351	3.85%	29	6.83%	4.92
3.6 Wholesale trade	-	-	-	0.00%	-	531	0.28%	13	1.08%	5.00
3.7 Retail trade	363	0.20%	6	1.74%	4.00	343	0.18%	5	1.71%	4.00
3.8 Accommodation and food services	12	0.01%	1	0.40%	4.00	30	0.02%	2	0.40%	4.00
3.9 Transport, postal, and warehousing	2,577	1.39%	30	2.32%	4.00	3,840	2.01%	20	5.27%	4.00
3.10 Information media and telecommunicati	491	0.27%	3	4.04%	4.34	15	0.01%	0	1.68%	5.00
3.11 Financial and insurance services	0	0.00%	0	0.37%	4.00	0	0.00%	0	0.41%	4.10
3.12 Rental, hiring, and real estate services	137	0.07%	0	8.24%	4.83	60	0.03%	1	1.64%	4.00
3.13 Education and training	-	-	-	0.00%	-	168	0.09%	2	2.41%	4.00
3.14 Health care and social assistance	133	0.07%	1	6.56%	4.00	86	0.04%	0	6.81%	4.00
3.15 Not Elsewhere Included	256	0.14%	3	2.31%	4.00	-	-	-	0.00%	-
Total Attributed Financed Emissions:	**184,856**			**Average PCAF Score:**	**4.24**	**190,804**			**Average PCAF Score:**	**4.27**

Table 8: Financed Emission Summary

05. Metrics & targets

Year-on-year Comparison

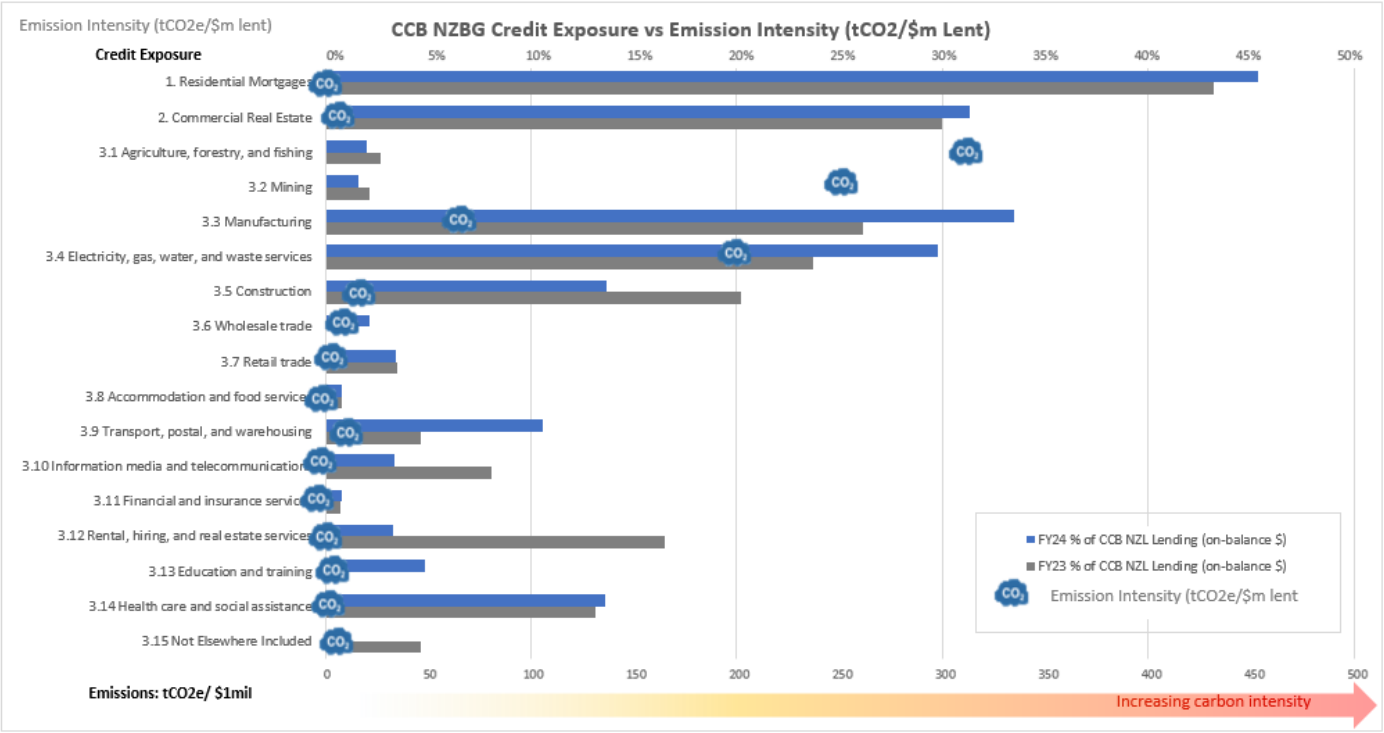


Figure 17: Credit Exposure vs Emission Intensity

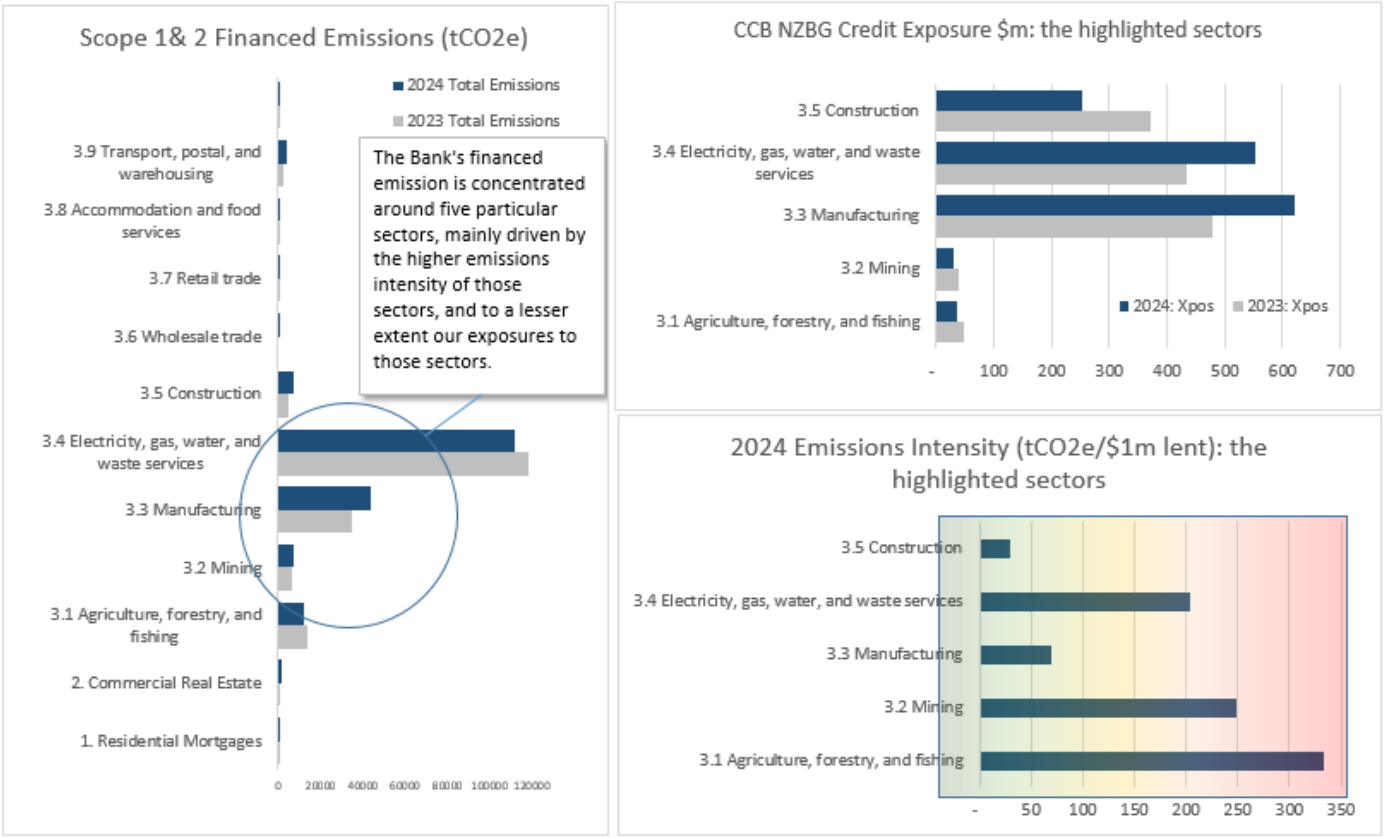


Figure 18: CCB NZBG financed emissions YoY Comparison

05. Metrics & targets

Data quality: The Bank also follows the PCAF guidance for estimating the emissions data quality we used for calculating financed emissions. A score of one is best and reflects verified and disclosed emissions. Whilst our current PCAF data quality score is high (averaging 4.27), the reporting of our financed emissions provides a step forward for the Bank to better identify and manage its climate-related risks and emissions, outside of our direct operational emissions.

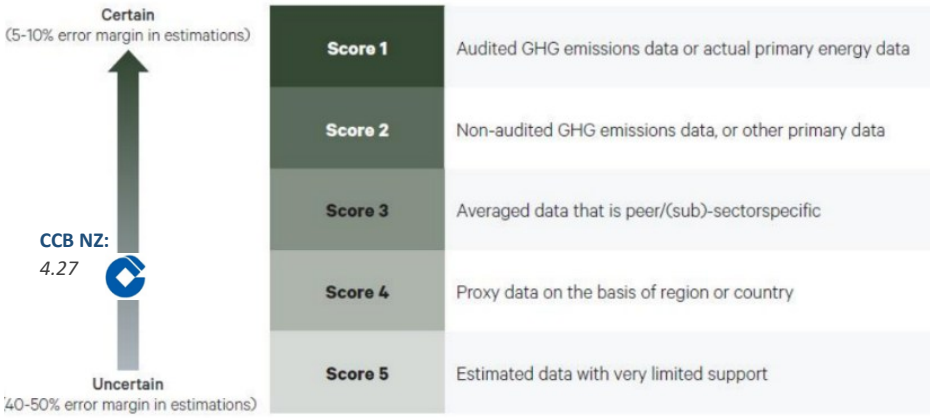


Figure 19: CCB NZBG's Data Quality Score and the General description for the data

Emissions data, calculation methodologies and disclosure standards are evolving rapidly. CCB NZBG will keep abreast of key developments and work with its selected data partners to ensure it can evolve its approach as new requirements and better fitting methodologies emerge.

Refer to *Appendix A2* for a more detailed overview of the methodologies for the three asset classes.

Appendix

- **A1. Strategy methodology and Assumptions for Scenario Analysis**
- **A2. Financed emissions methodologies overview**
- **A3. Operational emissions and managing residual emissions**
- **A4. Developments at CCB Corporation Group Level**
- **A5. Adoption Provisions**
- **A6. Independent Assurance Report**

A1. Strategy methodology and Assumptions for Scenario Analysis

This appendix provides the information in relation to the approach for integrating climate-related risk into the strategy and decision making. The Bank outlines the scenario analysis it has undertaken, the risks and opportunities identified, the anticipated impacts, and how the Bank will position itself as the global and domestic economy transitions towards a low-emissions, climate resilient future state. These are used to test the resiliency of the Bank's business model and strategy.

The Bank has utilised the common sets of narratives developed alongside its banking peers as the basis of its scenario analysis.
The work to compile the narratives was commissioned by the NZBA on behalf of its members, and developed by EY. The aim is to develop a common set of narratives to support a better understanding/assessment of climate-related risks and the reporting expectations against the TCFD recommendations and the Standards. The final outputs of that report include:

- A common set of scenario narratives and horizons to be used in climate-related risk assessment and disclosures
- A high-level set of climate-related risks that banks should consider as part of their risk assessment with risks identified based on input from project stakeholders
- Organisational actions for climate disclosures on governance, strategy, risk management, and metrics and targets

These three elements are designed to improve the comparability and consistency of climate-related risk disclosures in the banking sector, ultimately enabling primary users to be able to compare findings more readily. Three scenario narratives and four time horizons were developed to promote alignment of climate-related scenario analysis and risk disclosures across Aotearoa New Zealand's banking sector. The alignment of the scenarios to the chosen scenario dimensions was done in accordance with the XRB's guidance on sector-level scenario analysis (External Reporting Board, 2022).

The figures below summarise the framework used to develop the scenario narratives at a sectorial level, and how that was further incorporated into the Bank's own analysis.

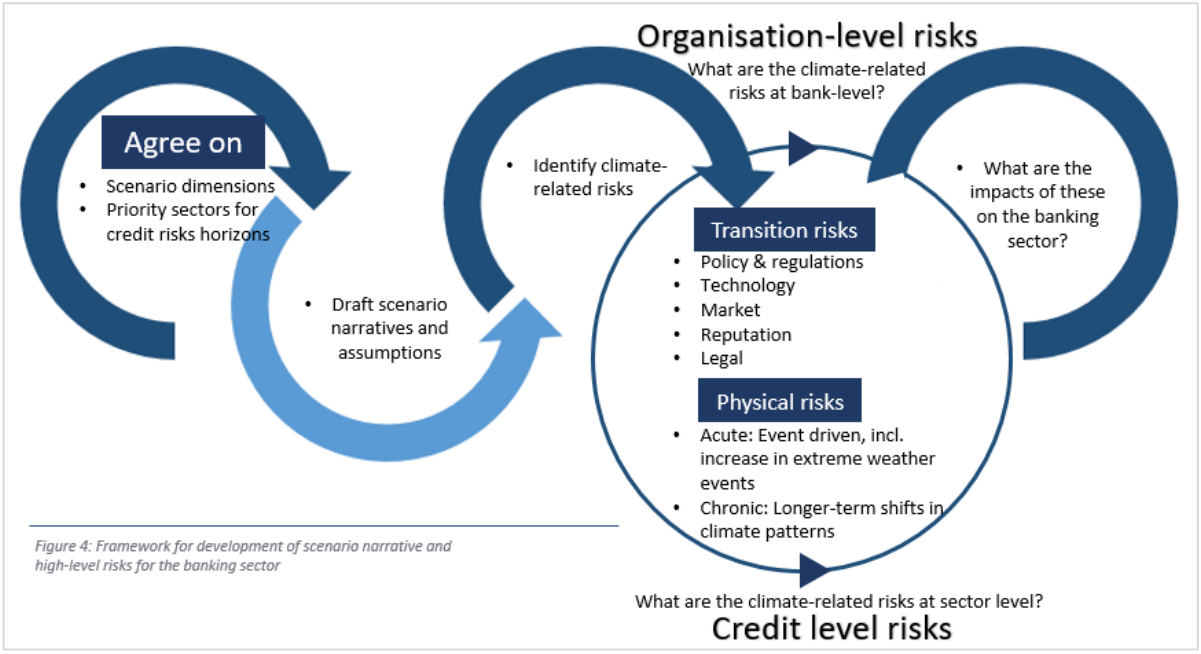


Figure 4: Framework for development of scenario narrative and high-level risks for the banking sector

Figure 20a: Work carried out at sectorial vs at the Bank's level

A1. Strategy methodology and Assumptions for Scenario Analysis

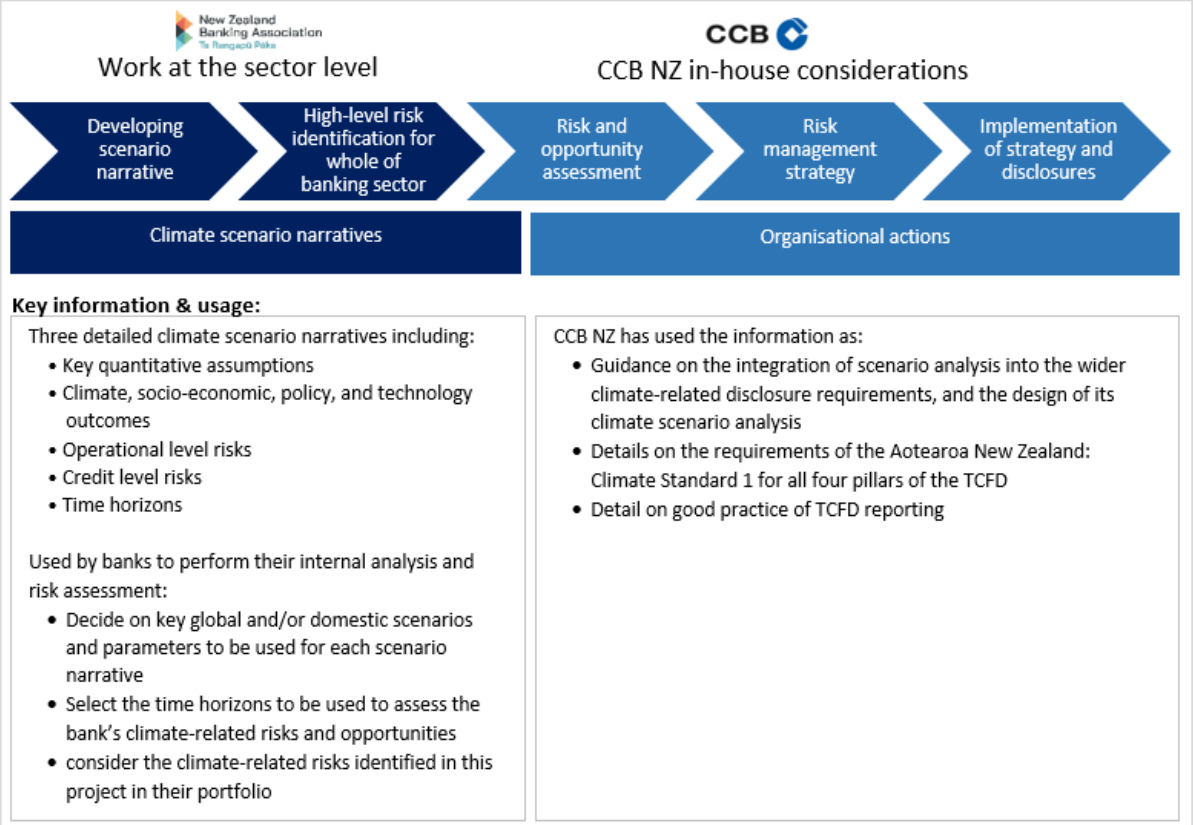


Figure 20b: Work carried out at sectorial vs at the Bank's level

A1. Strategy methodology and Assumptions for Scenario Analysis

Scenario Analyis: Risk and opportunities by key sectors

This section summarises CCB NZBG's key risk and opportunity considerations undertaken for the top four sectors (excl. the Agriculture sector) under its scenario analysis. Analysis of the Agriculture sector is not reported separately given the small representation (0.92%) in the whole credit portfolio. Additional information on the Bank's areas of focus in regards to green lending is provided on page 22.

Top four sectors by business lending exposures	Key potential implications for the sector and CCB NZBG		
	Physical Risks	**Transition Risks**	**Opportunities**
Real-estate Rental: Commercial & Residential *;* ***Residential Mortgages*** *– These sectors share a level of commonality in the risks and opportunities profiles*	**Key Risk: Extreme weather, flood, sea-level rise** • Increased extreme weather-induced damages drastically reduce asset values. • Significant increase in repair/ maintenance/ write-offs and early retirement of assets. • Disruptions from weather events, the loss of appeal for assets in flood-prone areas, and inability to meet new compliance standards resulting in loss of operational/ rental income. • Insurability/significant rise in insurance cost in high risk areas, impacting the value of collateral. **Flow-on implications:** 1. Impact on loan repayments from increased operational cost (e.g. repair, compliance and insurance cost) and disrupted income streams 2. Insurability diminishes the value of existing collaterals resulting in drops in credit mitigants, and increasing the loss incurred in the event of defaults.	**Key Risk: Customer behaviour change/regulatory impacts/increased cost of raw materials** • Shifting preference for high quality sustainable building standards may impact value/ impact of properties and lands • Efforts to meet the shifting preference and new regulatory requirements (including potential forced upgrades, managed retreats etc.) increasing uncertainty and operational cost. • Increase operating cost due to the passing of carbon price through the value chain (raw materials, resources, distribution etc.). **Flow-on implications:** 1. Impact on loan repayments from increased operational cost to meet the shifting preference and higher building standards, or fines and penalties for those who can't comply. 2. Diminishing land value restricts new amount that can be borrowed and increases the loss incurred on existing exposures in the event of defaults.	Increased demand for products and services **supporting energy, efficiency, sustainability** and **resilience** (e.g. the healthy homes requirements, adaptation measures in certain areas)

Construction	**Key Risk: Extreme weather, flood, sea level rise, heatwave**
	• Extreme weather impacting profitability in a sector that runs on relatively thin margins and tight cash-flows: e.g.
	  • Interruption to construction operations, causing damage, delays to project timelines, and disrupt logistics for delivery of supplies and removal of waste, and
	  • Increase in costs to repair and replace infrastructure.
	• Heatwaves increase health and safety considerations, and add to project delays.
	• Increased inundation and exposure to storm surges can devalue land.
	
	Flow-on implications:
	1. Impact on loan repayments from increased operational cost and delays in project completions.
	2. Project delays increasing the rate of settlement default risk, particularly in a downward trending market, impacting loan repayments.
		Key Risk: Customer behaviour change/ regulatory impacts/increased costs of raw materials
		• Regulatory requirements to use low emissions technologies/ alternatives in buildings increasing the overall cost of construction.
		• Flow-on impacts and operating costs for existing properties where retrofits are required to meet new building requirements.
		• Emissions pricing and emissions reduction requirements may increase overall operational and supply chain costs (e.g. on cement and steel, due to the high level of emissions associated with their manufacturing).
		
		Flow-on implications:
		1. Decreased profitability may cause an inability to meet loan repayments.
			Increased demand for projects that incorporate more **sustainable design features**, and have **lower GHG emission profiles** as a result of regulatory change and consumer preference.

Table 9: Key risk and opportunity considerations undertaken for the top four sectors

A1. Strategy methodology and Assumptions for Scenario Analysis

The matrices below provide a more detailed summary of these potential risk trade-offs, and the likelihood assessment against each of the five priority sectors referenced below against the three scenarios. **Note:** The risk to the residential home loans portfolio is considered alongside the property sectors in this analysis.

The Bank's analysis showed that **79.57%** of CCB NZBG's credit portfolio[11] (by drawn balance) is covered under these priority sectors (whilst noting there is minimal exposure to the Agriculture sector). Additionally, it is noted that the coverage increased to **76.60%** by customer count.

ORDERLY (1.5c)

Category	Risk driver Numbered	Agriculture	Transport & Shipping	Energy	Manufacturing	Construction & Property
Physical	P1. Drought	Likely	Likely	Likely	Likely	Not likely
	P2. Extreme weather	Likely	Likely	Not likely	Likely	Likely
	P3. Flood	Likely	Likely	Likely	Likely	Likely
	P4. Heatwave	Likely	Not likely	Likely	Likely	Likely
	P5. Precipitation change	Likely	Likely	Likely	Likely	Likely
	P6. Temperature change	Likely	Likely	Likely	Not likely	Likely
	P7. Sea level rise	Likely	Likely	Likely	Likely	Likely
	P8. Biodiversity loss	Likely	Not likely	Not likely	Not likely	Not likely
Transition	T1. Customer behaviour change	Very Likely	Very Likely	Very Likely	Very Likely	Very Likely
	T2. Increased costs of raw materials	Very Likely	Very Likely	Not likely	Likely	Likely
	T3. Regulatory impacts	Very Likely	Likely	Likely	Likely	Likely
	T4. Emissions reduction requirements	Very Likely	Likely	Not likely	Likely	Likely
	T5. Litigation risk	Likely	Likely	Likely	Likely	Likely
	T6. Emissions pricing	Likely	Likely	Very Likely	Likely	Likely
	T7. Reputation impacts	Likely	Likely	Likely	Likely	Likely
	T8. Lower emissions substitutes	Likely	Not likely	Likely	Likely	Likely
	T9. Emerging technologies	Likely	Not likely	Not likely	Not likely	Not likely
	T10. Unsuccessful investment	Not likely	Not likely	Likely	Likely	Not likely
	T11. Stakeholder relations	Likely	Likely	Likely	Likely	Likely

TOO LITTLE TOO LATE (>2c)

Category	Risk driver Numbered	Agriculture	Transport & Shipping	Energy	Manufacturing	Construction & Property
Physical	P1. Drought	Very Likely	Likely	Very Likely	Likely	Not likely
	P2. Extreme weather	Likely	Very Likely	Likely	Likely	Likely
	P3. Flood	Very Likely	Very Likely	Likely	Likely	Very Likely
	P4. Heatwave	Very Likely	Not likely	Very Likely	Likely	Likely
	P5. Precipitation change	Likely	Likely	Very Likely	Likely	Likely
	P6. Temperature change	Likely	Likely	Likely	Not likely	Likely
	P7. Sea level rise	Likely	Very Likely	Likely	Likely	Very Likely
	P8. Biodiversity loss	Very Likely	Not likely	Not likely	Not likely	Not likely
Transition	T1. Customer behaviour change	Very Likely	Likely	Likely	Likely	Very Likely
	T2. Increased costs of raw materials	Likely	Likely	Not likely	Likely	Not likely
	T3. Regulatory impacts	Very Likely	Likely	Very Likely	Not likely	Very Likely
	T4. Emissions reduction requirements	Likely	Likely	Not likely	Very Likely	Very Likely
	T5. Litigation risk	Likely	Likely	Likely	Very Likely	Likely
	T6. Emissions pricing	Very Likely	Very Likely	Very Likely	Very Likely	Very Likely
	T7. Reputation impacts	Likely	Likely	Likely	Likely	Likely
	T8. Lower emissions substitutes	Very Likely	Not likely	Very Likely	Likely	Very Likely
	T9. Emerging technologies	Likely	Not likely	Not likely	Not likely	Not likely
	T10. Unsuccessful investment	Not likely	Not likely	Very Likely	Likely	Not likely
	T11. Stakeholder relations	Not likely	Not likely	Not likely	Not likely	Not likely

Hothouse (>3c)

Category	Risk driver Numbered	Agriculture	Transport & Shipping	Energy	Manufacturing	Construction & Property
Physical	P1. Drought	Very Likely	Likely	Very Likely	Very Likely	Not likely
	P2. Extreme weather	Very Likely	Very Likely	Likely	Very Likely	Very Likely
	P3. Flood	Very Likely	Very Likely	Likely	Very Likely	Very Likely
	P4. Heatwave	Very Likely	Not likely	Very Likely	Likely	Very Likely
	P5. Precipitation change	Very Likely	Likely	Very Likely	Likely	Likely
	P6. Temperature change	Likely	Likely	Likely	Not likely	Likely
	P7. Sea level rise	Very Likely	Very Likely	Likely	Very Likely	Very Likely
	P8. Biodiversity loss	Very Likely	Not likely	Not likely	Not likely	Not likely
Transition	T1. Customer behaviour change	Likely	Likely	Likely	Likely	Likely
	T2. Increased costs of raw materials	Likely	Not likely	Not likely	Likely	Not likely
	T3. Regulatory impacts	Likely	Not likely	Likely	Not likely	Likely
	T4. Emissions reduction requirements	Likely	Likely	Not likely	Likely	Likely
	T5. Litigation risk	Likely	Likely	Likely	Likely	Likely
	T6. Emissions pricing	Likely	Likely	Likely	Likely	Likely
	T7. Reputation impacts	Likely	Likely	Likely	Likely	Likely
	T8. Lower emissions substitutes	Likely	Not likely	Likely	Likely	Likely
	T9. Emerging technologies	Likely	Not likely	Likely	Not likely	Not likely
	T10. Unsuccessful investment	Not likely	Not likely	Not likely	Not likely	Not likely
	T11. Stakeholder relations	Not likely	Not likely	Likely	Not likely	Not likely

Legends:

- Not likely
- Likely
- Very Likely

Source: Matrices summarised from the output of the NZBA Climate Scenario Narratives for the Banking Sector (2023)

Figure 21: Potential risk trade-offs analysis for Top five priority sectors

[11] Sectors in the remaining 20.43% not captured in the 2024 scenario analysis are Wholesale/ Retail Trade, Accommodation and Food Services, Information Media and Telecommunications, Financial and Insurance Services, Transport, Post and Warehousing.

A1. Strategy methodology and Assumptions for Scenario Analysis

Physical risk modelling and additional consideration on transition risk

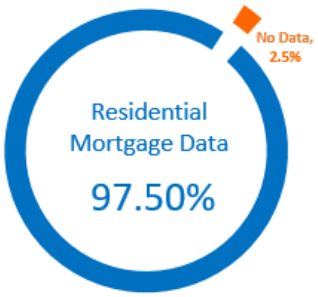
Physical risk modelling was completed on CCB NZBG's portfolio using RMS Moody's data (EFP and Climate Conditioning Flood Data ~ Refer to Appendix A1 for an overview of the methodology). Based on an RCP of 8.5 (which reflects the worst case scenario), the profiles are as follow:

Residential Lending Portfolio: key findings

Projection based on RCP8.5 scenario (the worst case: 'Too Little Too Late' scenario)

Year	Low Risk	Moderate Risk	High Risk
2024 (current)	98.91%	0.41%	0.68%
2030	98.91%	0.41%	0.68%
2050	98.91%	0.41%	0.68%
2080	98.91%	0.38%	0.71%

% of property modelled: 97.50%



Property-backed Non-residential Lending Portfolio: key findings

Projection based on RCP8.5 scenario (the worst case: 'Too Little Too Late' scenario)

Year	Low Risk	Moderate Risk	High Risk
2024 (current)	99.84%	0.15%	0.01%
2030	99.84%	0.15%	0.01%
2050	99.83%	0.15%	0.02%
2080	99.79%	0.15%	0.06%

% of property modelled: 95.46%

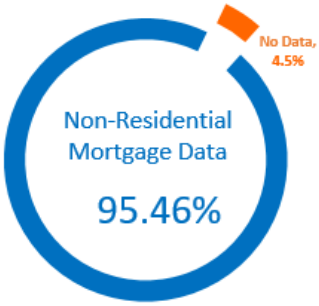


Figure 22: Physical risk modelling key findings

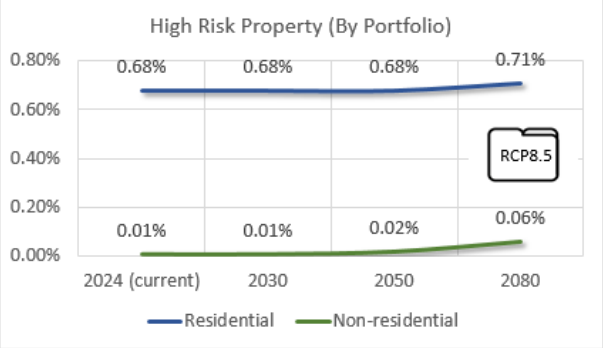


Figure 23: High risk property by portfolio

Our analysis showed that 0.68% of residential properties, and almost 0.01% of non-residential properties may be at high risk currently. This increases to 0.71% and 0.06% by 2080, under the worst-case scenario of RCP8.5. (Refer to *Figure 23*) A property is considered high risk if the expected mean damage ratio is greater than 20% as modelled in the RMS Moody's dataset[12].

Whilst the maturity profile of the residential mortgages in CCB NZBG can extend up to 30 years, the maturity profile of the non-residential exposures is significantly shorter at an average of less than 2 years. The shorter profile in the non-residential portfolio allows the Bank to more easily manage the climate risk profile of that portfolio through the adjustment of its business strategy.

[12] Refer to Appendix A1 for the rating classification definitions

A1. Strategy methodology and Assumptions for Scenario Analysis

Additional considerations on transition risk (impacting residential home loan borrowers)

Consideration was also given to the potential impacts on salaried employee borrowers, who may be affected by a transition to a low emissions economy, resulting in financial difficulties in meeting their loan obligations to the Bank. Rural regions have a higher share of workers in emission intensive industries and are expected to face greater impacts in the transition to a low emissions economy. The highest concentration of workers in high emission industries are concentrated in Southland, Gisborne, Taranaki, and the West Coast. The loss of fossil fuel related jobs will impact Taranaki and the West Coast the most, and Manawatu-Whanganui, the West Coast, Southland and Gisborne are heavily reliant on the agricultural sector. *[Source: MBIE -The Impacts of Economic Transitions on Firms, Workers, Regions and Households, 2021]*

Urban regions however, such as Auckland (to which the Bank is predominantly exposed), have the lowest share of employment in high emission industries. Job disruptions can impact on loan repayment abilities, particularly for those in the emission intensive industries which have high concentrations of workers with low or no qualifications (resulting in greater barriers to finding equivalent employment opportunities because of the transition).

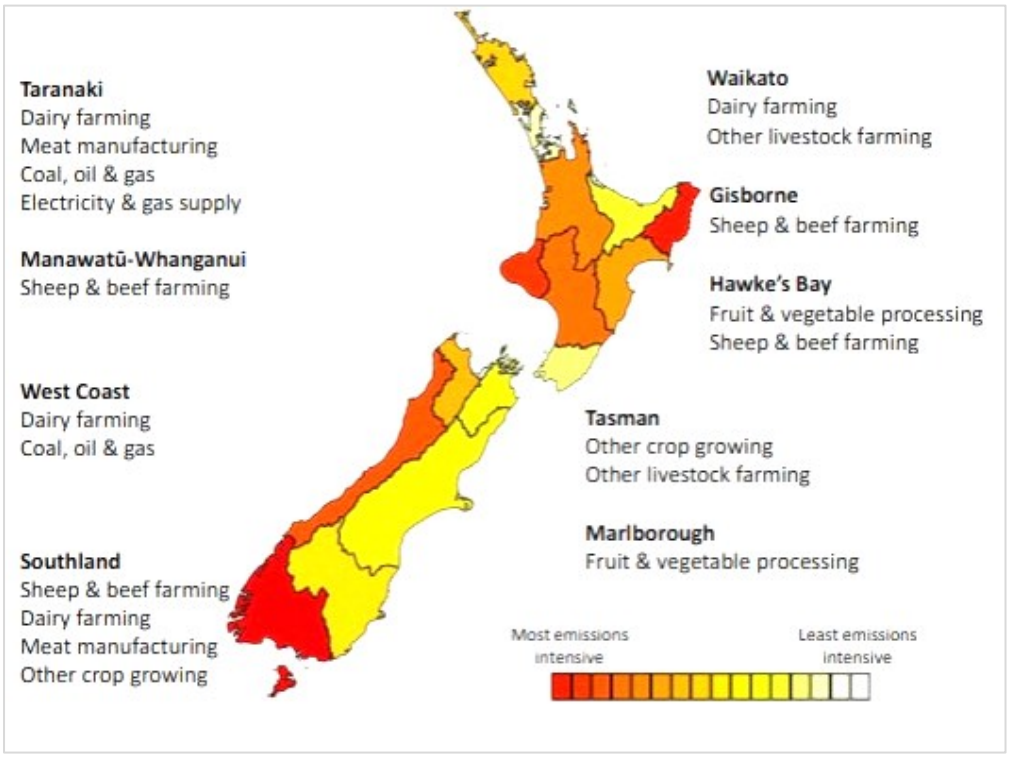


Figure 24: Important high intensity industries by region.

[Source MBIE -The Impacts of Economic Transitions on Firms, Workers, Regions and Households, 2021]

A1. Strategy methodology and Assumptions for Scenario Analysis

Physical risk analysis methodologies overview

Flood is the second highest insured loss in New Zealand, and the Insurance Council of New Zealand (ICNZ) data shows that since 1968 flood accounted for more than 50 percent of all loss events, and damage from heavy precipitation or river flooding represented 60 percent of weather related losses.

In the North Island (where CCB NZBG's exposures are predominantly located), flooding is often triggered by heavy rainfall brought by transitioned tropical cyclones. Prominent examples are Tropical Cyclone Debbie in 2017 and Tropical Cyclone Gabrielle in 2023. The El Niño Southern Oscillation (ENSO) markedly influences precipitation patterns across the country.

These extreme weather patterns are expected to become more frequent and intense as the climate changes.

CCB NZ has partnered with third party vendors, Valocity and Moody's RMS, to obtain better modelling of the flood risk on its real estate collaterals. The Moody's RMS Inland Flood Model is a fully probabilistic flood model built with data obtained from local organisations and institutions, including the National Institute of Water and Atmospheric Research (NIWA), Land Information New Zealand (LINZ), local regional councils and ICNZ. The model is based on 50,000 years of continuous simulation of the entire precipitation cycle capturing the spatial and temporal correlations of flood risk, and all sources of flood (pluvial and fluvial), resulting in a catalog of 350,000 simulated events[13].

The analysis obtained covered earthquake, flood and other property risk under current climatic conditions, and flood climate risk conditioned for future climate scenarios based on the scenarios dimensions and time horizons used in the Bank's scenario analysis.

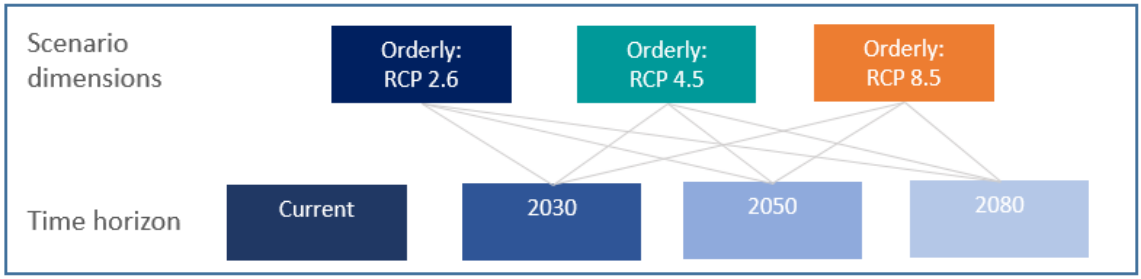


Figure 25: Scenario Dimensions

More specifically, the flood data contains a series of flood risk indicators including flood depth, elevation and distance to the coast against a 100, 250 and 500 years return events probability, conditioned by the time and scenario dimensions mentioned above.

Flood risk gradings are further derived for all real estate collaterals based on these risk indicators. The risk grading in the raw flood data are grouped by the different level of risk severity. Below are the further groupings that CCB NZBG utilised in the Physical Risk summary in this report.

Raw Data Rating	Rating Used in the Physical Risk Summary in this report	Expected Mean Damage Ratio
Extremely Low Risk	Low Risk	0 - 10%
Very Low Risk		
Low Risk		
Low to Moderate Risk		
Moderate Risk	Medium Risk	10 - 20%
Moderate to High Risk		
High Risk	High Risk	20 - 100%
High to Very High Risk		
Very High Risk		
Extremely High Risk		

Table 10: Physical risk rating used in this report

[13] Source: https://www.rms.com/blog/2021/05/04/rms-launches-new-zealand-inland-flood-hd-model-a-new-era-for-catastrophe-modeling

A2. Financed emissions methodologies overview

Financed emissions are indirect greenhouse gas emissions attributed to the Bank's lending activity. These emissions are categorised by the GHG Protocol as Scope 3, Category 15: Investments. Whilst not a member of PCAF (Partnership for Carbon Accounting Financials), CCB NZBG uses the PCAF guidance to calculate its financed emissions. (Refer to Section 5 of this report)

The PCAF methodology prescribes specific asset classes for inclusion as appropriate in financed emission estimations made by financial institutions. In 2022, CCB NZBG partnered with third party vendors, Generate Zero and Data Insight, to begin modelling the financed emissions using estimation approach in its business lending portfolio, covering the Scope 1 & Scope 2 financed emissions associated with lending to the top three asset classes in its portfolio, namely:

- Residential mortgage loans
- Commercial real estate loans
- Business lending

Relevant asset classes specified in the PCAF standard that are excluded from the Bank's financed emissions estimations due to data availability limitations are sovereign debt, and listed equity and corporate bonds. Motor vehicle loans and project finance are included in business lending.

Detailed Methodologies

Residential Mortgages

All residential mortgages on-balance sheet loans for the financing of residential property are included in the financed emissions calculation of the residential mortgages asset class.

The financed emission is calculated by multiplying the attribution factor by the emissions of the building as follows:

$$Financed\ emissions = \sum_{b} Attribution\ factor_b \times Building\ emissions_b$$

$$(with\ b = building)$$

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.96)

The emissions of buildings are calculated as the product of a building's energy consumption and specific emission factors for each source of energy consumed. The total energy use of the building includes the energy consumed by the building's occupants. The equation below is the result.

$$Financed\ emissions = \sum_{b,e} \frac{Outstanding\ amount_b}{Property\ value\ at\ origination_b} \times Energy\ consumption_{b,e} \times Emission\ factor_e$$

$$(with\ b = building\ and\ e = energy\ source\ )$$

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.96)

Data required: Actual building energy consumption is preferred but are not widely available. In the absence of metered data, energy use can be estimated based on building characteristics and publicly available data. The PCAF data quality, using the different options, are ranked from actual reported consumption (highest quality), energy labels data (mid-high quality), regional / floor area data (mid-lower quality) to regional / building number data (lowest quality).

(score 1 = highest data quality; score 5 = lowest data quality)

Data Quality	Options to estimate the financed emissions		When to use each option
Score 1	Option 1: Actual building emissions	1a	Primary data on **actual building energy consumption** (i.e., metered data) is available. Emissions are calculated using actual building energy consumption and **supplier-specific emission factors**[44] specific to the respective energy source.
Score 2		1b	Primary data on **actual building energy consumption** (i.e., metered data) is available. Emissions are calculated using actual building energy consumption and **average emission factors** specific to the respective energy source.
Score 3	Option 2: Estimated building emissions based on floor area	2a	**Estimated building energy consumption per floor area based on official building energy labels AND the floor area** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.
Score 4		2b	**Estimated building energy consumption per floor area based on building type and location-specific statistical data AND the floor area** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.
Score 5	Option 3: Estimated building emissions based on number of buildings	3	**Estimated building energy consumption per building based on building type and location-specific statistical data AND the number of buildings** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.

Table 11: General description of the data quality score for the Residential Mortgages asset class

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.98)

A2. Financed emissions methodologies overview

The Bank adopts **option *2b: Estimated building energy consumption per floor area based on building type and location specific statistical data and the floor area,*** in its emission calculation, where floor area information is available; and ***option 3: Estimated building energy consumption per building based on building type and location specific statistical data*** where floor area information is unavailable.

For both options, the emissions are calculated using estimated building energy consumption and average emission factors specific to the respective energy source. Key external data sources relied upon for these options are:

- Electricity authority regional electricity consumption data
- Stats NZ heating and cooling data by region
- Property floor area data

The Bank has been able to predominantly adopt option 2b for its calculation given the availability of the floor area information for the majority of the Bank's residential mortgage exposures. The PCAF data quality score, as a result, is 4.03.

The approach for residential mortgages remains unchanged in 2024. However, there are notable updates which have impact on the financed emission results:

- Updated Emissions Factors: In May 2024, the Ministry for the Environment released its 2024 emission factors. This led to a reduction in the electricity emission factor ($kgCO_2e/kWh$), resulting in decreased emissions intensity across all regions.
- Regional Emissions Update: Stats NZ published updated heating and cooling regional emissions data for 2023 in August. This update caused an increase in emissions intensity across all regions.
- PCAF Data Quality Adjustment: The indicative PCAF data quality score for emissions based on estimated floor area has been revised and adjusted from 4 to 5. This conservative adjustment reflects PCAF's specific requirement for "Building floor area" under option 2b. Properties with actual floor area data remain at a score of 4.

Commercial Real Estate

All commercial real estate on-balance sheet lendings are included in the financed emissions calculation for the Commercial Real Estate asset class.

Similar to the Residential Mortgages asset class, the PCAF model for the Commercial Real Estate asset class is calculated by multiplying the attribution factor by the emissions of the building as follows:

$$Financed\ emissions = \sum_{b} Attribution\ factor_b \times Building\ emissions_b$$

$(with\ b = building)$

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.91)

The emissions of buildings are calculated as the product of a building's energy consumption and specific emission factors for each source of energy consumed. The total energy use of the building includes the energy consumed by the occupants of the building. The equation below is the result.

$$Financed\ emissions = \sum_{b,e} \frac{Outstanding\ amount_b}{Property\ value\ at\ origination_b} \times Energy\ consumption_{b,e} \times Emission\ factor_e$$

$(with\ b = building\ and\ e = energy\ source)$

Data required: Similar to the Residential Mortgages asset class, actual building energy consumption is preferred but data is not widely available. In the absence of metered data, energy use can be estimated based on building characteristics and publicly available data. The PCAF data quality using the different options are ranked from actual reported consumption (highest quality), energy labels data (mid-high quality), regional / floor area data (mid-lower quality) to regional / building number data (lowest quality).

A2. Financed emissions methodologies overview

(score 1 = highest data quality; score 5 = lowest data quality)

Data Quality	Options to estimate the financed emissions		When to use each option
Score 1	Option 1: Actual building emissions	1a	Primary data on **actual building energy consumption** (i.e., metered data) is available. Emissions are calculated using actual building energy consumption and **supplier-specific emission factors**[144] specific to the respective energy source.
Score 2		1b	Primary data on **actual building energy consumption** (i.e., metered data) is available. Emissions are calculated using actual building energy consumption and **average emission factors** specific to the respective energy source.
Score 3	Option 2: Estimated building emissions based on floor area	2a	**Estimated building energy consumption per floor area based on official building energy labels AND the floor area** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.
Score 4		2b	**Estimated building energy consumption per floor area based on building type and location-specific statistical data AND the floor area** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.
Score 5	Option 3: Estimated building emissions based on number of buildings	3	**Estimated building energy consumption per building based on building type and location-specific statistical data AND the number of buildings** are available. Emissions are calculated using estimated building energy consumption and **average emission factors** specific to the respective energy source.

Table 12: General description of the data quality score for the Commercial Real Estate asset class

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.92)

Actual building energy consumption is preferred but data is not widely available in the absence of metered data, energy use can be estimated based on building characteristics and publicly available data. The latest methodology also required that property land use is provided for improved quality.

The Bank adopts **option 2: Estimated building energy consumption per floor area based on building type (commercial offices, non-commercial offices) and location-specific statistical data AND the floor area** (table 11). Emissions factors were calculated by multiplying the average electricity (Table 12) and average gas consumption (Table 13) (MJ./m^2) by the appropriate New Zealand Emissions Factors to get estimated emissions per m^2. Emission factors for gas and electricity have been updated to reflect the Ministry for the Environment 2024 publication, and computed using the acquired average emissions factors in conjunction with the corresponding floor area.

$$Financed\ emissions = \sum_{b,e} \frac{Outstanding\ amount_b}{Property\ value\ at\ origination_b} \times Estimated\ energy\ consumption\ from\ statistics_{b,e} \times Floor\ area_b \times Average\ emission\ factor_e$$

$$(with\ b = building\ and\ e = energy\ source)$$

Key external data sources relied upon for this option are:

- Ministry for the Environment factors for emissions per unit of activity for gas and electricity for emission factors
- Building Energy end use study 2014 (BEE,2014)
- Property floor area data

The Bank adopts **option 3: Estimated building energy consumption per floor area based on estimated floor area.**(table 11). All other buildings (both offices and non-commercial offices) are grouped rather than specific to estimated floor area, leading to a score of 5 due to the data limitation.

The approach for Commercial Real Estate has some updates applied to the methodology to align more closely with GHG standard and audit. The methodology has been revised to a more local model, using performance indicators from the Building Energy end use study 2014 (BEES, 2014). This is the approach more consistently adopted by other banks. This study provides a stronger representation of the New Zealand building stock.

As a result, there are fewer performance indicators by building type, and the data is now 10 years old, with no updated study available.

- Commercial office buildings: Performance indicators are broken down by size stratum. Offices with actual floor area data available are scored at 4.

- All other buildings: Performance indicators are grouped rather than specific to building use, leading to a score of 5 due to the lack of building-type-specific data.

With the majority of Commercial Real Estate exposure being attributed to non-commercial offices, the actual average PCAF score comes in at 4.77.

Business Lending

All on-balance sheet business lending is included in the calculation of the business lending asset class except:

- residential mortgages
- business lending that meets the definition of the Commercial Real Estate asset class (covered in the previous section)
- lending to Government and Sovereign debt
- corporate bonds
- intra-group lending between CCB entities
- lending (including nostro account balances) to other financial institutions for Treasury management purposes

The following classification has been used to map business records to the respective industries:

Industry	Industry ANZSIC Short Code
Agriculture, forestry, and fishing	A
Mining	B
Manufacturing	C
Electricity, gas, water, and waste services	D
Construction	E
Wholesale trade	F
Retail trade	G
Accommodation and food services	H
Transport, postal, and warehousing	I
Information media and telecommunications	J
Financial and insurance services	K
Rental, hiring, and real estate services	L
Professional, scientific, and technical services	M
Administrative and support services	N
Public administration and safety	O
Education and training	P
Health care and social assistance	Q
Arts and recreation services	R
Other services	S
Not Elsewhere Included	T

Table 13: Industry mapping against 2024 ANZSIC classifications

The financed emissions from business loans and unlisted equity are calculated by multiplying the attribution factor by the emissions of the borrower or investee company and then taking the sum of these emissions:

$$Financed\ emissions = \sum \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Company\ emissions_c$$

PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.71)

The financed emissions from business loans and unlisted equity can be calculated in different ways depending on the availability of financial and emissions data specific to the borrower or investee. Overall, PCAF distinguishes three different options to calculate the financed emissions from business loans and unlisted equity depending on the emissions data used.

A2. Financed emissions methodologies overview

(score 1 = highest data quality; score 5 = lowest data quality)

Data Quality	Options to estimate the financed emissions		When to use each option
Score 1	Option 1: Reported emissions	1a	Outstanding amount in the company and total company equity plus debt are known. **Verified emissions** of the company are available.
Score 2	Option 1: Reported emissions	1b	Outstanding amount in the company and total company equity plus debt are known. **Unverified emissions** calculated by the company are available.
Score 2	Option 2: Physical activity-based emissions	2a[102]	Outstanding amount in the company and total company equity plus debt are known. Reported company emissions are not known. Emissions are calculated using primary physical activity data for the company's energy **consumption** and emission factors[103] specific to that primary data. Relevant process emissions are added.
Score 3	Option 2: Physical activity-based emissions	2b	Outstanding amount in the company and total company equity plus debt are known. Reported company emissions are not known. Emissions are calculated using primary physical activity data for the company's **production** and emission factors specific to that primary data.
Score 4	Option 3: Economic activity-based emissions	3a	Outstanding amount in the company, total company equity plus debt, and the **company's revenue**[104] are known. Emission factors for the sector per unit of revenue are known (e.g., tCO_2e per euro or dollar of revenue earned in a sector).
Score 5	Option 3: Economic activity-based emissions	3b	Outstanding amount in the company is known. Emission factors for the sector per unit of asset (e.g., tCO_2e per euro or dollar of asset in a sector) are known.
Score 5	Option 3: Economic activity-based emissions	3c	Outstanding amount in the company is known. Emission factors for the sector per unit of revenue (e.g., tCO_2e per euro or dollar of revenue earned in a sector) and **asset turnover ratios** for the sector are known.

Table 14: General description of the data quality score for the Business Lending asset class PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition. (p.73)

The Bank adopts **option 3: Economic activity-based emissions** in calculating its emissions for business lending.

Where the information on total company equity plus debt, and the company's revenue are known, the Bank adopts **option 3a**.

$$Financed\ emissions = \sum_c \frac{Outstanding\ amount_c}{Total\ equity + debt_c} \times Revenue_c \times \frac{GHG\ emissions_s}{Revenue_s}$$

(with c = company and s = sector)

Where the company's revenue and total company equity plus debt information are not available or incomplete, the Bank adopts **option 3b**.

$$Financed\ emissions = \sum_c Outstanding\ Amount_c \times \frac{GHG\ emissions_s}{Assets_s}$$

(with c = company and s = sector)

Calculation results under option 3a attract a PCAF quality score of 4.00 whilst option 3b attracts a score of 5.00. Considering the variance in data quality across the different sectors within this specific asset class, the data quality score is calculated using the weighted average by outstanding loan value for each sector within the asset class using the following equation:

$$PCAF\ quality\ score = \frac{\sum_c Outstanding\ Amount_c \times Data\ Quality\ Score_c}{\sum_c Outstanding\ Amount_c}$$

(with c = company)

The percentage of business lending (by on-balance sheet outstanding loan value) calculated using the two sub-options are as follows. This has resulted in an average PCAF data quality score of 4.22 for the business lending asset class.

Key external data sources relied upon for this option are:

- Stats NZ industry data (Emissions, Financials)

A3. Operational emissions and managing residual emissions

Operational emissions methodology and reporting approach [Measured for CCB NZL, but represents the exposure for CCB NZBG]

Operational emissions are associated with the day-to-day running of our business. The Bank currently reports its Scope 1 and 2 operational emissions, and some of its Scope 3 emissions. The Bank's Scope 3 emissions are currently captured on the more readily available sources, with further work underway to start reporting on the remaining sources from 2025.

EY has issued a reasonable assurance opinion over our Scope 1 and 2 location-based emissions and a limited assurance conclusion over some of our Scope 3 operational GHG emissions for 2024. The Scope 3 emission sources subject to EY's limited assurance conclusion are included in the following table. We have not obtained assurance over our financed emissions or the operational emissions which are not included within our emission inventory for 2024. EY's assurance report is included in Appendix A6. Our operational emissions have also been certified by Toitū Net Carbon Zero Programme Technical Requirements.

An operational control consolidation approach was used to account for emissions. Organisational boundaries were set in alignment to the methodology described in the GHG Protocol standards. We have applied an operational control consolidation approach, which aligns with the direct operational footprint of all our business in Aotearoa New Zealand. The Bank does not hold any interest or share in other organizations. The Bank operates through eleven departments and teams as of the reporting period under the same umbrella and the emissions produced from the operation are consolidated in the reporting of CCB NZL.

GHG emission sources and methods specified in the table below are subject to uncertainties and we have applied for the adoption provison to not report certain Scope 3 emissions sources. (Refer to Appendix A5 for the adoption provison applied for 2024) We plan to expand on our inventory in 2025.

Scope	Category	Reported / Excluded
Scope 1	Stationary combustion	Nothing to report
	Transport Energy (company owned vehicles)	Reported
	Leakage of refrigerants	Not reported, Adoption Provision 4 applied
Scope 2	Electricity consumption	Reported
Scope 3	1. Purchased goods and services	Reported: Office paper. Excluded: Remaining purchased goods and services excluded using applied Adoption Provision 4.
	2. Capital goods	Not reported, Adoption Provision 4 applied
	3. Fuel and energy related activities (that are not included in Scope 1 or 2)	Reported
	4. Upstream transportation and distribution	Not reported, Adoption Provision 4 applied
	5. Waste generated in operations	Reported
	6. Business travel	Reported
	7. Employee commuting	Not reported, Adoption Provision 4 applied
	8. Upstream leased assets	Not reported, Adoption Provision 4 applied
	9. Downstream transportation and distribution	Reported
	10. Processing of sold products	Excluded: Not applicable
	11. Use of sold products	Excluded: Not applicable
	12. End-of-life treatment of sold products	Excluded: Not applicable
	13. Downstream leased assets	Excluded: Not applicable
	14. Franchises	Excluded: Not applicable
	15. Investments	Reported: See financed emissions section (but not assured for 2024, Adoption Provision 8 applied)

Table 15: CCB NZBG GHG emission

A3. Operational emissions and managing residual emissions

Reports, invoices and data are received from the relevant data sources and the relevant emission factors are applied to calculate the emissions. A calculation methodology has been used for quantifying the emissions inventory based on the following calculation approach:

Emissions = activity data x emissions factor

Emissions were calculated using Toitû emanage software, with emissions factors listed in the table 16 sourced from the Ministry for the Environment's (MfE) 2024 Measuring emissions: A guide for organisations. IPCC fifth assessment report has also been used as a preferred approach where available. Below are the exceptions[14] where emissions factors are from different sources:

- UK Department for Business, Energy and Industrial Strategy, Government greenhouse gas conversion factors for company reporting (DESNZ 2024); and
- Market Economics Limited, Consumption Emissions Modelling, report prepared for Auckland Council (MEL 2023).

Scope	Category	Overview of activity	Data source	Emission factors source	Units	Key assumptions and limitations that may involve uncertainty
Scope 1	Transport Energy (company owned vehicles)	Consumption of liquid petrol premium and diesel for transport purpose by fleet vehicles owned by CCB NZ.	Fuel activity data is based on monthly statements provided by the supplier and invoices.	MfE	Litre	It is assumed the data sources are complete and accurate. The fuel consumption source data is obtained from supplier customer activity data.
Scope 2	Electricity consumption	Electricity used at both business office and BCP office.	Electricity activity data is based on the supplier invoices.	MfE	kWh	It is assumed the data sources are complete and accurate. The electricity source data is obtained from supplier customer activity data.
Scope 3	Business travel and transport (non-company owned vehicles)	Indirect Scope 3 emission from air travel, rail travel, rental car, taxi, private car and accommodation undertaken by CCB NZ employees for business purposes.	Business travel and transport activity data is based on invoices provided by supplier, employee mileage reimbursement and taxi spend from our finance records. The largest contributing item in this category is air travel, which is measured using the data from financial records to understand the flight details and performed online	MfE DESNZ	Km(Air travel, Rail travel, Rental car, Private car) Room Nights (Accommodation) $ (Taxi)	It is assumed the data sources are complete and accurate. All air travel, rail travel, rental car, taxi and accommodation source data is obtained from supplier customer activity data.

[14] The emissions are occurring outside of New Zealand, or no specific New Zealand emission factors are available.

Scope	Category	Overview of activity	Data source	Emission factors source	Units	Key assumptions and limitations that may involve uncertainty
			searches to obtain the distance in km between airports.			
	Upstream transportation and distribution	Main source being the indirect Scope 3 emission from freight and courier provided by freight transport agencies and other supporting transport services for business purposes.	Freight and courier activity data is based on supplier invoices.	MEL	$	It is assumed the data sources are complete and accurate. The freight and courier source data is obtained from finance ledgers.
	Purchased goods and services	Indirect Scope 3 emission from paper consumption (100% recycled).	Paper consumption activity data is based on invoice records provided by supplier.	DESNZ	Tonne	It is assumed the data sources are complete and accurate. The paper consumption source data is obtained from supplier customer activity data.
	Disposal of solid waste - Landfilled	Indirect Scope 3 emission from landfilled waste at CCB NZ office.	The waste to landfill is estimated based on the measured volume record over a fornight.	MfE	Tonne	It is assumed the data sources are complete and accurate. The landfilled waste source data is based on supplier records under instruction.
	Transmission of energy (T&D losses)	Indirect Scope 3 emission from electricity losses that is attributed to the transmission and distribution (T&D) of electricity, which is calculated using a location-based methodology.	Electricity activity data is based on the suppliers' invoices.	MfE	kWh	It is assumed the data sources are complete and accurate. The electricity T&D loss is estimated based on supplier customer activity data.

Table 16: CCB NZBG Operational emission scope 1,2,3 emissions

A3. Operational emissions and managing residual emissions

Managing residual emissions
[Note: this is not part of the assurance scope of the operational emissions in 2024]
Source: the background information are adapted from Toitū Envirocare Carbon Programmes & Certification webpage: https://www.toitu.co.nz/what-we-offer/carbon-management/mitigate

The use of carbon credits also plays a key role in the transition to a low carbon economy. On the path to better measurement and reduction of its carbon footprint under the Toitū Envirocare Net Carbonzero certification, the Bank is committed to offsetting the remaining unavoidable emissions with high quality carbon credits[15].

Carbon credits are awarded to defined projects that **store**, **avoid** or **reduce** GHG emissions in the atmosphere.

- Store: These are usually forestry projects – land specifically set aside for reforestation with strict covenants to ensure the forest remains permanent and is not harvested
- Avoid: These are usually energy generation projects that use renewable energy instead of fossil-fuels, such as wind farms
- Reduce: These are usually a form of technology that reduces the usual amount of emissions produced, for example efficient solar cook stoves that replace inefficient fossil-fuel burning stoves

Carbon credits are issued by an appropriate authority that has confirmed the project meets the requirements of their standard. Examples of common requirements, or principles, of the standards include additionality, permanence, verification, and leakage. It is important to ensure that good quality credits are used as claims of carbon neutrality based on offsets that do not meet the requirements of recognised standards may be subject to investigation by regulators of advertising standards or consumer protection laws.

All credits used by Toitū Envirocare Carbonzero programme members must meet the following sets of principles[16]:

- Issued under a voluntary or compliance standard recognised by the programme
- Generated by a project that has been assessed and approved as being suitable for offsetting by the programme
- Issued in a recognised registry
- Retired, cancelled or otherwise taken out of circulation in the programme's account in the relevant registry

Toitū Envirocare carbonzero programme members can purchase carbon credits from a portfolio sourced by Toitū Envirocare from:

- a range of compliance and voluntary standards including Gold Standard (and Fair Trade Gold Standard), Clean Development Mechanism (CDM), and New Zealand's Permanent Forest Sink Initiative (PFSI)[17]
- a range of countries including New Zealand, China, Thailand, India, Chile, and others
- a range of project types (e.g. renewable energy generation, forest sequestration, landfill methane capture)

From 2022 to 2024[18], the Bank has purchased carbon credits sourced from the following projects:

2022 (46 units to offset 45.3tCO2e of operational GHG emission, weighted average cost per unit: NZ$33.69. It is key to note that there was a revision of Toitū's emission calculation methodology which resulted in the revision of the emissions from the 45.3tCO2e to the 48.35tCO2e in 2023. Toitu has confirmed that no top-up in carbon credit is required to cater for the changes resulting from this revision.)

- *[Toitū Envirocare's International Portfolio]* Wenchang Rural Methane Digesters Project in Hainan Province, China
- *[Toitū Envirocare's NZ Permanent Forest Sink Initiative Porftolio]* Coatbridge

2023 (80 units to offset 79.18 tCO2e of operational GHG emission, weighted average cost per unit: NZ$16.78)

[15] A carbon credit is a financial instrument that represents a unit of greenhouse gases (measured in carbon dioxide equivalents or CO2e). One carbon credit is equal to 1 tonne of CO2e.

[16] Toitū Envirocare consider a range of international regulations, recognised standards, and the best practice principles of International Carbon Reduction and Offset Alliance (ICROA), in the development of its assessment process.

[17] In November 2023, Toitū Envirocare has announced a move away from accepting carbon credits from New Zealand forests under its programme, citing a shift to better align with global standards. Going forward, only credits that are certified by the Integrity Council of the Voluntary Carbon Market, will be recognized under the programme.

[18] The purchases are to offset the remaining unavoidable emission from the year before (e.g. the purchase in 2023 is to offset the remaining unavoidable emission from 2022).

A3. Operational emissions and managing residual emissions

- *[Toitū Envirocare's International Portfolio]* Wenchang Rural Methane Digesters Project in Hainan Province, China
- *[Toitū Envirocare's NZ Permanent Forest Sink Initiative Portfolio]* Spraypoint

2024 (165 units to offset 164.18 tCO2e of operational GHG emission, weighted average cost per unit: NZ$19.84)

- *[Toitū Envirocare's International Portfolio]* Geothermal Energy Project in Taishan , China

2025 (yet to be finalised)

- The credits purchase will be determined based on the market-based reporting values as the emission from electricity consumption has been pre-offset after transferring to Ecotricity, which is excluded from the annual offset requirements.

A4. Developments at CCB Corporation Group Level

In September 2020, China announced the goal to peak carbon dioxide (CO2) emissions before the year 2030 and achieve carbon neutrality by 2060. Given China's scale, and the need to balance economic development and emission reductions, the transition to net zero faces significant challenges. Although being a late starter, China has adopted serious environmental and climate policies.

In February 2012, the China Banking Regulatory Commission (now, the National Administration of Financial Regulation, NAFR) issued the Guidelines on Green Credit, which provides specific requirements on the environmental and social risk management of financial institutions' green credit operations. In August 2016, the People's Bank of China (PBOC), Ministry of Finance, National Development and Reform Commission (NDRC), Ministry of Environmental Protection (now, Ministry of Ecology and Environment), CBIRC (now, NAFR) and the China Securities Regulatory Commission (CSRC) jointly issued the Guidance Opinions on Building a Green Financial System, taking the lead in building the green financial system.

In July 2021, the PBOC, based on the experience of the pilot institutions, and drawing on the international mainstream methodology for climate and environmental information disclosure and in light of the characteristics of Chinese financial institutions, issued the Guidelines on Environmental Information Disclosure of Financial Institutions, which requires financial institutions to disclose their own environmental information, both quantitative and qualitative. According to the Guidelines on Environmental Information Disclosure of Financial Institutions, qualitative information includes environmental strategy, governance structure, environmental risk management strategy, and identification of major issues; and quantitative environmental information includes environmental benefits and environmental stress tests of their own operations and investment and financing activities.

It is CCB's vision to become a world-leading sustainable development bank. As such it has continued to strengthen its governance and delivered the necessary operating model to intensify its effort to manage and explore climate-related risks and opportunities.

In May 2021, CCB became a supporter of the TCFD. This demonstrated CCB's commitment to continuously improve its governance and disclosure quality of environmental and climate-related information according to the common TCFD information disclosure framework, so as to better align itself with the information disclosure systems of international financial enterprises and investment institutions and enhance capital markets' and rating agencies' understanding and recognition of CCB's efforts in ESG and green finance.

A high level summary of CCB Group's Governance can be found in the Governance Section of the 2024 CCB NZ Banking Group Climate Report.

A5. Adoption Provisions

In recognition that it may take time to develop the capability to produce high-quality climate-related disclosures, and that some disclosure requirements, by their nature, may require an exemption, NZ CS 2 Adoption of Aotearoa New Zealand Climate Standards provides a limited number of adoption provisions from the disclosure requirements in Aotearoa New Zealand Climate Standards.

The Bank has elected to use Adoption provision 4, 5, 6, 7 and 8.

Name	Standard, section, and paragraph	CCB NZBG's Commentary
Adoption provision 4: Scope 3 GHG emissions for selected categories	NZ CS 1 Metric categories [Paragraph 22]	Refer to Appendix 3 for the selected Scope 3 operational emissions sources that are not reported in 2024. This exemption is adopted for the purpose of full transparency, as the non-disclosed Scope 3 operational emissions are not expected to be material, given operational emissions makes up only 0.13% of the Bank's operations in 2024.
Adoption provision 5: Comparatives for Scope 3 GHG emissions.	NZ CS 1 Risk Management [Paragraph 17]	This exempts the Bank from disclosing comparative information for the immediately preceding two reporting periods for some of the metrics disclosed. The exemption is adopted due to the lack of some of the data points, which were only captured since 2023.
Adoption provision 6: Comparatives for metrics	NZ CS 1 Risk Management [Paragraph 17]	This exempts the Bank from disclosing comparative information for the immediately preceding two reporting periods for some of the metrics disclosed. The exemption is adopted due to the lack of some of the data points, which were only captured since 2023.
Adoption provision 7: Analysis of trends	NZ CS 1 Risk Management [Paragraph 17] Metric categories [Paragraph 22]	This exempts the Bank from disclosing an analysis of the main trends evident from a comparison of each metric from previous reporting periods to the current reporting periods. The exemption is adopted due to the lack of some of the data points, which were only captured since 2023.
Adoption provision 8: Scope 3 GHG emissions assurance	NZ CS 1 [Paragraph 25] [Paragraph 26]	This exempts the Bank from obtaining assurance over its Scope 3 GHG emissions. The Bank has obtained reasonable assurance over our Scope 1 and 2 location-based operational GHG emissions and a limited assurance over some of our Scope 3 operational GHG emissions for 2024. No assurance was obtained on our Scope 3 financed emissions, disclosed in this report, for 2024.

A6. Independent Assurance Report

Shape the future
with confidence

Independent Assurance Report to China Construction Bank Corporation

China Construction Bank Corporation New Zealand Banking Group (the "Group") comprises the New Zealand business of the China Construction Bank Corporation (incorporated in China and trading as China Construction Bank Corporation New Zealand Branch) and China Construction Bank (New Zealand) Limited.

Limited Assurance Conclusion - Scope 3 GHG emissions
Based on our limited assurance procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Group's consolidated gross scope 3 Greenhouse Gas ("GHG") emissions (excluding financed emissions), related additional required disclosures of gross GHG emissions, and related gross GHG emissions methods, assumptions and estimation uncertainty, within the scope of our limited assurance engagement (as outlined below) included in the Group's Climate Report for the year ended 31 December 2024 ("Climate Statement") are not fairly presented and not prepared, in all material respects, in accordance with the Aotearoa New Zealand Climate Standards ("NZ CS") issued by the External Reporting Board (XRB).

Reasonable Assurance Opinion - Scope 1 and Scope 2 (location-based only) GHG emissions
In our opinion, the Group's consolidated Scope 1 and Scope 2 (location-based) gross GHG emissions, related additional required disclosures of gross GHG emissions, and related gross GHG emissions methods, assumptions and estimation uncertainty, within the scope of our reasonable assurance engagement (as outlined below) included within the Group's Climate Report for the year ended 31 December 2024, are fairly presented and prepared, in all material respects, in accordance with Aotearoa New Zealand Climate Standards ("NZ CS") issued by the External Reporting Board (XRB).

Scope
Ernst & Young Limited ('EY') has undertaken an assurance engagement, to issue:

- a limited assurance report on the Group's:
  - consolidated gross Scope 3 emissions (excluding financed emissions) on page 28;
  - related additional requirements for the disclosure of consolidated GHG emissions on pages 28 and 47 to 49;
  - related GHG emissions methods, assumptions and estimation uncertainty on pages 47 to 49.

- a reasonable assurance report on the Group's:
  - consolidated gross GHG emissions stated below:
    - Scope 1 on page 28;
    - Scope 2 (calculated using the location-based method) on page 28;
  - related additional requirements for the disclosure of consolidated GHG emissions on pages 28 and 47 to 49;
  - related GHG emissions methods, assumptions and estimation uncertainty on pages 47 to 49.

included in the Climate Statement for the year ended 31 December 2024 (the "Subject Matter" or "GHG Disclosures").

Our assurance engagement does not extend to any other information included, or referred to, in the Climate Statement on pages 1 to 46, 50 to 53 and 57. We have not performed any assurance procedures with respect to the excluded information and, therefore, no conclusion is expressed on it.

Criteria applied by China Construction Bank Corporation New Zealand Banking Group
In preparing the GHG Disclosures, the Group applied NZ CS (the "Criteria"). In applying the Criteria the methods and assumptions used are described on pages 28 and 47 to 49 of the GHG Disclosures, as are the estimation uncertainties inherent in the methods and assumptions used.

Key matters
We have determined that there are no key matters to communicate in our report.

A6. Independent Assurance Report

Shape the future
with confidence

Directors of China Construction Bank Corporation Responsibility
The Directors of China Construction Bank Corporation are responsible, on behalf of the Group, for the preparation and fair presentation of the GHG Disclosures in accordance with NZ CS. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the GHG Disclosures, such that they are free from material misstatement, whether due to fraud or error.

EY's Responsibility
Our responsibility is to express an assurance conclusion and opinion on the GHG Disclosures based on the procedures we have performed and the evidence we have obtained.

Our engagement was conducted in accordance with New Zealand Standard on Assurance Engagements 1 *Assurance Engagements over Greenhouse Gas Emissions Disclosures* ("NZ SAE 1") and in accordance with the International Standard for Assurance Engagements (New Zealand): *Assurance Engagements on Greenhouse Gas Statements* ('ISAE (NZ) 3410'). Those standards require that we plan and perform this engagement to obtain limited or reasonable assurance about whether the GHG Disclosures have been prepared, in all material respects, in accordance with the Criteria. The nature, timing and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

As we are engaged to form an independent conclusion on the GHG Disclosures prepared by management, we are not permitted to be involved in the preparation of the GHG information as doing so may compromise our independence.

Ernst & Young provides financial statement and supplementary information audit and interim review services and other assurance services to the Group. Partners and employees of our firm may deal with the Group on normal terms within the ordinary course of trading activities of the business of the Group. We have no other relationship with, or interest in the Group.

Our Independence and Quality Management
We have complied with the independence and other ethical requirements of NZ SAE 1 *Assurance Engagements over Greenhouse Gas Emissions Disclosures* issued by the External Reporting Board (XRB) and the Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board*, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed
We have performed an engagement including both limited and reasonable assurance. Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than, for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance obtained in a reasonable assurance engagement. Our limited assurance procedures were designed to obtain a lower level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance. Our limited assurance procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the report and related information and applying analytical and other relevant procedures. Our limited assurance procedures included:

A6. Independent Assurance Report

Shape the future
with confidence

- Obtaining, through inquiries, an understanding of the Group's control environment, processes and information systems relevant to the preparation of the GHG Disclosures. We did not evaluate the design of particular control activities, or obtain evidence about their implementation;
- Evaluating whether the Group's methods for developing estimates are appropriate and had been consistently applied. Our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate the Group's estimates;
- Testing, a limited number of items to, or from, supporting records, as appropriate;
- Performing analytical procedures on particular emissions categories by comparing the expected trends in GHGs emitted to actual GHGs emitted and making inquiries of management to obtain explanations for any significant differences we identified; and
- Considering the presentation and disclosure of the GHG Disclosures.

A reasonable assurance engagement involves performing procedures to obtain a higher level of evidence about the quantification of emissions and related information in the GHG Disclosures. A reasonable assurance engagement also includes:

- Considering internal controls relevant to the Group's preparation of the GHG Disclosures.
- Assessing the suitability in the circumstances of the Group's use of the Criteria;
- Evaluating the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by the Group; and
- Evaluating the overall presentation of the GHG Disclosures.

We also performed such other procedures as we considered necessary in the circumstances.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our assurance procedures, our assurance engagement was not designed to provide assurance on internal controls.

Inherent Uncertainties
The GHG quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHGs. Additionally, GHG procedures are subject to estimation uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

Other matters
The comparative GHG Disclosures (that is GHG Disclosures for the period ended 31 December 2021, 31 December 2022 and 31 December 2023) have not been subject to assurance. As such, these disclosures are not covered by our assurance conclusion.

Use of our Assurance Report
This report is made solely to China Construction Bank Corporation. We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than China Construction Bank Corporation, or for any purpose other than that for which it was prepared.

The engagement partner on the engagement resulting in this independent assurance conclusion is Pip Best.

Ernst & Young Limited

Ernst & Young Limited
Auckland
29 April 2025

Disclaimer

This report contains CCB NZBG's current assessment of the future climate-related risks and opportunities affecting parts of its business, as well as its current planning to address these risks. This process necessarily involves estimates, projections and assumptions about the future, which are inherently uncertain and are not forecasts of future performance. Forward-looking statements and commitments are based on CCB NZBG's reasonable understanding as at 31 December 2024 but incorporate limitations and assumptions that mean that future performance and actions may differ materially from this report. If CCB NZBG changes its assessment of the future climate-related risks and opportunities, it will not update this report, but will instead incorporate updates in future reports. CCB NZBG provides early and indicative assessments that will improve over time as relevant data, including greenhouse gas emissions data, climate risk data, and customer data becomes available. Similarly, climate-related risk modelling and metrics are subject to a number of methodological and data-related limitations. As a result, readers should make their own assessments and not place undue reliance on this report. While CCB NZBG has taken all due care in preparing this report, it is necessarily limited in coverage and a summary only.


CCB
中国建设银行(新西兰)
China Construction Bank (New Zealand)