A Brighter Future for all

2022 Climate Report

Front cover

Since joining us in 2011, Sanjeet has been part of our efforts to reduce our carbon footprint and improve our sustainability. We have led by example, setting targets, gaining international certifications and changing how we operate. We are grateful to Sanjeet and all his colleagues for helping to meet our climate commitments.

Acknowledgment of Country

We respectfully acknowledge the Traditional Owners of the Lands across Australia and pay our respect to their Elders past, present and emerging. Our registered office is located on the Lands of the Gadigal Peoples.

Contents

Important information

This report contains climate-related and other forward-looking statements and metrics which are not, and should not be considered to be guarantees, predictions or forecasts of future climate-related outcomes, financial performance or share prices. The statements are subject to known and unknown risks, uncertainties and other factors, many of which are beyond the Group's control. Readers are cautioned not to place undue reliance on such statements in light of the significant uncertainty in climate metrics and modelling that limit the extent to which they are useful for decision-making, and the many underlying risks and assumptions may cause actual outcomes to differ materially. While the Group has prepared the information in this report based on its current knowledge, understanding and in good faith, it reserves the right to change its views in the future.

This important information should be read together with page 58 (*Addressing uncertainty in climate modelling*); page 59 (*Key sources of uncertainty and limitations*); and pages 75–76 (*Important notices*).

Please read the important guidance, limitations and important notices throughout this report to aid your understanding.

The release of this announcement was authorised by the Board.
Commonwealth Bank of Australia | ACN 123 123 124 | Commonwealth Bank Place South, Level 1, 11 Harbour Street Sydney NSW 2000 | 10 August 2022 | 147/2022

Our progress to date

This year we set new sector-level financed emissions targets in four priority sectors consistent with limiting global warming to 1.5°C, and have strengthened our measurement and reporting of financed emissions.

Our foundations

Reduced our Scope 1 and 2 operational emissions by

90%

since 2014[2]

Financed emissions[1]

Reduced our financed emissions in upstream oil extraction by

35%

between 2020 and 2021

Portfolio alignment

Provided

$31bn

of sustainability funding since June 2020

Preliminary climate scenario analysis of

74%

of our exposures[3]

Reduced our financed emissions in upstream gas extraction by

30%

between 2020 and 2021

Increased financed electricity generation by

16%

in 2021, while reducing portfolio emissions intensity

Reported financed emissions for

80%

of our 2020 lending portfolio[4], aligned with the PCAF Standard

Reduced our financed emissions in thermal coal mining by

25%

between 2020 and 2021

Renewables account for

82%

of our power generation drawn lending exposure as at June 2021

Unless otherwise stated, this report relates to all Business Units and Support Units of the Commonwealth Bank of Australia, and excludes ASB Bank Limited and PT Bank Commonwealth. Operational emissions, financed emissions and sector-level targets include ASB Bank Limited, unless otherwise stated. All figures and commentary relate to the full year ended 30 June 2022 and comparisons are to the full year ended 30 June 2021, except for financed emissions and sector-level performance which are for the full year ended 30 June 2021 and comparisons are to the full year ended 30 June 2020, unless otherwise indicated. Financed emissions are lagged as 2022 customer emissions data has not yet been reported. For further information on methodology and definitions, see the Appendix on pages 52–74.

1 Due to the inherent uncertainties and volatility, our financed emissions may fluctuate over time.
2 For more information on our operational emissions see page 24.
3 Exposures are based on exposure at default excluding finance and insurance, government administration and defence.
4 Excludes financed and insurance, government administration and defence.

Foreword from the Chairman and CEO

The Bank's approach to climate change is being embedded in our strategy and aligned with our purpose – building a brighter future for all. One of our priorities is to play a leading role in supporting Australia's transition to a modern, resilient and sustainable economy.

The impacts of climate change have already been felt by many Australians, including through the devastation that recent natural disasters have had on our communities. This underlies the importance of taking action now to help stem the worst effects of a changing climate.

Addressing climate change is complex and requires a collaborative response by government, business and the community to manage both the risks and opportunities. We understand that as Australia's largest bank, we have an important role to play working together to support the transition to net zero emissions.

We have therefore partnered with Australia's national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO). Together we are developing Australia-specific data and transition pathways for key sectors of the Australian economy consistent with limiting global warming to 1.5°C. The research will help us set interim sector targets for our financed emissions. Moreover, with the research outcomes being made public, the partnership could also help other organisations shape their own climate-related strategies and targets.

The challenge for Australia

As changes to the climate accelerate, Australia is likely to see more frequent and severe weather events such as droughts, floods, bushfires and storms. These are some of the physical risks of a changing climate with the potential to impact economic productivity and community wellbeing.

It is also important that we consider the opportunities climate change presents. Australia is well positioned to capture the many opportunities of transitioning to a net zero emissions economy through its abundant renewable energy resources, deep pools of capital, and innovative workforce.

The continued investment in our renewable energy infrastructure means Australia has an opportunity to create jobs, reduce emissions from fossil fuels, contribute to global technology advances and build a cleaner future.

Australia also has a diverse agricultural sector. We are committed to working with customers in the agricultural sector to help them reduce their emissions and grow their reserves through the removal of carbon dioxide from the atmosphere.

Our climate strategy

Over the past two decades, we have reported on and reduced the Bank's operational emissions through reduction initiatives. We have been undertaking climate scenario analysis since 2018. This analysis has given us the opportunity to consider aspects of our lending portfolio. We have strived to be a part of the solution, continuing to strengthen our suite of sustainability product offerings to help support our customers and setting our Sustainability Funding Target. We recognise the need to continue to elevate our ambition in relation to climate change.

We are committed to playing a leadership role in Australia's transition to a net zero emissions economy by 2050. We see our role centring on financing the transition to a sustainable economy, helping our customers navigate the transition, and leading the transition conversation.

Our progress this year

This year we aligned our temperature ambition to 1.5°C[1], which informs our sector-level financed emissions targets, and joined the Net-Zero Banking Alliance. We strengthened our measurement and reporting on financed emissions, aligned with the Partnership for Carbon Accounting Financials Standard, covering 80% of our 2020 lending portfolio.

1 See the *Glossary* on page 68 for our definition of a '1.5°C temperature ambition' and '2020 financed emissions'.

We also completed climate scenario analysis covering 74% of our exposures. The findings from this analysis will help inform our strategy, lending decisions, and product and services development. We are working to deliver further insights and embed them throughout our business in the near-term. Going forward, we see an opportunity to not only apply these insights ourselves, but also share findings with government, industry and our customers to help encourage an inclusive transition.

Building on our operational emissions reduction targets, we set our first sector-level financed emissions reduction targets for priority sectors within our lending portfolio, covering a significant proportion of our 2020 financed emissions[1].

We are developing sector-level strategies to deliver against these targets while also looking to set additional science-based targets using the transition pathways being developed with CSIRO. By 2025, we intend to have targets on sectors that account for more than 75% of our 2020 financed emissions[1].

CBA's commitment to governance

The Board, together with management, has a clear focus on leading the organisation in addressing the challenges of climate change. This includes an understanding of, and contribution to, improvements in the science, education and societal change required to decarbonise the economy.

Catherine Livingstone AO
Chairman

Matt Comyn
CEO

Positioning for the future

Australia's transition to a net zero emissions economy by 2050 presents a significant opportunity for our country. First and foremost, we support a coordinated transition that identifies new investment opportunities and financial support for people and communities who will be most impacted.

We recently welcomed Australia's updated national goal of achieving a 43% reduction in greenhouse gas emissions by 2030. We believe the new target is ambitious but achievable for Australia. We will continue to explore ways in which we can help reduce our country-level emissions.

When considering how we can collectively decarbonise our economy, Australia is fortunate to have a range of available opportunities:

- Decarbonisation of our electricity grids through increased investment in solar, wind, storage, hydro and hydrogen.
- Electrification and conversion to renewable fuels within transport and heavy equipment.
- Development of a national network of electric vehicle charging stations, making electric vehicles a more attractive option for consumers.
- Increased investment in research and development of new technologies, particularly in energy storage and hard to abate products like steel, aluminium and cement.
- Investment in additional technologies and solutions that empower consumers to make more climate-friendly decisions.
- Broader partnerships with agricultural customers to better understand opportunities to drive global innovation on sustainable agricultural practices.
- Development of an Australian high quality carbon market that is globally recognised.

As Chairman-elect, I welcome the opportunity to continue the Bank's focus on playing our part in reducing emissions and supporting communities through the transition. We see an opportunity to bring stakeholders together, contribute insights based on our data to inform public policy that will accelerate progress and create new jobs. We are committed to helping build a brighter future for all.

Paul O'Malley
Chairman-elect

Our position on climate change

We are committed to playing a leadership role in Australia's transition to a net zero emissions economy by 2050, including setting interim targets.

We support the science on climate change and understand significant action is required to limit global temperature rises to 1.5°C or less.

Limiting the effects of climate change and preserving our natural capital, while continuing to grow Australia's economic prosperity, is a shared national priority.

As Australia's largest bank, our ambition is to support a purposeful transition in three main ways:

- lending to support the transition;
- helping customers navigate the transition; and
- leading the transition conversation.

We are taking action to reduce our own emissions. We understand that we have an opportunity to reduce both our operational emissions and financed emissions, and positively influence customer behaviour.

We believe climate change is a collective challenge, where leadership requires collaboration across and within sectors.

Our climate commitment means we will take action to support greenhouse gas emissions [1] reducing to net zero by 2050.

1 See the *Glossary* on page 69 for our definition of 'greenhouse gas emissions'. In this report, we may alternatively refer to greenhouse gas (GHG) emissions simply as 'emissions'. We also further split 'emissions' into our 'operational emissions' (all Scope 1, 2 and upstream Scope 3 emissions) and 'financed emissions' (downstream Scope 3 emissions, in particular those emissions resulting from our lending and financing activities). These terms have all been defined in the *Appendix* on pages 62–65 and the *Glossary*.

Our commitment to limit global warming

Addressing climate change is complex and requires a collaborative response by government, business and the community. This year we aligned our temperature ambition [1], which informs our sector-level financed emissions targets, to the maximum global temperature change target of 1.5°C above pre-industrial levels by 2100. We also joined the Net-Zero Banking Alliance (NZBA). Building on our 2021 operational emissions reduction targets, we set financed emissions targets for four priority sectors [2]. We are developing sector-level strategies to support the delivery of those targets. By 2025, we intend to have targets on sectors that account for more than 75% of our 2020 financed emissions.

Our actions are informed by science

We acknowledge that the work undertaken by the Intergovernmental Panel on Climate Change [3] (IPCC) concludes that human influence on the warming of the atmosphere, ocean and land is "unequivocal". The IPCC finds material benefit to limiting temperature rise to 1.5°C instead of 2°C [4]. The IPCC report [5] highlights Australian natural capital is at risk, including degradation of coral reefs and associated biodiversity as well as potential disruption to agricultural production. The Bank believes purposeful action is needed and we continue to make progressive steps to reduce our emissions and help our customers navigate the transition.

Preserving Australia's natural capital

Our Environmental and Social (E&S) Framework and Policy [6] includes commitments related to climate change, as well as biodiversity and natural capital. There is increased interest from customers, regulators, government and investors on the Bank's approach to climate change, biodiversity and natural capital. Declining natural capital can increase the risks related to climate change. An emerging challenge for Australia is how to balance population growth and economic activity without overusing our natural assets such as soil, air, water and natural habitats.

Our ESG risk assessment tool, with two pathways, guides business and institutional bankers to consider environmental impacts, supporting them in considering these factors in corporate lending decisions. This year, we joined the Taskforce on Nature-related Financial Disclosures (TNFD) Forum and designed a high-level roadmap to guide our approach to natural capital. In the coming year we aim to set our priorities related to natural capital and explore metrics to measure our progress.

For more information on our ESG risk assessment tool refer to page 60.

Science has developed credible 1.5°C pathways

Transition scenarios, such as the International Energy Agency's (IEA) Net Zero Roadmap, lay out credible global pathways in line with 1.5°C. The IEA notes this pathway is 'narrow and extremely challenging,' but 'still achievable,' further stating that 'technologies that are available on the market today provide nearly all of the emissions reductions required to 2030' under a 1.5°C scenario. United Nations Principles of Responsible Investing macroeconomic projections suggest that the cumulative global GDP cost before factoring physical risk would be almost nil by 2050 [7].

In aligning the Bank's temperature ambition [1], we considered the Australian policy context and feasibility of achieving 2030 interim targets on financed emissions for the five sectors [8] contributing 42% to our 2020 financed emissions baseline.

Our financed emissions are affected by a range of factors that contribute to the domestic and global emissions trajectory, including local and domestic policy, regulation, technological developments (such as the decarbonisation of Australia's electricity grid) and consumer preferences. Our estimate is Australia's transition to a net zero emissions economy will require $2.5–3 trillion of investment to 2050. While ambitious, this is similar in scale to the investment in Australia's "mining boom" from 2005–2015 [9]. However, if the outcomes described in the scenarios we use – such as rapid decarbonisation of Australia's electricity grid – do not eventuate, we may not achieve our financed emissions targets.

We acknowledge that there are multiple pathways to limit global warming and that the science will continue to evolve. We will continue to revisit our targets as new information emerges and we see one of our roles as leading the transition conversation by supporting new science-based insights to inform public policy that aims to support communities.

For more information on our work with partners see page 21.

1 See the *Glossary* on page 68 for our definition of a '1.5°C temperature ambition'.
2 Thermal coal mining, upstream oil extraction, upstream gas extraction and power generation.
3 IPCC, 2021: Summary for Policymakers. In: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* Page 4.
4 IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.*
5 IPCC, 2022: IPCC Sixth Assessment Report. *Working Group II – Impacts, Adaptation & Vulnerability, Australasia Factsheet.*
6 See the *Glossary* on page 69 for information on our E&S Framework and Policy.
7 Principles for Responsible Investing, 2022: Inevitable Policy Response 1.5°C Required Policy Scenario 2021 (IPR RPS 2021): Macroeconomic results. *Preparing financial markets for climate-related policy and regulatory risks.* Page 11.
8 Thermal coal mining, upstream oil extraction, upstream gas extraction, power generation and home lending. In line with the PCAF Standard, our financed emissions calculations consider our customers' Scope 3 emissions in upstream oil extraction, upstream gas extraction, and thermal coal mining. We do not currently consider customers' Scope 3 emissions in other sectors.
9 Equivalent in terms of peak gross fixed capital formation to GDP.

Our role supporting Australia's transition to net zero emissions

The global transformation to address climate change poses opportunities and risks for Australia. We believe Australia must move in a purposeful manner to maximise the opportunities, minimise the risks and ensure an inclusive transition across communities.

Australia benefits from abundant natural resources that support the transition, including sun, wind, copper, nickel and lithium. This will create new economic opportunities for our nation and its communities. As an example, Australia can invest in green hydrogen infrastructure and export hydrogen to neighbouring countries as a source of clean energy. It is likely that parts of the community will benefit from the transition, while others will face challenges. In line with our purpose of building a brighter future for all, we aim to play a leadership role in Australia's transition to net zero emissions.

Supporting our customers and communities

We are on a journey to embed climate considerations across our business and still have significant work ahead. As a predominantly retail and business bank, we acknowledge the important role we play supporting our 16 million customers to reduce their emissions and educate them on climate-friendly decisions.

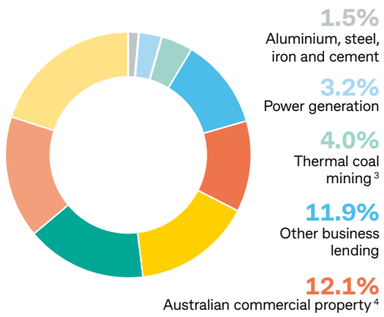
The Bank plays an important role in lending to support the transition. We provide 23%[1] of all bank lending and play a role in more than 40% of all financial transactions in Australia. There is an opportunity to support customers to invest in new technologies to achieve our national climate objectives. While only 1% of our lending is to energy sectors, those sectors account for an estimated 27% of our 2020 financed emissions[2,3]. As part of our strategy to support the transition to net zero emissions, our first steps focus on setting 2030 sector-level targets for our financed emissions in these sectors.

Property, agriculture and transport sectors materially contribute to Australia's emissions, and account for 60% of our 2020 financed emissions. As Australia's largest home lender, we recognise the role we can play providing retail customers with accessible solutions to help Australian homes become more energy and resource efficient. Greening the power grid and full electrification of the home will assist in reducing household emissions. The pathways to reducing emissions are less clear in agriculture. We support a transition where adopting affordable and scalable technologies helps our customers achieve their emission reduction goals.

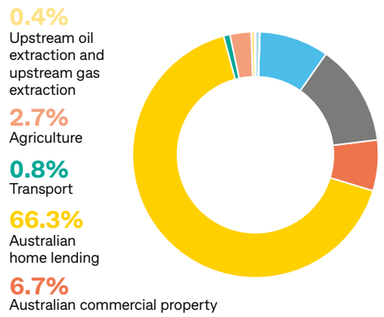
Australia's response to COVID-19 highlighted that purposeful financial support combined with collaborative public policymaking and debate can accelerate progress and recovery. As part of our approach to address climate change, we aim to bring stakeholders together and contribute our insights based on our data and understanding of the Australian economy.

Financed emissions by sector as at 30 June 2020

Financed emissions by sector



Drawn lending exposure by sector



1 Source: APRA Monthly Authorised Deposit-taking Institution Statistics for June 2022.

2 Thermal coal mining, upstream oil extraction, upstream gas extraction and power generation.

3 In line with the PCAF Standard, our financed emissions calculations consider our customers' Scope 3 emissions in these sectors, excluding power generation. We do not currently consider customers' Scope 3 emissions in other sectors. Future reporting of our financed emissions may include Scope 3 in additional sectors (see pages 42–43 for a breakdown of emissions by sector and scope).

4 Australian commercial property estimate is based on a simplified measurement approach, not aligned with the PCAF Standard (see page 55 for overview of our approach).

5 Not assessed includes consumer finance, offshore commercial property, and offshore and domestic subsidiary home lending.

We believe that Australia's transition should be:

Comprehensive
Taking action across most sectors is critical to achieving net zero emissions.

Purposeful
Action is required to commence now to reduce emissions in line with limiting global warming to 1.5°C.

Coordinated
The public, business and community sectors need to take coordinated action to provide certainty for communities and industries.

Inclusive
The needs of vulnerable communities are considered in shaping policies and taking action to transition.

Science-based
Informed by science and reliant on data and evidence.

Technology-led
Adopting affordable and scalable technologies which exist today to help meet net zero emissions commitments.

We believe an important role for banks is to finance the transition.

Focusing on an inclusive transition

Australia must aim for a transition which is both inclusive and protects Australia's environment and natural capital.

In a scenario where global warming increased to greater than 3°C, analysis indicates home loans representing more than 3% of our exposures[1] would be subject to increased physical climate risks in 2050.

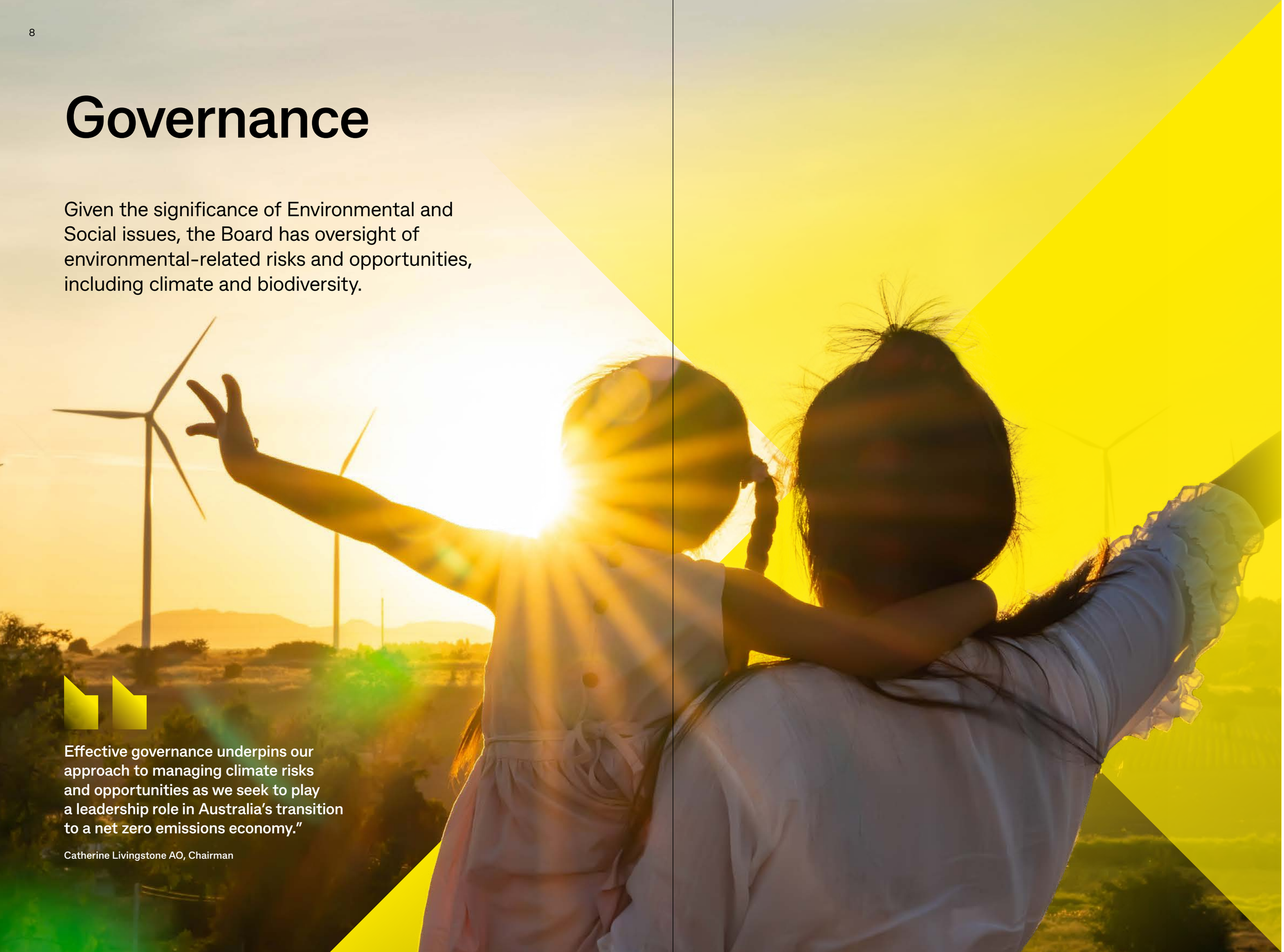
The transition could create inflationary pressure, particularly for essential goods and services. In addition, the livelihoods of those people and communities most impacted by the transition in the next decade could be challenged. For instance, we estimate more than 800,000 people currently live in Australian regions with a high dependency on the coal mining value chain.

A purposeful and coordinated transition needs to identify new opportunities for communities that face transition risk. We want to support Australia's public policy development in areas that meaningfully benefit our customers, such as support for regions relying on thermal coal, or the implementation of more energy efficient building practices. A national transition plan that includes social adjustment mechanisms would be welcomed.

1 Based on exposure at default, excluding finance and insurance, government administration and defence.

Governance

Given the significance of Environmental and Social issues, the Board has oversight of environmental-related risks and opportunities, including climate and biodiversity.



Effective governance underpins our approach to managing climate risks and opportunities as we seek to play a leadership role in Australia's transition to a net zero emissions economy."

Catherine Livingstone AO, Chairman

Our approach to governance

Our E&S Framework and Policy establishes Board responsibility for overseeing the management of E&S risks and opportunities. The Board holds the CEO and the Executive Leadership Team (ELT) accountable for the delivery of E&S responsibilities outlined in our policies, procedures and in accordance with the risk appetite set by the Board.

Our Environmental and Social governance framework

Board

Oversees the management of E&S-related (including climate) risks and opportunities

Impact	**Policy**	**Opportunities**	**Risk management**	**Disclosure**
Considers E&S impact of activities	Approves the E&S Framework and Policy	Endorses climate-related opportunities within strategic and business units	Approves the approach to managing E&S-related risks	Approves climate-related disclosure in external reports

Board Risk & Compliance Committee

Monitors the Bank's climate-related risk profile (including emerging risks).
Receives and reviews climate-related risk reports from management.

Executive Leadership Team (ELT)

Accountable for making specific recommendations to the CEO and agreeing common actions addressing: strategy, business performance, people leadership and culture, and risk and compliance management and control.

ELT E&S Committee

Chaired by CEO and responsible for directing the development and implementation of the Bank's E&S Framework and Policy.

Meets monthly to direct and oversee the Bank's implementation of the E&S strategy, governance, priorities for implementation, and disclosures.

Oversees progress, performance and reporting on climate-related initiatives.

Business E&S Action Group

Chaired by CFO, with representatives from all relevant business and support units. Meets monthly to support the ELT E&S Committee.

BU Action Groups

Retail	Business	Institutional	ASB

Executing key E&S initiatives; focused on supporting our customers.

Board responsibility

The Board is responsible for the strategic consideration of the E&S impact of the Bank's activities. The CEO and the ELT are accountable for the delivery of E&S responsibilities.

The Board approves the E&S Framework and Policy and certain associated climate-related disclosures. Our Board charter highlights the role the Board plays in setting the risk appetite of the Bank, including E&S risk appetite metrics. E&S risk was formally established as a material strategic risk type for the Bank in 2021.

The Board regularly considers E&S matters given their importance to our stakeholders and the Bank's long-term performance. At a minimum, E&S is on the agenda at each main Board meeting (six times per year). The Board has monitored the E&S work program, including the roadmap developed by management to meet CBA's climate change targets. Management uses a range of tools to identify and assess climate-related risks, taking a risk-based approach to prioritise those that are most material, and discussing with the Board as required.

This year, the Board resolved to align the Bank's temperature ambition to 1.5°C[1], which informs our sector-level financed emissions targets, and join the NZBA. This decision was informed after reviewing the Australian policy context, feasibility of achieving 2030 interim targets for certain lending portfolios, and the global emissions trajectory for three hard to abate sectors (cement, iron and steel, and aviation).

For more information on our transition roadmap see page 19.

Board climate expertise

Last year, the Board Nominations Committee endorsed, and the Board approved, E&S as a reference skill in the Board Skills Matrix. Non-Executive Directors are required to have significant experience across multiple Board skill areas and are expected to contribute to all elements of the strategy and risk framework, including E&S risk. No one director assumes responsibility for a singular topic. The Board collectively exercises its responsibilities. The Board considers the complexity of issues that impact on strategy, risk and operations.

Directors are assessed as 'high competency', 'practised' or 'aware' on skills outlined in the Board Skills Matrix, based on their professional or non-executive experience relating to a skill. On E&S skill, five Directors have been assessed as 'high competency', reflecting the broad scope of E&S, diverse experience of directors and heightened focus on E&S education.

For more information on our Board Skills Matrix, see page 72 of the 2022 Annual Report.

Executive performance and remuneration framework

The Board recognises the importance of integrating E&S accountability into our executive remuneration framework.

E&S (including climate) objectives are considered in short and long-term variable remuneration decisions through target setting, performance assessment, risk framework and remuneration outcomes. Our remuneration structure is designed to meet our strategic goals, including sustainability commitments.

For the CEO, this year's performance assessment and remuneration outcomes considered the Bank's progress against our strategy, including our response to E&S opportunities and risks. For other members of our ELT, this year's performance assessment and remuneration outcomes reflect accountability for responding to E&S opportunities and risks within their business units and developing and implementing the Bank's E&S Framework and Policy.

Next year, further work will be undertaken on executive metrics and Key Performance Indicators (KPIs). The Board will continue to oversee how E&S is considered and reflected in our performance and remuneration framework to meet shareholder and community expectations.

For more information refer to the Remuneration Report on pages 86–112 of the 2022 Annual Report.

1 See the *Glossary* on page 68 for our definition of a '1.5°C temperature ambition'.

Management accountability

The ELT E&S Committee and Business E&S Action Group were established last year, to oversee detailed implementation of our E&S work program and provide robust governance of E&S risks and opportunities, including climate change and biodiversity. This year, we continued to embed climate considerations in our existing governance forums.

The ELT E&S Committee, chaired by the CEO, consists of Group Executives and senior leaders across business and support unit functions. It is the approval body and point of escalation for decisions relating to the E&S work program underway across the Bank. Decisions made by the ELT E&S Committee include setting and monitoring targets and approving key methodologies, which are then reviewed and approved by the Board. Each member is accountable for driving the strategic priorities within their business or support unit. The Bank's CFO has oversight of the environmental-related aspects of the E&S work program across the Bank.

The ELT E&S Committee is supported by the Business E&S Action Group. The Business E&S Action Group is chaired by the Bank's CFO. It comprises representatives from relevant business and support units.

The Business E&S Action Group supports the ELT E&S Committee by reviewing E&S-related documentation; making recommendations regarding targets and methodologies; and providing updates on progress, actions, regulatory and industry developments related to our E&S work program.

Due to the compounding effect that climate risks may have on other risks faced by the Bank, we are starting to focus on integrating the management and oversight of climate risks into relevant policies, processes and governance through existing financial and non-financial risk committees.

We have had a Green, Social and Sustainability Funding (GSSF) Steering Committee in place since 2019 to oversee processes that support issuance by CBA of Sustainable Funding Instruments that meet international standards such as those issued by the International Capital Market Association and the Climate Bonds Initiative.

ASB has an Environmental and Social Committee which comprises the ASB executive leadership team and chaired by the ASB CEO. The committee's mandate is to oversee the effective implementation of ASB's E&S Policy across the business, including climate change impacts. The committee is supported by an E&S Action Group which functions as a senior management steering committee across ASB's climate change program. Certain other international subsidiaries of CBA have or are intending to adopt their own E&S policy and governance committees having regard to local regulatory requirements and jurisdiction considerations.

For more information on how the business and support units contribute to the Bank's climate approach, see page 14.

Governance committees and steering groups

As outlined in our E&S Framework and Policy, other governance committees within the Bank support the Board's oversight and the ELT E&S Committee's management of climate-related risks and opportunities.

During the year, further work was undertaken to strengthen the E&S work program governance processes at a business unit level. The customer-facing Business Unit Action Groups provide oversight of E&S initiatives and actions led within their business unit, including prioritising initiatives. They generally act as a conduit between the Business E&S Action Group and their business unit.

We believe product governance is critical to develop robust E&S product features and dedicated E&S products and services. Product governance forums exist within our customer facing business units to oversee the development and distribution of products. New E&S product concepts have been reviewed and approved by product governance forums within the Retail Bank, Business Bank and the Institutional Bank. This year, we announced, piloted and launched a range of sustainability-related products and offers, including a Green Home Offer, Property Sustainability Upgrade Loan, and the ESG Term Deposit. We are working to expand and scale our sustainability product suite, and to embed climate considerations in product governance forums.

Spotlight:

Emerging risks

The Board Risk & Compliance Committee received reporting on emerging risks in relation to a potentially disorderly global energy transition driven by the current global energy crisis. This affirmed the Board's view that the Bank has an important role to play in maintaining a secure energy platform in Australia through our strategy of supporting customers at the retail, business and institutional level in their pursuit of renewable power generation.

Building climate capability

A key enabler of our approach to risk management is to build our people's capability to identify, assess and manage climate risks. Selected Business Banking team members participated in a climate-related learning program led by Monash University. Business and Institutional team members undertook training and participated in awareness sessions on Environmental, Social and Governance Risk Fundamentals and our E&S Framework. Our newly created E&S Hub is an internal site to support CBA's people to learn more about our E&S commitments and fundamentals of climate change.

Our Board continues to expand its E&S expertise through education sessions. Two climate-focused education sessions were held for the Board in the last six months. These were led by external experts and covered: Australia's path to net zero emissions; the key policies and geopolitical considerations to enable the global transition; and implications for Australia.

Business and Support Unit accountabilities

Business Units

Retail

- Engage retail customers on opportunities to understand their carbon footprint, home energy efficiency as well as offset emissions.
- Develop green products and services for home lending and consumer finance.
- Support the measurement of financed emissions, development of glidepaths and commit efforts towards delivering against our financed emissions targets (when set).
- Manage climate risk through incorporating insights from climate scenario analysis and making adjustments to lending policies, practices and tools.

Business

- Engage small, medium and corporate business customers on Sustainable Finance and carbon opportunities, including sustainability-linked lending, the Property Sustainability Upgrade Loan and Energy Efficient Equipment Finance.
- Design and develop new sustainability finance products for small, medium and corporate customers.
- Support the measurement of financed emissions, development of glidepaths and delivery of targets on financed emissions (when set).
- Identify, monitor and manage climate risks (credit and strategic) through transaction-level decisions and portfolio-level monitoring.

Institutional

- Engage corporate customers on opportunities such as Sustainable loans and bonds, and green and ESG deposits.
- Expand on Sustainable Finance product offerings as well as carbon strategies.
- Support the measurement of financed emissions, development of glidepaths, and delivery of targets on financed emissions.
- Engage sector-specific carbon intensive customers with a view to understand transition management plans.
- Manage climate-related credit risk (physical and transition) through transaction-level decisions and portfolio-level monitoring.

ASB

- Undertake research to understand customers' climate change-related challenges and develop products and services that meet their needs.
- Engage business customers in carbon intensive sectors on opportunities, such as Sustainable Finance.
- Ensure action is taken to measure, report and reduce operational emissions in line with targets.
- Manage climate-related credit risk (physical and transition) through transaction-level decisions and portfolio-level monitoring.
- Support the measurement of financed emissions, development of glidepaths, and delivery of targets on financed emissions.

Support Units

Financial Services

- Define the environmental aspects of the Bank's E&S Framework and Policy and Strategy.
- Develop external climate-related reporting, including appropriate governance and review by management and the Board.
- Engage with investors, analysts and credit ratings agencies on E&S issues.
- Deliver climate scenario analysis and support the business in incorporating insights.
- Set and implement operational emissions targets and initiatives.

Group Audit

- Provide independent and objective assurance to the Board through Group Audit and Assurance.

Group Risk Management

- Develop and operationalise the E&S risk framework across the Bank.
- Enhance guidance of governance structures and capability requirements for the management of E&S risks.

Group Legal

- Identify, manage and mitigate risks in relation to E&S matters.
- Provide legal support to the Bank's business units and support units.

Group Marketing and Corporate Affairs

- Provide customer and stakeholder insights to inform strategy.
- Engage government, non-government organisations, industry, media and the community.
- Develop internal communications on climate strategy and support external communications on related products and services.

Next steps and future priorities

Board responsibility for climate-related risks	Review the Bank's priorities on natural capital, including metrics to assess our progress. Continue to oversee progress towards key climate-related commitments. Approve an evolved E&S Framework and Policy in 2023. Review E&S metrics and KPIs in our executive performance and remuneration framework.
Management's role in assessing and managing climate-related risks and opportunities	Further work to mature E&S governance processes at a business and support unit level, reviewing consistency and escalation points, with a focus on embedding in existing forums.
Policies and commitments	Review our E&S Framework and Policy in 2023 as part of our commitment to routine reviews of our Framework. Continue to enhance our monitoring and reporting of our E&S commitments.
Build climate capability	Further develop and integrate E&S risk management capability for business units and risk functions.

Strategy

As a bank, we recognise the role we will need to play in lending to support our customers in Australia's transition to net zero emissions.

Last year we set a more ambitious agenda. As part of the Bank's strategic priorities, we committed to playing a leadership role in supporting Australia's economic recovery and transition to a modern, resilient and sustainable economy. We also welcomed Australia's decision to commit to net zero emissions by 2050. We recognise our future success is intrinsically tied to Australia having a thriving economy. As Australia's largest bank, we believe we are well positioned to support the transition required."

Matt Comyn, CEO

Our climate strategy

We support the global transition to net zero emissions by 2050. For Australia, this means lowering our emissions, protecting our nation's biodiversity, and seeking to ensure the needs of our customers and vulnerable communities are considered as we transition together. Our climate strategy describes how we seek to make progress towards these goals.

In 2021, we set a more ambitious Group strategy, which guides all activities across the Bank. Our climate strategy is embedded within the pillars of our Group strategy:

Leadership in Australia's transition

See pages 19–21.

Building Australia's future economy

As we provide 23% of all bank lending and play a role in more than 40% of all financial transactions in this country, there is an opportunity to support Australia's transition through our lending.

Leading the transition conversation

A collaborative public debate can accelerate the transition to a sustainable economy. We are committed to bringing stakeholders together and contributing with insights based on our data and understanding of the Australian economy.

Reimagining banking

See pages 22–23.

Reimagined products and services

We want to help our customers participate in, and navigate, a net zero emissions future. We aim to help our customers through a combination of new products, partnerships and services.

Global best digital experience and technology

We believe data and insights are key enablers of the transition. We aim to use intuitive technology to bring value to our retail and business customers.

Simpler, better foundations

See pages 24–25.

Building our climate foundations

We aim to reduce our own emissions, build leading climate risk management practices, and provide effective governance and transparent disclosures.

Leadership in Australia's transition

We are progressively setting sector-level targets on our financed emissions. By 2025, we intend to have targets on sectors that account for more than 75% of our 2020 financed emissions. Our $70 billion Sustainability Funding Target will support growth in sustainable industries and assets.

Our transition roadmap

We have strengthened our commitment to decarbonising our portfolio by joining the NZBA. Due to our significant home lending and commercial property exposures, we recognise that setting targets for the real estate sectors is critical. Looking ahead, we plan to disclose further targets across a range of sectors in the next two years, including Australian home loans and commercial property. Where we set sector-level targets, we aim to develop strategies to deliver them. In line with our NZBA commitment, where we have set interim sector targets, we aim to publish within 12 months an overview of the categories of actions expected to be undertaken to meet the targets.

We are optimistic about our role in the transition. We do not have all the answers, but we believe we have an important role to play, working with others to make progress towards our shared goals."

Alan Docherty, CFO

Transition roadmap	2022	2023[1]	2024[1]
New 2030 sector targets	Thermal coal mining Upstream oil extraction Upstream gas extraction Power generation	Australian home lending Iron and steel, Aluminium, Cement	Australian commercial property Agriculture Transport
2020 drawn lending exposure coverage[1,2]	1%	67%	77%
2020 financed emissions coverage[1,3]	27%	44%	88%
Key external deliverables	NZBA commitment signed 2022 Climate Report	CSIRO report on Australia-specific transition pathways 2023 Climate Report	2024 Climate Report

1 Timing of targets and estimated coverage of 2020 drawn lending exposure and 2020 financed emissions is indicative and subject to change; for example due to changes in business structure, availability of relevant data, methodological developments, global and local emissions trajectories, and scientific literature.

2 Drawn lending exposure of sector targets as a percentage of the Group's 30 June 2020 drawn lending exposure excluding finance and insurance, government administration and defence.

3 Based on 2020 baseline. In line with the PCAF Standard, our financed emissions calculations consider our customers' Scope 3 emissions in upstream oil extraction, upstream gas extraction and thermal coal mining. We do not currently consider customers' Scope 3 emissions in other sectors. For more information on our financed emissions and our approach see pages 42–43.

Building Australia's future economy

Aligning our portfolio with the goals of the Paris Agreement

In line with our commitment to decarbonise our portfolio we joined the NZBA. We support increasing standardisation in financed emissions disclosures and signed up to the Partnership for Carbon Accounting Financials (PCAF) Standard.

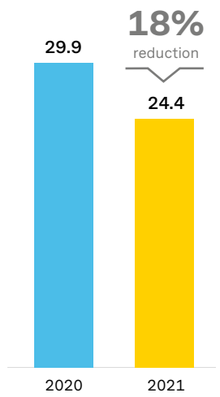
To help us understand the impact of our lending decisions and steer the portfolio at a sector-level, this year we implemented glidepaths and set 2030 targets for four priority sectors: thermal coal mining, upstream oil extraction, upstream gas extraction and power generation. We prioritised these four sectors as they were among our most emissions-intensive exposures, and had clear measurement methodologies which informed our target setting [2]. They represent 27% of our 2020 financed emissions. During the year, we have made progress against our targets and since 2020 our financed emissions have reduced by 18% [1] or an absolute emissions reduction of 5.5 $MtCO_2$-e.

We use science-based transition scenarios to inform our glidepaths. The NZBA states that scenarios shall come from credible sources; are no or limited overshoot pathways [3]; rely conservatively on negative emissions technologies; and to the extent possible, minimise misalignment with other United Nations Sustainable Development Goals. As the science, technology and data evolve, we will continue to review and update our reference scenarios.

For more information on financed emissions see pages 42–43.

For more information on the glidepaths see pages 44–47.

Financed emissions [1]
($MtCO_2$-e)

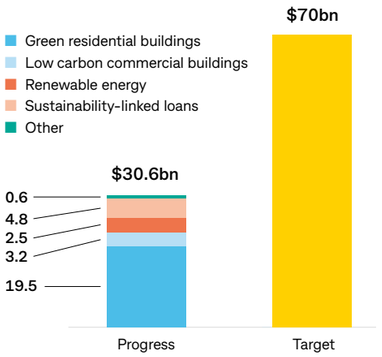


Tracking towards our Sustainability Funding Target

Last year, the Bank announced a more ambitious $70 billion Sustainability Funding Target in cumulative funding by 2030. We seek to support growth in sustainable industries and asset types that can have a positive impact on our economy and environment through sustainability funding. As of 30 June 2022, we have provided $30.6 billion in cumulative funding to our customers. In developing our target, we have considered and drawn from industry frameworks and we will continue to refine our methodologies as the industry evolves. We use these methodologies to guide certain pricing decisions and are working to further embed them into our internal transfer pricing and capital allocation processes.

For more information on our Sustainability Funding Target, see page 49.

Sustainability Funding Target



Updating our Green, Social and Sustainability Funding (GSSF) Framework

Our GSSF asset register contains some of our loans from our Sustainability Funding Target. This year we updated our GSSF Framework and published our 2022 Impact Report. The Framework aligns to the requirements of the International Capital Market Association and/or Climate Bonds Initiative. The Impact Report provides transparency to investors on the use of proceeds from instruments issued, the category of eligible assets and the estimated environmental and social impacts of the projects. As of 30 June 2022, our pool of green, social and sustainable assets was $2.77 billion. Our ambition is to grow these assets over time and continue facilitating the direct flow of funds from fixed income investors to green, social and sustainable projects.

The full Framework, Second Party Opinion and 2022 Impact Report can be found at commbank.com.au/sustainabilityinstruments

1 Between 2020 and 2021 we observed a significant reduction in our financed emissions associated with the transport sector. This was linked to a reduction in air travel over the corresponding period. It is possible that air travel could increase in future periods, which could lead to increases in our financed emissions associated with that sector. Portfolios not assessed include consumer finance, offshore commercial property, and offshore and domestic subsidiary home lending.

2 In line with the PCAF Standard, for the purpose of the glidepaths, drawn lending exposure is used and is grossed up for credit risk mitigation. Drawn lending exposure excludes commitments at offer, derivatives, guarantees, leases and trading securities.

3 The IPCC defines 'No overshoot' 1.5°C pathway as: those that give at least 50% probability based on current knowledge of limiting global warming to below 1.5°C. The IPCC defines 'Limited overshoot' as 1.5°C pathways as: those that limit warming to below 1.6°C and return to 1.5°C by 2100. Source: IPCC, 2018: Annex I Glossary. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.*

Leading the transition conversation

Addressing data gaps in measuring home lending and agricultural emissions

Obtaining high-quality data on our customers' emissions is critical to better understanding our financed emissions, setting challenging but achievable targets, and helping our customers take mitigating actions. This is a rapidly evolving area, with domestic and international initiatives underway to improve data quality. Unfortunately, data quality is particularly low in Australia for two sectors that are material contributors to our financed emissions: home lending and agriculture.

In other international markets, the presence of energy performance certificates with extensive coverage enables accurate estimation of household-level emissions for housing. For example, over half of dwellings in England and in Wales have had an Energy Performance Certificate issued. The equivalent ratings system in Australia covers only 10% of Australian buildings. This year, we explored methods to estimate emissions at the household–level using transaction data. However, data quality challenges limited our confidence in this estimate. Instead, we used state benchmarks based on the typical consumption of electricity and gas per home to estimate the emissions of the portfolio. Under this approach, we estimated our emissions intensity footprint per m^2 to be 38 $kgCO_2$-e/m^2 for 2021. Estimating this baseline is an essential first step to developing targets for this sector.

The Australian housing market covers a broad range of geographic and climatic zones. At present, emissions intensity scenarios available from external sources such as the IEA are not calibrated to our market. As part of our partnership with CSIRO, CSIRO will develop and publish credible emissions transition scenarios for the Australian housing sector and we will aim to use this to set sector-level targets.

The agriculture sector also presents specific challenges relating to the measurement of emissions. Emissions data for the agriculture sector is particularly difficult: as it produces multiple greenhouse gases (such as carbon dioxide, methane and nitrous oxide); includes a diverse range of agricultural activities; and has a unique and complex interplay between the generation and storage of emissions. This year, we trialled an approach to support a small group of agricultural customers in calculating their emissions footprint. We engaged leading industry academics to consider a robust approach and provided customers with training and information on emissions measurement.

Through the pilot, we discovered that while customers are interested in understanding their emissions, robust calculation approaches are time-intensive. We will use these insights to further develop our approach to calculating our financed emissions in the agriculture sector.

For more information on our sector targets see pages 44–47 and pages 53–57 for methodology.

Reviewing industry association positions

We are strengthening our approach to monitoring the position on climate change which is advocated by major industry associations. We will establish an annual review process to understand alignment between our position on climate and that of the industry associations in which we are active participants. If a misalignment is identified in the annual review, we will proactively share our position and rationale with the industry association through our participation in relevant industry forums.

Contributing to world-class partnerships

This year we partnered with Australia's national science agency, CSIRO. We are funding the CSIRO's development of Australia-specific transition pathways consistent with limiting global warming to 1.5°C. The effort builds on sector-level work that was already underway across Australia and globally.

The project will help us set interim sector targets for a range of sectors, including housing and commercial property, heavy industry and transport. CSIRO is also developing insights on key milestones to inform our sector-level transition strategies. For example, in defining a 1.5°C pathway for the housing sector, CSIRO is analysing the required level of energy efficiency improvements and the impact in changes of construction standards over time. We intend to make the results of this work public. This will include a range of data underpinning the scenarios to allow other organisations to shape their climate-related strategies and targets.

In addition to this, we have leveraged CSIRO's climate and modelling expertise to examine ways to make our agricultural lending decisions and portfolio management more sensitive to climate-related factors.

We also expect to actively participate in the NZBA and TNFD Forum.

Sharing insights

Within our Institutional bank, our Global Economic & Markets Research team publishes notes on climate-related topics under the banner of "Sustainable Economics". These have included an overview of the Australian Carbon Credit Units (ACCU) market, capital expenditures associated with Australia's transition, and managing nature-related risks.

This year we also launched our inaugural Sustainability Finance conference, focused on the trends, opportunities, challenges and risks on the path to a net zero emissions economy. The conference brings together leading academics in climate science and business thought leaders.

Reimagining banking

We continue to grow our product offerings to help our retail, business and institutional customers reduce and offset their emissions. By helping our customers navigate the transition, we aim to enable emissions reductions in the real economy.

Retail customers

With one in four home loans in Australia issued by CBA, we acknowledge our influence in the construction of new or renovated homes that we finance. We are working with industry partners to provide customers with accessible solutions that reduce their environmental footprint. We offer our customers a 0.99% fixed rate, 10-year Green Loan to finance the installation of eligible renewables, such as solar panels and batteries, in their home. This year we announced our Green Home Offer, providing eligible home loan customers with access to a low standard variable rate loan if their home meets certain sustainability and energy efficiency criteria, such as being a certified Green Building Council of Australia Green Star Home.

Business customers

We provide a range of product solutions that support our diverse business customers to enhance the sustainability of their businesses and manage the impacts of the transition. Many of our larger customers are seeking Sustainable Finance solutions that facilitate action on their transition strategies. This year, we issued the Bank's first Sustainability-Linked Loan to the agriculture sector.

We also launched our Property Sustainability Upgrade Loan. This product supports customers to install upgrades to their commercial properties that reduce both the buildings' environmental impact and its operating costs. We are also piloting a Green Loan for agribusinesses, which supports customers to purchase assets or implement practices that lead to positive environmental outcomes; and we have continued to provide discounted asset finance to support our customers to access energy efficient assets. Business customers also have access to Benefits finder which aims to curate relevant government grants and benefits to assist businesses, including a range of environmental, sustainability and energy efficiency programs.

Institutional customers

We have a growing Sustainable Finance business for our institutional customers. We support our customers' transition by providing and developing a broad suite of ESG products to support financing and incentivise our customers in their transition activities. An example of this was CBA's support of Reliance Rail with a syndicated $1.8 billion Green Sustainability-Linked Loan to support low carbon transportation.

This year, we reviewed our 100 carbon intensive customers, and through that process engaged with 82 to understand how they were assessing climate-related risks and opportunities as part of their climate transition planning.

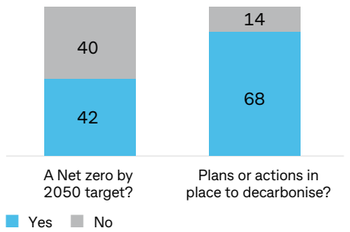
We explored our customers' transition readiness through interviews that focused on their climate-related governance, strategy, risk management, and metrics and targets. We also asked customers specifically about their transition plans, and complemented the effort with a quantitative analysis of a subset of these customers. Only 22 customers reported to us they had a transition plan they were ready to share.[1]

The exercise highlighted opportunities to support our customers in the transition, including accessing carbon markets, issuance of sustainability-linked loans; loan syndications; debt capital market activity; and structured asset finance opportunities. We will continue to engage our customers in line with our E&S Framework and Policy.

We are supporting customers at the retail, business and institutional level in their pursuit of renewable power generation – whether putting solar panels on your home, purchasing a battery for your business or developing utility-scale renewable generation infrastructure."

Sally Reid, Executive General Manager, Global Client Solutions

Engagement with 82 carbon intensive customers



1 Transition plan is based on the customers' definition of what a transition plan is.

Reimagined products and services

Building a credible, liquid and transparent carbon market in Australia

To reach net zero emissions by 2050, the global community needs to reduce emissions and remove carbon from the atmosphere. We see a critical role for carbon credits in this transition, particularly in offsetting emissions that cannot be abated.

Some of our customers are subject to regulatory regimes that require them to use carbon credits, while others are voluntarily using credits to offset their emissions as part of their decarbonisation strategies. The COP26 summit in Glasgow paved the way for greater refinement and certainty around how carbon markets should operate globally. It accelerated the development of internationally governed standards with provisions to avoid double-counting. A liquid and transparent carbon credit market plays an important role in incentivising the changes needed to reach net zero emissions.

The Bank is developing carbon offerings to assist customers in achieving their decarbonisation ambitions including: supporting farmers and project developers through financing of carbon projects to mobilise the supply of carbon credits; supporting the development of exchanges and actively participating in carbon markets; and supporting customers to measure and offset their carbon footprint. This year, we announced a strategic relationship with Xpansiv, a leading commodities marketplace, to support the growth of Australia's voluntary carbon market.

Global best digital experience and technology

We believe data and insights are key enablers of the transition to net zero emissions. We aim to use intuitive technology to empower our retail and business customers to understand and reduce their emissions. Knowing we do not have all the answers, we also participate in research to identify new ways to support our customers to make climate-friendly decisions.

Customer engagement with retail Green Loans

This year, the Bank looked to better understand what blockers existed for customers engaging with our retail Green Loan. We found customers lacked awareness of the options available to reduce their household emissions and it was challenging to understand the benefits relative to the costs. Given the purchase of clean energy technology is perceived to be complex, the information available can often be difficult to discern or can be conflicting.

The Bank is committed to supporting customers' decision making. We know customers value trusted advice on how to align their values with their actions and investments. We will continue to uplift the capabilities of our lender network in order to have helpful and insightful customer conversations.

Partnering with CoGo

During the year, we announced an Australian banking first partnership with CoGo. CoGo is a fintech provider who specialises in providing carbon emissions data, which CBA then uses to calculate personalised carbon footprints for retail and selected small business customers, based on their spending data.

Harvard University partnership

CBA has signed up to a four-year behavioural science research program collaborating with Harvard University STAR Lab to explore ways to help our customers and communities understand and take action on their own climate impacts. The program will focus on approaches to turn good intentions into clear actions, including investing in low carbon technology and offsetting.

Simpler, better foundations

Build leading climate risk management practices

Managing our exposures to climate risk is an important priority. We continue to enhance our approach to the measurement and reporting of E&S risk exposures.

This included expanding our ESG risk assessment tool to apply to a greater proportion of our business-lending portfolio and developing a home loan Risk Appetite Statement indicator.

This year's climate scenario analysis assessed physical and transition risk across key areas of our lending portfolio.

For more information, see the Risk chapter on pages 28–39.

Effective governance to deliver operational excellence

Effective governance is critical to managing climate risks and opportunities.

This year we have continued to mature our approach to governance at both the Board and management level.

For more information, see the Governance chapter on pages 8–15.

Reducing our operational emissions [1]

We have focused on improving our operational efficiency, and tracking and monitoring our operational emissions. Since 2008, we have been voluntarily reporting our emissions as part of the Climate Disclosure Project and since 2009 have aligned our operational emissions reporting to the Clean Energy Regulator's National Greenhouse and Energy Reporting Scheme (NGERS). The Bank was also the first Australian corporate to join the RE100 initiative in 2018.

We first set public metrics and targets related to our operational emissions in our 2017 climate policy position statement. Having achieved our Scope 1 and 2 target of 2.0tCO_2-e per FTE (excluding Australian data centres [2]) by 2020 in 2020, we set updated reduction targets last financial year, informed by science.

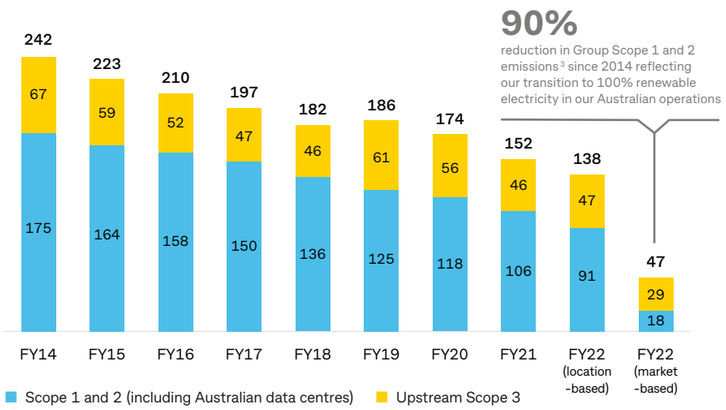
We have made significant progress to become more energy efficient. Combined with our transition to 100% renewable electricity in our Australian operations, this has delivered a 90% reduction in our Scope 1 and 2 emissions (including Australian data centres) since 2014 [3]. In addition to energy savings, we have taken steps to modernise our offices and branches. In our branch and office fit-outs, features contributing to our Green Star ratings include the use of low chemical paints, Forestry Standard certified timber and water-efficient fixtures and fittings.

Next year we will update our upstream Scope 3 operational emissions reduction target to align with limiting global warming to 1.5°C. We recognise more work is still required, as many of our remaining material operational emissions are in categories that are harder to abate, such as transport and travel. We will continue to use carbon credits to offset our residual operational emissions.

For more information on our operational emissions progress and initiatives see pages 50–51.

For more information on our operational emissions categories see pages 63–65.

Our operational emissions before carbon offsets ('000s tCO_2-e) [2,3]



90%
reduction in Group Scope 1 and 2 emissions [3] since 2014 reflecting our transition to 100% renewable electricity in our Australian operations

1 Our operational emissions commentary, targets and figures are for the Commonwealth Bank of Australia Group, including ASB Bank Limited and other overseas operations.

2 From FY14 to FY19, CBA data centres were deemed as non-operational control (Scope 3) and reclassified as operational control (Scope 1 and 2) from FY20.

3 Comparison of FY14 location-based reporting to FY22 Australian market-based reporting reflects the benefit of 100% renewable electricity used for our Australian operations. Includes emissions from Australian data centres.

Our operational footprint [1]

Achieving carbon neutrality

All of the Bank's operations globally have now been certified as carbon neutral. Our Climate Active certification incorporates our operations in Australia, Europe, North America and Asia. Our New Zealand subsidiary, ASB, is certified carbonzero through Toitū Envirocare [2].

Our approach is to reduce emissions locally, invest in on-site electricity generation in Australia and purchase 100% renewable electricity before offsetting any residual emissions. Currently, our residual operational emissions mainly relate to business travel, couriers and waste – which are harder to abate due to limited alternatives.

For Australia and other overseas markets (excluding New Zealand) we purchase renewable electricity certificates in each jurisdiction and then offset the residual operational emissions with ACCUs certified by Climate Active [2].

In New Zealand, renewably generated electricity comprises more than 80% of the national grid. ASB is committed to purchasing only credits from New Zealand projects to offset their Scope 1 and Scope 3 emissions. In 2022, the credits ASB purchased were all sourced from the Owenga private conservation reserve on the Chatham Islands, a Permanent Forest Sink Initiative.

Committed to a carbon neutral roadmap

Energy efficiency:
- 48% reduction in location-based Scope 1 and 2 emissions (including Australian data centres) since 2014.
- 34% reduction in ASB electricity usage since 2014 due to energy monitoring across its property portfolio.
- Average NABERS Energy – Office Tenancies rating of 5 stars.

Onsite renewables:
- 1,740 kW existing capacity of on-site solar.
- Produce 2.3% of our Australian load.
- Increasing to 2,000 kW capacity by 2025.

Buy renewables:
- Achieved 100% renewable electricity using local energy attribute certificates for Australian (since 2020) and other overseas (since 2021) operations.

Offset residual emissions:
- Climate Active certified for Australian (since 2020) and other overseas (since 2021) operations.
- Toitū Envirocare certified for New Zealand operations since 2019.

Continued focus on **reducing emissions** by driving efficiency, with carbon offsets reserved for **residual emissions.**

Reducing embodied carbon in our offices

The refurbishment of our new head office, Commonwealth Bank Place (CBP), incorporates leading sustainable design principles across energy, water, air quality and waste. The workplace includes a highly efficient passive chilled beam mechanical system leveraging 100% fresh air. The lighting incorporates daylight harvesting and motion-sensor LEDs to reduce energy consumption. Recycled water is used for toilets, coupled with efficient fittings and appliances to achieve a 6 Star NABERS rating. Importantly, 90% of construction waste has been diverted from landfill.

CBP is our first fit-out to target a reduction in embodied carbon, which is the carbon footprint produced in the making of a material, item of equipment or a building. The Bank is tracking above its internal reduction metric by reusing and re-purposing existing fit-out items.

1 Our operational emissions commentary, targets and figures are for the Commonwealth Bank of Australia Group, including ASB Bank Limited and other overseas operations.

2 See the Glossary on pages 68–70 for the definition of Toitū Envirocare and Climate Active.

Using scenarios to inform our strategy

We use climate scenario analysis to better understand potential outcomes of credible transition pathways, supporting our strategy and risk management decisions.

We acknowledge that different scenarios have the potential to impact Australian communities differently. To better understand the potential impacts and improve our ability to support customers, we have asked CSIRO to examine the economic outcomes of the scenarios being developed for Australia. The outcomes of this assessment will be used to inform the ongoing development of our climate change strategy.

Working with regulators

This year, we welcomed the opportunity to actively engage on APRA's Climate Vulnerability Assessment to provide insights into the risks of climate change on the financial system and economy.

Our approach to climate scenario analysis

We have prioritised the assessment of the financial impacts of climate change for four specific portfolios and risk types: acute physical risk in home loans, chronic physical risk in agriculture, transition risk in six high-emissions sectors[1] and regional transition risk, focused on the coal value chain, in home loans. We also assessed transition risk for the other business lending sectors, based on the macroeconomic projections under a "Delayed Transition" scenario.

For more information on our climate scenario analysis, see pages 34–37. To read about the uncertainty and limitations of climate scenario analysis, see page 58–59.

	Key insights
Acute physical risk in home loans	$31 billion of CBA's Australian home loans, or 3% of our exposures[2] are vulnerable to natural catastrophes, such as floods, cyclones or fires. While the estimated impact from current or future climate risk is limited, it might have a material impact on our customers. For more information see page 36.
Chronic physical risk in agriculture	Chronic physical risk impacts to agricultural productivity by 2050 are expected to be managed through investment in adaptation (e.g. crop diversification). Models indicate greater impacts in certain sub-sectors and regions (e.g. dairy, southern livestock and grains farming), however there is a high degree of uncertainty.
High-emissions sectors in business lending	Companies with a business model heavily reliant on the sale, combustion or transport of fossil fuels face significant disruption. Many of these companies currently generate strong cash flows that would allow repayment of outstanding debt, or to transition to renewable energies, before the price of carbon increases significantly. Given the size of our exposures[2] to these sectors, direct risks within our portfolio were found to be manageable. For more information see page 35.
Regional transition risk in home loans: coal value chain	We have $14 billion in exposure[2] to regions where more than 5% of jobs are directly tied to the coal value chain. When indirect jobs supporting the industry are included, the proportion of jobs linked to the coal value chain in these regions is estimated to increase to more than 10–15%. For more information see page 37.

1 Thermal coal mining, upstream gas extraction, upstream oil extraction, power generation and gas supply, manufacturing, transport and mining.
2 Based on exposure at default, excluding finance and insurance, government administration and defence.

Next steps and future priorities

New sector-level strategies	Develop new glidepaths, set sector-level targets and implement sector-level strategies to deliver our targets in line with our NZBA commitments.
Continue to develop our own capabilities and practices	Progress collaboration with the CSIRO on enhancements to physical climate data. Support the development and sharing of science-based insights to help inform public policy. Refine methodologies to measure emissions. Further work to understand our impact on nature and consideration of nature-related issues on our strategy. Work with our key suppliers to drive further emissions reductions. Review major industry associations', alignment with our E&S Framework and Policy.
Investigate future opportunities	Continue to expand our sustainability product suite, strengthening product governance. Explore further changes to pricing incentives and capital allocation to support the delivery of sector-level targets.

Risk

Climate change exposes our customers, communities and the Bank to a range of acute and chronic physical risks, such as increased extreme weather events. Not addressing climate change poses transition risks to society.

We are committed to embedding environmental and social considerations into our business processes and decision-making. Our approach is facilitated by our risk management framework, and by targets and minimum standards for a range of specific sectors."

CBA Environmental & Social Framework

Our approach to climate risk

The impacts of climate change, such as increasing frequency and severity of flood and bushfire events, have affected many Australian communities. Changing societal expectations, technological innovation and increased regulatory focus could challenge both our customers' and our own business models.

E&S risk is recognised as a material strategic risk in the Bank's Risk Management Framework (RMF). This acknowledges that E&S risks, which include the physical and transition risks of climate change, represent drivers of material financial, non-financial and strategic risk to the Bank.

This year, we have continued to mature our approach to assessing the risk of climate change by investing in climate risk management tools, processes and capabilities. We have conducted climate scenario analysis to stress test physical and transition risks. To better understand transition plans and key risks experienced by our customers, we also reviewed the transition readiness of our most carbon intensive institutional customers and engaged with the majority of them.

Further progress in assessing transition readiness will allow us to continue developing quantitative metrics to assess our credit exposure to physical and transition risks, some of which have been incorporated into our risk monitoring. This includes establishing a risk appetite statement (RAS) indicator for our home loan portfolio that seeks to measure our exposure to potential stranded assets.

In line with all our material risk types, climate change risk is subject to higher levels of governance, reporting and oversight by executive committees and the Board. This focus supports us to deliver on our strategy to play a leadership role in Australia's transition to a more modern, resilient and sustainable economy.

Integrating climate into our risk framework

The Bank manages risks through our RMF, which evolves to accommodate changes in the business operating environment, better practices, and regulatory and community expectations.

It incorporates the requirements of the APRA Prudential Standard CPS 220 Risk Management, supported by three key components:

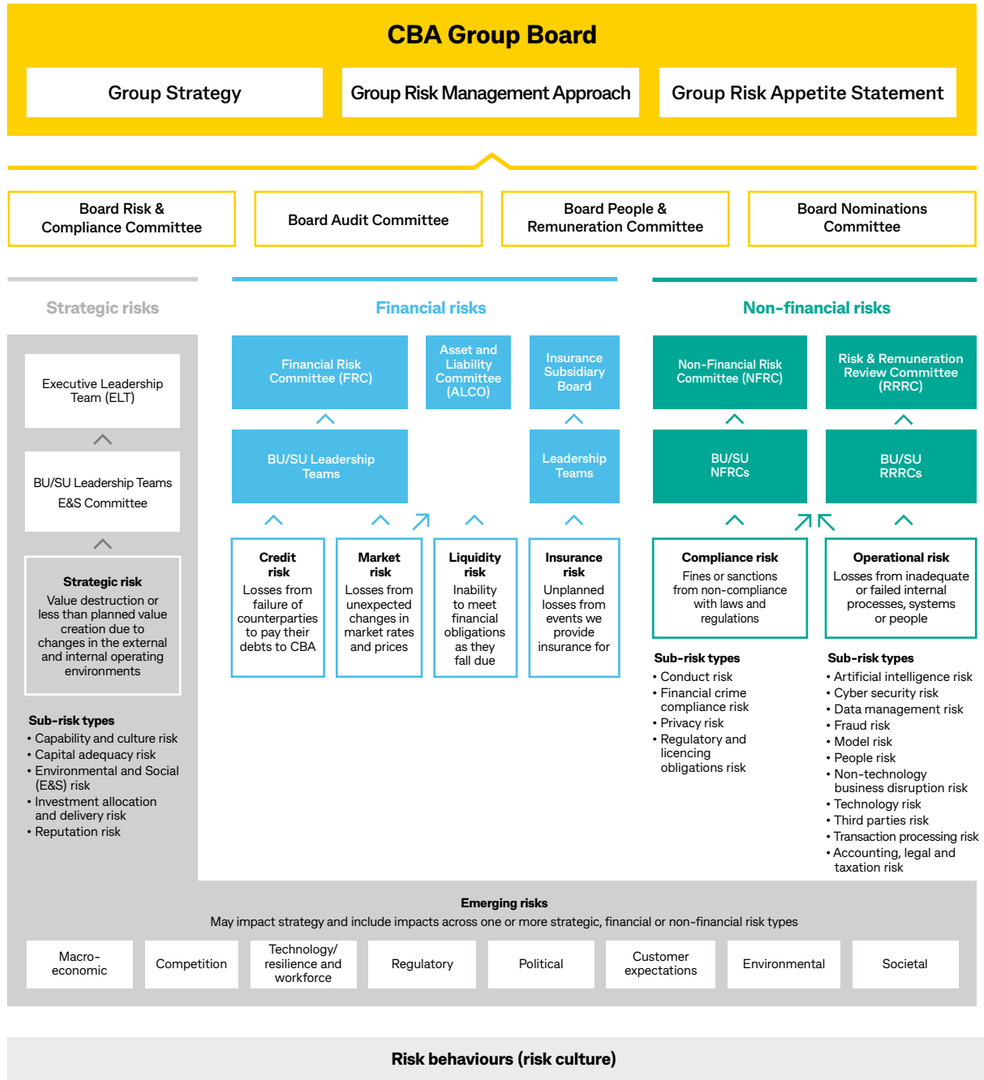
- The Group RAS articulates the type and degree of risk the Board is prepared to accept and the level of risk that the institution must operate within.
- The Group Risk Management Approach describes the Bank's approach to ensure management of its material risks in support of achieving its strategic goals and objectives.
- The Group strategy outlines the Bank's approach to the implementation of its strategic objectives. The strategy has a rolling three-year duration and considers material risks to the organisation.

Our RMF enables us to gain an overview of the material financial, non-financial and strategic risks the Bank is exposed to. The Bank recognises four RMF enablers: governance and reporting; policies and procedures; infrastructure; and accountabilities and skills. These enablers are in place for each risk type and allow the Bank to identify, assess, manage and report on our material risks, as well as allowing our people to adopt and apply good risk culture, behaviours and practices. The diagram outlines the Bank's RMF.

In the Board approved Group Risk Taxonomy, climate change risk is defined as a separate sub-risk type under the E&S material risk type category. The Bank considers climate change risk as a risk driver of other risks such as credit risk, market risk and reputation risk.

For more information on governance structures, policies and procedures see the *Governance* on pages 8–15.

Our Risk Management Framework



BU/SU: Business and Support Units

As a large bank, CBA is exposed to both the physical and transition risks associated with climate change:

- Physical risks – risks arising from damages or reduced asset values caused by extreme weather events such as floods, bushfires, storms and cyclones (acute risk), and longer-term shifts in climate patterns (chronic risk).
- Transition risks – risks arising from transitioning to a net zero emissions economy due to changes in domestic and international policy and regulation, technological innovation, social adaptation and market changes.

Mapping climate risk drivers to other risks

We recognise the compounding effect climate risk may have on our other material risks. In line with APRA's recently released practice guide CPG 229 Climate Change Financial Risks, the table below outlines the potential direct and indirect impacts that these transition and physical climate risk drivers can have on the Bank's material risk types, including the time horizons of their expected time to impact.

We are focused on integrating the identification, assessment and management of E&S risks into the management of each material risk type. This will minimise the financial and non-financial risks to the Bank, our customers, and the community, as well as help us achieve our climate strategy. This involves development and enhancement of E&S tools, risk processes, governance and capabilities for each risk type across the business.

Risk type	Climate risk drivers	Potential impacts	Time horizon to impact
Strategic			
Environmental and social	**Transition** – reputation **Physical** – acute and chronic	• Potential decline in financial performance. • Revenue from new sustainability products and services does not offset revenue from carbon intensive products and services. • Increased cost of capital or funding and carbon border adjustment taxes.	
Capital adequacy	**Physical** – acute and chronic	• Risk of insufficient capital to withstand impacts of climate events.	
Reputation	**Transition** – policy and legal and reputation	• The Bank's E&S Framework and Policy, emission reduction strategies (including financed emissions) or continued financing of carbon intensive or non-environmentally friendly industries could fail to meet stakeholder expectations.	
Financial			
Credit – default	**Physical** – acute and chronic	• Defaults on loans by businesses and households. • Potential for assets used as collateral to decline in value.	
Credit – stranded asset	**Transition** – policy and legal and reputation **Physical** – acute and chronic	• Inability to repay loans to the Bank due to physical and transition risks impacting the viability of existing business models.	
Market	**Transition** – market	• Value of securities held is negatively affected.	
Liquidity	**Physical** – acute and chronic	• Increased demand for liquidity in response to extreme weather events.	
Non-financial			
Compliance – conduct	**Transition** – policy and legal and technology **Physical** – acute and chronic	• Increased number of vulnerable customers and hardship cases. • Access to financial products and services. • Potentially inadvertent unfair treatment of customers.	
Compliance – regulatory and licencing	**Transition** – policy and legal	• Failure to comply with current and emerging climate risk regulations.	
Operational – third party	**Transition** – policy and legal	• Third parties performing services for, or on behalf of, the Bank failing to comply with current and emerging climate risk regulations or Bank policies.	
Litigation	**Transition** – policy and legal and reputation	• Potential legal action or penalties arising from strategies, policies, actions or decisions not being aligned to public disclosures or commitments.	
Operational – business disruption	**Physical** – acute and chronic	• Higher risk of business disruption to various services in these areas.	

Short-term – up to five years Medium-term – five to 10 years Long-term – more than 10 years

Identifying and assessing climate risks

We continue to build on our risk foundations and experience to identify and quantify the potential impacts of climate change across our portfolios. We use a range of tools to identify and assess climate-related risks, taking a risk-based approach to prioritise those that are most material. The diagram below provides an example of the tools and processes we use to identify and assess the climate-related financial risks (e.g. credit risk), non-financial risks (e.g. third parties risk) and strategic risks (e.g. reputation risk).

Strategic risks	Financial risks	Non-financial risks	Retail	Institutional and Business
✓	✓		Climate scenario analysis	
✓	✓	✓		ESG risk assessment tool
✓	✓			Productivity Mapping Tool [1]
✓	✓	✓	Risk and Control Self-Assessment	
✓		✓	Supplier Risk Governance Tool	

1 Productivity Mapping Tool applies to select Agribusiness customer.

We use climate scenario analysis to identify and quantify sector-level climate-related risks in our lending portfolios. This year, we prioritised material sectors with climate-related risks, including home loans (physical and transition); agriculture customers (physical); and business lending (transition).

Climate risk models include inherent uncertainties which should be understood and managed. The Bank seeks to minimise some of these uncertainties by entering into partnerships to gain access to external climate data, where available, and relies on our internal climate scenario analysis team, with local and international climate-related expertise, to interpret and apply the data into CBA's proprietary risk models and frameworks.

The models, internal climate scenario analysis team, and methodologies we are developing, strengthen our capabilities to advance our climate scenario analysis in the coming years.

For more information on our climate scenario analysis see pages 34–37.

The Bank recognises the importance of incorporating the consideration of climate risks into our corporate lending decisions. The nature and scope of the E&S risk assessment varies depending on the customer's size, segment and industry. This year, corporate lending to business banking customers between $1 million and $30 million, and who operate in sectors considered to be at higher risk of the impacts of climate change, were subject to a risk assessment using the expanded ESG risk assessment tool. For institutional corporate lending, and business customers seeking corporate lending greater than $30 million, bankers assess the potential impact transition and physical climate risk may have on the company and what customers are doing to mitigate these risks.

A Productivity Mapping Tool is used to assess risks associated with climate change on agricultural production performance. The tool is currently used to assess grain, livestock and dairy portfolios, and then ranks postcodes across three tiers of physical risk based on the utilisation of historical weather patterns and current environmental conditions. Over time, the Bank intends to expand the tool to incorporate other sub-sectors of agriculture and is partnering with the CSIRO to explore ways to incorporate a series of forward-looking climate scenarios.

An established annual Risk and Control Self-Assessment (RCSA) process exists within the Bank where business units and support units identify and assess the risks to achieving their business objectives. After the assessment of controls and mitigation strategies in place, risks with unacceptable residual risk ratings will either be risk accepted, or an issue may be raised in the Bank's risk system, with control improvement plans developed and monitored.

In 2022, the Bank formalised a detailed E&S risk and controls taxonomy, which was integrated into the annual RCSA cycle. E&S RCSAs have begun, and the completion of these in the next financial year will provide management and the Board with greater transparency of the E&S strategic, financial and non-financial risks and issues across the Bank. We have also commenced updating our Supplier Risk Governance (SRG) tool to further enhance our ability to assess supplier environmental practices against CBA policy and commitments.

For more information on how we make lending decisions, see the *Appendix* on pages 60–61.

Our climate scenario analysis

This year, we used climate scenario analysis to identify and assess our exposure to financial risks arising from climate change, incorporating both physical and transition risk.

The scenarios we used

Our climate scenario analysis is based on global scenarios widely adopted by financial institutions, most of them developed by the IPCC, Network for Greening the Financial System (NGFS) and the IEA. A major challenge for climate scenario analysis is the availability of granular modelling that reflects Australian and New Zealand conditions. Aggregated regional projections might not be representative of Australian and New Zealand economic models or exposure to natural perils. For example, the NGFS model groups Canada, Australia and New Zealand as a collective economy, while some IEA variables do not distinguish between 38 OECD economies. We have sought to address this gap by leveraging specialised third-party capabilities. For transition risk scenarios, our analysis was informed by externally sourced macroeconomic projections, and learnings from recent scenario analysis work conducted for APRA. For physical risk, we have used Finity peril rates to better understand climate risk at the address level, and CSIRO projections for broader chronic changes in temperature and rainfall variables at a 5km grid level. This year, we have focused on three main global climate pathways:

	Delayed transition	1.5˚C	Severe physical risk
Description	Used to test our resilience to high transition risk, in a scenario of rapid and disorderly transition after 2030, with medium physical risk.	Used in our target setting process, in a scenario of early transition risk impact due to rapid decarbonisation of the economy in the next decade, and limited increase of current levels of physical risk.	Used to test our resilience to physical risk, in a scenario of severe temperature increase resulting in severe physical risk.
Global warming by 2100[1]	1.1˚C–2.6˚C	0.3˚C–1.7˚C	2.6˚C–4.8˚C
Cost of emissions by 2050	AU$497 per tonne CO_2-e	AU$250 per tonne CO_2-e	AU$4 per tonne CO_2-e
Transition scenarios	NGFS Delayed Transition	IEA NZE, IPR RPS[3]	NGFS Current Policies
Physical scenarios[2] **(Representative concentration pathway)**	RCP 4.5	RCP 2.6	RCP 8.5
Our transition risk rating	High	High	Low
Our physical risk rating	Medium	Low	High

Our approach

Overall, this year we have tested the resilience of 74% and 63% of our lending portfolio to potential climate-related transition risks and physical risks, respectively. We have assessed the level of climate risk in these portfolios based on financial projections to 2050. A summary of our approach is tabled below:

Acute physical risk in home loans	Using the severe physical risk scenario and the United Nations Environment Programme Finance Initiative (UNEP FI) methodology, we classified the level of exposure of our Australian home loans portfolio against four types of natural perils (cyclone, storm, fire and flood) through to 2050. We then translated this into expected credit losses, taking into account assumptions regarding insurance coverage, default probability and real estate valuation impacts.
Chronic physical risk in agriculture	Using the severe physical risk scenario, we modelled agricultural productivity over a 30-year time horizon based on CSIRO's historical climate data and projections for Australia under a RCP 8.5 scenario, combined with CBA's farm crop type and location information. We then translated this into a loss impact based on the likelihood of default should these productivity impacts eventuate.
High-emissions sectors in business lending	Using the delayed transition scenario and the UNEP FI methodology, we modelled individual company financial performance over a 30-year time horizon, for a small number of companies within the six sub-sectors analysed. We then used our credit risk models to estimate probability and severity of credit losses, and extrapolated those results across our exposures in these sectors.
Regional transition risk in home loans: coal value chain	Using the delayed transition scenario, we modelled the deterioration in economic activity in regions whose economies are heavily reliant on the coal value chain over a 30-year time horizon and translated this into credit losses using our credit risk models.

1 Above pre-industrial levels, consistent with the scope of the Paris Agreement.

2 In line with the IPCC, we use the representative concentration pathway, or RCP, to describe the level of GHG concentration in the atmosphere in a given scenario. A higher RCP indicates greater GHG concentration, which is associated with greater temperature increases.

3 The Inevitable Policy Response (IPR) is a forecasting consortium commissioned by the United Nations Principles for Responsible Investment. Their Required Policy Scenario (RPS) details future policy developments needed to hold global temperature increases to a 1.5°C outcome.

The findings from this exercise indicate that 0.2% of our portfolio is in segments considered 'high-risk'[1]. However, we recognise that as Australia's largest bank, our performance is highly correlated to the Australian economy.

We are using these results to strengthen our approach to climate risk management. We are establishing a RAS indicator related to home loan exposures in high physical risk areas. We already include assessments of productivity in our agribusiness credit decision making, and are working with CSIRO to explore ways to include climate scenarios in this assessment. We used insights from this exercise in our engagement with carbon intensive customers. We have also incorporated insights from our transition risk analysis into our existing geographical risk monitoring and strategy.

			Pre-mitigation climate risk	
Sectors 30 June 2022	**Exposure at default** $ billion	**Exposure at default** % of scope	**Transition**[1] Delayed transition scenario	**Physical**[2] Severe physical risk scenario
Thermal coal mining	**0.2**	**0.0%**	High	Deprioritised
Upstream oil extraction and upstream gas extraction	**1.1**	**0.1%**	High	
Power generation and gas supply	**3.4**	**0.3%**	Mid-high	
Fossil fuels	1.0	**0.1%**	High	
Renewables, transmission and distribution[3]	2.5	**0.2%**	Low	
Manufacturing	**10.4**	**1.0%**	Mid-low	
Transport	**11.5**	**1.1%**	Mid-low	
Mining	**2.2**	**0.2%**	Mid-low	
Other Australia non-retail[4]	**79.1**	**7.9%**	Low	
Agriculture	**11.2**	**1.1%**	Deprioritised	Mid-low
Dairy	0.7	**0.1%**		Mid-high
Livestock	8.6	**0.9%**		Mid-low
Grains	1.9	**0.2%**		Mid-low
Australian housing	**625.0**	**62.0%**	Low	Low
Exposed to increased physical risk[5]	31.2	**3.1%**	Low	Mid-low
Exposed to increased cyclone risk	10.8	**1.1%**	Low	Mid-high
Exposed to increased flood risk	18.8	**1.9%**	Low	Mid-low
Exposed to increased fire risk	1.6	**0.2%**	Low	Mid-low
Exposed to coal value chain	14.0	**1.4%**	Mid-high	Low
Total exposure at default in scope[6]	**744.1**	**74%**		
Total CBA exposure at default[7]	**1,007.5**			

1 For transition risk in business lending, risk rating is based on modelled impacts probability of default. Sectors or firms experiencing larger adverse movement in probability of default are assigned a high risk rating. For transition risk in home lending, risk rating is based on percentage of jobs in local area that are directly involved in the coal value chain.

2 For physical risk in agriculture, rating based on modelled productivity impacts. For physical risk in home lending, rating based on frequency of events (floods), or modelled loss rates (cyclone and fire).

3 Power generation includes electricity generation, transmission, distribution and gas supply.

4 To assess transition risk for business lending to other business sectors, we ran our credit models using downscaled economic data for those sectors under a delayed transition scenario.

5 Reflects the most severe Finity rating in each natural peril type – storms not included as loss rate is relatively mild across all ratings.

6 Scope excludes ASB Bank Limited in New Zealand and other offshore exposures, consumer lending; finance and insurance; and government administration and defence. Variance between glidepath reporting on pages 44–47 and sector exposures above due to glidepath reporting being completed on drawn lending exposure only and includes offshore exposures.

7 Excludes Sovereign and Financial Institutions.

Case study:
Understanding acute physical risks for our home loan portfolio

Climate extremes are disproportionately impacted by warming, with a small increase in average temperatures having large impacts on weather and extreme events. As a result of a changing climate, Australia is expected to see an increase in frequency and severity of extreme weather events, or acute climate perils, such as cyclones, floods, bushfires and storms. Under a severe physical risk scenario for climate change by 2050, models predict temperature changes of up to 4.8°C from a 1995 baseline, and migration of cyclones southwards as a function of increased sea surface temperatures.

Recent research into historical, global climate catastrophe events has highlighted a link between economic losses and local temperature changes. Linking the impact of catastrophe events on house prices, and therefore mortgage stress, is less straightforward. To address this, the Bank has started to develop methodologies, leveraging learnings from the insurance industry, to estimate the corresponding financial impacts in the event of default.

First, we rate acute physical climate risk. We use a Finity dataset, which uses historical data and modelled climate projections to provide peril risk ratings for locations across Australia. We then use these ratings to project impacts to house prices using our proprietary credit risk models, including the mitigating effect of home insurance penetration, Loan-to-Value ratios (LVR) [1] and lenders mortgage insurance.

Potential impact on our portfolio

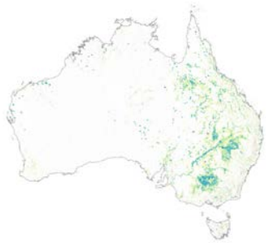
Approximately 3% of our assessed exposures are currently located within areas exposed to increasing risk such as cyclone exposed coastal regions, low lying flood plains and rural areas in close proximity to the urban fringe.

In particular, peril risk ratings reveal increases in cyclone, flood and fire risk by 2050 under a representative concentration pathway 8.5 scenario, with more pronounced impacts to cyclone risk. This is consistent with studies showing that cyclones have been, and will continue to form, further south and therefore have the potential to make landfall in populated areas previously not exposed to cyclone risk. If this happened in the north of New South Wales, where construction standards have not been designed to resist cyclones, material losses could be observed which are not currently reflected in our current estimates.

Home loan portfolio in high risk areas

Low lending exposure in high peril risk regions, potentially significant increase in cyclone risk.

Our climate risk assessment considers the LVR and possibility that our customers do not have adequate insurance. In situations where customers defaulted due to climate-related events, the ultimate loss CBA would face would be influenced by LVRs.

Cyclone		Flood		Fire	
					
High risk exposure [2] ($bn)	**11**	High risk exposure [3] ($bn)	**19**	High risk exposure [2] ($bn)	**2**
Physical risk rating	**mid-high**	Physical risk rating	**mid-low**	Physical risk rating	**mid-low**
No. of properties (000s)	**38**	No. of properties (000s)	**56**	No. of properties (000s)	**5**

1 LVR is the ratio between the value of the loan and the value of the underlying property.
2 High risk based on areas where modelled peril loss rates, based on hazard risk and historical insurance claims, exceeded a fixed threshold.
3 High peril risk for flood includes properties within 1 in 50-year return period flood zones.

Case study:
Understanding regional transition risks for our home loan portfolio

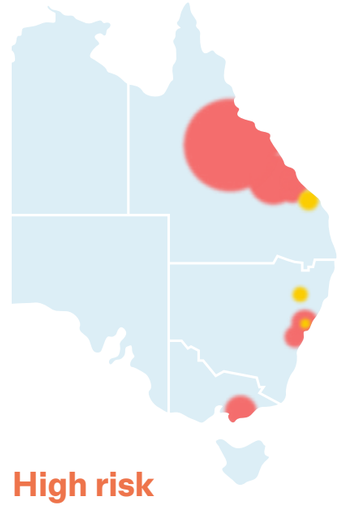
To assess the implication for our Australian home loans of a global contraction in coal demand, we assessed the exposure of our home loan portfolio to local economies heavily reliant on the coal value chain.

We first identified areas of the country that are most economically dependent on the coal value chain, before analysing projected pathways for the reduction of fossil fuel demand in climate transition scenarios. This demand profile was used to determine the potential timing and scale of changes with respect to demand for Australian coal exports. These projected pathways were combined with publicly available information on the physical location of key elements of the coal value chain, such as mines and ports, in addition to using Australian Bureau of Statistics employment data to assess the local area concentration of employment within affected industries. Based on the concentration of the local workforce in relevant industries, we estimated the likely impact to both direct and indirect economic activity and employment opportunities in affected areas. Historic precedent was also taken into consideration with regard to mining industry-related shocks to the home loan portfolio.

This analysis suggests that communities with workforces that are highly concentrated in fossil fuel related industries are likely to be significantly impacted under varying Paris-aligned scenarios. These impacts will likely be felt through the coal value chain and the broader local economy.

The concentration of a local area to the fossil fuel value chain increases the risk that indirect employment and broader economic value, including residential property values in these regions, is reduced as a result of a significant reduction in global coal demand. Based on these factors $14 billion of home loan exposure as at June 2022 was assessed as being at a mid to high level of climate transition risk.

Regional economies reliant on coal



Internal risk rating [1]

Improving our scenario analysis

Our climate scenario analysis has yielded valuable insights. However, we are still in the early stages of maturing our approach. Significant work is needed to expand the scope, improve the granularity and accuracy, and understand the uncertainty of our climate scenario projections.

Next year we plan to extend our climate scenario analysis in terms of scope and coverage. We will continue to consider and integrate recent developments in climate science to improve the rigour of our analysis. An example is, our collaboration with CSIRO on enhancements to granularity of physical climate data.

Overall, climate scenario analysis is a tool that we will increasingly use to inform our strategy and decision making. To further improve our insights we will continue to build our internal capabilities to conduct climate scenario analysis on a regular basis and with expanded scope.

For more information on our approach to climate scenario analysis see pages 58–59.

1 Regional rating based on: workforce concentration in coal-related industry; alternative primary industry employment opportunities; and CBA's mortgage market share relative to national average.

Managing and monitoring climate risks

We continue to enhance the management and monitoring of climate risks across our business. The diagram below provides an example of the tools and processes we use to manage and monitor the climate-related financial risks (e.g. credit risk), non-financial risks (e.g. third parties risk) and strategic risks (e.g. reputation risk) across our key portfolios.

Strategic risks	Financial risks	Non-financial risks	Retail	Institutional and Business
✓	✓	✓	Risk Appetite Statement	
✓	✓	✓	Management reporting (sector-level financed emissions targets, our own emissions targets)	
✓	✓		Transaction approval and escalations	
✓	✓			Engaging with selected customers on transition readiness
✓		✓	Business Continuity Planning	
✓		✓	Regulatory compliance, monitoring and engagement	

In addition to our qualitative E&S RAS, we are working towards embedding quantitative stranded asset RAS indicators across our portfolios, building on our climate scenario analysis results. This work requires the availability of reliable, quality industry and customer data.

Our home loan portfolio RAS indicator, approved by the Board in June 2022, measures the percentage of home loans with high climate physical risk exposure (flood, bushfire, storm and cyclone peril events) and is combined with lending metrics. This monitors home loans with potential higher credit risk due to lower resilience to recover from extreme weather events. Additional indicators are currently under development for our non-retail portfolios and further steps to strengthen our climate risk exposure indicators across various portfolios continues.

In recent years, we have monitored and disclosed our exposures to the energy sector through the Energy Value Chain. This year, we set financed emissions targets for four priority sectors: thermal coal mining, upstream oil extraction, upstream gas extraction and power generation which are also monitored quarterly by management.

For more information on our EVC and sector-level targets, see pages 44–48.

Climate scenario analysis and the development of the climate RAS, metrics and sector-level targets have helped us better understand the risks and challenges faced by our customers.

Our ESG risk assessment tool supports corporate lending decisions in the institutional and business banking areas. Approval of corporate lending decisions is made by bankers, with higher-risk decisions being escalated to management or committees for decision.

We are working to understand our customers' needs and transition readiness to bring us closer to a net zero emissions economy. During the year we engaged 82 of our most carbon intensive institutional customers to better understand their risks and transition readiness.

The Bank addresses regulatory obligations and compliance risks by incorporating new local and international regulatory requirements where applicable into the development of strategy, policies and procedures. Measures are in place to verify that climate disclosures or commitments are aligned to the E&S Framework and Policy; policies; or regulatory expectations.

Managing climate-related disruption to our business operations

Climate-related events can impact the continuity of the Bank's operations through the safety and availability of our people; physical damage to facilities; disruptions to supplier services (cash delivery and ATM servicing); and the increased need for customer support and financial assistance services. In response, the Bank mobilises crisis response teams to monitor developing situations, implements operational response capabilities and coordinates customer and community communications.

Where relevant, additional natural disaster plans have been developed to link existing business continuity plans to relevant crisis response mechanisms.

Next steps and future priorities

Build leading climate risk management practices

- Continue to regularly conduct climate scenario analysis, translating insights into decision-useful indicators.
- Further embed glidepaths into strategy and risk management.
- Ongoing training and assessment to enhance our employees' capabilities.

Develop our management information and reporting capabilities

- Enhance our retail RAS indicator over time with insurance considerations.
- Finalise the non-retail RAS indicators.
- Develop an agriculture RAS. In the interim, management will continue to monitor exposure to areas at risk of low productivity due to climate physical risks.
- Complete E&S RCSAs across the business, which will also strengthen the capability to perform aggregate climate risk and control reporting across the Bank.
- Enhance portfolio-level climate risk metrics for quarterly monitoring by management.

Enhance our climate scenario analysis

- Continue to evolve our climate scenario analysis in terms of scope and coverage.

Continue to enhance our risk tools and methodologies

- Incorporate insights from climate scenario analysis into our policies, practices and tools.
- Continue to enhance our assessment of climate into new supplier assessments using the SRG tool, processes and guidance.

Metrics and targets

We are committed to playing a leadership role in Australia's transition to a net zero emissions economy by 2050. We set targets and track progress related to our climate strategy.

Performance summary

The table below outlines our progress for the 2022 financial year against our strategy, targets and commitments.

	Metric	Target	Progress FY20	Progress FY21	Progress FY22	Status	Reference
Leadership in Australia's transition							
Sustainability Funding Target [1,2]	cumulative $ billion	FY30: $70bn	– [3]	– [3]	$30.6bn	→	Page 49
Thermal coal mining financed emissions [1,2,4]	% reduction vs FY20 baseline	FY30: -100%	–	-25%	–	⊕	Page 47
Upstream oil extraction financed emissions [1,2,4]	% reduction vs FY20 baseline	FY30: -27%	–	-35%	–	⊕	Page 47
Upstream gas extraction financed emissions [1,2,4]	% reduction vs FY20 baseline	FY30: -17%	–	-30%	–	⊕	Page 47
Power generation emissions intensity [1,2,4]	$kgCO_2/MWh$	FY30: 105	222	187	–	⊕	Page 44
Business lending emissions intensity [1,4,5]	$kgCO_2$-e/$ lending	Average decrease over time	0.17	0.13	–	→	Page 43
Simpler, better foundations [1,7]							
Scope 1 and 2 operational emissions	% reduction vs FY20 baseline [6]	FY25: -21% FY30: -42%	–	-22% [8]	-34% [8]	→	Page 50
Upstream Scope 3 operational emissions (excluding financed emissions)	% reduction vs FY20 baseline [6]	FY25: -12.5% FY30: -25%	–	-67% [8]	-68% [8]	→	Page 51
RE100 – renewable electricity	% of global operations	FY30: 100%	100% (AU)	100% (AU)	100% (AU) 75% (NZ) [9] 100% (Other)	→	Page 51
On-site renewable energy	kW	FY20: 1,250 FY25: 2,000	1,510	1,705	1,740	→	Page 51
Carbon neutral for our residual operational emissions	% of global operations	FY22: 100%	100% (AU & NZ)	100%	Pending certification in arrears	✓	Page 25

✓ Achieved → Commenced ⊕ New

More information on our environmental performance is available at commbank.com.au/sustainabilityreporting

1 Our commitments are outlined in our E&S Framework and Policy. The E&S Framework is available at commbank.com.au/policies.
2 Reported for the first time in FY22.
3 In 2021, we replaced our Low Carbon Funding Target ($15 billion by 2025) with a broader Sustainability Funding Target. In FY21, we achieved $6.4 billion in funding against our old Low Carbon Funding Target.
4 Financed emissions are lagged as 2022 customer emissions data has not yet been reported.
5 Comparative information has been restated to conform to presentation in the current period.
6 For detailed definitions, including how the operational emissions targets differ from the emissions reported in the Sustainability performance metrics on page 42 of the 2022 Annual Report, see the reconciliation on page 65 and the Group operational emissions methodology on pages 62–65.
7 Our operational emissions commentary, targets and figures are for the Commonwealth Bank of Australia Group, including ASB Bank Limited and other overseas operations.
8 Operational emissions have been reduced due to the impact of COVID-19 on business operations. This is expected to normalise over the term of the target.
9 Excludes base building electricity.

Financed emissions

We see significant potential to support the transition by tracking and influencing the emissions of the customers we lend money to (financed emissions). Since 2015, we have disclosed the emissions intensity of our business lending portfolios. This year, following our decision to join PCAF, we have updated our methodology to align with the PCAF Standard for calculating financed emissions, including leveraging PCAF's emission factor database. We have also strengthened our calculation of financed emissions in the Australian agriculture portfolio by incorporating customer-level production and financial data, where available. At this stage, we do not estimate our facilitated emissions.

Our disclosure incorporates, for the first time, an estimate of the financed emissions of our Australian home lending portfolio. This is an important step as we seek to help our retail customers reduce the emissions associated with their home.

Under this new approach, we estimate the 2021 absolute financed emissions of our lending portfolio[1] at 24.4 $MtCO_2$-e, mainly attributable to our exposures in the energy sectors[2], agriculture and home lending. The emissions intensity of our business lending is estimated at 0.13 $MtCO_2$-e per dollar of drawn lending exposure, representing a decrease of 24% versus the prior period. We calculate this based on emissions and drawn lending exposure to non-retail sectors shown in our financed emissions table. For simplicity, and in light of materiality, project finance exposures are included within the relevant sector. Between 2020 and 2021 we observed a significant reduction in our financed emissions associated with the transport sector. This was linked to a reduction in air travel over the corresponding period. It is possible that air travel could increase in future periods, which could lead to increases in our financed emissions associated with that sector.

Emissions data, calculation methodologies and disclosure standards are evolving rapidly. While we anticipate further improvements in coverage and data quality over time, we believe this year's calculation represents a step forward. It covers 87% of our drawn lending exposures of which 80% is PCAF aligned. This provides greater comparability for our stakeholders across the financial services sector. Over time, we expect to evolve our approach as new data and methodologies emerge.

Refer to pages 53–57 for our methodology and calculations for financed emissions.

Financed emissions

	Financed emissions										Glidepaths	
	% In-scope portfolio[3]		Absolute emissions[3]				Data quality				Performance			Target	Reference Scenario
Sector	% In-scope portfolio FY21[1]	% In-scope portfolio FY20[1]	FY21 Scope 1 and 2 ($MtCO_2$-e)	FY21 Scope 3 ($MtCO_2$-e)[4]	FY21 ($MtCO_2$-e)	FY20 ($MtCO_2$-e)	FY21 PCAF score Scope 1 and 2	FY20 PCAF score Scope 1 and 2	% reported client level data FY21[5]	% reported client level data FY20[5]	Measure	FY21	FY20	2030	Reference scenario
Australian home lending[6]	66.7%	66.3%	4.5		4.5	4.6	4.0	4.0	0%	0%	$kgCO_2$-e/m^2	37.70	39.50		
Thermal coal mining	<0.1%	<0.1%	<0.1	0.9	0.9	1.2	3.0	3.0	>99%	>99%	Absolute emissions	0.9	1.2	-100% vs baseline	IEA NZE 2021
Upstream oil extraction	0.2%	0.4%	0.1	1.6	1.7	2.6	2.1	2.0	>99%	98%	Absolute emissions	1.7	2.6	-27% vs baseline	IEA NZE 2021
Upstream gas extraction			0.2	2.0	2.3	3.3	2.1	2.0	>99%	98%	Absolute emissions	2.3	3.3	-17% vs baseline	IEA NZE 2021
Power generation[7]	0.5%	0.5%	0.9		0.9	1.0	2.5	2.4	>99%	>99%	$kgCO_2$/MWh	187	222	105 $kgCO_2$/MWh	IEA NZE 2021
Agriculture[8]	2.7%	2.7%	4.9		4.9	4.9	4.4	4.5	31%	25%	$kgCO_2$-e/$ lent	0.24	0.25		
Transport[8]	0.6%	0.8%	2.5		2.5	4.7	4.0	4.0	29%	25%	$kgCO_2$-e/$ lent	0.51	0.82		
Aluminium, steel, iron and cement (heavy industry)[8]	<0.1%	<0.1%	0.3		0.3	0.5	2.7	2.4	77%	88%	$kgCO_2$-e/$ lent	2.24	1.33		
Other business lending[8,9,10]	8.9%	9.3%	2.7		2.7	3.5	4.4	4.4	16%	18%	$kgCO_2$-e/$ lent	0.04	0.05		
PCAF aligned portfolio	**79.6%**	**80.0%**													
Australian commercial property	7.0%	6.7%	3.8		3.8	3.6	–[11]	–[11]	0%	0%	$kgCO_2$-e/$ lent	0.07	0.08		
Portfolio[12]	**86.7%**	**86.8%**	**19.9**	**4.5**	**24.4**	**29.9**	**4.0**	**4.0**	**4%**	**4%**					

1 In-scope portfolio excludes finance and insurance, government administration and defence.
2 Includes thermal coal mining, upstream oil extraction, upstream gas extraction and power generation.
3 Total % in-scope portfolio and absolute emissions may not cast due to rounding. Absolute emissions for thermal coal mining, upstream oil extraction and upstream gas extraction are CO_2 only (or CO_2-e subject to data limitations).
4 "Grey box" indicates Scope 3 is not available as it is not yet measured in our financed emissions calculations. We adopt PCAF's prescribed Scope 3 phase in approach and have measured Scope 3 for thermal coal mining, upstream oil extraction and upstream gas extraction only. As at 30 June 2021, our PCAF Scope 3 data quality score is 2.8.
5 Proportion of drawn lending where Scope 1 and 2 financed emissions are based on reported emissions or production data.
6 Includes exposures to lines of credit and reverse mortgages secured by residential buildings, which represent less than 2% of Australian home lending exposure.
7 Absolute emissions includes Scope 1 emissions only, for more details on our methodology refer to page 57.
8 Individual exposures are grouped by customer and allocated to the sector with the largest exposure.
9 'Other business lending' includes all other business lending exposures not reflected elsewhere. This includes sectors that are adjacent to those listed elsewhere in the table, such as services to agriculture, services to transport, electricity, gas and water supply (excluding power generation), mining (excluding thermal coal) and manufacturing (excluding heavy industry).
10 Includes emissions associated with the construction of certain power generation assets.
11 "-" indicates emissions estimate for Australian commercial property not calculated in line with the PCAF Standard.
12 Portfolios not assessed include consumer finance, offshore commercial property, and offshore and domestic subsidiary home lending.

Sector targets [1]

Our portfolio covers a number of industries, sectors, communities and geographies. This means that our approach to steering our portfolio to net zero demands consideration of the specific technologies and transition pathways for each sector. In 2021, we shared we were developing four priority sector glidepaths to help us transparently track alignment to the Paris Agreement at the sector-level, and our intention to implement the glidepaths internally.

We used the IEA SDS as the reference scenario in our initial drafts of the glidepaths, and committed to review the ongoing suitability of this scenario in 2022.

This year, we aligned our temperature ambition to 1.5°C [2]. In line with this decision, we changed the underlying reference scenario of our glidepaths to the IEA NZE, which is consistent with limiting global warming to 1.5°C. We also implemented the glidepaths through internal reporting, analysis and by establishing a quarterly monitoring process involving our ELT E&S Committee and Business E&S Action Group. We are now announcing 2030 interim targets for the four priority sectors. In line with our NZBA commitments, we aim to continue to develop sector-level targets on other sectors identified by the NZBA. By 2025, we intend to have set targets on sectors that account for more than 75% of our 2020 financed emissions. As we set targets, we will also develop strategies to achieve them. Each year, we aim to disclose our progress towards our interim targets along with new targets as they are developed.

Refer to pages 56–57 for more information on our sector target methodology and our reference scenario selections.

Power generation – conventional generation and renewable generation

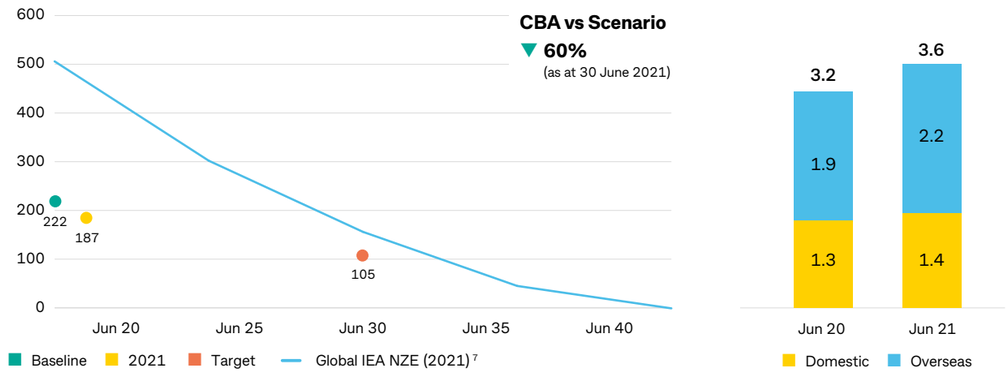
We aim to support our gentailer customers in decarbonising electricity generation. As outlined in our E&S Framework and Policy, we support the transition to a net zero emissions economy and as part of this consider it critical to maintain a secure energy platform in Australia. The Bank is a leading provider of non-recourse finance to renewable energy projects in Australia. We are also supporting a growing number of battery and pumped hydro storage projects. This enables renewable energy to be stored and then released on demand when it is needed, creating stability and reliability in the electricity system.

Sector overview and outlook

Renewable electricity provides a cost-effective way of reducing emissions and is integral to Australia reaching net zero emissions by 2050. Expanding the supply of renewable electricity not only reduces the direct emissions of the electricity sector but is critical to enabling the decarbonisation of other sectors by reducing Scope 2 emissions. Australia's future economy will rely on widespread electrification across transport, heating, cooking, hot water and many other industrial processes.

The electrification of the economy is expected to require electricity generation in the National Electricity Market to nearly double by 2050, while at the same time coal-fired power generation is withdrawing from the grid [3]. In 2021, 27% [4] of Australia's electricity supply was sourced from renewable energy. This is forecast to increase to 83% by 2030–2031 and 98% by 2050 [3]. To deliver this, large-scale renewable energy generation must grow by a factor of almost nine. Small-scale renewable systems, such as roof top solar, must grow by a factor of almost five. [3]

Power generation emissions intensity [5,6] ($kgCO_2/MWh$)



Drawn lending exposure ($bn)

1 Our commitments are outlined in our E&S Framework and Policy. The E&S Framework is available at commbank.com.au/policies.
2 See the Glossary on page 68 for our definition of a '1.5°C temperature ambition'.
3 Australian Energy Market Operator (AEMO) 2022 Integrated System Plan. Not a CBA forecast.
4 Department of Industry, Science, Energy and Resources – Australian Energy Statistics 2022.
5 Annual attributed emissions divided by annual attributed generation.
6 Baseline (June 2020) and June 2021 power generation emissions intensity has been included in the scope of PwC's limited assurance engagement.
7 IEA World Energy Outlook 2021.

Portfolio and progress [1]

To track our progress in supporting the decarbonisation of electricity generation, we monitor the emissions intensity of our power generation portfolio. The portfolio is diversified by technology and geography, with 61% of our lending exposure outside of Australia, and 82% in renewables as at 30 June 2021. Our 2020 baseline of 222 $kgCO_2/MWh$ was well below the global average.

This year, we have set an interim 2030 target: 105 $kgCO_2/MWh$, a reduction of 53% compared to our 2020 baseline. This target is 33% lower than the equivalent 2030 figure in the global IEA NZE transition pathway. Our E&S Framework and Policy includes commitments related to coal-fired power plants and coal-fired power generation. Delivering on these commitments will support us in attaining our 2030 sector-level target of 105 $kgCO_2/MWh$.

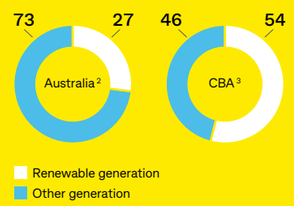
In line with our NZBA commitment, we include in the scope of our power generation sector-level target customers that generate more than 5% of their revenue directly from coal-fired electricity generation. We have conducted reviews that aim to identify such customers that may not be automatically captured in the sector.

Our strategy is to continue to grow lending to renewable generation and storage, while supporting Australian and New Zealand gentailers in their decarbonisation journeys.

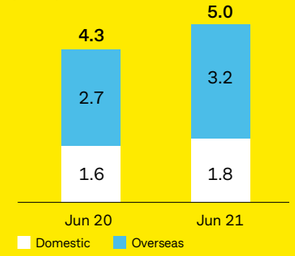
As at 30 June 2021, the emissions intensity of our power generation portfolio was 187 $kgCO_2/MWh$, 60% below the selected transition pathway.

While we reduced the emissions intensity of our portfolio over this period, the electricity generation we financed increased. Growing renewable generation capacity is critical to supporting Australia's low carbon grid transition. Between June 2020 and June 2021, we increased our attributed generation by 16%, from 4,306 MWh to 4,993 MWh.

Electricity generation
(MWh) %



Attributed generation [4]
(GWh)



Power generation emissions intensity progress

Between 30 June 2020 and 30 June 2021, we have reduced the emissions intensity of our power generation portfolio by 16% or 35 $kgCO_2/MWh$ driven by:

Portfolio changes ▼ 48 $kgCO_2/MWh$

Due to increasing our drawn lending exposure to the renewables sector by 21% (or $0.5 billion) and decreasing our drawn lending exposure to emissions-intensive customers.

Customers' climate performance ▼ 3 $kgCO_2/MWh$

Reflecting the net impact from changes to our customers' emissions and generation. During the period, changes in customer emissions and generation reduced our emissions intensity by 3 $kgCO_2/MWh$. Over time, we expect to see our Australian gentailer customers reduce their emissions.

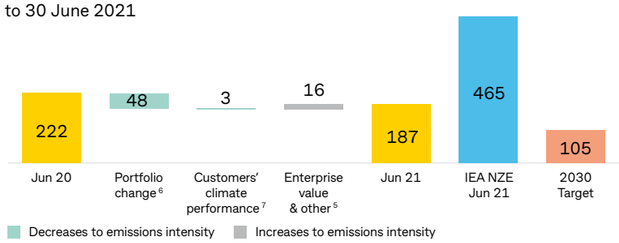
Enterprise value and other [5] ▲ 16 $kgCO_2/MWh$

Our financed emissions methodology attributes our customers' emissions and generation based on the proportion of our drawn lending to our customers' enterprise value, in line with the PCAF Standard. Therefore, changes in enterprise value affect our attributed financed emissions and generation. Between 30 June 2020 and 30 June 2021, we saw a reduction in the enterprise value of certain emissions-intensive customers, leading to a greater attribution of their emissions and generation. We also saw an increase in the enterprise value of certain renewable customers, resulting in a lower attribution of their generation.

Potential volatility may exist within our power generation glidepath. Drawdowns of unused credit limits could change our share of emissions and generation.

Power generation emissions intensity ($kgCO_2/MWh$)

Underlying drivers of our progress 30 June 2020 to 30 June 2021



1 Due to lags in emissions and generation data, the glidepaths reflect our progress as at 30 June 2021 with our baseline being 30 June 2020.
2 Department of Industry, Science, Energy and Resources – Australian Energy Statistics 2022.
3 Calculated as CBA's attributed generation from renewable customers as a percentage of total CBA attributed generation.
4 Attributed generation refers to CBA allocation of customers' total generation, calculated through an attribution factor consistent with PCAF methodology.
5 Impact of the change of customers' enterprise value in CBA's attributed emissions. Includes FX.
6 Movements in drawn lending exposure can affect the factor used to attribute a proportion of the customer's emissions and generation to CBA.
7 Includes the attribution of changes in individual company's emissions and generation to CBA.

Thermal coal mining, upstream oil extraction and upstream gas extraction

The three remaining priority sectors are thermal coal mining, upstream oil extraction and upstream gas extraction. Our E&S Framework and Policy[1] sets out our commitments related to finance in these sectors.

Thermal coal mining

Sector overview and outlook

Thermal coal is one of Australia's largest export industries and remains a significant employer in Australia. Australia currently exports 192 million tonnes of thermal coal, with this number expected to increase over the next 10 years[2].

Portfolio and progress[3]

As at 30 June 2021, our thermal coal drawn lending exposure was $111 million, a reduction of $27 million from the prior year. This reduction has also driven a reduction in the absolute emissions of our thermal coal mining portfolio from our 2020 baseline of 1.2 $MtCO_2$ to 0.9 $MtCO_2$.

This year, we have set a 2030 interim target for thermal coal mining, to reduce our financed emissions in thermal coal mining by 100% from our 2020 baseline. In line with our NZBA commitment, we include all customers with more than 5% of their revenues coming directly from the sale of thermal coal in this target.

Upstream oil extraction and upstream gas extraction

Sector overview and outlook

Australia is a relatively minor participant in global oil markets with 0.3% of the world's oil reserves and accounts for 0.5% of global oil production[4].

Gas is expected to continue to play a role in electricity generation particularly during periods of low variable renewable generation or prolonged coal-fired generation outages.

In 2021 Australia exported 81 million tonnes of Liquefied Natural Gas (LNG), making it the leading supplier globally. LNG is Australia's second largest commodities export earner ($70 billion in 2021–2022) after iron ore ($133 billion).[4]

Portfolio and progress[3]

CBA's lending exposures to upstream oil extraction and upstream gas extraction represent less than 1.0% of the Bank's balance sheet. The Bank's offshore upstream oil extraction and upstream gas extraction portfolio accounts for 57% of the total portfolio. When a customer has emissions associated with upstream oil extraction and upstream gas extraction, we attribute their emissions for both activities using total drawn lending exposure to the customer. Between 30 June 2020 and 30 June 2021, we reduced our drawn lending exposure to upstream oil extraction and upstream gas extraction by 38%, from $2.9 billion to $1.8 billion.

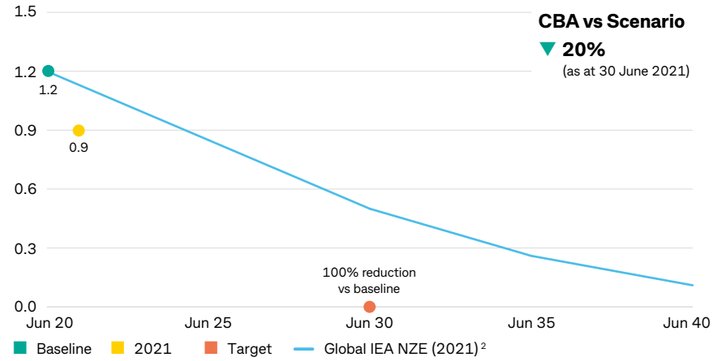
This year, we have set 2030 interim targets for these sectors. In upstream oil extraction, our target is a 27% reduction from our 2020 baseline. In upstream gas extraction, our target is a 17% reduction from our 2020 baseline. These targets align with the global IEA NZE transition pathways for these sectors.

Our 2020 baseline for upstream oil extraction was 2.6 $MtCO_2$. As at 30 June 2021, the absolute emissions of our upstream oil extraction portfolio was 1.7 $MtCO_2$, 34% below the global IEA NZE transition pathway. Our 2020 baseline for upstream gas extraction was 3.3 $MtCO_2$. As at 30 June 2021, the absolute emissions of our upstream gas extraction portfolio was 2.3 $MtCO_2$, 31% below the global IEA NZE transition pathway.

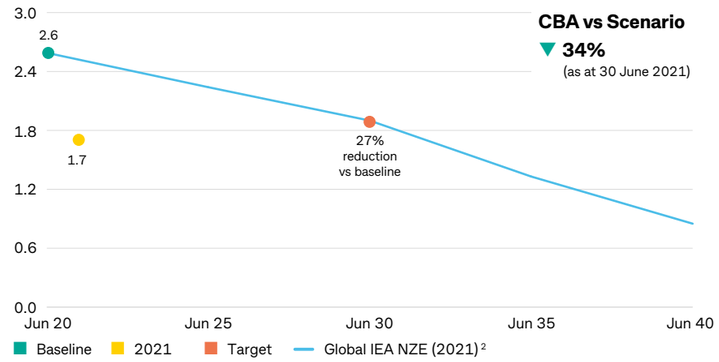
Our progress against our 2030 targets has been supported by a significant reduction in our lending to upstream oil extraction and upstream gas extraction between 30 June 2020 and 30 June 2021.

1 Our commitments are outlined in our E&S Framework and Policy. The E&S Framework is available at commbank.com.au/policies.
2 Department of Industry, Science, Energy and Resources, 2022: Resources and Energy Quarterly March 2022.
3 Due to lags in emissions and generation data, the glidepaths reflect our progress as at 30 June 2021 with our baseline being 30 June 2020.
4 Department of Industry, Science, Energy and Resources, 2022: Resources and Energy Quarterly June 2022.

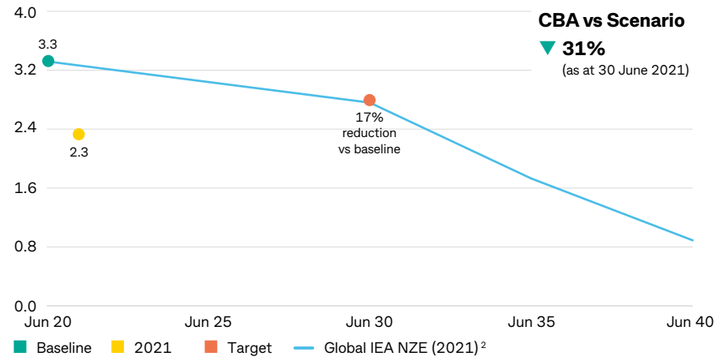
Thermal coal mining absolute emissions ($MtCO_2$ per annum)[1]



Upstream oil extraction absolute emissions ($MtCO_2$ per annum)[1]



Upstream gas extraction absolute emissions ($MtCO_2$ per annum)[1]



1 Baseline (June 2020) and June 2021 thermal coal mining, upstream oil extraction and upstream gas extraction absolute emissions have been included in the scope of PwC's limited assurance engagement.
2 IEA World Energy Outlook 2021.

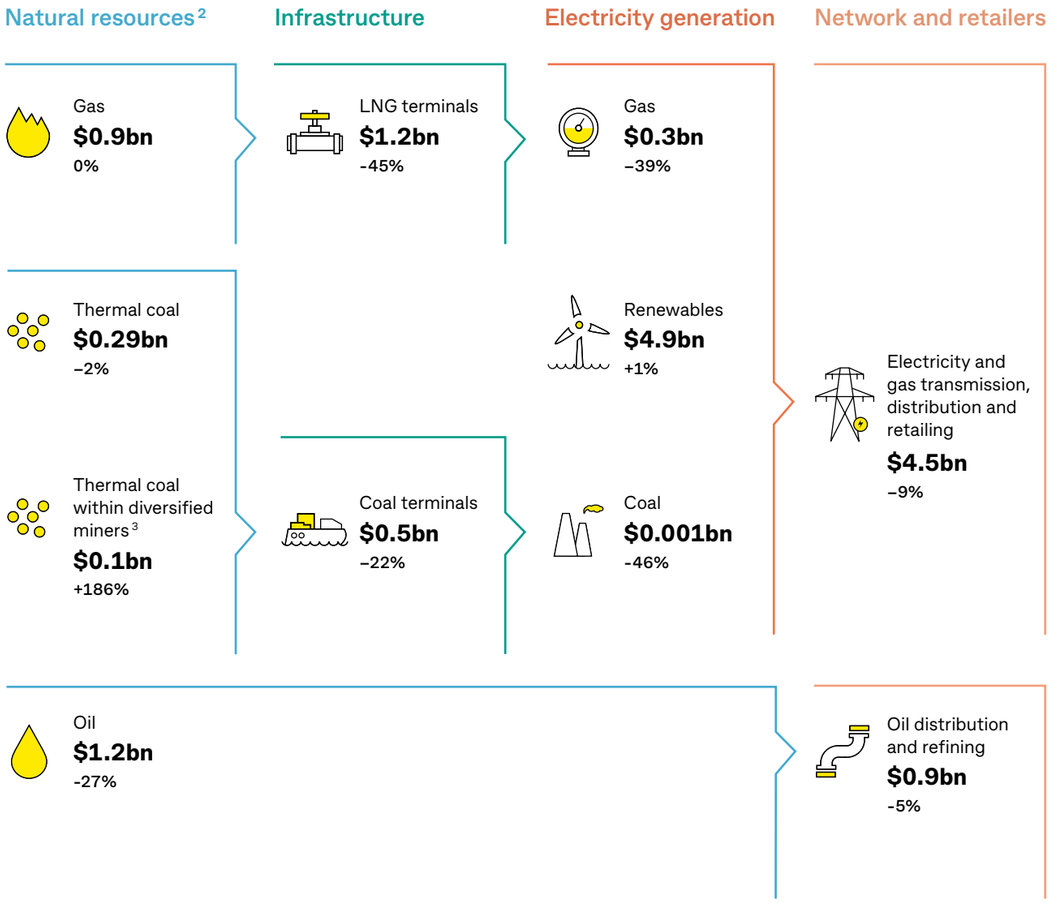
Energy Value Chain

The Energy Value Chain describes our exposure to energy-related assets. This includes all exposures under our total committed exposures. Our total committed exposure to all non-renewable energy assets has reduced this year while our exposure to renewables has increased by 1% to $4.9 billion.

Going forward, we will continue to align our financed emissions methodology and reporting with PCAF as data and methodologies evolve. As a result, the disclosure below will be superseded.

Energy Value Chain exposures as at 30 June 2022[1]

Key: +/- change since FY21



For the definition, refer to the Glossary on page 68.

1 All figures are Total Committed Exposures (TCE) excluding Commitment at Offer and trading securities exposures as at 30 June 2022. Figures represented have been specifically derived based on material client exposures, and have not been netted off against any insurance or guarantees that mitigate the Group's risk exposure to clients. Not included are 'Other energy-related' exposures $0.2 billion which comprise smaller loans and exposure to energy trading entities.

2 Exposures to metallurgical coal mining $0.01 billion, and metallurgical coal mining within diversified miners $0.02 billion not included.

3 Due to high coal prices in 2022, the percentage EBITDA contribution of thermal coal to diversified mining clients has increased. This has led to a large increase in the exposure attributed to this category. Thermal coal exposure within each diversified miner is calculated as the Group's exposure to the miner, excluding exposure to thermal coal subsidiaries, multiplied by the percentage EBITDA contribution of thermal coal in its latest annual financial statements. Excluded from the exposures are exposures to thermal coal subsidiaries of diversified miners, i.e. subsidiaries whose business activities are predominantly related to thermal coal mining. These are allocated to thermal coal.

Contribution to Sustainability Funding Target by asset class

In the last two years, we have provided $30.6 billion in cumulative sustainability funding to our customers.

This year, ASB also endorsed a cumulative Sustainability Funding Target of NZ$6.5 billion by 2030 from a 2022 base year. ASB's target will be tracked separately to the $70 billion Sustainability Funding Target.

Asset class ($bn)	30 June 2020 balance of lending	New and incremental financing since 1 July 2020
Green residential buildings	24.1	19.5
Sustainability-linked loans	0.7	4.8
Low carbon commercial buildings	4.5	3.2
Renewable energy	2.9	2.5
Social assets	0.2	0.4
Low carbon transport	1.0	0.2
Pollution/waste management	0.1	0.0
Energy efficiency	0.0	0.0
	33.5	**30.6**

For more information on the definition and calculation of each asset category see pages 71–74.

Reducing our operational emissions [1]

Scope 1 and 2 operational emissions, 2022 progress and initiatives we have undertaken

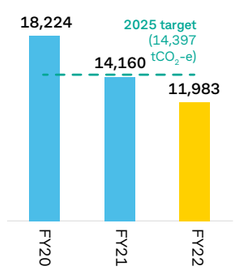
Program overview	Decarbonisation of operations
Our target	**Scope 1 and 2 operational emissions** FY20 baseline: 18,224 tCO_2-e Reduction by 21% by 2025 (FY20) Reduction by 42% by 2030 (FY20)
Our governance	The Board is responsible for overseeing progress against our operational emissions targets. For CBA, progress against our targets is tracked periodically through the E&S Action Group. The ASB Board is responsible for overseeing ASB's operational emissions, with execution overseen by the ASB E&S Committee.
Key sustainability challenges	Our long-term approach, informed by best practice, in terms of our carbon neutral roadmap, delivered a 90% reduction in Scope 1 and 2 operational emissions from 2014 through to 2022. This was achieved by sustained delivery on energy efficiency across our property portfolio and the purchase of 100% renewable electricity in Australia from 2020. The result of these efforts means our 2020 target baseline is very low, as it includes zero emissions from purchased electricity in Australia. The residual Scope 1 and 2 operational emissions are harder to abate – including motor vehicle use and gas, diesel and refrigerants used to operate or provide back-up power for our buildings and data centres.
Our approach	While we continue to focus on the energy efficiency of our buildings, in 2022 we commenced planning the transition of our fleet to electric vehicles.
Our progress	In 2022, we reduced our Scope 1 and 2 operational emissions by 34% against our 2025 target of 21% by: • Investing in smart technologies and practices, to increase monitoring capabilities. • Refrigerant reduction from water-based cooling systems deployed at Norwest Data Centre. • Branches built to a 5 Green Star certified design and maintaining a minimum 5 Star Green Star and 4.8 average NABERS Energy – Office Tenancies rating across commercial buildings. • We have transitioned 24% of CBA's fleet to hybrid vehicles with a further 9% on order. • Producing on-site solar energy of 2,176MWh, equivalent of 2.3% of our Australian load. • ASB has partnered with electric car share provider Zilch, and completed the transition of its Auckland pool fleet to electric vehicles. • ASB has implemented energy monitoring across its property portfolio and reduced electricity usage by 50% since 2008. • Currently, more than 80% of New Zealand's electricity is generated from renewable sources. ASB has purchased renewable energy certificates to offset the residual grid emissions used, in line with the RE100 certification process.
Future actions	• Continue transitioning the CBA fleet to hybrid vehicles and moving to electric vehicles over time. • ASB will roll out electric vehicles across its 'tool of trade' fleet, with hybrid vehicles in locations where electronic vehicle infrastructure is not yet available.
Policy [2]	Our commitments are outlined in our E&S Framework and Policy.
Frameworks and certifications [3]	• National Greenhouse Emissions Reporting (NGER) • Corporate Emissions Reduction Transparency Report (Pilot) • Climate Active (Australia and other overseas) • Toitū Envirocare carbonzero (New Zealand) • RE100 initiative • ISO 14001 2015 Environmental Management System and ISO 50001 2018 Energy Management System; ISO 9001 2015 Quality Management System; ISO 14064-1 2018 Greenhouse Gases (New Zealand).
Sustainable Development Goals	

1 Our operational emissions commentary, targets and figures are for the Commonwealth Bank of Australia Group, including ASB Bank Limited and other overseas operations.
2 The E&S Framework is available at commbank.com.au/policies.
3 Certifications occur after the Bank's reporting period and therefore we report our certifications one year in arrears (i.e. In 2022, we will report our 2021 achievement).

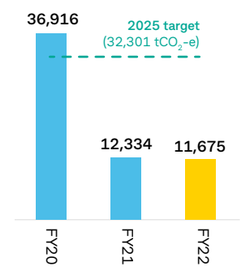
Upstream Scope 3 operational emissions, 2022 progress and initiatives we have undertaken

Program overview	Decarbonisation of our operations
Our target	**Upstream Scope 3 operational emissions** FY20 baseline: 36,916 tCO_2-e Reduction by 12.5% by 2025 (FY20) Reduction by 25% by 2030 (FY20)
Our governance	The Board is responsible for overseeing progress against our operational emissions targets. For CBA, progress against our targets is tracked periodically through the E&S Action Group. The ASB Board is responsible for overseeing ASB's operational emissions, with execution overseen by the ASB E&S Committee.
Key sustainability challenges	Given our significant reductions in Scope 1 and 2 operational emissions, the majority of our total operational emissions baseline comes from Scope 3 sources. However, the ongoing impact of COVID-19 on business travel has significantly reduced our Scope 3 operational emissions since setting the target. Our challenge will be to minimise the emissions rebound as travel opens back up.
Our approach	Our approach has been to focus on business travel, couriers and waste that represent 97% of our upstream Scope 3 operational emissions baseline.
Our progress	In 2022, our Scope 3 operational emissions reduced by 68% against our 2025 target of 12.5%. Operational emissions have reduced due to the impact of COVID-19 on business operations. This is expected to normalise over the term of the target. Other reductions and initiatives have been: • Implementing a global travel management platform to centrally manage our travel emissions. • Implementing changes to our courier supplier, optimising operations and improving data availability. • Continued to improve the waste management processes and diversion rates across our commercial buildings. • More efficient base building operations due to green office spaces, and leasing of newer and greener buildings.
Future actions	• Leverage our improved data availability to track and manage emission increases as the impacts of COVID-19 subside. • Expand our assessment of Scope 3 operational emissions and update our upstream Scope 3 operational emissions target to align with limiting global warming to 1.5°C. • Investigate opportunities to reduce the impact of air travel via Sustainable Aircraft Fuel (SAF). • Expand our supplier engagement across the supplier lifecycle and work with our key suppliers to drive reductions.
Policy [1]	Our commitments are outlined in our E&S Framework and Policy and our Supplier Lifecycle Policy.
Frameworks and certifications [2]	Corporate Emissions Reduction Transparency Report (Pilot) Climate Active (Australia and other overseas) Toitū Envirocare carbonzero (New Zealand)
Sustainable Development Goals	

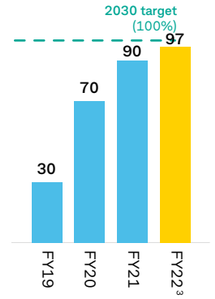
Scope 1 and 2 operational emissions
Performance against target (tCO_2-e)



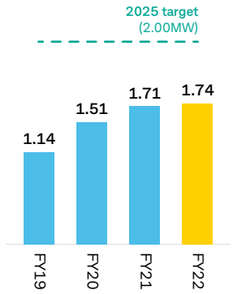
Upstream Scope 3 operational emissions
Performance against target (tCO_2-e)



Renewable energy share of purchased electricity
Group RE100 progress (%)



On-site renewable energy
Solar PV cumulative install capacity (MW)



1 The E&S Framework is available at commbank.com.au/policies.
2 Certifications occur after the Bank's reporting period and therefore we report our certifications one year in arrears (i.e. In 2022, we will report our 2021 achievement).
3 Excludes ASB base building electricity.

Appendix

This section describes the calculations, methodologies, assumptions and key references used in the preparation of this report.

PwC has provided limited assurance in respect of our sector targets (thermal coal mining, upstream oil extraction, upstream gas extraction and power generation) and the Sustainability Funding Target. A copy of PwC's limited assurance statement is available at the end of this report on pages 77–79.

Methodology

Our methodology for financed emissions

We have updated our approach to align with the PCAF Standard, where applicable. We aim to balance comparability with our historic approach and best practice as data availability improves and methodologies are updated.

Our financed emissions methodological choices

Methodology choice	CBA's choice to align to PCAF
Financial products and services	Business (including project finance and commercial property) and home lending. We chose these as they have strong links to the real economy.
Financed emissions attribution – numerator	Drawn amount.
Financed emissions attribution – denominator	Public companies: Enterprise Value including Cash (EVIC).[1] Private companies: equity and debt.
Emissions measurement	Align with PCAF data hierarchy. Prioritise the use of customer-level emissions data in line with the PCAF data hierarchy.

The scope of our financed emissions calculations

The PCAF methodology prescribes specific asset classes for financial institutions to cover, as relevant, in their financed emissions calculations. We continue to calculate the financed emissions of our business lending[2] portfolio (including project finance and commercial property). This year we also estimated the financed emissions of our Australian home lending portfolio. In general, we calculate our financed emissions using estimates of customers' Scope 1 and Scope 2 emissions. The PCAF Standard requires that Scope 3 emissions be included for customers in oil and gas and mining, and provides a set of NACE codes[3], for business activities to be included. The set of business activities included in the PCAF Standard goes beyond oil and gas extraction and mining. Due to data availability and methodological choices, we do not include customers' Scope 3 emissions outside of upstream oil extraction, upstream gas extraction, and thermal coal mining. Further, we have not calculated financed emissions associated with our commercial property portfolio in line with the PCAF Standard. To understand our financed emissions in this sector, we have used a top-down calculation described on page 55. This is due to limitations in availability of data required to generate this estimate in line with the PCAF methodology. We are working to address these limitations.

Choosing our attribution approach

In line with the PCAF methodology, we attribute a portion of a customer's emissions to the Bank to calculate our financed emissions. For business lending (including project finance), this is determined by the ratio between our outstanding, or drawn lending amount to the customer, and the customer's enterprise value. To calculate enterprise value we use EVIC[1] for public companies, and we use equity plus long and short-term debt for privately held companies. For the Australian home lending portfolio, the attribution is calculated based on the outstanding loan amount divided by the property value at origination.

Choosing our baseline

The current 'baseline' for our financed emissions is 30 June 2020 (FY20). We note that the choice of FY20 as a baseline carries the limitation that it could be not be the best representation of a typical year due to reduced economic activity from COVID-19. Despite this, we felt it most appropriate to use a baseline year closest to the year our priority sector targets were set. We may update our baseline, for example due to changes in calculation methodologies and improvements in data accuracy. Any update to baselines will be accompanied by an explanation for the change.

1 Enterprise Value including Cash is defined by PCAF as the sum of the market capitalisation of ordinary shares at fiscal year-end, the market capitalisation of preferred shares at fiscal year-end, and the book values of total debt and minorities' interests. No deductions of cash or cash equivalents are made to avoid the possibility of negative enterprise values.

2 Business lending refers to non-retail lending exposures excluding financed and insurance and government administration and defence. Business lending exposure excludes commitments at offer, guarantees, derivatives, leases and trading securities.

3 As defined in the PCAF Standard, NACE is the abbreviation for the Statistical Classification of Economic Activities in the European Community. ANZSIC codes are the equivalent in Australia.

Methodology (continued)

Limitations regarding diversified companies

We generally allocate each customer to a specific sector for the purposes of estimating our financed emissions. Where emissions intensity multipliers are used, we calculate the emissions for that customer based on the sector to which they have been allocated. Accordingly, if a customer is diversified across business activities, the estimate of their emissions may be under-or over-stated. Where reported customer-level data is used, allocating customers to a specific sector could lead to an under- or over-statement of financed emissions at the sector-level. Where customers have diversified business activities across multiple glidepath sectors best efforts are made to isolate the relevant sectoral component of their emissions. Subject to data availability, the relevant sectoral component of their emissions is calculated using customer reported emissions or with reference to their production in that glidepath sector.

Our emissions measurement approach

The emissions we use for a particular customer are dependent on the nature of their business activities, the value chain emissions boundary and data availability. Given the complexity and variation in these factors, we apply a range of approaches to measure our customers' emissions.

For most sectors, we focus on customers' Scope 1 and Scope 2 emissions. PCAF stipulates a subset of sectors where customers' Scope 3 emissions are to be included as of 2021[1]. In line with that requirement we have included customer Scope 3 emissions in our upstream oil extraction, upstream gas extraction, and thermal coal mining estimates for both 2020 and 2021. However, due to data availability and methodological choices, we have not addressed all of the ANZSIC codes that are equivalent to the NACE codes listed by PCAF.

For the business lending portfolio (including project finance) excluding commercial property and glidepath sectors, we follow the PCAF data hierarchy. This approach enables the assignment of a PCAF data quality score from one to five (highest to lowest) which accounts for the varying levels of estimations and uncertainty in a customer's emissions.

1. Use customers' reported emissions data[2] (PCAF score of 1, or 2 if unconfirmed verified); then
2. Use customers' reported production data and multiply this by an appropriate physical intensity emissions factor[3] (PCAF score of 3); then
3. Use customers' financial data (revenue) and multiply this by an appropriate, sector-level economic intensity emissions factor[4] e.g. CO_2-e per dollar of revenue (PCAF score of 4); then
4. Use an appropriate, sector-level proxy[5] to estimate revenue and multiply this by an appropriate, sector-level economic intensity emissions factor[4] (PCAF score of 5).

Where we have reported emissions, but have not confirmed the emissions were verified by a third party auditor, we assign a PCAF data quality score of '2'. At this stage, this includes emissions sourced from regulatory databases such as NGERS. In general, we aim to measure emissions using customer reported emissions or production data and minimise reliance on economic or other estimate techniques. For our glidepaths, we apply approach 1 and 2 above, however for a small number of glidepath sector customers, neither emissions nor production data is available. In these instances, we adopt an economic intensity approach, using an intensity factor calculated based on other customers reported emissions data and drawn lending exposure. We multiply this factor by drawn lending exposure to calculate emissions. We aim to improve our financed emissions data quality, including through direct engagement with our customers and through our refined glidepath customer approach.

See the *financed emissions* table on pages 42–43 for the score for each sector.

1 From 2021, PCAF requires inclusion of Scope 3 emission for energy (oil and gas) and mining sectors (i.e. NACE L2: 05-09, 19, 20).
2 Based on emissions data sourced from the Australian National Greenhouse and Energy Reporting Scheme, publicly available reports and other company disclosures and known performance measures.
3 Physical intensity factors applied vary based on sector and region. See page 55 for the physical intensity factors used for Agriculture. See page 57 for information on the physical intensity factors used for glidepath sectors (upstream oil extraction, upstream gas extraction, power generation and thermal coal mining). Where physical intensity factors have been used in other sectors, they were sourced from the PCAF database.
4 Economic intensity factors are based on the PCAF emissions factor database or appropriate factors derived from public or internal data.
5 Based on data from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) for the Agriculture sector and from IBISWorld for other business lending sectors.

Estimating emissions for the Australian home lending portfolio

According to the Australian Government, buildings account for around 19% of total energy use and 18% of direct carbon emissions in Australia. Understanding the emissions intensity and footprint of our Australian home loan portfolio is a challenging goal given the lack of primary emissions data at a household-level.

This year, our approach to estimate absolute emissions and emissions intensity for the Australian home lending portfolio used state benchmarks based on the typical consumption of electricity and gas per home to estimate the emissions of the portfolio. This corresponds to a PCAF data score of 4. The approach relies on the following steps:

1. Gather location-specific average energy consumption benchmarks[1], stratified by climate zone and household size (using number of bedrooms as a proxy).
2. Calculate the estimated energy consumption for each household by assigning the relevant benchmark.
3. Calculate an estimate of absolute emissions for each household by multiplying the energy consumption by a relevant emissions factor[2].
4. Attribute our share of the household emissions by multiplying the household emissions by the LVR, or the outstanding loan value divided by the value of the security at origination.
5. Attribute our share of the household floor area by multiplying the household emissions by the LVR.
6. Calculate emissions intensity by dividing the total attributed emissions by the total attributed floor area.

We aim to refine our estimation of household emissions. The Bank is applying its modelling capabilities, combined with imagery and analytical techniques. We have experimented with estimating household emissions using known building characteristics and transaction-level data. Benchmarking indicates our household-level measurement comes within 10% of other industry approaches.

As we move to set a sector-level target we also need to overcome the limited availability of Australia-specific transition pathways for the buildings sector that are consistent with our selected global transition pathways. As part of our partnership with CSIRO, an emissions transition pathway for the Australian housing sector is being developed, consistent with the IEA NZE. This scenario will inform the development of an Australian home lending glidepath and the basis for future sector-level targets.

Estimating emissions for the agriculture sector

We follow the PCAF Standard and PCAF data hierarchy, as described in 'Our emissions measurement approach', in calculating financed emissions in the Agriculture sector.

This year, we strengthened our approach by using customer-level production and financial data for livestock (including beef cattle, dairy cattle and sheep) and crops, where available. This production data was combined with appropriate physical emissions intensity factors sourced from PCAF, or derived from official government statistics[3], to attribute emissions.

Agricultural data is complex. Through the construction of the required production data, leveraging annual livestock return data provided by customers, we have had to make some assumptions and apply our business knowledge. We expect to refine and expand the Agricultural production data we use over the coming years as we develop glidepaths for this sector.

Estimating emissions for Australian commercial property

We did not calculate the financed emissions of our commercial property portfolio in line with the PCAF Standard. To estimate the approximate scale of financed emissions associated with our Australian commercial property portfolio, we used a 'top-down' approach that approximates the PCAF Standard for commercial real estate using sector-level, rather than customer-level, data. First, we sourced an external estimate of total 2020 emissions (Scope 1 and Scope 2) of Australian commercial properties. We then calculated our attributed emissions by dividing our total drawn commercial property exposures by an estimate of total value at origination of Australian commercial properties. This approximates the PCAF attribution calculation for commercial real estate. We arrived at an estimate of total value at origination of Australian commercial properties by dividing total Australian commercial property actual exposures by an estimate of the average LVR of Australian commercial properties. We sourced the Australian commercial property actual exposures from APRA disclosures and relied on internal data to estimate the average LVR of Australian commercial properties. This approach is highly assumption-driven and uncertain, and our estimate is subject to change.

1 Based on the Australian Energy Regulator's electricity and gas benchmark dataset 2020.
2 Based on the Australian National Greenhouse Accounts, October 2020 and Department of Industry, Science, Energy and Resources: Australia's emissions projections 2021.
3 Sources included Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES; the Department of Industry, Science, Energy and Resources; Stats NZ; and the New Zealand Ministry for the Environment.

Methodology (continued)

Sector target methodology

Our glidepath approach provides sector-level metrics to measure and track the alignment of our financed emissions with limiting global warming to 1.5°C. We use our glidepaths to set sector-level targets.

In line with the UNEP FI Target-Setting Guidelines, for sectors covered by glidepaths we strive to measure customer emissions across a defined component of the sector scope that captures the most material emissions within the value chain, and set reduction targets that are consistent with limiting global warming to 1.5°C, based on the latest science.

In order to achieve this there are a series of additional methodological considerations for our glidepath sectors. The table below summarises the key methodological choices made during the development of our priority sector glidepaths: power generation; upstream oil extraction and upstream gas extraction; and thermal coal mining.

Financed emissions methodology					Target setting methodology	
Measurement methodology [1]	Financed emission attribution [2]	Client-level data coverage % [3]	GHG's included [4]	Sector scope	Reporting metric	Scenario
Thermal coal mining						
Business loans	Drawn Amount/EV	>99%	CO_2 (or CO_2-e, subject to data limitations)	Upstream scope 1, 2 and 3 [5] emissions	Absolute emissions ($MtCO_2$)	IEA NZE (2021)
Upstream oil extraction and upstream gas extraction						
Business loans	Drawn Amount/EV	>99%	CO_2 (or CO_2-e, subject to data limitations)	Upstream scope 1, 2 and 3 [5] emissions	Absolute emissions ($MtCO_2$)	IEA NZE (2021)
Power generation						
Business loans	Drawn Amount/EV	>99%	CO_2 (or CO_2-e, subject to data limitations)	Scope 1 only	Emissions intensity ($kgCO_2/MWh$)	IEA NZE (2021)

Defining the sector scope

For each sector this involves setting boundaries to define the emissions a customer is responsible for and collecting the required data to measure the emissions. The above table identifies the relevant scope for priority sector glidepaths. We use ANZSIC codes as well as business knowledge to assign our customers to the most appropriate part of the value chain.

Selecting our target metrics

In line with our NZBA commitments, we set targets using absolute emissions or physical intensity. However, we may choose to use other metrics (e.g. absolute financing) where relevant. We have found:

- Absolute emissions targets are most appropriate in sectors, where science indicates the output has to be reduced substantially and, in some cases, completely by 2050 to limit global warming to 1.5°C.
- Emissions intensity targets are appropriate when the output in question may in fact grow, but at a decreasing emissions intensity – such as power generation.

1 As defined in PCAF methodology.
2 Enterprise Value (EV) is calculated per the following. For private companies, this is the sum of total equity and debt found in a client's balance sheet. For listed companies, this is the companies enterprise value including cash (EVIC).
3 Proportion of 2021 exposures where financed emissions are based on reported emissions or production data.
4 Currently includes CO_2 only due to data and methodology limitations.
5 Includes Category 11 'Use of Sold Products' as per the GHG Protocol.

Selecting our reference scenarios

When selecting reference scenarios, three criteria are important to us:

1. Consistent with our temperature ambition of 1.5°C.
2. From credible, independent and reputable sources and are informed by science, with limited or no overshoot [1] and a conservative reliance on negative emissions technologies.
3. Providing geographical and sectoral relevance.

For each of our glidepaths we analyse various scenarios which are widely used by the industry. In May 2021, the IEA published Net Zero Emissions by 2050 scenario (NZE2050) which paved the way for the global economy to achieve net zero 20 years earlier than the previous Sustainable Development Scenario (SDS), also changing the ambition from well-below 2°C to 1.5°C. We have selected the IEA NZE, which is consistent with limiting global warming to 1.5°C, as our reference scenario for priority sectors. We will continue to monitor the latest climate science to ensure relevance of our selected reference scenarios and we expect to update them over time.

Our approach by sector

Thermal coal mining

For thermal coal mining the alignment metrics are absolute emissions. Our E&S Framework and Policy [2] details our commitments regarding thermal coal mining financing.

We include any clients with more than 5% of their revenues coming directly from the sale of thermal coal in our glidepath. The portfolio is measured using customers' Scope 1, 2 and 3 (Use of Sold Products) emissions, using customer-level emissions data, where available. Where customer-level emissions data is not available, the customer's reported production data is multiplied by a physical emissions intensity factor [3] to estimate Scope 1 and Scope 2 emissions. Scope 3 emissions are estimated by multiplying production by National Greenhouse Accounts energy content and emissions factors for bituminous coal.

Upstream oil extraction and upstream gas extraction

For upstream oil extraction [4] and upstream gas extraction [4] the alignment metric is absolute emissions. We have chosen to focus on the upstream segment as every unit of oil or gas combusted must first be extracted. The portfolio is measured using customers' Scope 1, 2 and 3 (Use of Sold Products) emissions. Where a customer reports emissions, we assign emissions to upstream oil extraction and upstream gas extraction using a 'pro-rata' share based on the customer's production of oil and gas, respectively, expressed in 'million barrels of oil equivalent'. Where customer-level emissions data is not available, the customer's reported production data is multiplied by a physical emissions intensity factor [3] to estimate Scope 1 and Scope 2 emissions. Scope 3 emissions are estimated by first converting production, in barrels of oil equivalent, to energy content using an energy content factor sourced from BP's statistical Review of World Energy and then multiplying the energy content by emissions factors from the National Greenhouse Accounts. For a small number of customers, neither emissions nor production data is available. In these instances, we adopt an economic intensity approach, using an intensity factor calculated based on other customers' reported emissions data and drawn lending exposure. We multiply this factor by drawn lending exposure to calculate emissions.

The selected reference scenario for the upstream oil extraction and upstream gas extraction sectors is the global IEA NZE (2021), which is consistent with limiting global warming to 1.5°C. A global scenario was deemed to be appropriate given that natural gas and oil are internationally traded commodities.

Power generation

For power generation [5] the alignment metric is $kgCO_2$ [6]/MWh. The portfolio is measured for customers' Scope 1 generation emissions, using customer-level emissions and generation data. Where customer-level emissions data is not available, emissions are estimated using the customer's reported generation and grid specific physical emissions intensity factors from the relevant regional body (e.g. National Greenhouse Accounts for Australia or equivalent source outside of Australia). Zero emissions are assumed for renewable customers unless customer reported emissions are available.

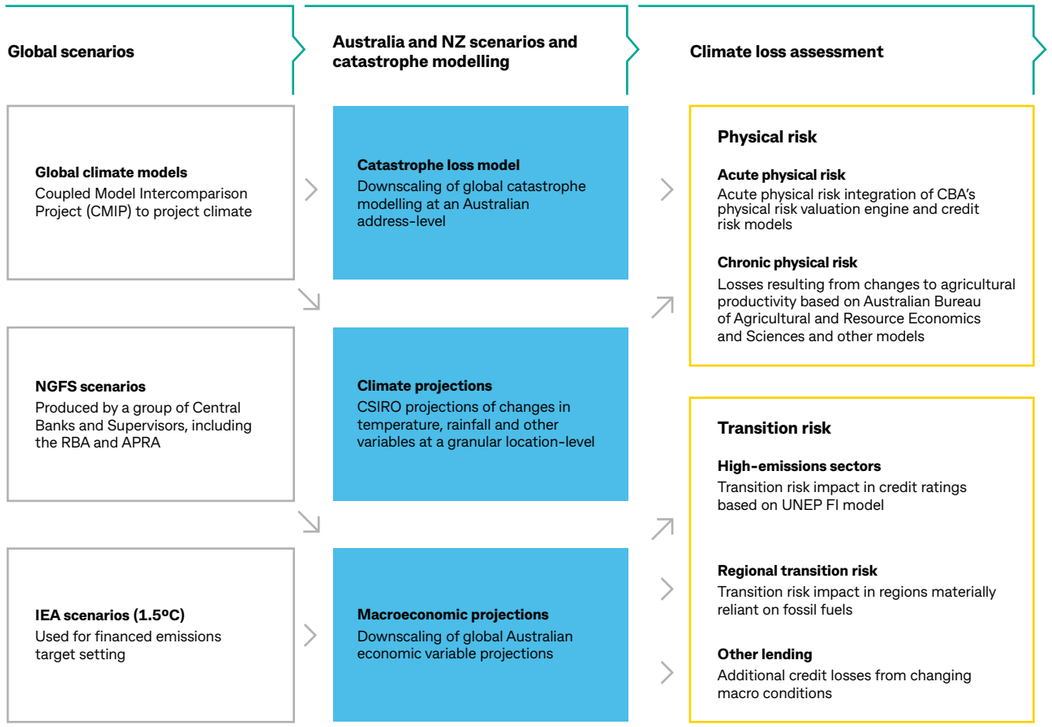
The glidepath clients are aggregated using the 'attributed generation-weighted' approach. This approach divides the total attributed emissions by total attributed generation. Unlike other approaches (such as the debt-weighted approach), this links the emissions intensity directly to real world impact, as it represents the actual emissions of every MWh generated in the real economy financed by CBA.

We track the portfolio emissions intensity against the IEA NZE, based on total electricity and heat sectors CO_2 emissions divided by total electricity generation. Our 2030 target of 105 $kgCO_2$ is 33% below the equivalent figure in the global IEA NZE transition pathway. We originally tracked towards this value based on the IEA's SDS for OECD nations, and chose to retain it as our 2030 target as it represents a lower emissions intensity than the IEA NZE transition pathway in 2030.

1 The IPCC defines 'No overshoot' 1.5°C pathway as: those that give at least 50% probability based on current knowledge of limiting global warming to below 1.5°C. The IPCC defines 'Limited overshoot' as 1.5°C pathways as: those that limit warming to below 1.6°C and return to 1.5°C by 2100. Source: IPCC, 2018: Annex I Glossary. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.*
2 Our commitments are outlined in our E&S Framework and Policy. The E&S Framework is available at commbank.com.au/policies.
3 Scope 1 and 2 physical emissions intensity factor is calculated based off the portfolio of customers where CBA has both emissions and production data.
4 Upstream oil extraction refers to entities whose principal operations include the exploration and development of oil fields for the purposes of extracting and producing crude oil. This does not include midstream or downstream. Upstream gas extraction refers to entities whose principal operations include exploration, ownership, development and management of gas fields, that are utilised for the purpose of natural gas production. This does not include midstream or downstream.
5 Customers that generate significant revenue from electricity generation. This includes customers with >5% revenue from thermal coal electricity generation. Customers with less than $1 million of exposures are generally excluded.
6 The pathways for the IEA NZE focus on CO_2 emissions. Where available, the emissions collected for our customers are CO_2. Where data limitations exist, we have used CO_2-e.

Our approach to climate scenario analysis

Our approach to conducting climate scenario analysis is outlined below. We begin with global scenarios, drawn from global climate models and global macroeconomic projections. These are 'downscaled' to Australia and New Zealand, translating the data to a more granular level. We source global scenarios from reputable parties such as the IEA, and have leveraged third-party capabilities for the downscaling exercise. For example, we relied on data used by the insurance industry to model the impact of natural perils in real estate. We then use multiple modelling techniques to estimate the impact of physical climate risk or transition climate risk on credit losses. This draws on internal expertise in climate and credit loss modelling.



Addressing uncertainty in climate modelling

There are a range of uncertainties when looking to model scenarios and their climate-related impacts. Understanding uncertainty within climate modelling allows us to focus on reducing it where possible, accepting where necessary, and interpreting and communicating results in an appropriate manner. We consider the risks of relying on uncertain information when making decisions based on climate scenario analysis.

We aim to take a pragmatic approach to address uncertainty. This starts with identifying key sources of uncertainty that are introduced at each stage of the modelling chain. Each source of uncertainty is classified into uncertainty that can be reduced and uncertainty that cannot be reduced. Examples of uncertainty that cannot be reduced include limitations in forecasting socio-economic pathways, and potential for inaccuracy in downscaled projections of extreme rainfall in specific locations. To address uncertainty that cannot be reduced, we intend to apply the precautionary principle and interpret results conservatively where there is high materiality. We also aim to avoid false precision in modelled outcomes, for example by rating physical risk across an entire portfolio rather than expecting single address results to be equally robust. With respect to uncertainty that can be reduced, we focus on improving data capture and storage, ranging from building construction codes of our portfolio to underinsurance projections and employment sector data.

Key sources of uncertainty and limitations

There are limitations and uncertainty associated with projections of future climate scenarios, given the limitations of current scientific understanding of the climate system and its cascading impact to the broader economy and society, and complexity of climate risk modelling.

The table below highlights a non-exhaustive list of some of the key sources of uncertainty and range of limitations.

Modelling step	Key sources of uncertainty and limitations
Global scenarios	• Global climate models are extremely complex and explore futures that are sometimes outside the range of historical data. These models could be inaccurate. • Extremes are not well captured in climate modelling as relationships are complex and unpredictable, and extremes often occur in very specific locations, while climate models usually model larger areas. Scaling peril rates for future climate conditions could therefore be inaccurate. • Economic variables are projected over a 30-year time horizon, with assumptions regarding factors such as policy and technology. These projections could be inaccurate. • The interaction of global climate and socio-economic variables, and the impact of new technological developments on structural economic relationships, are unknown. Modelled outcomes may not be realised.
Australia and New Zealand scenarios and catastrophe modelling	• The approach taken to 'downscale' physical climate data assumes certain relationships observed in past data will continue into the future, but they may not. For example, the downscaling approach takes the outputs of a climate model run backward into the past, compares those to the average observations for the period of comparison, and adjusts future projections by the same 'bias'. It is possible that the 'bias' could behave differently under future climate conditions. • Economic scenario data has been downscaled from global and aggregated regional variables to national variables. This approach may not accurately reflect Australia's specific conditions, including government policies, energy generation mix, geographic dispersion and general macroeconomic conditions. As such, the modelled scenarios could be inaccurate.
Climate loss assessment	**Physical risk** • As climate impacts become more prominent and severe, the relationship between physical catastrophes and asset prices could change in unexpected ways. • Historical observations on credit losses under catastrophes may not be consistent with losses under future scenarios, if, for example, insurance coverage was to change differently to our forecasts. • Relationships between climate and agricultural productivity are typically based on regressions and as such limited to the range of climate variables experienced in the baseline period. This may not be representative of future climate outcomes. • The effectiveness of actions that could mitigate the impact of climate change is uncertain. • Credit risk outcomes are calculated on aggregated statistics and subject to broad assumptions. This could under-predict the likelihood and/or impact of extreme outcomes. **Transition risk** • Modelling climate impacts to individual counterparties is significantly complex and subject to considerable variability and judgement. For example, business structure, generation mix, emissions-intensity, energy-intensity, product mix, technology mix, geographic dispersion, supply chains and physical location can all impact a business' or sector's exposure to climate change. • Climate transition risk can materialise in a variety of ways, including through direct exposure of carbon prices or indirect impacts from reduced demand. This creates significant difficulty in modelling and quantifying feedback impacts. • Due to limited available data, multiple data sources were used for transition risk analysis. As different sources model varied scenarios and assumptions, data employed may not be consistent to a single scenario. • Counterparties use different reporting methods and accounting treatments, limiting comparability of financial data.

ESG risk assessment tool

The Bank recognises the importance of incorporating E&S risks into our corporate lending decisions. We have developed an ESG risk assessment tool that helps our bankers:

- identify and assess the E&S risks the Bank is exposed to through our relationships with our customers;
- assess whether lending aligns to the commitments described in our E&S Framework and Policy; and
- understand how clients are managing E&S risks.

Project finance transactions follow the Equator Principles process requirements.

In 2022, ESG risk assessments were performed on institutional corporate lending and business customers with proposed corporate lending greater than $1 million. These assessments are performed in one of two ways:

- The Corporate and Institutional Pathway (business corporate lending greater than $30 million and institutional corporate lending).
- The Commercial Pathway (business corporate lending between $1 million and $30 million).

The ESG risk assessment tool is supported by a dataset of initial risk ratings across key focus areas, including climate and energy; climate physical risk; water; pollution; biodiversity; human rights; labour rights and modern slavery; workplace health and safety; and anti-corruption and governance. The ESG risk assessment tool is integrated into the Bank's corporate loan pricing system to embed it as part of the corporate lending decision process.

The Corporate and Institutional Pathway

The Corporate and Institutional Pathway has been used and progressively updated since 2015. Questions in the tool are designed to direct bankers' focus on relevant E&S commitments that potentially apply to that transaction. The ESG risk assessment tool then directs users to escalate assessments where there is uncertainty with the E&S Framework and Policy to their General Manager to determine if further escalation is required.

The ESG risk assessment tool steps the banker through a process of identifying key risks for the specific customer or transaction across the nine focus areas and describe the mitigants customers have in place to manage these risks.

The tool directs and records the approval process required by business and credit risk teams. The escalation pathway to senior management or governance forums is determined by the final escalation rating.

Process overview: Corporate and Institutional Pathway

Initial Rating
Initial rating derived based on the country and initial industry risk ratings.

Validation
Bankers identify the key ESG risks related to the transaction and customer's business.

Mitigation
Bankers record the strategies the customers have in place to mitagate key ESG risks, for example public targets or commitments.

Approval
Business and risk teams approve ESG assessments. The level of approval required is determined by the final ESG risk ratings.

Escalation
Additional escalation may be required if the ESG assessment is for customers in sensitive industries or requires additional review.

The Commercial Pathway

The Commercial Pathway was introduced in 2021 and has been designed to be simpler, more efficient and supportive of a higher volume of business customers at scale. In 2022, the Commercial Pathway is used to assess business corporate lending between $1 million and $30 million. Business customers who apply to borrow more than $30 million are assessed via the Corporate and Institutional Pathway.

Under this pathway, the ESG risk assessment tool includes questions to assess client alignment to the E&S Framework and Policy, and about topics assessed as being inherently high or very high risk to the customer based on their ANZSIC code. The questions are multiple choice based, noting that some questions require the banker to input additional context in the free text field. For example, a residential property developer may be asked questions relating to the potential impacts of their value chain or operations on biodiverse areas; whether they conduct any business in a country with higher prevalence of modern slavery; or whether their activities involve any interaction with, or impact on the lands, territories, resources, or sites of cultural heritage of indigenous peoples in Australia or in a country outside Australia with an indigenous population.

Upon completion of an assessment, the tool automatically identifies the appropriate approval based on the responses given. Approval levels are aligned to the identified level of risk and are the responsibility of the Executive Manager, General Manager and senior management or governance forums.

Process overview: Commercial Pathway

ANZSIC code assessment
Identification of high and very high ESG risk areas based on client industry.

Complete assessment questions
Bankers complete assessment questions for high and very high risk areas.

Assessment approval
Completed assessments are approved by the designated Line 1 approver.

Escalation
Additional escalation to leadership or senior governance may be required based on the assessment responses.

Group operational emissions

Environmental management systems and certifications

We measure and manage the direct environmental impacts of our activities under our operational control using an environmental management system. Envizi is used for Australia and other overseas operational emissions with data coverage equating to 97% of emissions. For New Zealand, ASB calculates operational emissions using the e-manage system by Toitū Envirocare.

Certifications

- ISO 9001:2015 – Quality Management System. Scope of certification: the management of delivery of major retail capital works.
- ISO 14001:2015 – Environmental Management System. Scope of certification: the provision of Property Operations and Facilities Management across the CBA Group, including Commercial, Retail, Data Centres, SST (ATMs) for CBA and Bankwest.
- ISO 50001:2018 – Energy Management System. Scope of certification: the provision of Facilities Management across the CBA Group including Commercial, Retail, Data Centres, SST (ATMs) for CBA and Bankwest.
- ISO 14064-1:2018 – Greenhouse gases (NZ) – specifies principles and requirements for the quantification and reporting of greenhouse gas.

Organisational boundaries, calculations and emissions factors

Organisational boundaries

Australia: Our emissions are based on an extended 'operational control' approach to establish our operational boundary and identify which emission sources need to be included. The operational control boundary covers the Bank's Australia-based operations, including Bankwest, and includes commercial and retail facilities as well as data centres. We have extended our boundary to include key relevant emission sources beyond our operational control, such as the provision of base building services in our commercial sites, business travel activities, employees working from home, paper and courier services used by the bank.

New Zealand: An operational control consolidation approach is used to account for emissions. Organisational boundaries are set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards.

Other overseas: All emissions are based on per FTE estimates of Australian operations.

Calculations and emissions factors

For Australia and other overseas, invoices or reports are received from the relevant data source and are loaded into Envizi. The platform then calculates the emissions using the relevant emissions factors. Emissions factors are reviewed and updated by Envizi for CBA, and are sourced from:

- Scope 1 – NGERS and the IPCC.
- Scope 2 – NGERS and IEA (for other overseas).
- Scope 3 – NGERS, Climate Active and Department for Environment, Food & Rural Affairs (DEFRA).

For New Zealand, invoices or reports are received from the relevant data source and are loaded into Toitū e-manage. The platform then calculates the emissions using the relevant emissions factors. Emissions factors for Scope 1, 2 and 3 are sourced from Ministry for Environment NZ, Measuring Emissions: A Guide for Organisations (2022) and BEIS (2022).

Scope 1 emissions

Scope 1 emissions are direct emissions from operations that are owned or controlled by the reporting company (e.g. for CBA, emissions from natural gas consumed in our retail, commercial or data centre properties).

Australia

Scope category	Description	Data sources	Units
Natural gas and diesel stationary	Emissions from the consumption of diesel and natural gas in retail, commercial and data centre properties in Australia under the Group's operational control.	Diesel usage reports Natural Gas Usage Invoices	L (Fuel) MJ (Gas)
Transport	Emissions from the consumption of diesel, ethanol E10 and petrol from our business use of our tool of trade vehicle fleet in Australia.	SG Fleets Monthly Report	L (Fuel)
Refrigerant	Emissions from installation, servicing and disposal of air conditioning units based on top up of refrigerants from contractors maintaining the equipment in retail, commercial and data centre properties in Australia under the Group's operational control.	HVAC contractors	kg (Refrigerant)

New Zealand

Scope category	Description	Data sources	Units
Natural gas and diesel stationary	Emissions from the consumption of natural gas and diesel across ASB retail, corporate and data centre properties in New Zealand under ASB's operational control.	Diesel usage reports Natural gas usage invoices	L (Fuel) kWh (Gas)
Transport	Emissions from the consumption of diesel and petrol from our business use of our tool of trade vehicle fleet in New Zealand.	SG Fleets monthly report	L (Fuel)
Refrigerant	Emissions from installation, servicing and disposal of air conditioning units based on top up of refrigerants from contractors maintaining the equipment in retail, commercial and data centre properties under ASB's operational control.	HVAC contractors	kg (Refrigerant)

Scope 2 emissions

Scope 2 emissions are indirect emissions from the generation of purchased energy consumed by a company (e.g. emissions from electricity CBA buys from the grid for use in our ATM, branches and commercial office buildings).

Australia

In Australia, we use a location-based and market-based reporting approach. Location-based methodology reflects the average emissions intensity of grids on which energy consumption occurs, while a market-based methodology reflects emissions from electricity that we have purposefully chosen.

Scope category	Description	Data sources	Units
Purchased electricity – property portfolio	Emissions from the electricity used by ATMs, retail, commercial and residential properties under the Group's operational control in Australia.	Invoice PDFs/EDIs from Electricity Retailer	kWh
Purchased electricity – data centres	Emissions from the electricity used by data centres under the Group's operational control in Australia.	Invoice PDFs/EDIs from Electricity Retailer	kWh

New Zealand

Scope category	Description	Data sources	Units
Electricity consumption	Emissions from the electricity used by onsite ATMs, retail, corporate and data centre properties in New Zealand under ASB's operational control.	Invoice PDFs/EDIs from Electricity Retailer	kWh

Upstream Scope 3 emissions

Upstream Scope 3 emissions are all other indirect emissions (not included in scope 2) that occur in the value chain of the reporting company (e.g. for CBA, emissions from business flights or employees working from home).

For information on CBA's financed emissions methodology, see page 53–55.

Australia

Scope category	Description	Data sources	Units
Purchased electricity – data centres	Indirect emissions from the electricity in the Group's Australian data centres not under the Group's operational control.	Invoice PDFs from Landlord/Retailer	kWh (Electricity)
Natural gas and diesel stationary	Indirect emissions associated with the use of diesel and natural gas in retail, commercial and data centre properties in Australia under the Group's operational control.	Diesel usage reports Natural Gas Usage Invoices	L (Fuel) MJ (Gas)
Transport	Indirect emissions from rental car and taxi use, business use of private vehicles, business flights, and indirect emissions from business use of our tool of trade vehicle fleet.	Monthly Flights Report CBA Operating Expense Management System Monthly Transactions Report	Flight Ticket Class/Airport Codes $ (Expenditure) L (Fuel)
Hotel accommodation	Indirect emissions from hotel accommodation used by employees and calculated based on the duration of stay and average hotel star rating on accommodation.	Monthly Hotels Report	Days/Nights Stay
Transmission and distribution losses	Indirect emissions associated with the electricity used by ATMs, retail, commercial, data centre and residential properties under the Group's operational and non-operational control in Australia.	Invoice PDFs/EDIs from Electricity Retailer	kWh (Electricity)
Office paper	Indirect emissions generated from the Group's use of office paper in the Group's commercial operations and retail branches under the Group's operational control in Australia.	Monthly Paper Transactions Report	GSM (paper weight)
Base building	Indirect emissions generated from CBA's proportion (by net lettable area) of base building electricity and natural gas usage for the Group's Australian commercial offices.	Landlord utilities invoices/reports	kWh (Electricity) MJ (Natural Gas)
Waste (commercial operation)	Indirect emissions generated from our waste to landfill, from commercial properties under our operational control in Australia.	Cleaning Contractor Waste Report Landlord/Base Building Waste Report	Tonnes (Waste) kg (Waste)
Water (commercial, retail and data centres)	Indirect emissions generated from the water usage at our commercial, retail properties and data centres under our operational control in Australia.	Utility Bills Landlord Bills Facilities Manager Water meter reading	kL (Water)
Work from home emissions	Indirect emissions generated by number of employees working from home.	CBA Office Occupancy	FTE (employees)
Couriers	Indirect emissions generated from Australian courier contracts. Calculated based on the value of the spend on couriers and courier emissions report.	Quarterly Transport Report	tCO_2-e (Courier)

New Zealand

Scope category	Description	Data sources	Units
Transmission and distribution losses	Indirect emissions associated with the electricity used by ATMs, retail, commercial, data centre and residential properties under ASB's operational and non-operational control.	ATM channel report Invoice PDFs/EDIs from electricity retailer	kWh (Electricity)
Transport	Indirect emissions from rental car and taxi use, business use of private vehicles, business flights, and indirect emissions from business use of our tool of trade vehicle fleet.	Monthly travel report ASB's Operating Expense Management System	$ (Taxi (incl. Uber)) km (Rental car; car average (all fuel types)) Flight Ticket Class/Airport Codes
Hotel Accommodation	Indirect emissions from hotel accommodation used by employees and calculated based on the value of the spend on accommodation.	Monthly travel report	Days/Nights stay
Office Paper	Indirect emissions generated from the ASB's use of office paper in commercial operations and retail branches under the ASB's operational control.	Monthly paper transaction report	kg (Paper)
Waste (commercial operation)	Indirect emissions generated from our waste to landfill, from commercial properties under ASB operational control.	Landlord/Base building waste report	kg (Waste to landfill)
Work from home emissions	Indirect emissions generated from ASB staff working from home through COVID-19 restrictions from August to December 2021.	Ministry of Health lockdown record ASB employment record	Employee per day

Reconciliation of our 2022 operational emissions reporting

(tCO_2-e)	As reported in the 2022 Annual Report on page 42	As reported in the 2022 Climate Report on page 51	Reason for difference
Group			
Scope 1	6,667	6,083	Other overseas emissions are excluded from the operational emissions target baseline as we are unable to source reliable data. In the Annual Report Other overseas is calculated based on FTE intensity estimates.
Scope 2	83,429	5,900	The operational emissions target excludes electricity emissions where we are sourcing 100% of our electricity needs from renewable sources. Other overseas emissions are based on FTE intensity estimates in the Annual Report. The operational emissions target uses invoice data for Other overseas.
Scope 3	47,565	11,675	The operational emissions target excludes electricity emissions where we are sourcing 100% of our electricity needs from renewable sources. The operational emissions target excludes emissions where we cannot influence reductions or emissions that are based on estimates in the Annual Report.

Our Task Force on Climate-related Financial Disclosures content index

The following table is a reference guide to CBA's progress on implementing the 11 Task Force on Climate-related Financial Disclosures (TCFD) recommendations as covered within this report.

TCFD recommendation	CBA report section on current status	Future priorities
Governance		
Board oversight of climate-related risks and opportunities.	Board responsibility, board climate expertise and our executive remuneration framework on pages 10–11.	Review the Bank's priorities on natural capital, including metrics to assess our progress. Approve an evolved E&S Framework and Policy in 2023. Review E&S metrics and Key Performance Indicators in our executive performance and remuneration framework.
Management's role in assessing and managing climate-related risks and opportunities.	Management accountability on page 12. Governance committees and steering committees and building climate capability on page 13. Business and Support Unit accountabilities on page 14.	Further develop and integrate E&S risk management capability for business units and risk functions. Further work to mature E&S governance processes at a business and support unit level, reviewing consistency and escalation points, with a focus on embedding in existing forums.
For further information see *Governance* chapter, next steps and future priorities on page 15.		
Strategy		
Climate-related risks and opportunities identified over the short, medium and long term.	Our climate strategy on page 18.	Continue to expand our sustainability product suite, strengthening product governance.
Impact of climate-related risks and opportunities on our businesses, strategy and financial planning.	Leadership in Australia's transition on page 19. Reimagining banking on page 22. Simpler, better foundations on page 24.	Further work to understand our impact on nature and consideration of nature issues on our strategy. Explore further changes to pricing incentives and capital allocation to support the delivery of sector-level targets.
Resilience of organisation's strategy to a 2°C or lower scenario.	Our climate scenario analysis on pages 34–37.	Continue to evolve our climate scenario analysis in terms of scope and coverage.
For further information see *Strategy* chapter, next steps and future priorities on page 27 and *Risk* chapter, next steps and future priorities on page 39.		

TCFD recommendation	CBA report section on current status	Future priorities
Risk		
Processes for identifying and assessing risks.	Our approach to climate risk on page 30. Mapping climate risk drivers to other risks on page 32. Identifying and assessing climate risks on page 33.	Complete E&S Risk and Control Self-Assessments across the business, which will also strengthen the capability to perform aggregate climate risk and control reporting across the Bank. Continue to regularly conduct climate scenario analysis, translating insights into decision-useful indicators.
Processes for managing climate-related risks.	Managing and monitoring climate risk on page 38.	Finalise the non-retail RAS indicators.
Processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Integrating climate risk into our risk framework on page 30. Our Risk Management Framework on page 31.	Incorporate insights from climate scenario analysis into our policies, practices and tools.
For further information see *Risk* chapter, next steps and future priorities on page 39.		
Metrics and targets		
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Performance summary table on page 41. Energy Value Chain on page 48.	By 2025, set interim sector-level targets for financed emissions for remaining NZBA sectors (see page 19). For sectors where we have set interim sector-level targets, publish an overview of the categories of actions expected to be undertaken to meet the interim sector targets and an approximate timeline.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks.	Financed emissions on pages 42–43. Reducing our operational emissions on pages 50–51.	Update our upstream Scope 3 operational emissions target to align with limiting global warming to 1.5°C.
Describe the targets used by the organisation to manage climate related risks and opportunities and performance against targets.	Sector targets on pages 44–47. Contribution to Sustainability Funding Target by asset class on page 49. Appendix on pages 52–74.	Replace Energy Value Chain disclosure with updated reporting against the methodologies set out by our new financed emissions disclosures.

Glossary of terms

Term	Definition
1.5°C temperature ambition	Our 1.5˚C temperature ambition refers to the maximum global temperature change target which informs our sector-level financed emissions targets. In line with our NZBA commitments, our strategy is to set, by 2025, sector-level financed emissions targets for sectors that account for at least 75% of the bank's 2020 financed emissions using transition scenarios that see maximum global average temperature rises of 1.5˚C above pre-industrial levels by 2100.
2020 financed emissions	Our estimate of the Bank's financed emissions as at 30 June 2020. Our calculations cover 87% of our drawn lending exposures, of which 80% is aligned with the PCAF Standard. Refer to page 42 for more information about our 2020 financed emissions, and page 53 for more information about our methodology.
Absolute emissions	Greenhouse gas (GHG) emissions, expressed in terms of weight of CO_2 (e.g. tCO_2) or weight of CO_2 equivalent (tCO_2-e) for a given scope/s.
ANZSIC	Australia and New Zealand Standard Industry Classification.
APRA	Australian Prudential Regulation Authority.
ASB	ASB Bank Limited is one of New Zealand's leading commercial banks, and is a subsidiary of the Commonwealth Bank of Australia Group.
Attribution share or attribution factor	The share of total greenhouse gas (GHG) emissions of the borrower or investee that are allocated to the loan or investments.
Climate Active	Climate Active is an ongoing partnership between the Australian Government and Australian businesses to drive voluntary climate action. The Climate Active Carbon Neutral Standard supports and guides businesses as they account for and reduce carbon emissions to reach carbon neutrality.
CO_2-e	Carbon dioxide equivalent (CO_2-e) is a measurement used to compare emissions from various greenhouse gases based on their global warming potential. Other gas amounts are converted into the equivalent amount of carbon dioxide to provide a single emissions metric. Conversion factors vary based on the underlying assumptions.
CSIRO	Commonwealth Scientific and Industrial Research Organisation.
Direct emissions	Emissions from sources that are owned or controlled by the reporting entity and/or the borrower.
Emissions intensity metric	Emissions per a specific unit. There is a difference between economic intensity, e.g. tCO_2-e/$million financing, tCO_2-e/$million company revenue and 'physical intensity', which compares emissions to a unit of output, e.g.: tCO_2-e/MWh, tCO_2-e/t of steel produced.
Emissions scopes	The GHG Protocol Corporate Standard classifies an organisation's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting organisation, including both upstream and downstream emissions.
Emissions factor	A figure provided by a credible third party that provides an estimated amount of CO_2 emitted for a specific activity, e.g. emissions per barrel of oil combusted. These can be multiplied with production figures to estimate emissions.
Energy Value Chain (EVC)	The Energy Value Chain reports the financing provided to certain energy-related sectors as at 30 June. The reported amounts are based on total committed exposure, excluding Commitment at Offer and trading securities exposures. Exposure amounts have not been netted off against any insurance or guarantees that mitigate the Group's risk exposure to clients. Includes domestic and offshore exposures.

Term	Definition
E&S Framework and Policy	The E&S Framework provides a reference point for our people and stakeholders on the minimum standards we seek to abide by, the targets we seek to implement, and the governance and oversight in place to support our endeavours. Our E&S Framework is underpinned by our internal Group Environmental and Social Policy (E&S Policy) and any business unit-specific procedures. Our E&S Framework which will be reviewed in 2023 is available at commbank.com.au/policies.
Exposure at default (EAD)	The extent to which a bank may be exposed upon default of an obligor.
Financed emissions	The emissions financed by a financial institution's loans and/or investments. They are estimated based on an attributed proportion of the financial institution's customers' emissions. These financed emissions are part of the financial institution's Scope 3, Category 15 emissions.
Glidepath	A tool to set and articulate interim and long-term aspirations with respect to emissions as they relate to a bank's financing activities.
Gentailers	Combined retail and power generation companies.
Greenhouse gases (GHGs)	Greenhouse gases (GHGs) are the six gases listed in the Kyoto Protocol including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF_6).
IEA	International Energy Agency.
IEA NZE	The Net Zero Emissions by 2050 Scenario as published in the IEA's World Energy Outlook.
IEA SDS	The Sustainable Development Scenario as published in IEA's World Energy Outlook.
Indirect Emissions	Emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity.
IPCC	Intergovernmental Panel on Climate Change.
NABERS	National Australian Built Environment Rating System.
NatHERS	Nationwide House Energy Rating Scheme.
Natural capital	Stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people.
NGFS	Network for Greening the Financial System.
Non-retail	This refers to our Institutional Banking & Markets and Business Banking portfolios.
NZBA	Net-Zero Banking Alliance (NZBA) is an industry-led initiative run by the UN which brings together banks committed to aligning their portfolio with net zero emissions by 2050.
Production	The amount of output – in the relevant unit (e.g. barrels of oil, megawatt hours) – the counterparty has produced.
Reference scenario	A science-based global decarbonisation pathway.

Term	Definition
Paris Agreement	The Paris Agreement, adopted within the United Nations Framework Convention on Climate Change in December 2015, commits all participating countries to limit global temperature rise to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C, to adapt to changes already occurring, and to regularly increase efforts over time.
Partnership for Carbon Accounting Financials (PCAF)	A global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.
Physical-activity based emissions modelling	Modelling the emissions of a counterparty using their production data and emissions factors.
Scope 1 and 2 greenhouse gas emissions reduction	The Scope 1 and 2 target is based on a 1.5°C trajectory, requiring 4.2% annual linear contraction. Emissions relate to the consumption of Natural Gas, Stationary Fuel, Refrigerant and Electricity used in retail, commercial and data centre properties under the Group's operational control, and business use of tool of trade vehicles. Australian electricity emissions are zero as the equivalent of 100% of our Australian operational electricity needs have been sourced from renewable sources. Only electricity is included in other overseas emissions due to data limitations.
Scope 1 emissions	Emissions from operations that are owned or controlled by the reporting company.
Scope 2 emissions	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company.
Scope 3 emissions	All indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.
Toitū carbonzero certification	Toitū Envirocare is a CDP-accredited solutions provider in Australia and New Zealand accredited in emissions verification. Their carbonzero certification offers certification in accordance with ISO 14064-1 or PAS 2050.
Total committed exposure (TCE)	Total Committed Exposure is defined as the balance outstanding and undrawn components of committed facility limits. It is calculated before collateralisation and excludes settlement exposures on derivatives.
UNEP FI	United Nations Environment Programme Finance Initiative.
Upstream Scope 3 greenhouse gas emissions (excluding financed emissions) reduction	The Scope 3 target is based on a well below 2°C trajectory, requiring a 2.5% annual linear contraction. To ensure the baseline is representative of a typical year, Scope 3 Business Travel emissions are adjusted to FY19 values to normalise for the impacts of the COVID-19 pandemic. Includes indirect greenhouse gas emissions as a result of sources outside the Group's operational control, but support the Group's business activities. Base building, Business Use of Private Vehicles and Work From Home emissions are excluded. Due to data limitations New Zealand emissions exclude upstream Stationary and Transport fuels, and Courier emissions. Only Flight emissions are included for other overseas due to data limitations.

Sustainability Funding Target

Target: $70 billion in cumulative sustainability funding by 2030

We seek to support growth in sustainable industries and asset types that can have a positive impact on our economy and environment through sustainability funding. Unless specified below, we use total lending exposure which excludes commitments at offer, derivatives, guarantees, leases and trading securities to calculate the cumulative funding since 30 June 2020. We include all new funding. Where a refinance occurs, we include the refinanced balance if the exposure has not already been included in the cumulative progress. If the exposure has already been included, but the refinance leads to an increase in balance, we include the incremental balance.

The following asset classes are included in the cumulative progress as at 30 June 2022: renewable energy, low carbon transport, low carbon commercial buildings, energy efficiency, green residential buildings, pollution and waste management, sustainability-linked loans and social assets. Definitions and details on eligibility are outlined in the table below. Further asset classes may be included in the future, and we will continue to draw from industry frameworks.

Category	Definition	Included assets	Exclusions	Exposure type
Renewable energy	Lending to entities involved in providing and manufacturing equipment, and the development, construction, operation, distribution and maintenance of large scale renewable energy projects.	1. Domestic and offshore assets. 2. Entity's main business is electricity generation (more than 50% of EBITDA derived from electricity generation), and at least 90% of the generation is sourced from the following: – Wind, Solar (photovoltaics, concentrated solar power/solar thermal), Hydro, Geothermal, Wave, Tidal, Landfill gas (if asset is classified as an eligible generator under the Australian Renewable Energy Target (RET)). – Any other asset classified as an eligible generator under the RET or other Australian energy policy. 3. Entities whose operations involve transmitting and distributing renewable electricity, entities whose operations involve storage facilities including large scale energy storage facilities and batteries, as well as, manufacturing facilities dedicated wholly to onshore and offshore development of renewable technology. 4. An exposure that is at the head company level can still be included if the purpose of the CBA product is to be used for the needs of certain assets/projects/ subsidiaries of the counterparty that fit the above criteria.	Exposures under the value of $1 million.	Total lending exposure. Exposure amounts have not been netted off against any insurance or guarantees that mitigate CBA's risk exposure to clients.

Sustainability Funding Target (continued)

Category	Definition	Included assets	Exclusions	Exposure type
Low carbon transport	Lending related to low carbon transport and related infrastructure.	1. Low Carbon/Clean transport defined as the following public/private vehicles: – Electric passenger and freight vehicles. – Electric off-road machinery and engines. – Hydrogen passenger and freight vehicles. – Trains: Non-diesel rolling stock and vehicles for electrified trams, trolley buses and cable cars. – Buses: electric or hydrogen buses. 2. Supporting infrastructure, such as: – Large scale supporting infrastructure including charging and alternative fuel infrastructure and batteries. – Dedicated infrastructure for electrified transport. – Public walking and cycling infrastructure. – Bus rapid transit system. – All infrastructure for electrified freight rail.	Hybrid fuel efficient vehicles.	Total lending exposure.
Low carbon commercial buildings	Lending secured by ≥ 5 Star NABERS Energy rated commercial buildings.	1. Commercial buildings that are ≥5 star NABERS Energy rated at time of origination – refinancing does not impact this assessment. Where origination date is unknown, NABERS assessment is undertaken as at reporting date. 2. Includes projects under construction, based on expected NABERS Energy rating. 3. Apportionment undertaken on loans with multiple underlying securities so that only the balance attributed to securities that satisfy the definition are counted. Apportionment is based on the property value that satisfies the definition divided by the portfolio value of all securities held as collateral against the loan.	Unsecured loans. Exposures under the value of $10 million.	Total lending exposure.
Energy efficiency	Lending for assets that improve energy efficiency or generate renewable energy excluding those that are reported under other categories.	1. Solar, wind, hydro powered equipment including panel installations. 2. Batteries used to store energy for commercial use and charging equipment.	Unsecured loans. Excludes exposures to assets reported under other categories.	Total lending exposure.
Green residential buildings	Mortgage loans related to existing or new construction/renovation of residential buildings that are considered low carbon under accepted standards.	1. Mortgage loans to finance new residential buildings which represent the top 15% of properties in the relevant jurisdiction in terms of local market carbon performance, e.g. that comply with energy efficient local building codes that are used as a proxy for the achievement of the 15% hurdle rate, in accordance with Climate Bonds Standards for Australia, Green Building Council of Australia or NatHERS 5+ Star Rating. 2. Mortgage loans for a property that has renewable energy output in accordance with Climate Bond Standards for Australia, or Green Building Council of Australia.	Excludes Bankwest.	Total lending exposure.
Pollution and waste management	Lending related to activities that contribute to soil remediation, waste prevention and collection, waste reduction and waste recycling.	1. The development, operation and upgrade of physical recycling facilities for metals, plastic or paper. 2. Recycling or composting to divert waste from landfill. 3. Organic waste treatment and composting. 4. Organic waste to energy power generation projects. 5. Landfill gas collection power generation projects for closed landfills with 75% or more gas capture efficiency.	Unsecured loans. Exposures less than $1 million.	Total lending exposure.
Sustainability-linked loans	Loans with predetermined targets to facilitate environmentally or socially sustainable outcomes.	Sustainability-linked loans are instruments which incentivise the borrower's achievement of ambitious, predetermined sustainability performance targets. The use of proceeds in most instances will be for general corporate purpose.	Exposures less than $1 million.	Total lending exposure.

Sustainability Funding Target (continued)

Category	Definition	Included assets	Exclusions	Exposure type
Social assets	Lending that facilitates and supports economic activity which mitigates social issues and challenges, and/or achieves positive social outcomes.	Eligible social projects should be directed towards specified target populations, for example those outlined in the Social Loan Principles. Eligible assets include funding or financing related to the acquisition, construction, equipment or operation of activities that expand: • Access to health, healthcare and wellbeing. • Access to educational and vocational training. • Access to adequate, safe, affordable housing to people from low socio-economic groups[1] victims of domestic or family violence or Aboriginal and Torres Strait Islander peoples. • Affordable basic infrastructure. Includes: • Assets that operate or are under construction to operate. • Loans to organisations that derive 90% or more of its revenues from activities in the above list of eligible categories.	Unsecured loans. Exposures less than $1 million.	Total lending exposure.

1 Low socio-economic groups are defined as people who are homeless or are in receipt of Australian Commonwealth Rent Assistance.

Important notices

Guidance on forward-looking statements and climate information

This report contains climate-related and other forward-looking statements and metrics, such as targets (including Climate and Sustainable Funding and Financing targets), climate scenarios and emissions intensity pathways, estimated climate projections, forecasts and statements of the Group's current intentions. Any such forward-looking statements included in this report speak only as at the date of this report, 10 August 2022, and undue reliance should not be placed upon such statements. Although the Group currently believes the forward-looking statements have a reasonable basis, they are not certain and involve known and unknown risks and assumptions, many of which are beyond the control of the Group, which may cause actual results, performance, conditions, circumstances or the ability to meet commitments and targets set forth in the Group's forward-looking statements may differ materially from those expressed or implied in such statements. While the Group has prepared the information in this report based on its current knowledge and understanding and in good faith, it reserves the right to change its views in the future. Readers are cautioned not to place undue reliance on forward-looking statements particularly in light of the current economic uncertainties and disruption caused by the ongoing impacts of the COVID-19 pandemic in addition to the conflict in Ukraine and related geo-political uncertainty.

Words or phrases such as 'anticipate', 'effort', 'estimate', 'believe', 'budget', 'continue', 'could', 'expect', 'forecast', 'goal', 'guidance', 'intend', 'may', 'objective', 'outlook', 'plan', 'potential', 'predict', 'projection', 'seek', 'should', 'target', 'will', 'would' or similar expressions that convey the prospective nature of events or outcomes generally indicate forward-looking statements or other similar words, and include statements regarding the Group's intent, belief or current expectations with respect to the Group's business and operations, market conditions, results of operations and financial condition, capital adequacy and risk management. To the maximum extent permitted by law, responsibility for the accuracy or completeness of any forward-looking statements, whether as a result of new information, future events or results or otherwise, is disclaimed.

Forward-looking statements may also be made – verbally and in writing – by members of the Group's management in connection to this document. Such statements are also subject to the same limitations, uncertainties and assumptions which are set out in this report.

This disclaimer should be read together with:

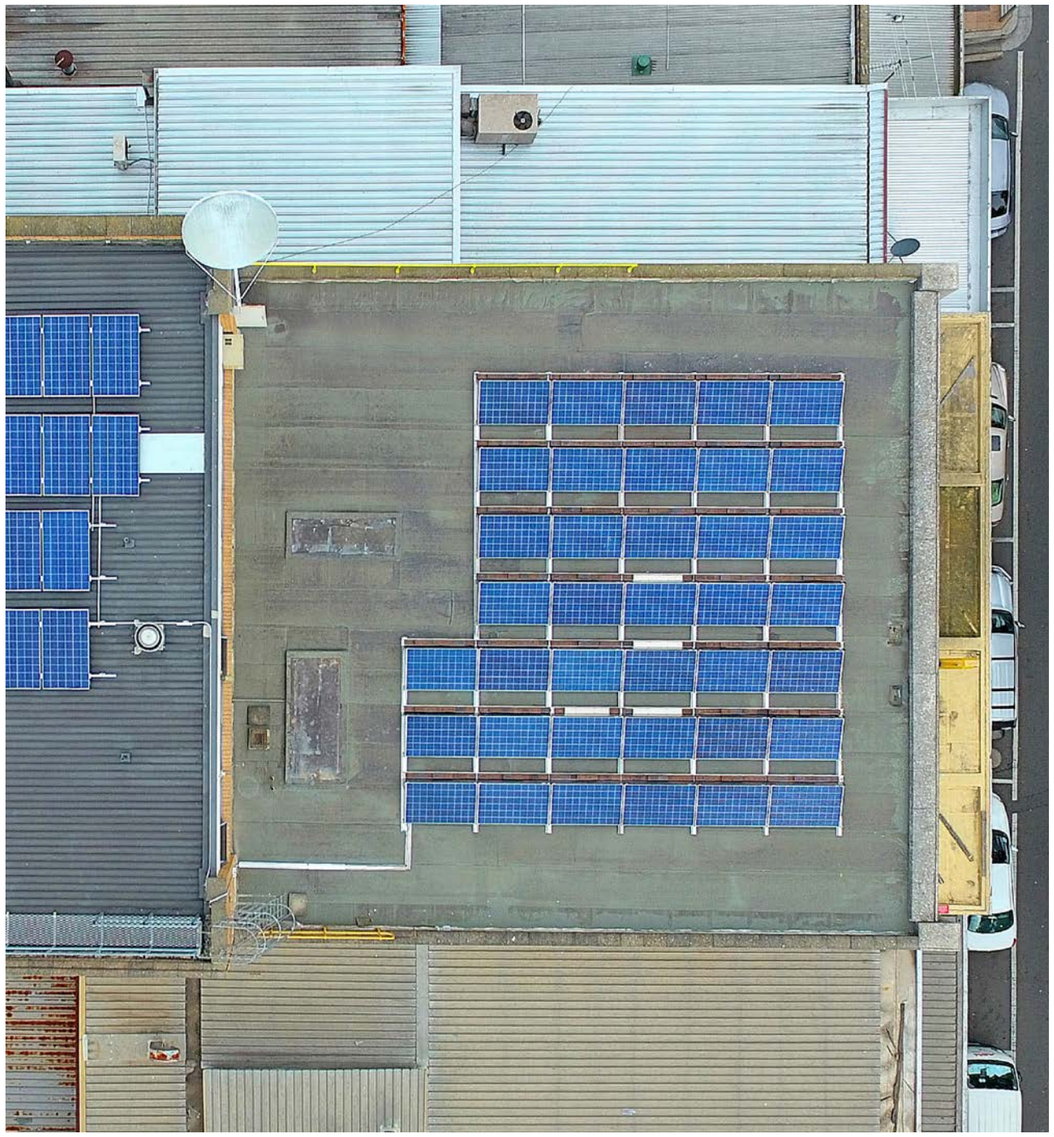
- page 58 (*Addressing uncertainty in climate modelling*); and
- page 59 (*Key sources of uncertainty and limitations*) of this report.

The measures and forward-looking statements in this report reflect best estimates, assumptions and judgements at the date of this report. There is a risk that these judgements, estimates or assumptions may subsequently prove to be incorrect. Subject to applicable disclosure requirements, the Group is under no obligation to update any of the forward-looking statements contained within this report, whether to reflect any change in our expectations regarding any forward-looking statements, any change in events, conditions or circumstances on which any such statement is based, or otherwise. Forward-looking statements may be affected by a number of uncertainties and factors, including but without limitations are:

- lack of reliable emissions and other important data;
- quality of historical emissions data;
- lack of common definitions and standards for climate-related data;
- lack of transparency and comparability of climate-related forward-looking methodologies;
- variation in climate-related approaches and outcomes;
- variations and other challenges in climate-related data and methodologies may lead to under or overestimates, and consequently present exaggerated indication of climate-related risks;
- limitations of climate scenario analysis and the models that analyse them;
- reliance on assumptions and future uncertainty (calculations of forward-looking metrics are complex and require many methodological choices and assumptions);
- uncertainty and changes to climate-related policy, laws and regulations including future legal proceedings and regulatory investigations;
- complexity of calculation may require the assistance of one or more external data and methodology providers;
- climate-data, modelling and methodology is rapidly evolving, and this may directly or indirectly affect the metrics and data points used in the preparation of this report, and the targets contained in this report; and
- changes arising out of market practices and standards, including emerging and developing ESG standards.

Other notices

The material in this report is general background information about the Group and its activities current as at the date of the report, 10 August 2022. It is information given in summary form and does not purport to be complete. Information in this report is not intended to be relied upon as advice to investors or potential investors and does not take into account the investment objectives, financial situation or needs of any particular investor. Investors should consider these factors and consult with their own legal, tax, business and/or financial advisors in connection with any investment decision.



Independent limited assurance report on selected Sustainability Funding and Sector-level Glidepath Subject Matter presented in the Commonwealth Bank of Australia 2022 Climate Report

pwc

To: the Board of Directors of the Commonwealth Bank of Australia

Scope

In accordance with the terms of engagement letter dated 14 July 2022, we were engaged by the Commonwealth Bank of Australia and its subsidiaries ("the Group") to perform an independent limited assurance engagement in respect of the Selected Sustainability Funding and Sector-level Glidepath Subject Metrics (the "Subject Matter") presented in 2022 Climate Report (the "Climate Report").

Subject Matter and Reporting Criteria

The Subject Matter comprises the following metrics:

1. Sustainability Funding by Asset Class ($billion) as presented in the table on page 49 of the Climate Report:
   a. As at 30 June 2020; and
   b. New and incremental financing during the period 1 July 2020 to 30 June 2022.
2. The following Sector-level Glidepath metrics presented on pages 42–47 of the Climate Report:
   a. Emissions intensity for the preceding 12 months of drawn lending exposures in *Power Generation sector*:
      i. 222 kg CO_2/MWh as at 30 June 2020;
      ii. 187 kg CO_2/MWh as at 30 June 2021;
   b. Attributed emissions for the preceding 12 months from drawn lending exposure to *Thermal Coal sector* – absolute emissions:
      i. 1.2 $MtCO_2$ as at 30 June 2020;
      ii. 0.9 $MtCO_2$ as at 30 June 2021;
   c. Attributed emissions for the preceding 12 months from drawn lending exposure to *Upstream Oil Extraction sector* – absolute emissions:
      i. 2.6 $MtCO_2$ as at 30 June 2020;
      ii. 1.7 $MtCO_2$ as at 30 June 2021;
   d. Attributed emissions for the preceding 12 months from drawn lending exposure to *Upstream Gas Extraction sector* – absolute emissions:
      i. 3.3 $MtCO_2$ as at 30 June 2020; and
      ii. 2.3 $MtCO_2$ as at 30 June 2021.

The criteria (the "Criteria") against which we assessed the Subject Matter are established by management and are presented as follows:

1. Sustainability Funding: In the Sustainability Funding Target table presented on pages 71–74 of the Climate Report; and
2. Sector-level Glidepath metrics: In the PCAF data quality scores in the financed emissions table on page 43 and the Methodology on pages 53–57 of the Climate Report.

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Understanding reporting and measurement methodologies

The Subject Matter reported by the Group needs to be read and understood together with the Criteria, which the Group is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and measure the Subject Matter allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

It is acknowledged by stakeholders globally, including regulators, that there are significant limitations in the availability and quality of emissions data from third parties, resulting in the extensive use of proxy data. This limitation has resulted in PCAF establishing a data quality score which is incorporated into the Group's Reporting Criteria. It is anticipated that the principles and methodologies used to measure and report the Subject Matter will develop over time and may be subject to change in line with market practice and regulation, impacting comparability year-on year

Management's responsibilities

The Management of the Group are responsible for establishing objective Criteria for preparing the Subject Matter and for the measurement and preparation of the Subject Matter in accordance with the Criteria.

Our Independence and Quality control

We have complied with relevant ethical requirements related to assurance engagements, which include independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In accordance with Auditing Standard ASQC 1 *Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, Other Assurance Engagements and Related Services Engagement*s the firm maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibilities

Our responsibility is to express a limited assurance conclusion based on the procedures we have performed and the evidence we have obtained.

Our engagement has been conducted in accordance with the Australian Standard on Assurance Engagements (ASAE 3000) *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Australian Standard on Assurance Engagements (ASAE3410) *Assurance Engagements on Greenhouse Gas Statements*. These standards require that we plan and perform this engagement to obtain limited assurance about whether anything has come to our attention to indicate that the Subject Matter has not been prepared, in all material respects, in accordance with the Criteria, for the Period. The procedures we performed were based on our professional judgement and included:

- Undertaking enquiries with Management regarding the process and controls for capturing, collating and reporting the Subject Matter;
- Agreeing a sample of lending exposures and their categorisation back to source systems and documentation;
- Agreeing a sample of external data used in the estimation and attribution of emissions to third party sources;
- Assessing the reasonableness of any material estimates made in preparing the Subject Matter;
- Reperforming a sample of calculations undertaken in preparing the Subject Matter and the appropriate application of the Reporting Criteria in those calculations; and
- Reviewing the presentation and disclosure of the Subject Matter and Reporting Criteria in the Climate Report.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Accordingly, we do not express a reasonable assurance opinion.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Use of report

This report was prepared for the Board of Directors of the Commonwealth Bank of Australia. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Board of Directors of the Commonwealth Bank of Australia, or for any purpose other than that for which it was prepared.

Inherent limitations

Because of the inherent limitations of any assurance engagements due to the selective testing of the information examined, it is possible that fraud, error or non-compliance may occur and not be detected. A limited assurance engagement is not designed to detect all instances of non-compliance of the Subject Matter with the Criteria, as it is limited primarily to making enquiries, of management, and applying analytical procedures. The limited assurance conclusion expressed in this report has been formed on the above basis.

Conclusion

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the Subject Matter has not been prepared, in all material respects, in accordance with the Criteria as presented in the 2022 Climate Report.

PricewaterhouseCoopers

PricewaterhouseCoopers

John Tomac

John Tomac
Partner

Sydney
10 August 2022

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