

Climate-related financial disclosures



Why is CBA taking action on climate change?

As a provider of financial services including lending, insurance and wealth management, climate change presents both risks and opportunities to our business. We are a supporter of the Task Force on Climate-related Financial Disclosures (TCFD) and this is our first report in line with its recommendations.

We are taking action on climate change to:

- Better understand the impacts of climate change on the Bank
- Increase the resilience of the Bank to climate risks
- Take advantage of opportunities created by climate change
- Support our customers and people in the transition to a low carbon economy

We are taking a phased approach to identifying and managing climate risk. That means we are focusing on having the right policies in place, understanding risk, developing and implementing strategic responses, building internal and customer capability, and contributing to economy-wide initiatives.

	Phase 1 Policy, due diligence, governance	Phase 2 Analysis of portfolio risks and opportunities	Phase 3 Extending scenario analysis, strategic responses, capability building
	Pre-FY18	FY18	FY19-20
Governance	<ul style="list-style-type: none"> Climate Policy Position Statement⁽¹⁾ Environment Policy⁽²⁾ Equator Principles III signatory⁽³⁾ ESG Lending Commitments⁽⁴⁾ Responsible Investing Framework⁽⁵⁾ 	<ul style="list-style-type: none"> The Board governs climate risks and opportunities through the Risk Management Framework⁽⁷⁾ 	<ul style="list-style-type: none"> Review our Climate Policy Position Statement Update Responsible Investing Framework Update investment-related ESG risk management policies
Strategy	<ul style="list-style-type: none"> Commitment to support the objectives of the Paris Agreement 	<ul style="list-style-type: none"> Climate scenario analysis: <ol style="list-style-type: none"> Business lending – transition risks FirstChoice Australian Share Fund – transition risks Retail (home lending) and insurance – physical risks Portfolio-level strategic responses 	<ul style="list-style-type: none"> Climate scenario analysis: <ol style="list-style-type: none"> Business lending – physical risks Retail (home lending) and insurance – transition risks Investment portfolios – transition and physical risks Further develop portfolio-level strategic responses Client engagement
Risk management	<ul style="list-style-type: none"> Elevated climate as a strategic risk and a long-term driver of both financial and non-financial risks⁽⁶⁾ ESG risk assessment including climate risk, introduced for business lending Introduced training on ESG risks, including climate, for business lenders Established Energy Value Chain analysis 	<ul style="list-style-type: none"> ESG risk assessment process for business lending updated Updated Energy Value Chain analysis 	<ul style="list-style-type: none"> Include physical risks in ESG risk assessment process for business lending Update client due diligence to include transition heat maps for climate sensitive sectors Update Energy Value Chain analysis
Metrics and targets	<ul style="list-style-type: none"> Emissions reduction target (scope 1 and 2) Assessed emissions in business lending portfolio Set low carbon project funding target of \$15bn by 2025 	<ul style="list-style-type: none"> Emissions reduction target (scope 1 and 2) Assessed emissions in business lending portfolio Low carbon project funding target 	<ul style="list-style-type: none"> Emissions reduction target (scope 1 and 2) Assessed emissions in business lending portfolio Low carbon project funding target

(1), (2), (3), (4), (5) Available at: <https://www.commbank.com.au/about-us/opportunity-initiatives/policies-and-practices.html>

(6) Note 31 Risk Management, FY17 Commonwealth Bank Annual Report.

(7) The Group's Risk Management Framework is detailed in Note 9.1 to the Financial Statements on page 195.



Scenario analysis helps us understand potential impacts, risks and opportunities for the Bank.

Climate governance

The Board acknowledges that climate change is creating risks and opportunities for our business, our customers and our communities. Due to their significance, the Board directly oversees the management of the Bank’s climate-related risks and strategies, including through:

- Receiving reports on risks in business lending and stranded asset risks
- Considering the results of climate scenario analysis undertaken in the 2018 financial year for transition and physical risks and opportunities
- Approving the Bank’s Climate Policy Position Statement, which outlines our approach to climate-related risks and opportunities
- Setting and monitoring performance against our climate-related goals and targets (outlined on page 60)
- Reviewing and approving the climate-related disclosures in our Annual Report

The Executive Leadership Team (ELT) is responsible for:

- Directing the development and implementation of ESG policies, including climate
- Oversight of progress, performance and reporting on climate
- Leading external engagement, advocacy and helping customers on climate-related matters



Physical risk

Arises from extreme weather events (e.g. storm, flood, drought) or longer-term shifts in climate patterns (e.g. rising temperatures). This can result in financial costs due to direct damage to assets and indirect impacts from disruption to businesses and their supply chain.



Transition risk

Refers to financial impacts as a result of the policy, legal, technology, reputation and market changes associated with the transition to a low carbon economy.

Climate strategy

To understand potential climate impacts, risks and opportunities for the Bank, and to build the resilience of our business, we have commenced company-wide scenario analysis. We have prioritised analysis of areas that are most material given the size of our portfolios.

Here we outline the scenarios we chose, the process we went through, the results of the scenario analysis and how the results have impacted our strategic decisions. The results of our scenario analysis will help to inform the evolution of our Climate Policy Position Statement.

It is important to note that scenario analysis considers the outcomes of a range of possible future pathways, based on assumptions, and is not a forecast or prediction.

Scenario analysis

Global Co-ordination – 2 degrees



This scenario reflects the impacts of supportive national and international climate policy, which results in a smooth transition to a low carbon economy enabled by global emissions trading.

The Global Co-ordination scenario is based on investment in large scale, low-emissions infrastructure such as carbon capture and storage (CCS), biofuels production and distribution. Such investment improves the long-term viability of these technologies.

Disruptive Decarbonisation – 2 degrees



This scenario reflects the potential disruptive impacts associated with decarbonisation.

It is achieved through a disorderly transition, led by consumers and business rather than policy. Under this scenario, there is an initial delay in action to 2025 during which time emissions continue to rise. There are challenges securing finance for large scale renewable energy projects in the short term, due to inconsistent climate policy. There is strong reliance on bottom up action, including renewable electricity (particularly small scale solar), electric vehicles and energy efficiency.

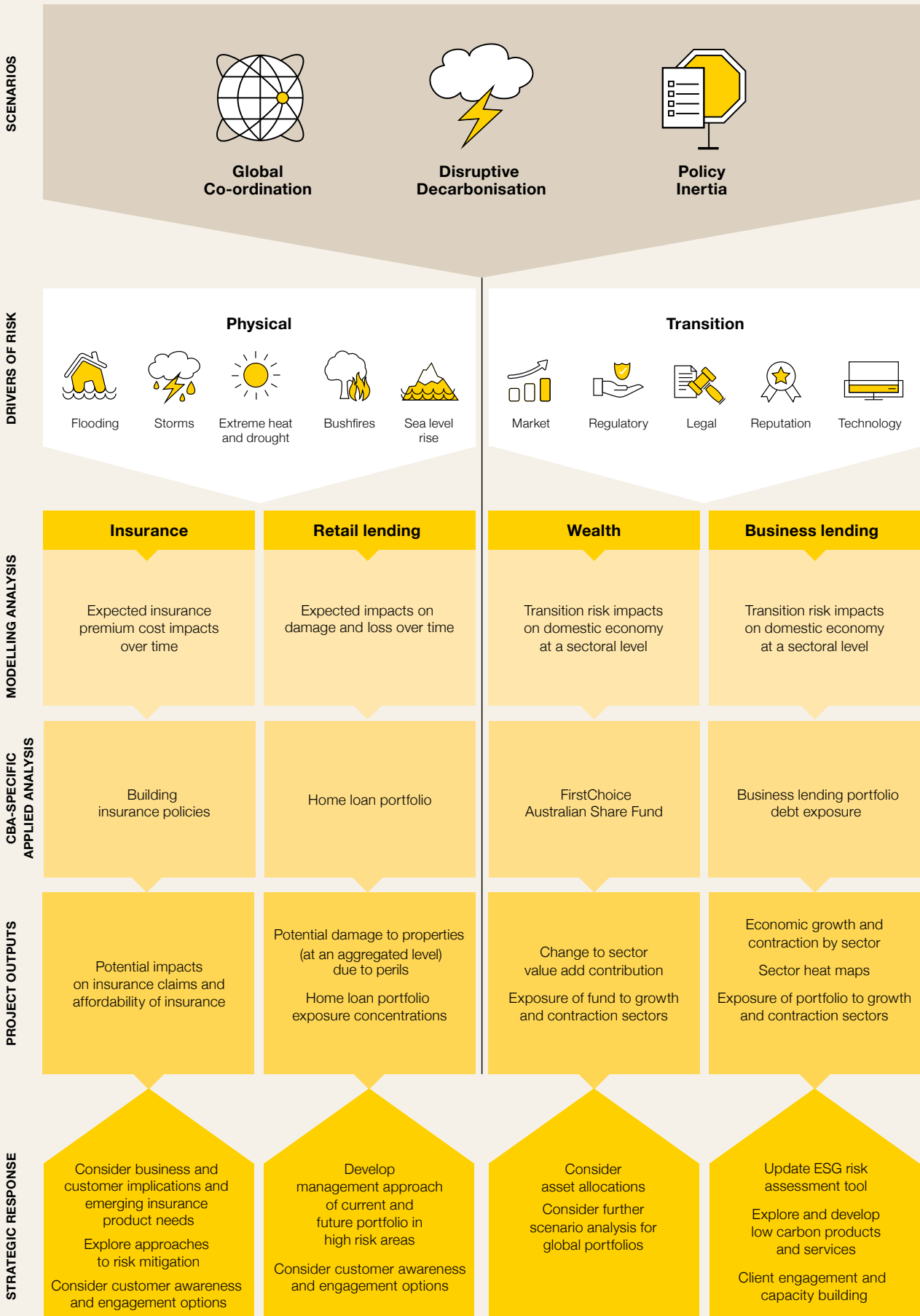
Policy Inertia – 3 degrees



This scenario reflects the current national and international policies. In this scenario, the current Nationally Determined Contributions are maintained, and no further international frameworks and mechanisms are negotiated to encourage additional global decarbonisation. A lack of certainty around mechanisms to achieve abatement targets reduces the capacity to invest in large scale abatement activity. This results in a disorderly transition with a reliance on bottom up, small-scale technologies.

Further information on scenario characteristics is available on page 52 for the physical analysis and page 54 for the transition analysis.

2018 financial year climate change scenario analysis program



Physical risks and opportunities

Home lending makes up nearly half of the Group’s balance sheet, making it a material portfolio with regard to our exposure to climate risks and opportunities. Physical risks are the most relevant to property and insurance, driving our focus and coverage for this component of our scenario analysis.

We have considered the impact of five perils on our home lending across Commonwealth Bank and Bankwest, and building insurance policies in CommInsure. The perils we have considered are:

- Inundation – including sea level rise and storm surge, resulting in flooding
- Soil contraction – as a result of increased heat and reduced average rainfall in some areas, which causes damage to foundations in contracting clay soils
- Inland or riverine flooding
- Wind/cyclone
- Bushfire

We have undertaken detailed physical risk scenario analysis using the model developed by the Climate Risk consultancy, which combines asset, hazard and climate change projection data to understand the estimated annual average loss which is a combination of the annual probability of an extreme weather event capable of damaging a property, and the costs associated with such damage in a given year.

Most data is drawn from Australian Government agencies such as Bureau of Meteorology, CSIRO, and Geosciences Australia, as well as state government entities including rural fire services, Valuer General and land data services. We have also incorporated proprietary flood modelling undertaken for the Commonwealth Bank.

We have modelled damage to the underlying properties currently subject to loans from and/or insured with the Bank. The results are on an aggregated basis, including postcode-level.

Scenario characteristics – physical analysis

	Low emissions scenario	High emissions scenario
CBA climate scenario alignment	Global Coordination Disruptive Decarbonisation	Policy Inertia
Temperature rise by 2100	2 degrees	4 degrees
IPCC⁽¹⁾ climate projections	RCP ⁽²⁾ 4.5	RCP 8.5
Sea level rise	0.5m by 2100	1.1m by 2100

(1) Intergovernmental Panel on Climate Change.

(2) Representative Concentration Pathway.

Although the Group is committed to supporting the achievement of a 2 degree scenario, we are cognisant that the high emissions scenario (RCP 8.5) represents the greater risk to the Bank, because a higher level of warming gives rise to greater physical climate impacts.

The physical impacts we are likely to see up to 2050 are primarily driven by historical levels of emissions, as there is a delay between emissions and increased frequency and severity of weather events. Therefore, the different trajectories between our two 2 degree scenarios are of little consequence to physical impacts over the timeframe of our analysis, but would be significant in the longer term.

This project was undertaken with the support of Deloitte and Climate Risk.

Physical risks and opportunities in our home lending and insurance portfolios

What we found

This project has undertaken a forward-looking, portfolio-level assessment based on current home lending and insurance portfolios.

The analysis suggests the impact of physical climate change risk will greatly vary across the geographic locations as well as the vulnerability of each property. The diversity in geographic and climate conditions determine the climate risks experienced within a location, as well as the severity of impact. The analysis indicates that whilst all locations in which our residential property portfolio is situated will be subject to impacts of climate change to varying degrees, only a small proportion of properties in high risk locations and with vulnerable characteristics are projected to experience a significant increase in impacts over the scenario time period.

Locations affected by climate risk are expected to experience an increase in maintenance and damage costs, leading to higher insurance costs, due to flooding, storms, bushfire and drought, with rising sea levels expected to have the most significant increase. For the small proportion of current properties that may be significantly affected, this may lead to difficulties in customers servicing their loans.

Based on these results, if we were to continue to lend in these areas, property demand and valuations in locations more prone to physical climate risk may be adversely impacted.

To understand the potential credit implications of the physical impact of climate change, we have analysed the annual average loss associated with both extreme events and incremental changes in climate. Through this project, we have analysed where damage, and associated loss, is likely to occur for customers currently in our portfolio and the rate that it will increase. We have also analysed which perils, not all of which are currently covered under mainstream insurance policies, are likely to cause the problems, and their rate of increase. The results for estimated annual average loss and the high risk proportion of our portfolio are shown in more detail on the following page.

Estimated annual average losses to customers from physical risks

Impact

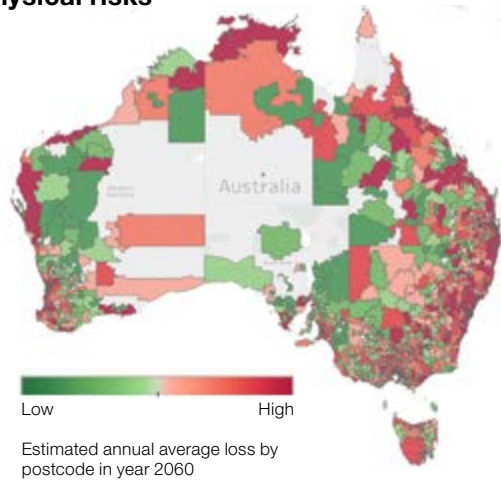


Customers facing increasing repair and replacement costs for physical damage to their properties.

Findings

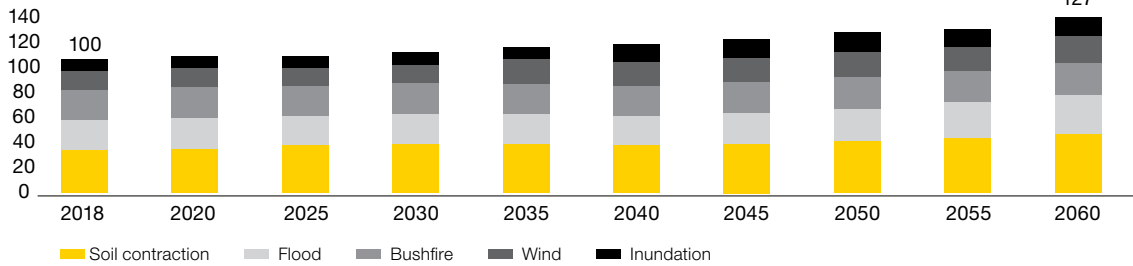


Under the high emissions (RCP 8.5) scenario, if we were to continue to lend in these areas, the estimated annual average losses to customers across our home lending portfolio are expected to increase by 27% by 2060 – this is less than 1% per annum. The largest contributor to these losses currently arises from soil contraction, but the modeling shows that coastal inundation losses could increase by 71% by 2060, primarily due to sea level rises.



Estimated annual average loss by peril

Index (2018 = 100)

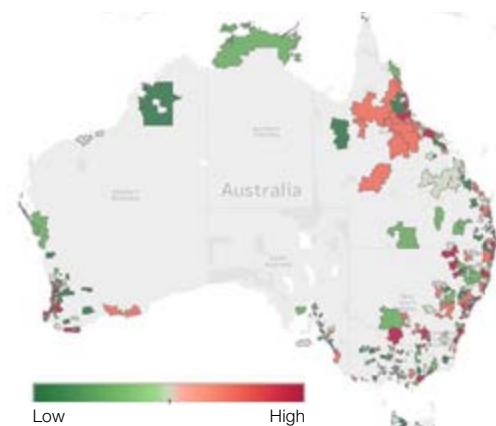
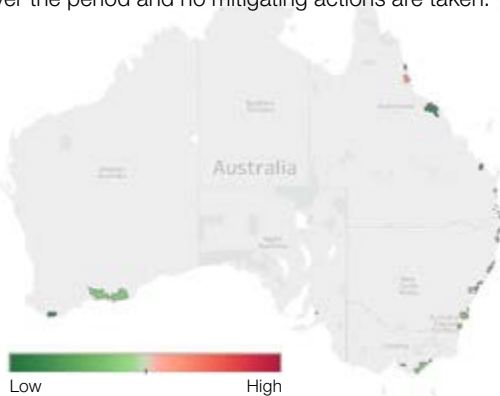
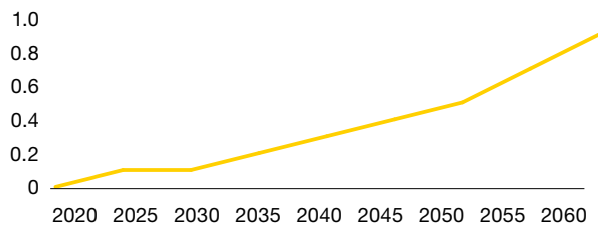


High risk properties

To better understand our potential credit risk, we have estimated the part of our current portfolio which may be high risk, where this is located and how it could change over time. We have considered high risk to be properties where the increase in insurance costs from 2018 as a result of climate change have the potential to create financial strain for customers and their property values.

High risk properties make up only 0.01% of our portfolio (by outstanding balance) in 2020 and rises to be around 1% in 2060 if there are no changes in the way we lend in these areas. This assumes no change in the portfolio over the period and no mitigating actions are taken.

Estimated % of portfolio (outstanding balance) considered high risk



How we are responding

It is important for the Bank to consider the impacts and risks of physical climate changes on our customers as well as our insurance and residential lending portfolios. We will continue to develop our understanding of physical climate change and the locations and types of properties most affected by climate risk. Based on these learnings, we will build our capability to effectively respond, develop and implement business rules (such as maximum loan to valuation ratios or loan conditions) to protect both our customers and the Bank from risks associated with climate change.

The expected impact of climate change may compound the existing issue of insurance affordability in areas with high risk of severe weather events. To counter this threat, we will consider the most effective approaches to mitigating against physical climate change risks. This will include consideration of our products and services through which there may be opportunities to assist or incentivise customers to make home resilience improvements, and advocating on their behalf for governments to invest in mitigation measures to respond to community level risks.

Minimising climate risk for property, both residential and commercial, is an issue that goes beyond the banking and insurance sectors. Appropriate planning regulation is essential to building climate resilience in the sector going forward and both a private and public response is needed. Where we don't have the ability to help our customers directly, we will engage and advocate on their behalf across government, insurance and banking to find solutions to these problems before they become acute.

To this end, we have been actively involved in the development of the National Risk Reduction Framework, as a priority of the National Resilience Taskforce, which is being led by the Department of Home Affairs. This is a collective effort involving public, private and community sectors in the development of a framework to identify, address and mitigate disaster risk.

Transition risks and opportunities

We have undertaken scenario analysis to assess the transition risks and opportunities in our business lending portfolio, covering Commonwealth Bank, Bankwest and ASB. The climate scenarios (outlined on page 50) were assessed to identify the impacts for the Australian economy at a sectoral level, and these were analysed in relation to the Bank's debt exposure and one of our domestic equity portfolios, to 2050.

The scenarios align to reference scenarios and industry-specific research. There were a number of out-of-model adjustments, based on industry-specific research, made in order to ensure that the model reflected our view of different climate futures. These adjustments were on:

- carbon pricing and offset markets
- international energy demand
- materials efficiency
- domestic energy use
- new business models

This project was supported by EY and ClimateWorks Australia.

Transition risks and opportunities in our business lending portfolio

What we found

Emissions fall under all three of our scenarios. However, Australia only meets its existing international emissions commitments under the Global Co-ordination and Disruptive Decarbonisation scenarios.

The analysis provided economic growth, by sector, for the Australian economy under the three scenarios through to 2050.

The analysis found that the overall economy grows across all scenarios and timeframes through to 2050. However, the rate of growth, sectors impacted and degree of impact, vary by scenario.

The variation is illustrated in the transition risk heatmap which represents the growth and contraction at a sectoral level across the three scenarios over the medium term (2035).

Scenario characteristics – transition analysis

Scenario characteristics	Global Coordination	Disruptive Decarbonisation	Policy Inertia
Reference scenarios	Deep Decarbonisation Pathways Project IEA 2DS	Deep Decarbonisation Pathways Project Review of disruptive technologies and business models	Deep Decarbonisation Pathways Project IEA 4DS
Target	66% likelihood of limiting global warming to 2°C	66% likelihood of limiting global warming to 2°C	66% likelihood of limiting global warming to 3°C
Proportion of renewables of total generation in 2050 (from baseline of 15% in 2017)	73%	94% Distributed generation increases from 4% of total generation in 2017 to 39% in 2050	58%

Analysis of our business lending portfolio shows that 97% of our business lending portfolio sits within sectors that continue to grow under all scenarios. There is a small portion of our portfolio – less than 2% – which sits in sectors that contract under all scenarios. And the remainder of our portfolio (1%) sits across sectors that grow under one or two scenarios and decline under other scenarios.

How we are responding

To ensure transition risk is considered going forward, we will incorporate the results of our scenario analysis into our client-level due diligence process. Our initial focus will be on sectors most likely to be impacted by climate change. We will use this to help us understand risk exposure at a client and a portfolio level, and inform our engagement with clients (where relevant) and risk evaluation. We will incorporate relevant questions into the process to allow us to further understand client exposure, and their strategy to respond to climate risk. This will help us to determine our clients' resilience and inform our lending actions and strategies.

Our support for the transition to a low carbon economy, from an energy value chain perspective, is reflected in our declining exposure to coal and our growing exposure to renewables, and to gas as a transition fuel. The energy value chain infographic (on page 59) shows our main concentrations of credit exposure to carbon-related assets. The 2018 financial year analysis shows the downward trend in our exposure to the coal sector continued, across mining, infrastructure and electricity generation.

Transition risks and opportunities in our agribusiness portfolio

What we found

Undertaking transition analysis was the first step toward analysing the strategic risks and opportunities for agriculture.

How we are responding

There is still considerable work that needs to be completed to better understand the physical impacts of climate on agricultural industries across the regions in which they operate, and to understand the implications for our portfolio. The physical risk analysis for agriculture will be undertaken in the 2019 financial year. We will start training our agribusiness teams to support customers by increasing their awareness of the issue and consider how best to incorporate climate into the agribusiness due diligence process. This will consider the outcomes of the physical risk analysis and expert guidance on observed best practices.

Transition risk heat map by industry (2017–2035)

Sector	Global Coordination	Disruptive decarbonisation	Policy Inertia
Accommodation and hotels	Green	Green	Green
Agricultural services and fishing	Green	Green	Green
Air transport	Green	Green	Green
Alumina	Yellow	Orange	Green
Aluminium	Yellow	Orange	Red
Business services	Green	Green	Green
Cement	Yellow	Yellow	Green
Coal mining	Orange	Red	Yellow
Communication services	Green	Green	Green
Construction services	Green	Green	Green
Dairy	Green	Green	Green
Electricity – coal	Red	Red	Red
Electricity – gas	Green	Green	Green
Electricity – hydro	Orange	Orange	Orange
Electricity – non-hydro renewable	Green	Green	Green
Electricity – oil products	Red	Red	Red
Electricity supply	Green	Green	Green
Financial services	Green	Green	Green
Forestry and logging	Green	Green	Green
Gas mining	Green	Green	Green
Gas supply	Yellow	Yellow	Yellow
Grains	Green	Green	Green
Iron and steel	Yellow	Orange	Orange
Iron ore mining	Green	Yellow	Green
Meat products	Green	Green	Green
Motor vehicle and parts	Yellow	Orange	Yellow
Non-ferrous metal ores	Green	Yellow	Green
Non-metallic construction materials (not cement)	Green	Green	Green
Oil mining	Orange	Orange	Orange
Paper products	Green	Green	Green
Petroleum refinery	Red	Red	Red
Printing and publishing	Green	Green	Green
Private transport services	Yellow	Yellow	Yellow
Public services	Green	Green	Green
Rail transport – freight	Green	Green	Green
Rail transport – passenger	Green	Green	Green
Road transport – freight	Green	Green	Green
Road transport – passenger	Green	Green	Green
Rubber and plastic products	Green	Green	Green
Sheep and cattle	Yellow	Yellow	Green
Textiles, clothing and footwear	Green	Green	Green
Trade services	Green	Green	Green
Water supply	Green	Green	Green
Wood products	Green	Green	Green



Transition risks and opportunities in our Wealth business

What we found

As part of our transition risk analysis, we have measured the carbon footprint of our equity investments, and are continuing to work on the footprinting of our bonds.

CFS’s two MySuper offers – Commonwealth Essential Super and FirstChoice Employer Super – currently have carbon footprints higher than their asset allocation weighted benchmarks. However, both footprints have reduced since 30 June 2016⁽¹⁾.

As at 31 March 2018, the equities allocation of the Commonwealth Essential Super range has a carbon footprint of 435,500 tCO₂e. Per \$100,000 invested this equates to 16.01 tCO₂e or four cars driven daily for a year⁽²⁾. The equities allocation of the FirstChoice Employer Super range has a carbon footprint of 919,600 tCO₂e. Per \$100,000 invested this equates to 34.17 tCO₂e or seven cars driven daily for a year.

We have also undertaken scenario analysis of FirstChoice Australian Share Fund, as a proxy for Wealth’s domestic equity portfolios. The scenario analysis found a very low proportion of FirstChoice Australian Share Fund’s assets – 1.5 per cent – sit in sectors that contract under all three scenarios. Two-thirds of the Fund’s assets are in sectors that grow under all scenarios. The remainder of Fund assets are in sectors that grow under our Policy Inertia and/or Global Co-ordination scenarios, but not under Disruptive Decarbonisation.

How we are responding

We are currently investigating approaches to undertake further detailed scenario analysis of our investment portfolios, expand the transition risk analysis to include other asset classes, and explore physical risk analysis. We intend to progress this analysis in the 2019 financial year.

CFS has updated its ESG Risk Management and Proxy Voting Policy, and Investment Governance Framework; Commonwealth Private has adopted the Responsible Investing Framework and created an ESG Policy; and CommSec is incorporating ESG and climate risk criteria into its Investment Policy.

These policies ensure ESG and climate risk criteria are taken into account in investment selection, and that, over time, Wealth reduces the ESG and climate risks our clients are exposed to through asset allocation, advocacy, engagement and shareholder voting.

Next steps

We are continuing to roll out scenario analysis across the Bank and we will next consider physical risks for business lending and transition risks for retail lending and insurance.

We will also widen the breadth of our investment analysis to cover transition and physical risks and opportunities for our global portfolios.

Colonial First State Global Asset Management (CFSGAM) has developed a summary of its approach to managing climate change risks and opportunities. In developing the statement CFSGAM has sought to align its disclosure with the TCFD’s recommendations and the Investor Group on Climate Change’s Guide for Investor Disclosure.

The approach to climate change is available here: <http://ri.firststateinvestments.com/our-approach/featured-content/climate-change/>



(1) Carbon emissions data is provided and calculated by MSCI Inc. MSCI collects reported Scope 1 and Scope 2 emissions from each company. Only 60% of companies in the global equities universe report their greenhouse gas emissions, so MSCI estimates the remaining 40%.

(2) The equivalent number of cars data is sourced from the United States Environmental Protection Agency Greenhouse Gas Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.

There are significant opportunities presented by the transition to a low carbon economy.



Low carbon transition opportunities

There are significant opportunities presented by the transition to a low carbon economy.

Sustainable finance

This financial year our lending exposure to the renewable energy sector grew to \$3.7 billion, reflecting our expertise in this market. For the year ended June 2018, Commonwealth Bank ranked number one for Mandated Lead Arranger financing roles of renewables projects in Australia and ranked 18th globally.⁽¹⁾

We have also set up a Sustainable Finance Committee to focus on identifying other low carbon opportunities, such as climate bonds. This year we led more than \$2 billion of green or sustainability notes.

We continue to support business investment in energy efficiency improvements through our \$300 million partnership with the Clean Energy Finance Corporation on the Energy Efficient Equipment Finance program.

In the 2017 financial year we set ourselves a Low Carbon Target of \$15 billion by 2025⁽²⁾. Our progress to date shows our exposure to low carbon projects as at 30 June 2018 is \$7.3 billion. Eligible projects include renewable energy, 6-star rated commercial green buildings, energy efficiency and low carbon transport. We have aligned our Low Carbon Target eligible projects with the green project categories identified in the Green Loan principles⁽³⁾.

Global environmental markets

We are aiming to be a market leader in environmental markets, supporting our clients' transition to a net zero emissions economy. We target clients globally who have a strategy in place to support their transition. We support this transition by providing tailored financing and risk management environmental market solutions to meet client requirements. This includes facilitating liquidity across global environmental markets.

Products and services

Across retail and business lending, investment and insurance, we will continue to explore and develop product and service options which meet emerging customer needs, to help them reduce their exposure and/or build resilience to climate change.

This year we added a new Alliance Partner – Affirmative Investment Management – and the Affirmative Global Bond Fund (the Fund) to the FirstChoice platform. The Fund invests in global green bonds and utilises ESG criteria and environmental impact screens; it is the first of its kind available to retail investors in Australia.



2025	\$15bn
2018	\$7.3bn

(1) IJ Global, Renewables League tables, 2018 financial year, by transaction value.

(2) Our target is on the basis of total committed exposures as at 30 June 2025, and is not a cumulative financing target.

(3) The Green Loan Principles were launched in March 2018 by the Loan Market Association, in conjunction with the Asia Pacific Loan Market Association, and supported by the International Capital Market Association. It is a high level framework for the wholesale green loan market. Indicative categories of eligibility for Green Projects are included in Appendix 1 of the Green Loan Principles. They are based on the categories provided in the Green Bond Principles 2017.

Climate risk management

Climate is a strategic business risk which we identify, assess and manage as part of our ESG risk framework.

Our approach to climate risk management is shown below, cascading down from Group-level framework to sector/ portfolio controls, through to specific transaction and client-level consideration of ESG risks.

Comprehensive policy frameworks

We have a comprehensive set of policy frameworks that govern our approach to climate risk management. The Risk Management Approach documents the Group’s key risk management practices across all major risk classes.

Climate risk is largely a credit risk for the Bank. Extreme weather events and the legal, market, policy, technology and reputational impacts of transitioning to a low carbon economy have the potential to disrupt business activities, damage property and otherwise affect the value of assets held and our customers’ ability to repay their loans on property, businesses and projects. Additional credit risk could arise from the occurrence of stranded assets, if this is not sufficiently identified and managed through our risk management framework.

Climate has both financial and non-financial implications and is covered as a specific aspect of Strategic Risk in Note 9.1 (Risk Management).

Climate in our ESG risk assessment process

The Bank is a major global provider of lending services. Assessing potential transactions for ESG risks – including climate – is a key step in our approach to credit risk due diligence for business lending.

Business lending is subject to ESG risk assessment. This must take place before a loan can be priced. The process includes an initial ESG risk assessment based on country of operations and over 500 industry sectors. The overall ESG risk levels are aligned with the Equator Principles’ risk categories A, B and C.

Additional ESG due diligence is required for transactions which have medium or high ESG risks identified in the initial assessment.

Detail on our ESG risk assessment process is outlined on page 40.

The Bank reports regularly to the Board on the key ESG risks in the portfolio using the ESG variables collected in the assessment process. For example, the number of high, medium and low ESG risks across the business lending portfolio.

Climate as part of ESG training

Our ESG training (ESG Fundamentals and the ESG Risk Tool) includes climate risk – physical and transition – to help identify the risks, as well as suggestions on the type of evidence that clients should provide. This training is compulsory for all Institutional Banking and Business Banking client facing roles, plus the credit risk teams.

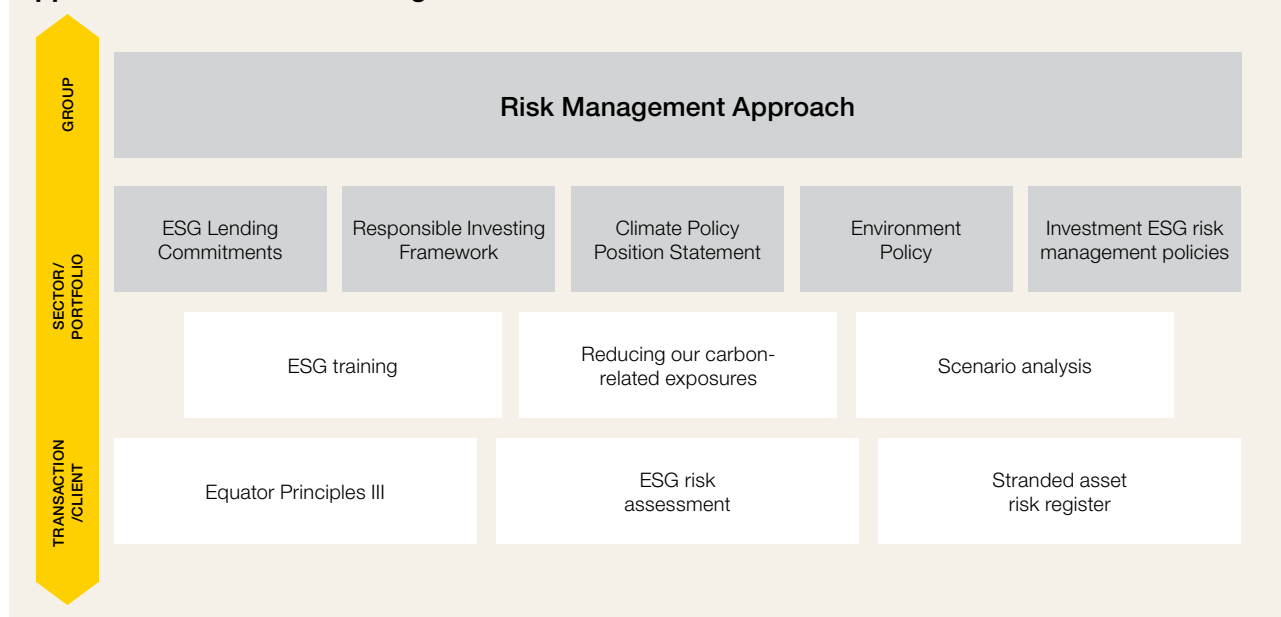
Reducing our carbon-related exposures

To understand the concentration of carbon-related exposures, we measure the following:

- Energy value chain: Our 2018 financial year exposures continue to show significant movement away from coal towards renewables, and gas as a transition fuel.
- Assessed emissions in our business lending portfolio: We continue to reduce the emissions intensity of our business lending portfolio. In the 2016 financial year, the emissions intensity of our business lending portfolio was 0.29 kgCO₂/AUD of expenditure. In the 2017 financial year⁽¹⁾, this declined to 0.28 kgCO₂/AUD of expenditure.

This has been driven by a significant decline in the sector classified as Electricity, Gas and Water Supply over the period, in line with the transition of our power generation exposures from coal to renewables, as was shown in the 2017 Energy Value Chain.

Approach to climate risk management

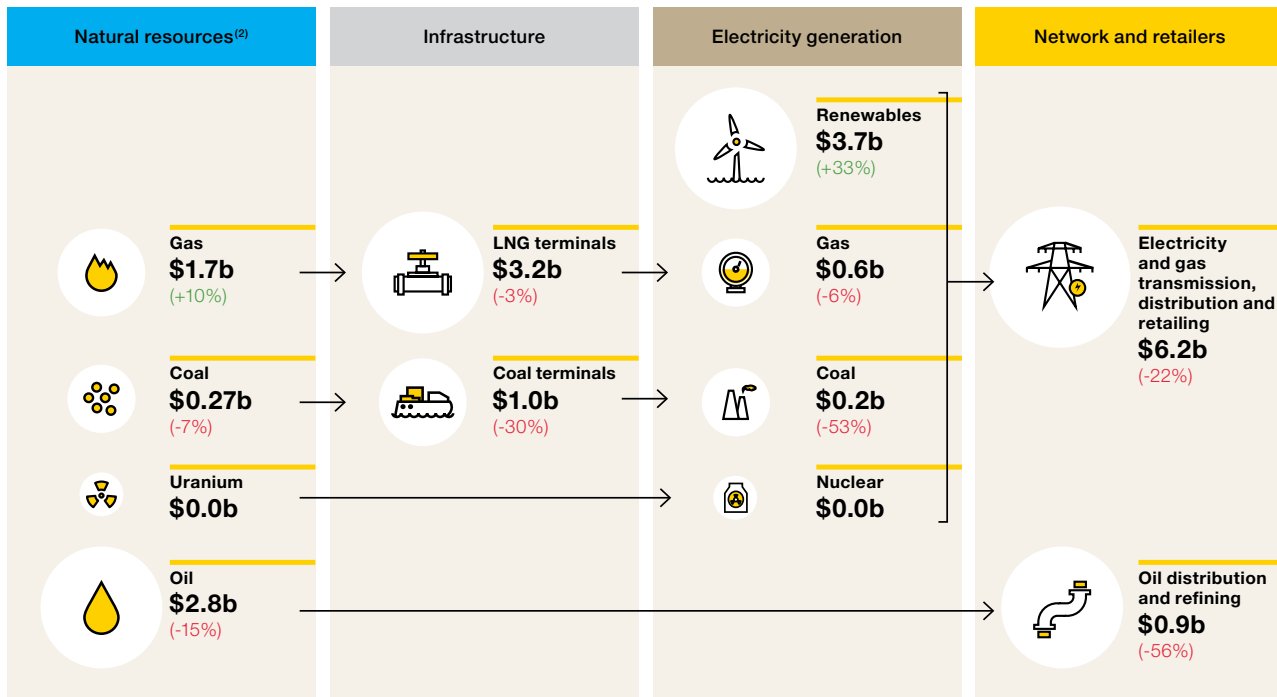


(1) Our financed emissions method relies on client-specific data which limits when we can undertake and release the analysis. 2018 financial year analysis will be undertaken once 2018 client data is available.

FY18 Energy Value Chain

CBA exposures⁽¹⁾ as at 30 June 2018

Key: (+%) (-%)
Change since FY17



(1) All figures are Total Committed Exposures (TCE) as of 30 June 2018. Figures represented have been specifically derived based on material client exposures.
 (2) Diversified miners not included.
 (3) Other energy-related exposures (\$0.2b) includes smaller loans.

Compared to the previous year, our exposure to mining fell (-16%) and emissions allocated to mining sector clients fell (-18%). However, the expenditure allocated to mining sector clients also fell (-37%). The net result of these changes is that the weighted average emissions intensity of the sector rose over the period.

- In the Wealth portfolio, the Group uses a variety of tools such as MSCI ESG Manager and MSCI Barra Portfolio Manager which identify, measure and track ESG and carbon risk at the company, stock, bond, asset and investment strategy level.
- Carbon footprint and carbon intensity metrics (CFS equity investments): The footprints for both MySuper offers have reduced since 30 June 2016.

For most of these metrics, we publicly report on our performance and progress to hold ourselves accountable and demonstrate our commitment to reducing our exposure to carbon-related assets.

Scenario analysis

Our use of scenario analysis in the 2018 financial year, for strategic management as well as a risk management tool, is outlined in detail in the Climate strategy section on page 50.

Updating our Equator Principles III (EPIII) process

We are in the process of updating our EPIII due diligence process to include an assessment of our clients' approach to climate transition and physical risks. The consideration of transition risks is included as part of the EPIII alternatives analysis for high carbon-intensive projects. We will include physical risks in the Commonwealth Bank EPIII due diligence as well as add it to the ESG risk assessment process in the 2019 financial year.

Stranded asset risk register

We focus on assessing our institutional lending exposures against the risk of stranded assets. The risk of obsolescence for all clients is managed through the origination and annual review process. Exposures identified as potentially being impacted by stranded asset risk, due to climate and other factors, are subject to heightened consideration and assessment in the credit process. We maintain a stranded asset risk register, and currently there is considered to be no material risk of loss due to climate-related stranded asset risk.

Metrics and targets

We report regularly on key metrics in order to measure our progress and hold ourselves accountable to our stakeholders with regard to climate risks and opportunities.

Our Climate Policy Position Statement commits us to a number of targets. The table below shows our latest progress against our climate-related targets.

Metric	Target	FY18 progress
Low carbon target	\$15 billion by 2025	\$7.3 billion Committed exposure as at 30 June 2018
Sourcing renewable energy for our power needs	25% by 2020	Tender and consumption modelling completed. Currently undertaking power purchase agreement contract negotiations.
Emissions per FTE (Australia)	2.0 tCO₂-e by 2020	2.3 tCO ₂ -e
Solar panels on branches	1,250 kW by 2020	750 kW
Assessed emissions in our business lending portfolio	An average emissions intensity decrease of our business lending portfolio consistent with our commitment to a net zero emissions economy by 2050	0.28 kgCO ₂ -e/AUD of expenditure (FY17)

For a full set of our environmental, social and governance metrics, see our 2018 Group non-financial performance metrics on pages 75–78.