

IMPACT  
REPORT  
2022

Strengthened by



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## Acknowledgement of Country

Australian Unity Limited, Australia Unity Funds Limited and Altius Asset Management acknowledge Aboriginal and Torres Strait Islander peoples as the first peoples and traditional custodians of Australia and recognise their continued custodianship of country, land, sea and skies. We pay respects to elders, past, present and emerging.



# Welcome to our first bond impact report



At Altius Asset Management, we consider ourselves leaders in responsible cash and fixed interest management. As a boutique funds management arm of Australian Unity's investments business, we use our award-winning expertise in environmental, social and governance (ESG) analysis to assess debt issuers and build sustainable investment portfolios for our clients.

As part of our investment philosophy, we are committed to doing our bit in driving the growth and development of a vibrant and trusted sustainable finance market, and we have an acknowledged track record of innovation and market leadership in doing just that.

We believe disclosure, transparency, and clarity of communication are all key elements of market integrity. However, the reporting of impact (both positive and negative) of investments is still in its infancy, especially in fixed interest. Nonetheless, we believe the absence of complete data and standardised methodology is no excuse to not provide useful, if not entirely comprehensive, insights into the investment portfolios we create for our clients and the significant ESG benefits achieved for them compared to traditional bond benchmark portfolios. And that's what this report is about.

At Altius, while we don't classify ourselves as a pure impact investor, we strongly believe all investments – across all asset classes – have impacts and as a responsible investor we have a duty to deliver products that make as positive an impact as possible without compromising returns and/or weakening risk management. This can be achieved through the careful screening of securities as part of the portfolio construction process, weeding out entities engaged in potentially negative social and environmental impacts, while promoting capital market users that are aligned to the United Nations' Sustainable Development Goals.

To this end, we have great pride in presenting what is, to our knowledge, Australia's first bond impact report. In this report, we assess the trajectory of three of our bond funds in terms of emissions against International Energy Agency (IEA) scenarios. We also assess our funds' combined exposure to the transition and physical risk of climate change.

We have provided case studies of our holdings as tangible examples of how we invest and engage across our funds to effect positive change more broadly as a key part of our investment process.

We hope this report will not only inform financial professionals and investors, but also provoke many questions, and inspire discussions that will ultimately help us improve our reporting and engagement with investors and debt issuers alike. We also hope this report might encourage discourse with other investment managers to consider the real-world impact they are making with their investment decisions.

This report is part of an important step forward in the maturing of sustainable finance markets towards what we believe will become the accepted standard of disclosure for all users of capital markets.

We hope you enjoy reading the Altius Impact Report 2022 and find the insights just as fascinating as we did.

**Bill Bovingdon**  
Chief Investment Officer  
Altius Asset Management

# Key takeaways



By reading this report, you will be able to take away a number of key insights about the impact of mainstream investments, like bonds:

## 1 Making an impact with investing

How to use bonds to make an impact with the way you invest. [Read more.](#)

## 2 Measuring and tracking carbon within a portfolio

How our portfolios have a superior carbon profile (scope 1 & 2) to their Benchmarks. [Read more.](#)

## 3 Comparing the carbon risk exposure of individual portfolio holdings

What to consider when comparing companies and how they are lowering their carbon emissions. [Read more.](#)

## 4 Assessing portfolios under accepted climate scenarios

How the combined portfolio's emission trajectory is aligned to the Paris Agreement. [Read more.](#)

## 5 Avoiding stranded asset risk

How to transition to low carbon investments by avoiding companies at risk of potential future greenhouse gas emissions restrictions. [Read more.](#)

## 6 Understanding climate risk

How to build portfolios that consider the physical risks of climate change, including floods and droughts. [Read more.](#)

## 7 Ensuring active engagement with ESG issues

How our ESG advocacy delivers effective engagement for investors on issues that matter most to them. [Read more.](#)

# About this report



Our intention in putting together this Impact Report is to demonstrate how the integration of responsible investment principles across the portfolio construction process can help investors deliver positive real-world outcomes with their capital.

In this inaugural report, we demonstrate how our investments are making an impact on investing. We take an in-depth look at how our Green Bond Fund, Sustainable

Bond Fund, and Sustainable Short Term Income Fund are allocating capital to reduce carbon emissions whilst delivering positive real-world outcomes.

These three funds embody our commitment to responsible investing, by seeking to generate positive, measurable social and environmental impact alongside financial return.

Here's how we're doing it:

## Green Bond Fund

Our Green Bond Fund invests in green, sustainable and social bonds with a primary aim of targeting investments that will contribute to lower carbon emissions. It is aligned with Australian Unity's values to create positive impact.

We take a diversified approach to cash and fixed interest funds management, combining both credit and duration strategies, and seek competitive returns for investors throughout all market conditions. Our team's depth and breadth of experience in fixed interest markets enhances our management of market risk as we focus on responsible investing to shape a positive future.

This fund may be appropriate for a client seeking capital preservation and to be used as a core or satellite component within a portfolio, where the client has a medium or long investment timeframe, low risk/return profile and needs daily access to capital.

## Sustainable Short Term Income Fund

The Sustainable Short Term Income Fund offers daily liquidity and exposure to short-term money market and medium-term floating instruments that provide competitive returns and diversification.

The fund also considers ESG issues when selecting investments, and aligns with Australian Unity's values to create positive impact.

This fund may be appropriate for a client seeking capital preservation and income distribution. It is best used as a core or satellite component within a portfolio, where the client has a medium to long investment timeframe, low risk/return profile and needs daily access to capital.





# About this report

## Sustainable Bond Fund

Our Sustainable Bond Fund is a diversified fixed interest fund designed to align with investors' specific personal and social values without compromising returns over the long-term. The fund takes an active approach to cash and fixed interest funds management, combining both credit and duration strategies, and seeks competitive returns for investors throughout all market conditions, while investing in borrowers that operate responsibly and sustainably.

Our Green Bond Fund, Sustainable Short Term Income Fund and Sustainable Bond Fund together have an aggregate amount invested of \$804 million<sup>1</sup> (as at 30 June 2022). This report assesses the impact performance of the funds individually against relevant

benchmarks and collectively against a specifically created benchmark that comprises 47% of the AusBond Composite Index and 53% of the BBG Floating Credit Index (the Combined Benchmark). The Combined Benchmark represents the weighted average components of the individual benchmarks aggregated into a single and consistent measure for use across the three funds.

Importantly, for the purposes of this report, these three funds are collectively referred to as the Combined Fund.

For further information about specific investments in these funds, go to: [www.altiusam.com](http://www.altiusam.com)



1. Note on methodology and coverage: This Altius impact report assesses the impact of approximately 57% of the Funds' aggregate \$804 million invested, representing the percentage of investments for which we have adequate data to support the assessments contained in this report. In due course, we expect to be able to source the additional information needed to assess a greater proportion of the Funds' holdings. Impact measures, such as carbon footprint, are derived from the 'parent' debt issuer, regardless of the nature of the investment. As such, 'use of proceed' bonds, which form a large component of our total fund investments, are reported according to their overarching emission profile, regardless of their role in financing projects that reduce emissions.

## About this report

### Our responsible investment journey

Over the last 10 years, we have been firmly committed to developing ESG and responsible investing solutions, which can be accessed through the Combined Fund. We are proud of the progress we have made, which includes:





## About this report

### Working with ISS Australia

In preparing this report, Altius has worked closely with the Australian Institutional Shareholder Services (ISS) ESG team – a fixture of the Australasian responsible investment market since 2000 – which has provided an aggregated fund report, as well as reports which measure the individual fund performance against the appropriate benchmark.

### The role of the Sustainability Advisory Committee

Integral to Altius's responsible investment approach is its cash and fixed interest sustainability policy, which is overseen by its Sustainability Advisory Committee that was established in 2014. This committee is charged with using its combined knowledge of ESG issues, financial market expertise and insights to provide recommendations and guidance.

The committee does not make investment decisions, but instead debates and informs the development of sustainable and responsible investment policies, and assists the Altius investment team in making judgments that define the investible universe for the funds.





# Impact investing: Making a lasting difference



## Why put together what we believe is Australia's first bond impact report?

The rise in awareness of ESG issues has spurred great interest in ethical and responsible investing, with more Australians now expecting their savings (87%) and superannuation (86%) to be invested responsibly and ethically.

But what these figures from the Responsible Investment Association Australasia (RIAA) conceal is the increasing demand by investors for investment opportunities that go the next step, by taking their investing beyond integration of traditional ESG principles.

These investors are seeking to use their capital to invest in solutions that make a genuine impact. They may be doing this by turning to specialised impact investing – a style of investing where targeted investments seek to make a clear and lasting difference to society and the environment.

According to the Global Impact Investing Network (GIIN) – a worldwide movement aimed at increasing the awareness of impact investing – impact investing takes the concept of responsible investing to the next level, where capital is invested with organisations, projects or funds that are generating measurable and positive social and environmental outcomes, alongside a financial return.

Today, impact investing can be seen in a range of sectors: from sustainable agriculture, renewable energy, conservation, and microfinance, to affordable and accessible basic services, like housing, healthcare, and education. And increasingly, investors can access a range of asset classes, like cash and fixed interest, to ensure their capital is invested in solutions that make an impact, which benefits both the environment and society.

However, 'pure' impact investments are generally satellite strategies, as they are bespoke, complex, and therefore difficult for most investors to achieve in scale. We seek to highlight that all investments have impact and more traditional investments, like bonds, can also aim at achieving meaningful positive impact, without compromising financial returns to achieve this.

It's against this backdrop and the rising demand by investors to understand the outcomes of their investments beyond the financial return, that we thought the time was right to produce a report that specifically analysed the role of bonds when constructing a portfolio that is aimed at making an impact with investing.



# Impact investing: Making a lasting difference

## Exploring our impact: A deep dive into our process

When considering how an investment can make a beneficial impact on the way you invest, it's important to first consider how this impact is actually being achieved and how it is being measured.

At Altius, we apply four criteria against our Combined Fund<sup>1</sup> (Green Bond Fund, Sustainable Bond Fund, and Sustainable Short Term Income Fund) to measure impact. To do this, we use a range of metrics and risk analysis as part of our approach to portfolio construction, including:

- 1 Measuring the Combined Fund's portfolio carbon emissions to approved industry standards;**
- 2 Aligning the fund to IEA climate scenarios for decarbonisation;**
- 3 Ensuring we manage our transition risk as part of our climate risk analysis; and**
- 4 Analysing and measuring the physical climate risk on companies from both an operational and macro market level.**

The following pages take a deeper look at how we approach these four criteria when assessing our impact with the Combined Fund. We highlight how we apply this criteria to holdings when assessing investment opportunities for our fund, which includes looking at four case studies that we believe, demonstrates our positive approach to the allocation of capital.

### Portfolio carbon metrics Data Availability Challenges

When considering the metrics of carbon emissions for the Combined Fund, coverage for the analysis is approximately 57% (which equates to \$458 million of a total \$804 million) versus a Combined Benchmark coverage of approximately 53%. Metrics from this analysis have been provided by the ISS ESG – Climate Impact Assessment report – which has sourced the emissions data through company sustainability reports and/or Carbon Disclosure Project (CDP) reporting.

Getting access to reliable data that is needed for impact assessment is a global challenge for our industry. There are whole classes of securities that are not captured within the funds or their benchmarks, such as sovereigns, semi government authorities, and some corporate bonds.

In particular, capturing the sovereign and semi government authority's data using the existing methodology would result in the double counting of emissions. At Altius, we are in discussion with these entities about methodologies for disclosure, as well as involving ourselves in developments within the market, together with ISS ESG, so we can provide a more detailed assessment of our Combined Fund in future reports.

Clearly, without knowing the nature of this data, it isn't possible to dismiss the possibility of a skew in the resulting emission analysis. However, using a benchmark relative basis means that such distortions are reduced.

Assessment of scope 1 and 2 emissions are calculated using the ownership ratio of each individual holding multiplied by the greenhouse gas (GHG) emissions of that specific organisation's enterprise value. The results of the individual exposures are then added to obtain the portfolio and benchmark emissions respectively.



# Impact investing: Making a lasting difference

## 1. Measuring the Combined Fund's portfolio carbon emissions

Scope 1 emissions cover direct emissions from owned or controlled sources, while scope 2 emissions cover indirect emissions from the generation of purchased energy consumed by the reporting company. Scope 3 emissions include all other indirect emissions that occur in a company's value chain (such as use of its end products).

In the analysis provided below, scope 1 and 2 emissions<sup>2</sup> of the Combined Fund are 70.4% below the Combined Benchmark on a relative basis.

	Emission exposure tCO <sub>2</sub> e		Relative emission exposure		
	Scope 1 & 2	Incl. Scope 3	Relative carbon footprint <sup>3</sup>	Carbon intensity <sup>4</sup>	Weighted avg. carbon intensity <sup>4</sup>
Portfolio	1,083	24,522	2.37	11.46	7.07
Combined Benchmark	3,654	23,391	8.00	51.94	26.5
Net performance	70.4%	-4.8%	70.4%	77.9%	73.3%

Source: ISS ESG Australia, 2022

2. Refer to the Methodology section on page 32 for details.

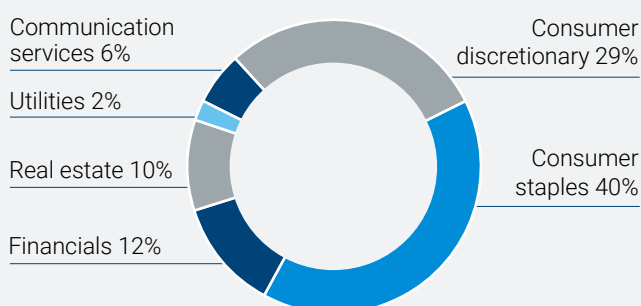
3. A carbon footprint is the total greenhouse gas (GHG) emissions. CO<sub>2</sub>e is the standard unit for measuring carbon footprint and stands for carbon dioxide equivalents. It includes other greenhouse gases such as methane and nitrous oxide.

4. Refer to the Methodology section on page 32 for more detail regarding measurements and standards.

# Impact investing: Making a lasting difference

The following chart shows that sector contributions of the Combined Fund in relation to scope 1 and 2 emissions are dominated by consumer staples (40%) and consumer discretionary (29%).

## Sector contributions to emissions



Source: ISS ESG Australia, 2022

Looking more closely at the emissions profile of the Combined Fund, the table below highlights the top 10 contributors to scope 1 and 2 emissions. This represents 22.5% of total holdings, which contributes 85% of the Fund's emissions.

The number one contributor to the emissions is Woolworths, which represents 2.9% of the market value of the Combined Fund and contributes 39.9% to the Combined Fund's emissions. Whilst this seems high, our investments are in the green bonds issued by Woolworths, which are contributing positively to lowering emissions, as they are 'use of proceeds' bonds (refer to glossary and case study).

Holdings like Woolworths demonstrate some of the challenges we face when measuring impact, with emission profiles drawn from the parent company, rather than reflecting the emission reduction nature of the projects that are funded by a particular bond. However, despite this, the scope 1 and 2 emissions of the Combined Fund are well below the Combined Benchmark.

## Top 10 Contributors to Portfolio Emissions

Issuer name	Contribution to portfolio Emission Exposure	Portfolio Weight (%)
Woolworths Group Limited	39.86%	2.90%
Wesfarmers Limited	15.91%	1.69%
Toyota Motor Corp.	7.86%	1.73%
Mercedes-Benz Group AG	5.14%	1.67%
Vodafone Group Plc	4.23%	1.32%
Suncorp Group Limited	2.69%	8.26%
Vicinity Centres	2.57%	0.59%
Lendlease Group	2.55%	0.38%
Dexus	2.15%	0.62%
Bendigo and Adelaide Bank Limited	2.09%	3.38%
<b>Total for Top 10</b>	<b>85.06%</b>	<b>22.53%</b>

Source: ISS ESG Australia, 2022





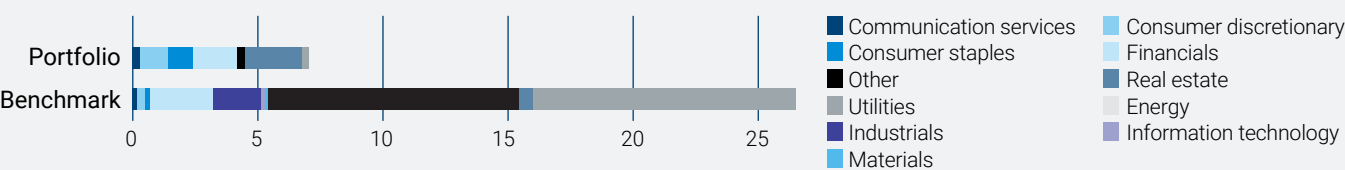
# Impact investing: Making a lasting difference

## Carbon Intensity

This metric is assessed as the total of scope 1 and 2 carbon emissions per million dollars of revenue, as a proxy of the carbon efficiency per unit of output. When assessing the carbon intensity and weighted average carbon intensity, the Combined Fund's portfolio is 77.9% and 73.3% below the Combined Benchmark respectively. The key contributor to this positive impact is being underweight in the utilities sector, which is identified in the greenhouse gas emission intensity graph below:

### Greenhouse gas emission intensity

Weighted average greenhouse gas intensity sector contribution (tCO<sub>2</sub>e / Mio AUD revenue)



Source: ISS ESG Australia, 2022

The top five emission intense companies are represented by four property trusts, which all have higher emissions compared to their peer average. Mercury NZ (which generates electricity from 100% renewable sources) being the outperformer, contributing 115.25 tCO<sub>2</sub>e versus its peer average of 2663.37.

Issuer name	Emission intensity	Peer group avg. intensity
1. Charter Hall Group	129.14	78.63
2. Dexus	121.22	78.63
3. Mercury NZ Ltd.	115.25	2,663.27
4. Vicinity Centres	110.35	68.85
5. The GPT Group	95.56	78.63

Source: ISS ESG Australia, 2022

Assessing the carbon intensity metric of Altius' three funds, the Green Bond Fund has a weighted average carbon intensity that is 73.3% lower than its benchmark, while the Sustainable Bond Fund has a weighted average carbon intensity that is 67.9% lower than its benchmark. The Sustainable Short Term Income Fund also has a weighted average carbon intensity that is lower than its benchmark of 84.1%.

# Impact investing: Making a lasting difference

## Assessing Scope 3 Emissions

Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain. Some examples are extraction and production of purchased materials, transportation of purchased fuels, use of sold products and services.

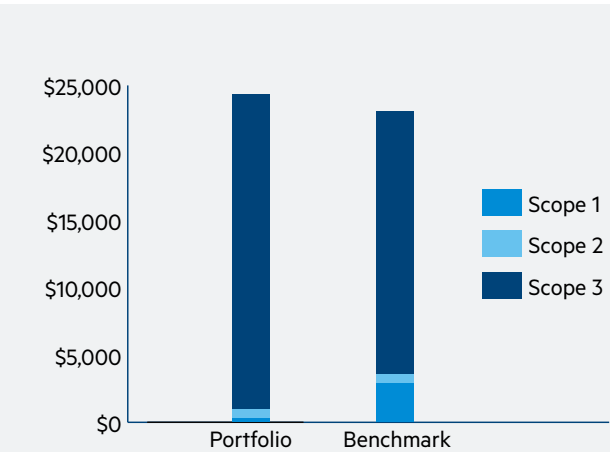
However, scope 3 emissions data is notoriously difficult to capture and gives rise to a double-counting issue where investments are made in companies along the same supply chain. In principle, scope 3 emissions can be calculated using a similar methodology to scope 1 and 2, but due to limited reporting and data availability for the Combined Fund, most of this data is modelled in this report.

On the scope 3 metric, the Combined Fund has slightly higher emissions than the benchmark (4.8% higher), as identified in the table on page 6. A key reason for this is the Combined Fund's exposure to corporate bond holdings, such as Toyota and Mercedes Finance.

Therefore, these investments are assessed according to their parent company's aggregate scope 3 emission profiles, as are residential mortgage-backed securities, rather than capturing the emissions profile reflective of residential property.

It should be noted that there is not yet a standard methodology for measuring the carbon footprint of green bonds. The Partnership for Carbon Accounting Financials (PCAF), whose methodologies are recommended by the Task Force on Climate-Related Financial Disclosures (TCFD), is currently developing such a methodology. However, this will apply only to corporate-issued green bonds where the corporate has operational control over the use of proceeds.

Currently, the carbon footprint for all corporate-issued bonds, green or otherwise, is traced back to that of the parent company. Within the Combined Fund, the carbon footprint is likely to be overestimated for these securities.



Source: ISS ESG Australia, 2022





# Impact investing: Making a lasting difference

## 2. Climate scenario alignment

This section of the report compares current and future portfolio greenhouse gas emissions by using the IEA's carbon budget scenarios for decarbonisation out to the year 2050.

There are three scenarios<sup>5</sup>:

- ▲ Sustainable Development Scenario (SDS)
- ▲ Stated Policy Scenario (STEPS)
- ▲ Announced Policy Scenario (APS)

The SDS scenario is aligned to the Paris Agreement, which seeks to limit global warming to well below 2°C, preferably to 1.5°C. The three scenarios are further explained as follows:

### Sustainable Development Scenario – SDS

This is an integrated scenario with a specific pathway that is aimed at ensuring universal access to affordable, reliable, sustainable and modern energy services by 2030. This pathway is aligned to the United Nations Sustainable Development Goals (SDG) – namely, affordable and clean energy (SDG 7); substantially reducing air pollution (SDG 3.9); and taking effective action to combat climate change (SDG 13).

### Stated Policy Scenario – STEPS

This scenario reflects current policy settings based on a sector-by-sector assessment of the specific policies that are in place, as well as those that have been announced by governments around the world.

### Announced Policy Scenario – APS

This scenario assumes that all climate commitments made by governments around the world, including Nationally Determined Contributions (NDCs) and longer-term net zero targets, will be met in full and on time.

When applying these scenarios to the Combined Fund, the relative performance of investments held under each scenario is shown as the percentage of assigned budget used by the Combined Fund's portfolio, the Combined Benchmark, and the time periods where it is within and exceeding the budgets.

## Results

The Combined Fund is fully aligned with the SDS scenario, which is a Paris Aligned Investment Initiative. While no climate modelling system can accurately predict what global temperatures will be in 10, 20 or 30 years' time, based on the IEA scenarios and currently available data, the results identify that the Combined Fund has a predictive temperature increase of 1.5°C, while the Combined Benchmark gives rise to a potential temperature increase of 2.5°C.

Combined Fund and Combined Benchmark comparison to SDS budget (red= Overshoot)				
	2021	2030	2040	2050
Combined fund	-84.12%	-81.92%	-66.8%	-30.47%
Combined benchmark	-68.01%	-44.14%	+64.38%	+414.61%

Source: ISS ESG Australia, 2022

5. [iea.org/reports/world-energy-model/understanding-weo-scenarios](https://www.iea.org/reports/world-energy-model/understanding-weo-scenarios)

# Impact investing: Making a lasting difference

The trajectory of the Combined Fund and the Combined Benchmark under each scenario is highlighted in the below graph. Each scenario expects a certain level of temperature increase and an implied cumulative carbon budget, which starts at 100% of current annual emissions and ending below 20% under the most optimistic IEA scenario (left hand axis).

A carbon budget specifies the cumulative amount of carbon dioxide emissions permitted while remaining consistent with a certain temperature range by the end of the century. For example, to remain within the limits of the SDS, less carbon can be combusted compared to the scenarios that expect a significant temperature increase, such as the STEPS scenario.

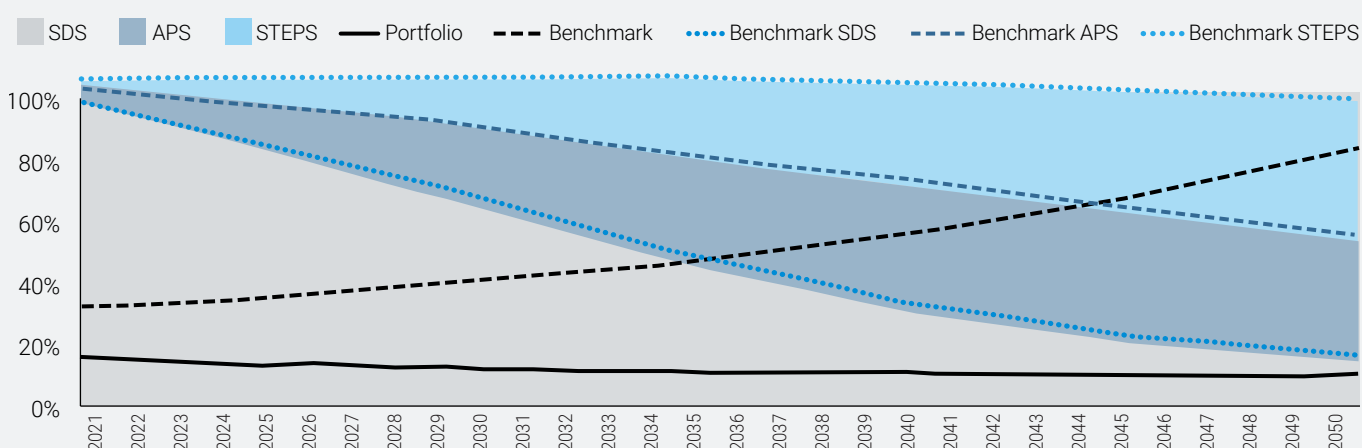
To calculate the carbon budget, ISS follows the Sectoral Decarbonisation Approach (SDA) developed by the Science Based Targets Initiative. This approach allocates each sector a carbon budget for a given scenario and provides an annual reduction rate for every company within that sector.

The ISS ESG scenario analysis combines the IEA scenarios with a SDA by allocating a carbon budget to a company based on its market share and the expected emissions trajectory associated with that sector.

The shaded areas of the graph show the carbon budgets for the Combined Fund under each of the IEA scenarios. The portfolio line shows the trajectory of the Combined Fund in comparison to each of the scenarios.

The dotted lines within the graph represents the benchmark under each of the scenarios (noting the sector make-up of the benchmark allows a slightly higher budget than the Combined Fund) in comparison to the benchmark's trajectory over time. As you can see, the Combined Fund has both a lower starting point and superior trajectory over time.

## Portfolio emissions pathway versus Climate scenarios budgets



Source: ISS ESG Australia, 2022



# Impact investing: Making a lasting difference

## Individual fund level metrics

Assessed against the most ambitious, Paris-aligned climate scenario (SDS), the Altius Green Bond Fund strategy is effectively aligned by 2050. This compares with to the Bloomberg AusBond Composite 0+ Yr Index (the fund specific index), which has a potential temperature increase of 2.8°C.

The Altius Sustainable Short Term Income Fund strategy is also aligned with a SDS scenario by 2050 and has a potential temperature increase of 1.5°C, compared to the Bloomberg Floating Credit Index (a proxy index for appropriate carbon metric assessment), which has a potential temperature increase of 2.3°C.

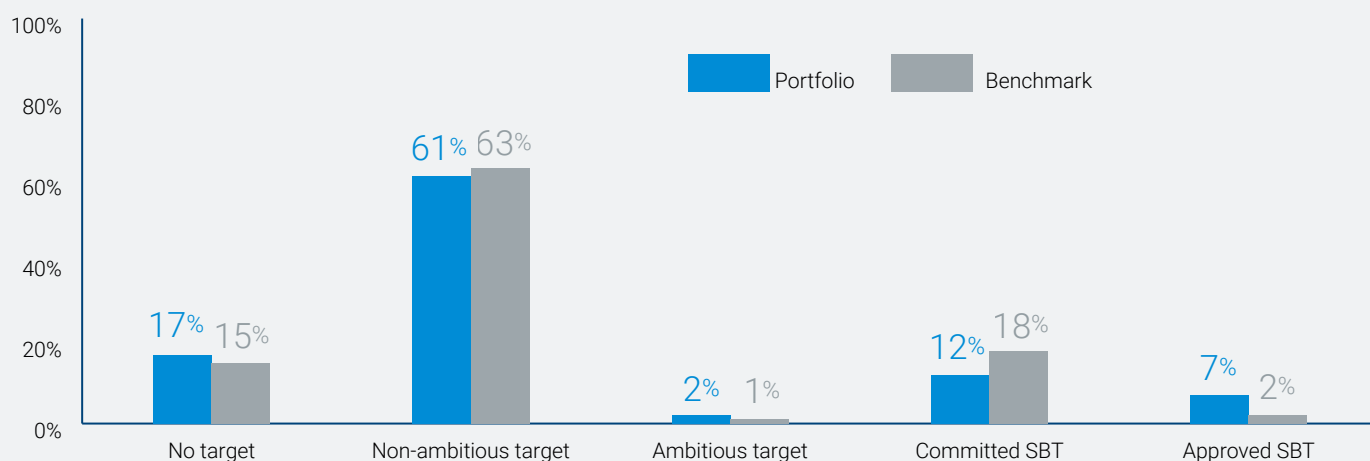
And like our Green Bond Fund strategy, our Sustainable Bond Fund strategy is also effectively aligned with a SDS scenario by 2050, compared to the Bloomberg AusBond Composite 0+ Yr Index, which has a potential temperature increase of 2.8°C.

## Climate Target Assessments

With an increasing number of companies declaring climate targets, the ISS ESG has assessed the Combined Fund and the Combined Benchmark to identify and categorise these targets. A company's reduction targets are classified along five categories: No Target, Non-Ambitious Target, Ambitious Target, Committed Science Based Targets (SBT), and Approved SBT.

The following climate targets alignment graph provides an indication of how well companies are aligning with international climate goals, such as the Paris Agreement.

More specifically, the Non-Ambitious and Ambitious targets are analysed as part of the ISS ESG ratings factor 'GHG emission reduction targets and action plans'. This factor identifies companies that have set climate targets outside the Science Based Target initiatives.



Source: ISS ESG Australia, 2022

# Impact investing: Making a lasting difference

To transition to a low carbon economy, companies need to commit to alignment with international climate goals and be able to clearly demonstrate future progress. Currently, 21% of the Combined Fund's portfolio value is committed to such a goal. This includes ambitious targets set by the companies, as well as committed and approved science-based targets. Companies that we have identified within the Combined Fund that have made these commitments include Woolworths, Spark New Zealand, and Dexu.

However, target commitments are not a guarantee that a company will reach its goals and disappointingly, there is a large percentage of holdings (78%) within both the Combined Fund and Combined Benchmark that have no target or non-ambitious targets. These holdings consist of domestic and international banks, as well as exposures to domestic property trusts within the Combined Fund. They will all be part of an active engagement strategy by the Altius Sustainability Advisory Committee over the coming year.

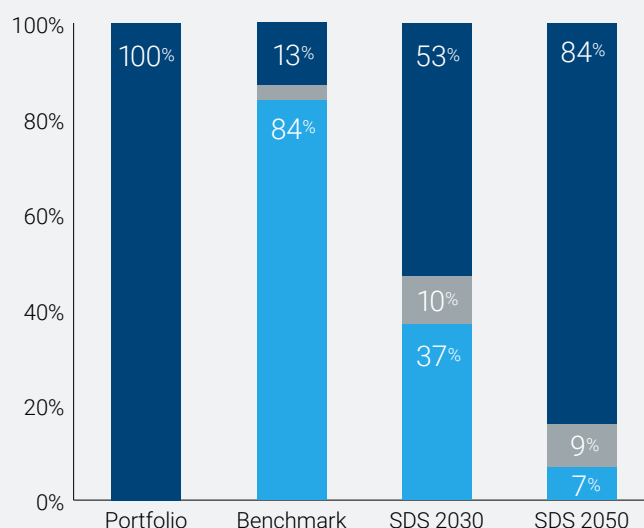
## 3. Transition climate risk analysis

The transition to a low carbon economy poses several risks. A decarbonised world needs to address both the demand side (e.g. utilities burning fossil fuels) and the supply side (e.g. fossil fuel reserves) of future emissions. For utilities, consideration must be made as to whether the power currently generated, and planned future power generation, comes from renewable (green), fossil (brown) or a combination of both sources. For fossil reserve owning companies, potential future greenhouse gas emissions restrictions might indicate a stranded asset risk.

Utilities relying on fossil power production without a substitute plan might have a higher risk of getting hit by climate change regulatory measures, as well as reputational damage.

The graph below compares the energy generation mix of the Combined Fund's portfolio with the Combined Benchmark and a SDS compatible target mix in 2030 and 2050, according to the IEA. The Combined Fund has a 100% exposure to renewables from energy generation, in comparison to just 13% for the Combined Benchmark.

**Power generation exposure**  
(Portfolio vs. Benchmark vs. Climate Target)



Source: ISS ESG Australia, 2022

For fossil reserve owning companies, stranded asset risk is a considerable risk, given that scientists estimate about 80% of those fossil fuel reserves need to stay in the ground to not exceed 2°C of warming. The Combined Fund's portfolio contains zero potential future carbon emissions. Compliance with this position is ensured by Altius's sustainability governance framework.



# Impact investing: Making a lasting difference

## 4. Physical climate risk analysis

Physical risks are increasingly being observed across the globe. In more recent times, the impact of bushfires and floods in Australia have been devastating. The flow-on effects are widespread and can have a financial impact on a company, both operationally and at a macro market level.

Operational risks are quantified by considering the costs of repairing assets damaged by tropical cyclones, river floods, wildfires, and the loss of income due to the associated business interruptions. The impact of heat stress on labour productivity and the resulting increase in production costs are also considered.

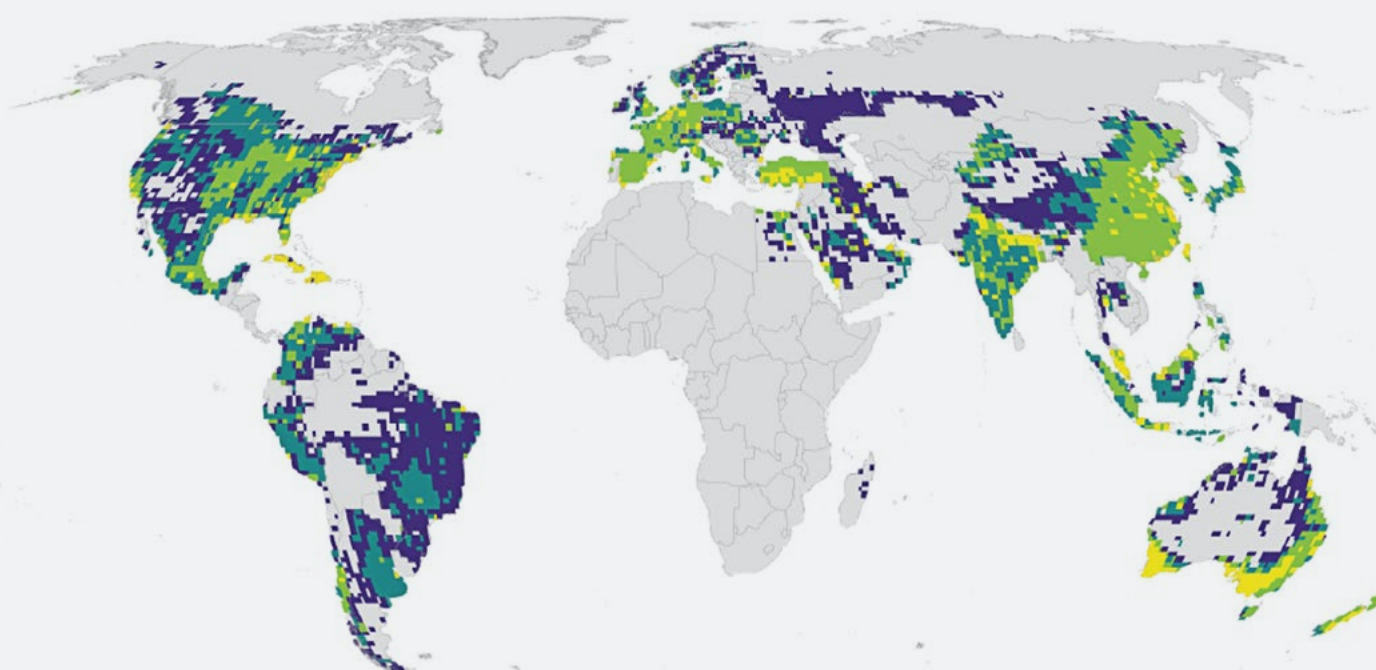
Market risks are quantified by the revenue at risk due to the nationwide effects on a country's Gross Domestic Product (GDP) due to the combined impact of droughts

and heat stress on agricultural productivity, the decrease in labour productivity, and human health effects. The ISS ESG physical risk assessment assumes a one-to-one relation between GDP changes and changes in company revenue.

Even with limiting global warming to a 2°C increase, rising temperatures will change the climate system and exacerbate physical risks, such as floods, droughts and storms. The map below shows the physical risk exposure of the Combined Fund's portfolios by 2050 in a 'most likely' warming scenario, built around the Representative Concentration Pathway 4.5 from the Intergovernmental Panel on Climate Change's (IPCC) 5th Assessment Report.

Source: ISS ESG Australia, 2022

This map shows the portfolio's physical risk exposure by 2050 in a likely warming scenario



Source: ISS ESG Australia, 2022

■ Highest ■ High ■ Moderate ■ Light ■ None

# Impact investing: Making a lasting difference

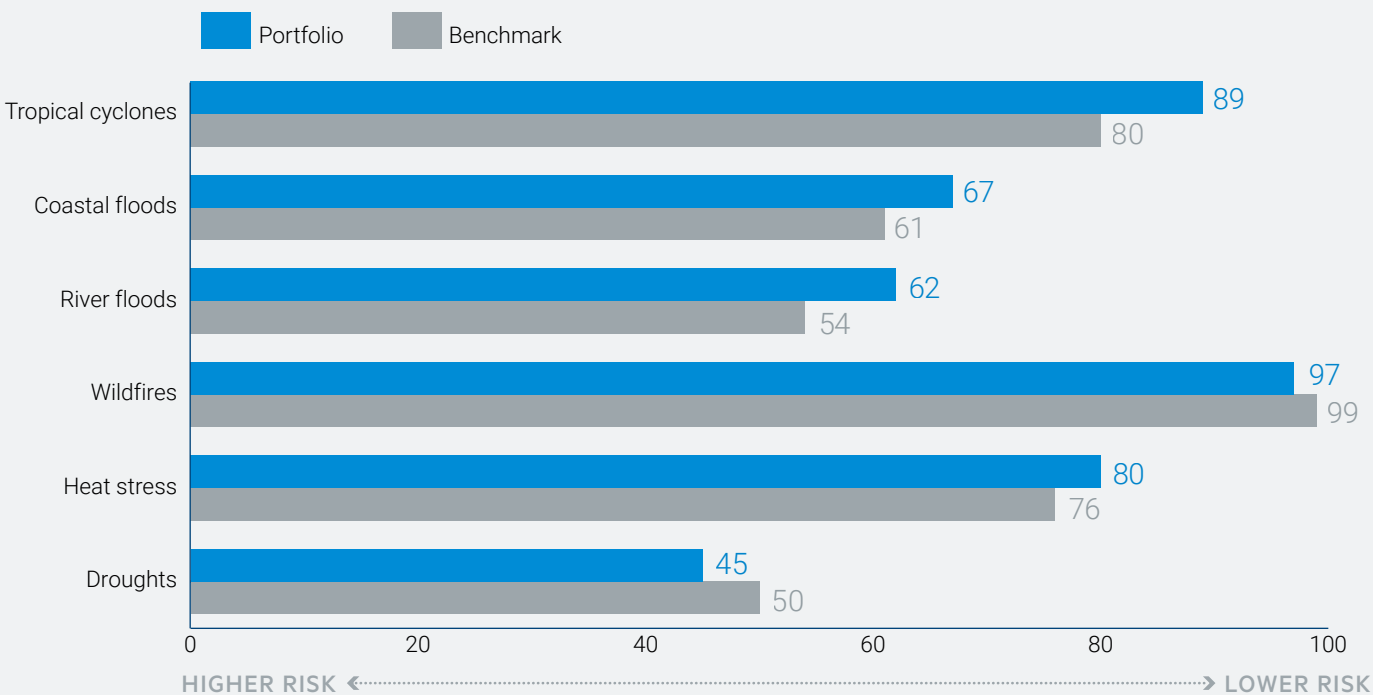
Representative Concentration Pathways (RCP) were used to develop greenhouse gas concentration trajectories. The word 'representative' signifies that each RCP provides only one of many possible scenarios.

A 'most likely' scenario is built around RCP 4.5 (equivalent to a 1-3°C temperature rise by 2100).

Holdings within the Combined Fund's portfolio are exposed to different natural hazards in different geographical locations, which can affect the value of the Combined Fund's

portfolio and the Combined Benchmark. The chart below evaluates the change in financial risk due to six of the costliest hazards under a 'most likely' scenario. A low score indicates a large increase in physical risks, while a high score reflects a minimal increase in physical risks. Drought is the largest physical risk of the Combined Fund.

The Physical Risk Score measures the change in an issuer's financial risk relative to its sector median in the likely scenario (RCP 4.5). The score is bounded to the range 0-100.



Source: ISS ESG Australia, 2022



# Impact investing: Making a lasting difference

## Top 10 portfolio holdings by highest overall risk exposure

The Physical Risk Score of each holding is impacted by the projected change in exposure to individual hazards. The table below shows portfolio holdings that will see the most increase in risk and the potential hazards contributing to this risk in a likely scenario. A low score reflects a large projected increase in physical risks, while a high score reflects a minimal increase in physical risks.

Issuer name	Overall physical risk	Tropical cyclones	Coastal floods	River floods	Wildfires	Heat stress	Droughts
Overseas-Chinese Banking Corporation Limited	26	25	26	41	100	32	47
Verizon Communications Inc.	40	31	100	48	44	100	50
Citigroup Inc.	46	100	74	56	100	41	50
Toyota Motor Corp.	47	51	50	50	100	100	50
Bank of Queensland Ltd.	48	100	76	100	100	60	35
Bendigo and Adelaide Bank Limited	48	100	72	67	100	67	35
Mercedes-Benz Group AG	48	73	72	58	100	100	50
Commonwealth Bank of Australia	49	100	50	47	100	100	36
Macquarie Group Limited	49	100	74	46	100	67	47
UBS Group AG	49	62	52	42	100	54	50

Source: ISS ESG Australia, 2022

The largest holdings are attributed to debt from financial institutions reflecting the lending books of issuers which are exposed to several hazards. Lending books exposed to the agriculture sector, both directly and indirectly, are most at risk, and the impact of droughts is a common theme of hazard across nine of the top 10 portfolio holdings. Additionally, there is the potential for an adverse impact on the country's Gross Domestic Product (GDP) due to decreased agricultural yield.

Heat stress can also have an adverse impact on labour productivity and the cost of health. Impacts from hazards, such as tropical cyclones and river floods, can include large asset repair costs and loss of revenue due to business interruption.

Of note is our holding in Overseas Chinese Banking Corporation Ltd (OCBC), which has the highest overall physical risk (lowest score). This indicates a significant vulnerability to tropical cyclones, coastal floods, river floods, and heat stress, which is due to the parent company's geographical location. Similarly, Verizon Communications Inc is impacted by tropical cyclones, river floods and wildfires, because of its direct exposure to infrastructure risk.

# Impact in action: Case studies



To highlight Altius' positive approach to the allocation of capital, we have showcased four holdings within the Combined Fund, which qualify as green, social, sustainability-linked, and sustainability bonds (GSSS bonds). The Combined Fund holds approximately \$228 million of GSSS bonds as at the date of this report.

As part of our portfolio construction process, each of these investments are governed by our 'Green, Sustainable and Social policy', which provides parameters for selection. The policy integrates the ICMA Green and Social Bond Principles and Sustainable Bond guidelines<sup>6</sup>, and the ICMA Sustainable Linked Bond/Loan Principles. This policy applies to green, sustainable and social bonds, and sustainability-linked securities that were considered for inclusion in the Combined Fund.

We continue to research further opportunities for investment in the ESG sector. In particular, we are engaged in efforts to encourage data sharing for use within the industry, which we believe will greatly assist in broader reporting frameworks.

The Combined Fund portfolio invests in several green, sustainable and social bonds. The following section captures some of the key initiatives enabled by our investment and how they contribute to the United Nations Sustainable Development Goals (SDGs) in the case of four specific bonds.

These four case studies are covered below. Read on to learn more about these bonds, and how these holdings reflect our positive approach to allocating capital that makes an impact with investing.



6. <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>  
<https://www.icmagroup.org/green-social-and-sustainability-bonds/social-bond-principles-sbp/>  
<https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>  
<https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-Principles-June-2020-171120.pdf>






# Impact in action: Case studies

## 1. National Housing Finance and Investment Corporation (NHFIC)

NHFIC is dedicated to improving housing outcomes for Australians and provides long-term, low-cost finance via loans, investments and grants to registered community housing providers to support the provision of more social and affordable housing.

NHFIC issued three new bonds in FY21, including its first sustainability bond. The three new bonds provided community housing providers with financial sustainability via longer tenure and lower interest loans – delivering \$161 million in savings in estimated interest charges and reduced fees over the life of the loans.

### Key SDGs and targets achieved

SDGs		Targets
	<b>No poverty</b>	<b>Target 1.4:</b> Ensure access to basic services ownership and control over land and other forms of property.
	<b>Clean water and sanitation</b>	<b>Target 6.3, 6.4 and 6b:</b> Improve water quality by substantially increasing recycling and safe reuse, increase water use efficiency, and improve water and sanitation management.
	<b>Affordable and clean energy</b>	<b>Targets 7.3 and 7a:</b> Promote investment in energy infrastructure and clean energy technology and improve energy efficiency.
	<b>Sustainable cities and communities</b>	<b>Target 11.1:</b> Make cities and human settlement inclusive, safe, resilient and sustainable.
	<b>Responsible consumption and production</b>	<b>Target 12.5:</b> Substantially reduce waste generation through prevention, reduction, recycling, and reuse.

Source: NHFIC Social Bond Report 2020-21

Where available, NHFIC has included tenant profiles to highlight the stories of Australians whose lives have been improved by the work of their community housing partners. These tenant profiles include:

- ▲ at risk cohorts – including at risk youth, those affected by domestic violence, and people at risk of homelessness;
- ▲ individuals with a disability;
- ▲ older Australians;
- ▲ Indigenous Australians; and
- ▲ women and single parents.



# Impact in action: Case studies

## 2. QIC Green Bond

In 2019, QIC Shopping Centre Fund (renamed QIC Town Centre Fund or 'QTCF' on 1 October 2021) issued a \$300 million Climate Bond Initiative (CBI) certified green bond – a world-first for the retail property sector and an important milestone for QTCF, as it demonstrated QIC's ongoing focus on sustainability.

The QTCF Green Bond has been issued in accordance with the QIC Town Centre Fund Sustainability Financing Framework (the QTCF Framework), which has been developed to support and contribute towards meeting the relevant SDGs, as well as meeting the criteria for certification by the Climate Bonds Initiative (CBI) under the Climate Bonds Standard.

The Green Bond asset pool includes three high-quality Australian retail assets. These assets have undergone staged redevelopment programs and are part of a portfolio-wide energy efficiency program of works, which continue to deliver further energy improvements. These assets comprise:

- 1. Eastland in Ringwood, Victoria;**
- 2. Robina Town Centre in the Gold Coast, Queensland; and**
- 3. Grand Central in Toowoomba, Queensland.**

The assets in the QIC Green Bond Fund received a GRESB score<sup>7</sup> for 2021 of 82.



7. GRESB is a mission-driven and industry-led organisation that provides actionable and transparent environmental, social and governance (ESG) data to financial markets. GRESB provides a consistent framework to measure the ESG performance of individual assets and portfolios based on self-reported data.

# Impact in action: Case studies

## Performance and activities completed during 2020




Carbon reduction initiatives implemented over this period included the commencement of installation of a 5.5 megawatt solar photovoltaic (PV) system at Robina Town Centre and a 1 megawatt system at Grand Central. These two systems officially commenced supply in the second quarter of the 2021 calendar year. The systems are expected to reduce annual carbon emissions at the centres by more than 8,500 tonnes CO<sub>2</sub>e (Robina Town Centre) and more than 1,500 tonnes CO<sub>2</sub>e (Grand Central) respectively.

Mechanical plant upgrades at Robina Town Centre resulted in the decommissioning and replacement of two end-of-life chillers with one high-capacity energy efficient chiller. This work is part of a plan to progressively rationalise from five to three centralised chillers at the centre by transitioning to more appropriately sized and efficient systems.

The deployment of a computer-integrated manufacturing (CIM) data analytics platform continued through 2020, with chiller performance modelling and equipment run-time monitoring implemented across the three centres. This initiative, along with the support of the CIM engineers, has assisted the operations staff of the three centres to optimise the operation of significant plant and equipment, while targeting improved energy efficiencies and lowering carbon emissions for these assets.

The QTCF portfolio-wide energy efficiency program and solar PV rollout will in total contribute to deliver carbon emissions intensity reductions (kg CO<sub>2</sub>/m<sup>2</sup>) for each of the shopping centres that meet the minimum requirements for Climate Bond Standards certification under the Low Carbon Buildings – Property Upgrade criteria. This requires a minimum 30% carbon emissions intensity reduction for a 5-year bond, increasing to a minimum of 34% for a 10-year bond.

## Key SDGs and targets achieved:

SDGs	Targets
 <b>Affordable and clean energy</b>	<b>Target 7.3:</b> By 2030, double the global rate of improvement in energy efficiency.
 <b>Industry, innovation, and infrastructure</b>	<b>Target 9.4:</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency, and greater adoption of clean and environmentally sound technologies and industrial processes.
 <b>Sustainable cities and communities</b>	<b>Target 11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities.

Source: 2021 ESG report ([qicre.com](https://www.qicre.com))



## Impact in action: Case studies

### 3. NSW Treasury Corporation (TCorp)

TCorp remains a leader in Australia's bond market. In 2021, total issuance under its NSW Sustainability Bond Programme was \$5.2 billion. TCorp continues to build a deep and liquid sustainable finance option, providing investors with increased flexibility for managing ESG focused portfolios.

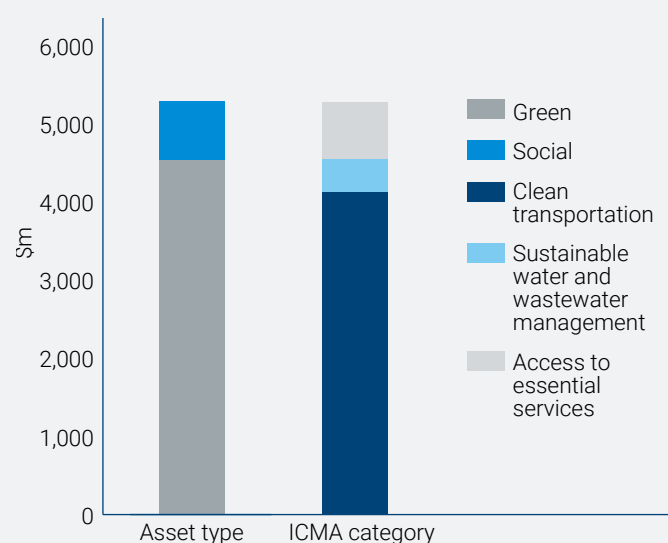
Proceeds issued under the NSW Sustainability Bond Framework are used to finance and refinance projects and assets that:

- ▲ deliver positive environmental and social outcomes;
- ▲ align with and contribute towards meeting SDGs; and
- ▲ support the NSW Government's environmental and social objectives.

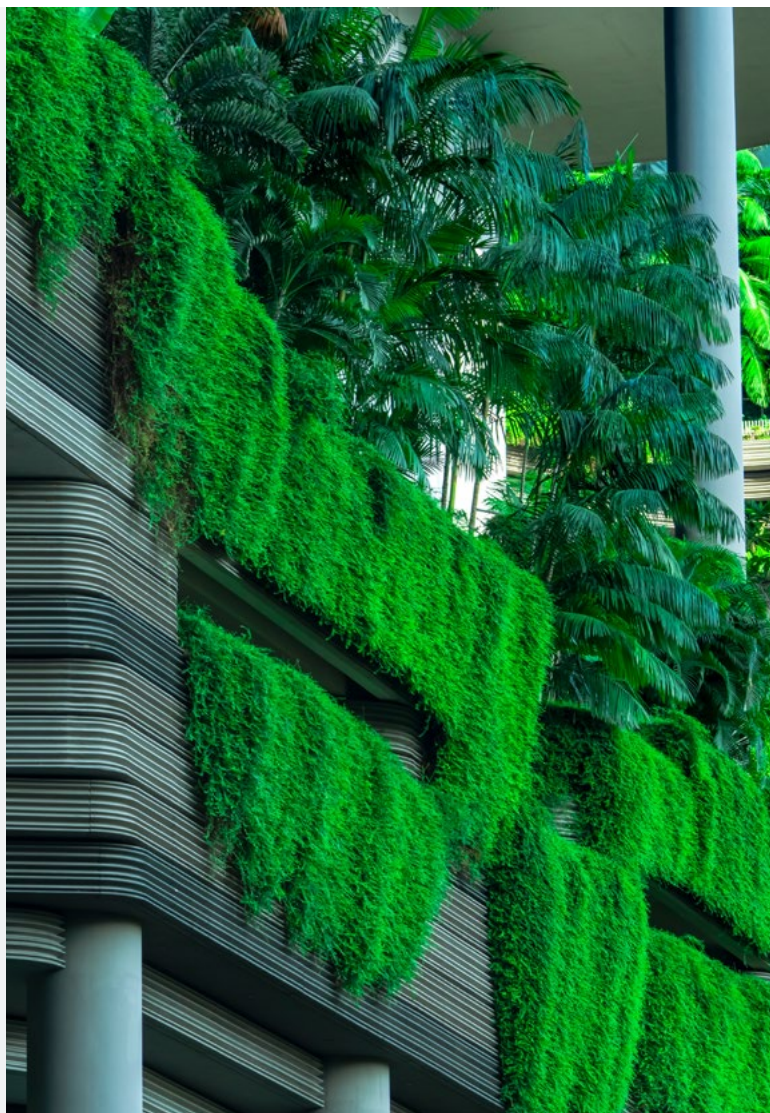
#### Bonds issued

Security type	Maturity	Coupon	Volume on issue
Green	15 November 2028	3.00%	\$1.8 billion
Green	20 November 2030	1.25%	\$1.3 billion
Sustainability	20 March 2025	1.25%	\$2.1 billion

#### Breakdown of asset type and sectors



Source: TCorp NSW Sustainability Bond Programme Annual Report 2021





## Impact in action: Case studies

### Key projects and 2021 outcomes from the NSW Sustainability Bond Programme

<b>Clean transportation</b>	<p><b>Sydney Metro Northwest and Newcastle Light Rail</b></p> <ul style="list-style-type: none"> <li>• 14,978,300 passenger trips on public transport.</li> <li>• 100% offset of operational electricity needs by solar power for Metro Northwest, avoiding an estimated 64,309 tCO<sub>2</sub>. Power being supplied by Beryl Solar Farm.</li> </ul>
<b>Sustainable water and wastewater management</b>	<p><b>Lower South Creek Treatment Program</b></p> <ul style="list-style-type: none"> <li>• Upgrade to Lower South Creek water recycling plants to increase resilience and liveability for half a million people in Western Sydney by 2040. Upgrade involves three of Sydney Water's major inland wastewater treatment plants.</li> <li>• Design received the highest sustainability rating from the Infrastructure Sustainability Council for water infrastructure.</li> <li>• During construction and across its 50-year operation, it is estimated to have a 42% greenhouse gas emissions reduction.</li> </ul> <p><b>Green Square Trunk Stormwater Improvement</b></p> <ul style="list-style-type: none"> <li>• Construction of a 2km underground stormwater drain from Zetland to existing stormwater system in Alexandria. The drain now takes floodwater from South Sydney into Botany Bay. The system significantly reduced flood risk and improves water quality by treating stormwater runoff through gross pollutant traps. The development reduces the demand for drinking water through recycling of 900kL/day of stormwater at full capacity.</li> <li>• Waterway naturalisation and stormwater improvement.</li> <li>• Replacement of deteriorating concrete sections with sandstone and stabilization of banks with native plants, trees and rocks.</li> <li>• Naturalisation of waterways leads to improved water quality, improves biodiversity and mitigation of floods.</li> </ul>
<b>Social infrastructure</b>	<p><b>Public school infrastructure</b></p> <ul style="list-style-type: none"> <li>• 32 new schools built and major upgrades.</li> <li>• 42,069 school teaching spaces (state total).</li> </ul> <p><b>Transport Access Program – tranche 3</b></p> <ul style="list-style-type: none"> <li>• 13 train station upgrades completed.</li> <li>• 62.5% of NSW train stations accessible to people with physical disability and limited mobility.</li> </ul>

Source: [TCorp NSW Sustainability Bond Programme Annual Report 2021](#)

## Impact in action: Case studies

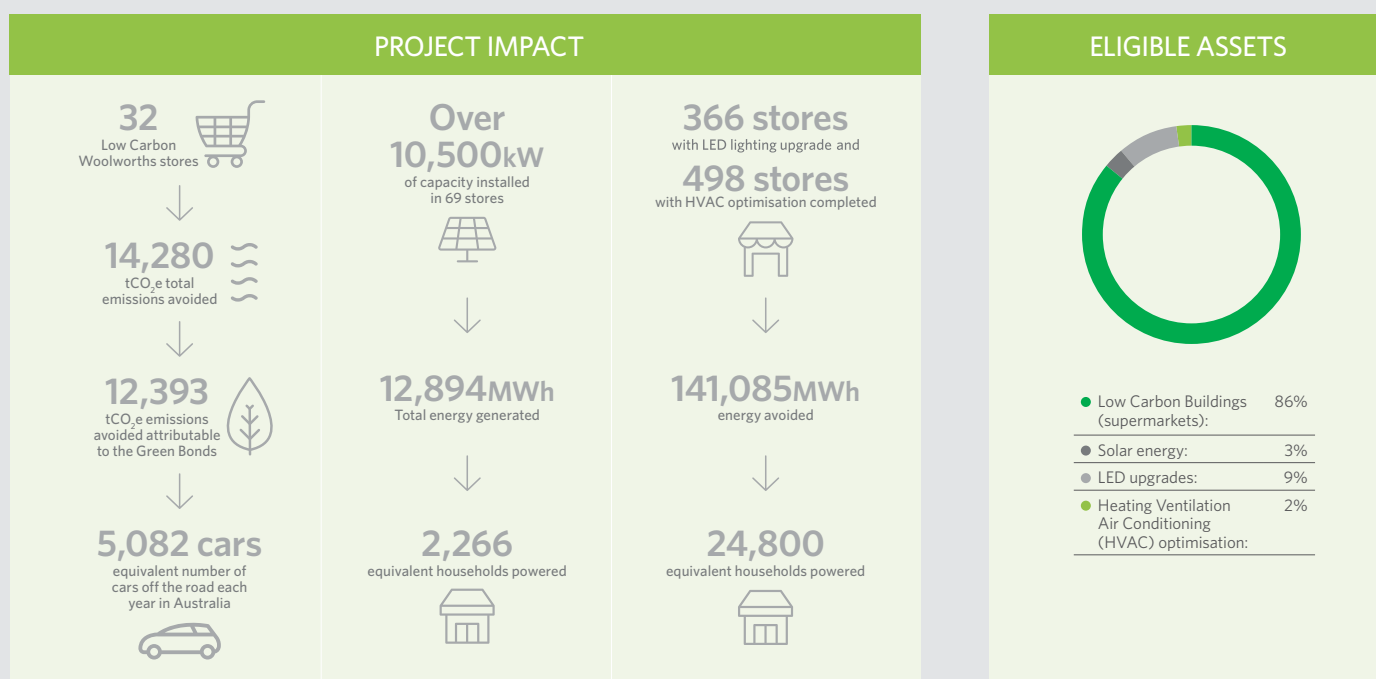
### 4. Woolworths Group

In April 2019, Woolworths Group issued \$400 million of green bonds and was the first retailer in Australia (and the first supermarket retailer globally) to issue green bonds certified by the Climate Bonds Initiative (CBI), confirming compliance with the Climate Bonds Standard.

The green bonds were issued under a framework that is aligned to the Green Bond Principles, published by the International Capital Market Association, and supports the

financing of projects, assets or expenditure that will deliver positive environmental outcomes.

Woolworths Group's eligible assets are principally comprised of a portfolio of Woolworths stores that satisfy the CBI's Low Carbon Building Criteria. As at June 2021, \$334 million of the proceeds of the green bond was allocated to low carbon supermarkets.



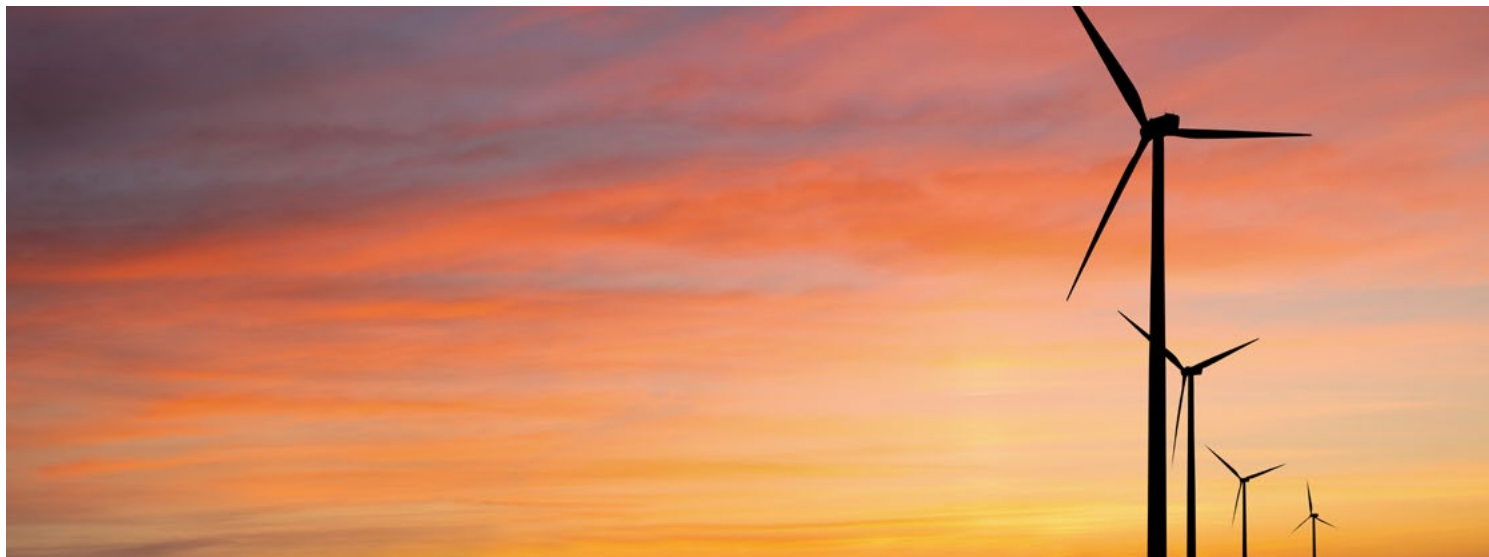
Source: [Debt Investors – Woolworths Group](#)

In addition, over the course of FY18 and FY19, Woolworths Group invested a total of \$78 million in the installation of solar panels, LED lighting upgrades, and the optimisation of heating, ventilation and air conditioning systems in stores.

Whilst Woolworths Group continues to invest in a range of sustainability initiatives, the proceeds of the green bonds were used to refinance the funding of these projects completed in FY18 and FY19. As at June 2021, these projects were valued at \$66 million, which represents the carrying value of these projects.

These projects are eligible assets for the green bonds, as they are upgrades to existing buildings and achieve an emissions reduction of at least 30% from the relevant baseline level of emissions, had the project not been implemented.

# Engagement in action



When it comes to investing, active ownership of assets is no longer a domain exclusive to equity managers. Instead, active ownership now extends across a broad spectrum of asset classes. This includes bond investors, who have also become more active in recent times.

Altius' approach to engagement has evolved over the years. It forms an important component of the role played by our Sustainability Advisory Committee. Some of the themes we are focusing on this year include 'natural capital' – which is another term used for the stock of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to both support economies and provide fundamental necessities, habitat and benefits to people.

'Natural capital' is particularly important for us, given the recent announcement by the NSW Government in relation to its Natural Capital Statement of Intent, which sets the framework for sustainably managing the natural assets in NSW.

In addition to this, climate change also remains a continuing area of focus for the team.

The Altius Sustainability Advisory Committee has actively engaged with prominent debt issuers since the launch of our Sustainable Bond Fund in 2014. Areas of engagement have included: climate change, animal cruelty, physical safety, gaming and alcohol, culture, and governance.

## Corporate misconduct

But our engagement doesn't stop there. At the time of launching our first sustainable fund in 2014, our investors expressed concerns about the way Australian banks treated customers.

There were numerous examples of high profile governance failures, particularly in the areas of financial planning, anti-money laundering, and insurance. Commonwealth Bank of Australia, for example, was found to be responsible for a range of governance shortcomings and was penalised by AUSTRAC. Similarly, concerns were aired in respect of CommInsure's treatment of sick and dying customers.

At the time of the release of the final report on the CBA's Open Advice Review program, we noted that it was unclear what changes had been made to the bank's risk management framework and how it would identify and respond to misconduct.

Following multiple scandals and reflecting investors' concerns, we divested our holdings in CBA bonds in 2016. Subsequently, revelations at the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry (the Commission) identified that AMP deliberately lied to regulators, prompting us to initiate immediate divestment.



## Engagement in action

Additionally, the Commission revealed that National Bank of Australia (NAB) sought to minimise the scale of the fees-for-service problem at the bank and showed little interest in co-operating with the investigators. We considered divesting our holding, but resignations by senior management, including the CEO and Chairperson, led us to retain our holding with a watch status.

Since the Commission, we have noted the concerted efforts by the major banks to repair their reputation and to strengthen their risk cultures, but there have been mistakes.

Westpac was excluded from the fund in 2019 following an AUSTRAC investigation into 23 million alleged breaches of anti-money laundering and counter-terrorism laws, with links to child exploitation in the Philippines. In September 2020, Westpac settled the AUSTRAC suit for \$1.3 billion, the largest corporate fine in Australia.

In December 2020, the Australian Prudential Regulation Authority (APRA) pursued action against Westpac over breaches of liquidity standards related to the incorrect

treatment of specific funding and loan products during 2019 and 2020. In May 2021, the Australian Securities and Investments Commission (ASIC) also prosecuted Westpac for insider trading and unconscionable conduct over Ausgrid trades. As a consequence of these issues, Westpac remains on our excluded list.

However, an important element of our engagement process is that excluded borrowers can return to our investment universe if failings are addressed.

CBA was reinstated after a number of meaningful initiatives, such as the public reporting on its progress with its Remedial Action Plan and in our view, peer leading climate policy. We applaud CBA's overhaul of many policies relating to environment and society, as reported in its 2019 annual report. New climate and environment policies include a commitment to reduce exposure to thermal coal mining and power generation, with a view to exit the sector by 2030. We commend CBA's climate policy and commitment to transparency.



## Gambling and alcohol

In 2020, the Altius team engaged with Woolworths with respect to its green bonds. Altius had made a special exemption to invest in Woolworths, given the company's efforts to lower its carbon footprint, as the Combined Fund normally precludes from investing in companies with material activities in gambling and alcohol. However, we advised the company that our decision was predicated on Woolworths following through on its commitment to demerge its liquor, hotels and gambling business, Endeavour Group, within a reasonable time frame. The demerger was completed in July 2021.

At the same time, Altius also registered concerns with Woolworths in relation to its proposal to build a large-scale Dan Murphy's outlet in Darwin, which would have been in close proximity to several vulnerable Indigenous communities. Woolworths had planned to build the store, despite opposition by the Indigenous community and health and social groups. Altius asked the company to reconsider its proposal, given the negative social impacts, risks and potential medical harm to Indigenous communities living within close proximity to the outlet. Altius applauded Woolworth's decision to cease those development plans.

## Climate change

Considering the climate crisis, we requested key banks within our portfolio to strengthen their commitments to stop financing new investment in fossil fuel supply projects (including expansionary projects), which is in line with the IEA's latest roadmap to net zero by 2050. We also requested the banks to set science-based targets to align their lending and investment activities with the Paris Agreement.

Requests for clarification on commitments/policies were sent to the Chairperson and/or investor relations of the various banks throughout 2021, of which CBA and UBS AG Group (UBS) have responded.

UBS advised its intent to develop and publish a comprehensive climate action plan for achieving net zero greenhouse gas emissions across all its operations by 2050, which was communicated in the firm's climate reporting in March 2022. More specifically, as set out in its net zero statement, science-based targets will be set for 2025, 2030 and 2035 to progress towards the net zero goal.

CBA responded by highlighting its contribution to transitioning to net zero. It confirmed its commitment to playing its part in limiting climate change in line with the goals of the Paris Agreement, and supporting the transition to net zero emissions by 2050.

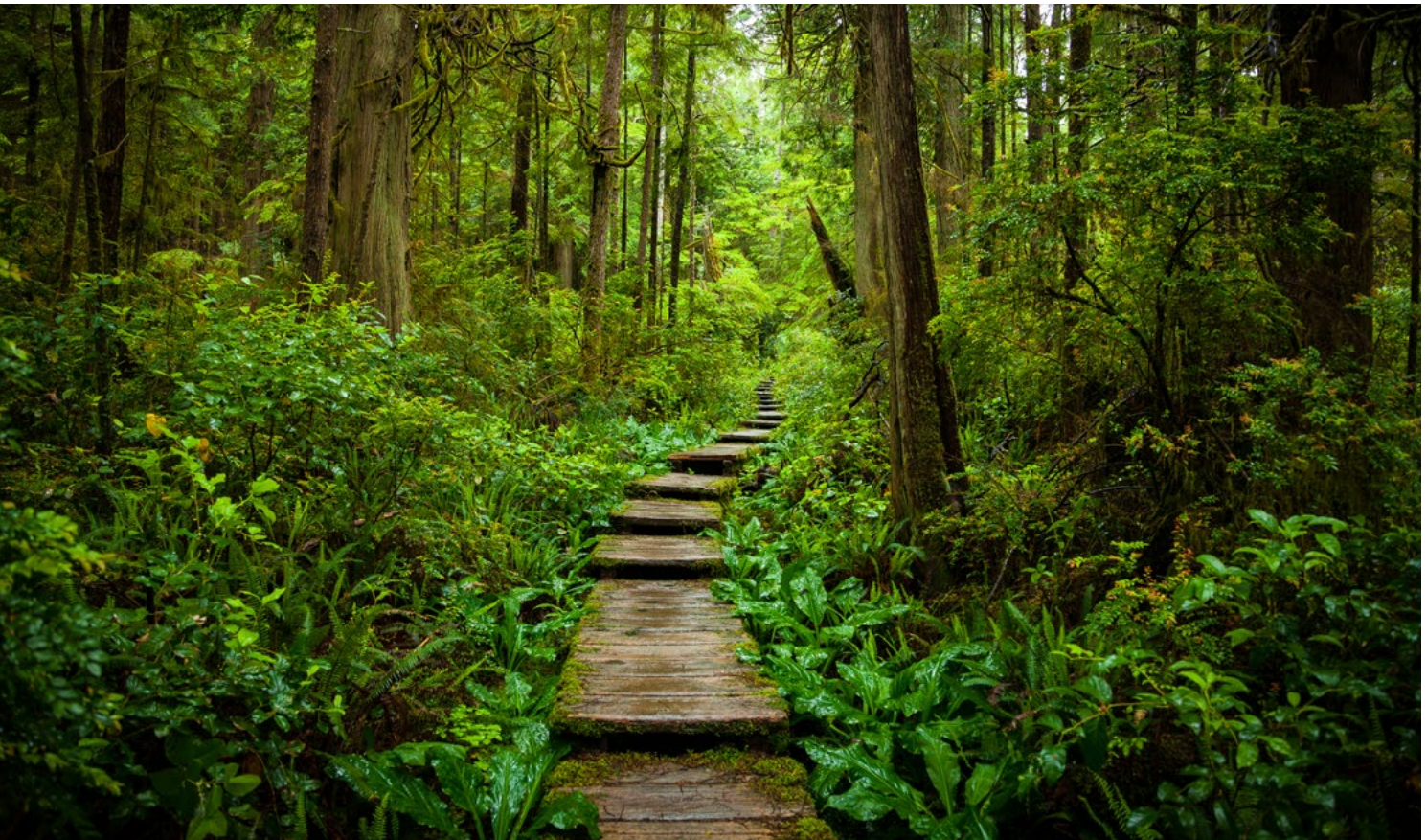
Supporting Australia's transition to a more sustainable future is claimed to be a key strategic pillar for CBA, and it has set a new Sustainability Funding Target of \$70 billion in cumulative financing between the financial years of 2021 and 2030. This replaces its Low Carbon Funding Target of \$15 billion by 2025.

We continue to engage with these and other banks as part of our program for 2022.





# Our next steps



## We are extremely proud to deliver our first Impact Report – but our work does not stop here.

We are committed to producing this report annually and to increase our coverage, as the industry works to develop greater sovereign, semi-government and residential mortgage-backed securities holdings disclosure.

Our efforts will continue to show real world impact, with our approach and reporting mechanisms meeting the highest of industry standards and practices. Our analysts will be working harder in the coming year to ensure that the securities we allocate capital to are delivering as they claim, and that the use of proceeds are verified to a standard that addresses concerns of greenwashing.

The work of the Sustainability Advisory Committee will continue to evolve over the coming years, as we welcome new members and observers.

Our engagement activity will continue to focus on climate change that we initiated with a number of banks throughout 2021. In addition to this, we will also look at other themes that are linked to the Australian Unity Community and Social Value framework and aligned to the SDGs.

We would like to thank ISS ESG, which has supported the Sustainability Advisory Committee for many years, by providing quality service, support and bespoke research when required. We will continue to work with ISS ESG as our preferred research provider, developing and enhancing our ambition to have a best-in-class approach to investing.



# Methodology



We use Institutional Shareholder Services Group’s ESG database of emission numbers for over 25,000 corporates and issuers of corporate debt. Outputs are key carbon metrics that can be used for a range of reporting frameworks.

### Position Weight

The aggregated weight per position in the Combined Fund portfolio calculated as aggregated position value / Total Analysis Value.

### Position Ownership Ratio

The aggregated position value / MCap or AEV, respectively.

### Emission Exposure Scope 1 & 2 (tCO<sub>2</sub>e2)

Position Ownership Ratio\* Position Scope 1 & 2 GHG emissions (tCO<sub>2</sub>e)

### Position Weighted Intensity

Position Weight\* (Position Scope 1 & 2 GHG emissions (tCO<sub>2</sub>e) / revenue millions)

### Emission Exposure

Calculated using the following formula for Scope 1 & 2. The same approach is used for calculating Scope 3 emissions.

$$\sum_i^n \text{Position Ownership Ratio} \times \text{Position Scope 1 \& 2 Emissions}_i$$

### Relative Carbon Footprint

$$\frac{\sum_i^n \text{Emissions Exposure}}{\sum_i^n \text{Total Analysis Value}}$$

### Carbon intensity

$$\frac{(\sum_i^n \text{Position Ownership Ratio}_i \times \text{Position Scope 1 \& 2 Emissions}_i)}{\sum_i^n \text{Position Ownership Ratio}_i \times \text{Position Revenue}_i}$$

### Weighted average carbon intensity

$$\sum_i^n \text{Position Weight}_i \times \frac{\text{Position Scope 1 \& 2 Emissions}_i}{\text{Position Revenue}_i}$$

### Science-based targets

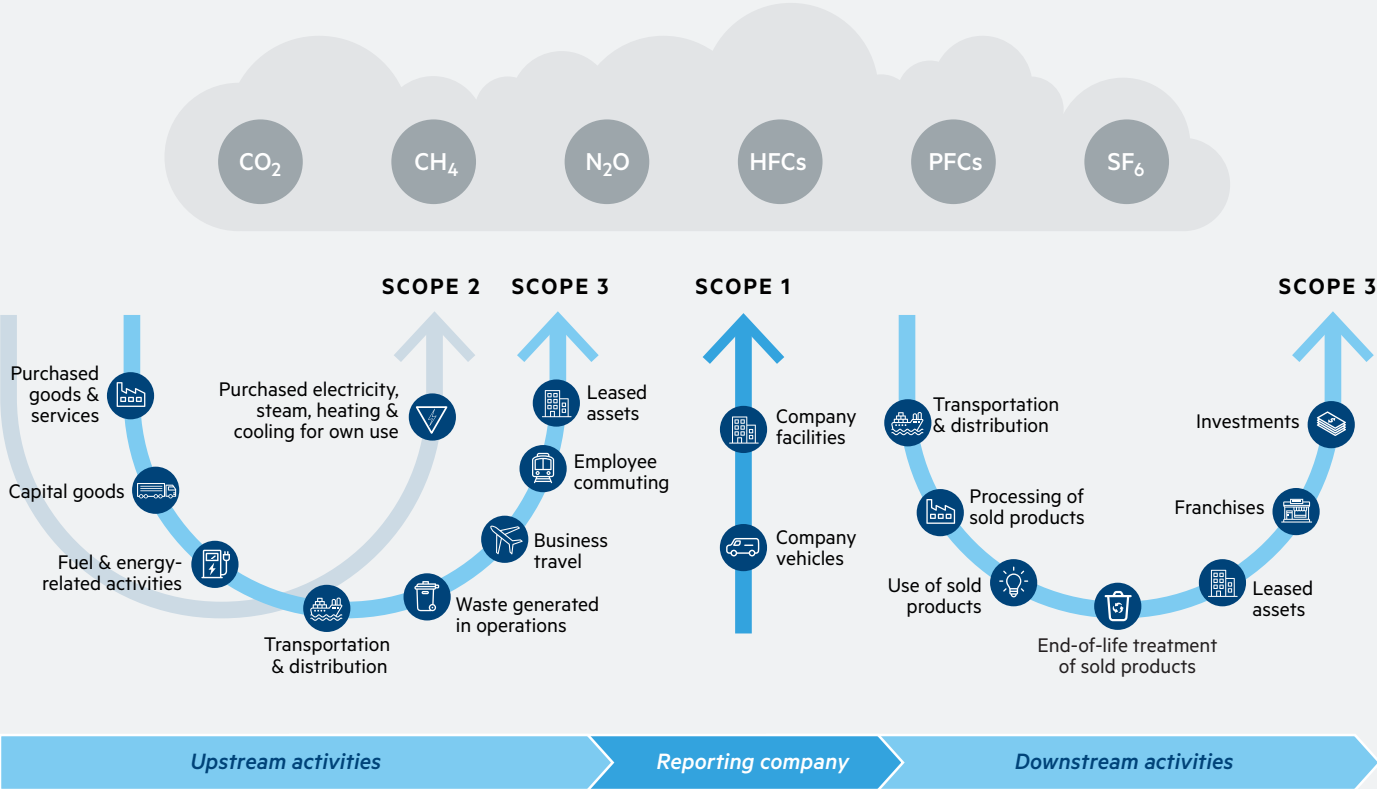
A set of goals developed by a business to provide it with a clear pathway to reduce greenhouse gas emissions. An emissions reduction target is defined as ‘science-based’ if it is developed in line with the scale of reductions required to keep global warming below 2°C from pre-industrial levels.

### Climate Assessment Targets

Climate science uses emission pathways to assess different trajectories towards limiting warming to dedicated warming levels, most commonly to below 1.5°C or 2°C.

Emissions

- Scope 1** covers direct emissions from owned or controlled sources.
- Scope 2** covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company.
- Scope 3** includes all other indirect emissions that occur in a company's value chain.



# Glossary

**Adjusted Enterprise Value:** Defined by Total Debt plus Market Capitalisation.

**BBG:** Bloomberg Floating Credit Index.

**Bloomberg AusBond Credit FRN 0+ Yr Index:** This index is engineered to measure the market of floating rate credit securities issued in the Australian debt market. This is a legacy UBS index and is a subset of the Bloomberg AusBond Master Index. It is a rules-based, market value weighted index, which includes bonds maturing in 0+ years.

**Bloomberg AusBond Composite 0+ Yr Index:** This index is engineered to measure the Australian debt market and is a composite of Treasury, Semi-Government, Supranational/ Sovereign, and Credit indices. This is a legacy UBS index and is a subset of the Bloomberg AusBond Master Index. It is a rules-based, market value weighted index, which includes bonds maturing in 0+ years.

**CBI<sup>8</sup>:** Climate Bonds Initiative is an international organisation working to mobilise global capital for climate action.

**ESG:** Environmental, Social and Governance.

**GHG:** Greenhouse gases.

**ICMA<sup>6</sup>:** International Capital Market Association represents financial institutions active in the international capital market worldwide.

**Green bonds:** are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible green projects (see Use of Proceeds section below) and which are aligned with the four core components of the green bond principles.

**Sustainability-linked bonds:** are any type of bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability/ESG objectives.

**Social bonds:** are use of proceeds bonds that raise funds for new and existing projects with positive social outcomes.

**Sustainability bonds:** are bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both green and social projects.



8. <https://www.climatebonds.net/>

6. <https://www.icmagroup.org/>  
<https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>  
<https://www.icmagroup.org/green-social-and-sustainability-bonds/social-bond-principles-sbp/>  
<https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>



**IEA<sup>9</sup>:** International Energy Agency, committed to shaping a secure and sustainable energy future by providing a variety of programs and initiatives, helping ensure energy security, tracking clean energy transitions, collecting data, and providing training around the world.

**SDS: Sustainable Development Scenario**

An integrated scenario specifying a pathway that is aimed at ensuring universal access to affordable, reliable, sustainable and modern energy services by 2030. This pathway is aligned to the United Nations Sustainable Development Goals (SDG) – namely, affordable and clean energy (SDG 7); substantially reducing air pollution (SDG 3.9); and taking effective action to combat climate change (SDG 13).

**STEPS: Stated Policy Scenario**

A scenario which reflects current policy settings based on a sector-by-sector assessment of the specific policies that are in place, as well as those that have been announced by governments around the world.

**APS: Announced Policy Scenario**

A scenario which assumes that all climate commitments made by governments around the world, including Nationally Determined Contributions (NDCs) and longer-term net zero targets, will be met in full and on time.

**IPCC<sup>10</sup>:** The Intergovernmental Panel on Climate Change is a United Nations body for assessing the science related to climate change.

**ISS ESG:** International Shareholder Services ESG work with investors to develop and integrate responsible investing policies and practices, engage on responsible investment issues, and monitor portfolio company practices through screening solutions. ISS ESG also provides climate data, analytics, and advisory services to help financial market participants understand, measure, and act on climate-related risks across all asset classes.

**PCAF<sup>11</sup>:** The Partnership for Carbon Accounting Financials is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose greenhouse gas emissions associated with their loans and investments.

**RCP:** Representative Concentration Pathway. RCPs were used to develop greenhouse gas concentration trajectories. The word 'representative' signifies that each RCP provides only one of many possible scenarios.

**SDA<sup>12</sup>:** Sector Decarbonisation Approach is a method for setting corporate CO<sub>2</sub> emissions intensity reduction targets in line with climate science.

**SDG<sup>13</sup>:** Sustainable Development Goals are a collection of 17 interlinked global goals designed to be a 'blueprint to achieve a better and more sustainable future for all'. The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by 2030.

**TFCD:** Task Force on Climate-Related Financial Disclosures was set up by the Financial Stability Board (FSB) to develop recommendations on the types of information that companies should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing a specific set of risks related to climate change.

**Use of Proceeds:** Proceeds of the bond issue must be utilised for green or social-related projects. Recourse is to the issuer of the debt, not the project or asset. Proceeds should be earmarked for green or social projects by the issuer. All projects should have a clear environmental or social benefit.

The ICMA Green (GBP) and Social (SBF) Bond principles are voluntary guidelines that are used to improve market transparency, disclosure and promote the integrity of the green, social and sustainable bond market. There are four core components that define a green, sustainable or social bond.

All Use of Proceed bonds purchased must satisfy our assessment that all of the following steps (or a sufficient number of steps with regard to compensating processes) qualify as a green, sustainable or social bond for our portfolios:

1. Use of proceeds.
2. Process for project evaluation and selection.
3. Management of proceeds.
4. Reporting.

9. <https://www.iea.org/reports/world-energy-model/understanding-weo-scenarios#abstract>

10. [https://www.ipcc-data.org/guidelines/pages/glossary/glossary\\_r.html](https://www.ipcc-data.org/guidelines/pages/glossary/glossary_r.html); <https://www.ipcc.ch/report/emissions-scenarios/>

11. <https://carbonaccountingfinancials.com/>

12. <https://sciencebasedtargets.org/resources/files/Sectoral-Decarbonization-Approach-Report.pdf>

13. [https://en.wikipedia.org/wiki/Sustainable\\_Development\\_Goals](https://en.wikipedia.org/wiki/Sustainable_Development_Goals); <https://sdgs.un.org/goals>

# Acknowledgements

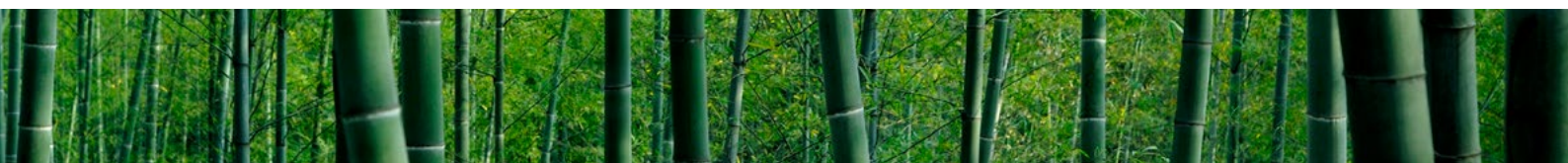


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