Information as at 30 June 2024

Summary of Annual Climate Scenario Analysis Project

Contents

Definitions[1]

Active ownership - Taking actions to influence or attempt to influence the governance, practices, policies and management of companies the Fund has investments in.

Acute climate impacts – Weather-related or weather-exacerbated events: floods, drought, tropical cyclone, strong wind, wildfire, hurricane, etc.

Asset class - An asset class is a particular group of assets that have similar characteristics, such as equities, property, fixed interest and cash.[2]

AUM (Asset Under Management) – total market value of investments that NGS Super manages on behalf of our members.

Carbon credits - A carbon credit refers to a tradable permit or certificate that represents the reduction, avoidance or removal of one metric ton of carbon dioxide (CO2) or its equivalent greenhouse gases (GHGs) from the atmosphere.

Carbon neutral - We define carbon neutral as a state of net-zero carbon emissions for scope 1 and scope 2 emissions of the NGS Super Diversified (MySuper) investment option. While the term carbon neutral references only carbon, the measure for carbon NGS Super uses is CO2e which stands for "carbon dioxide and equivalents" which is a measure that includes seven Green House Gases defined under Kyoto Protocol but brings them back to a common unit of measure.

Scope 1 emissions – Direct emissions from a company or business because of their operations examples include emissions from company vehicles and company facilities.

- **Scope 2 emissions** – Indirect greenhouse gas emissions produced from the generation of purchased electricity, steam, heating, or cooling that an organization consumes. These emissions occur at the facility where the energy is generated, not where it is used.
- **Scope 3 emissions** - All indirect emissions not included in scope 2 but that occur in the value chain of the reporting company. They are broken down into 15 categories and considered either upstream or downstream emissions. Examples of upstream emissions are emissions generated from business travel, waste generated in operations, purchased goods and services to name a few. Examples of downstream emissions are emissions generated from processing of sold products, use of sold products, end of life treatment of sold products etc.

Carbon Neutral Goal – the goal to lower the Diversified (MySuper) investment options scope 1 and scope 2 emissions from its investments and from 2030 onwards, to offset the estimated remaining scope 1 and 2 emissions from the options investments, subject to NGS Super's duty to act in members' best financial interest. Carbon Neutral Goal will be reviewed annually and is based on estimates and third-party data that may not be accurate.

CDR – Carbon dioxide removal (CDR) is a process in which carbon dioxide (CO2) is removed from the atmosphere by deliberate human activities and durably stored in geological, terrestrial, or ocean reservoirs, or in products.

[1] You can also find some of the definitions on our website Make Sense of Investment Language. Some climate-related definitions are adjusted in this paper to enhance member comprehension. Please note that all the definitions we provided here are for the purpose of this document only.
[2] You can read more about asset class in here: Asset classes: An introduction

Chronic climate impact - long-term and gradual effects of climate change that accumulate over time, such as rising average temperatures, shifting precipitation patterns, and prolonged droughts. These impacts can lead to sustained environmental, economic, and social disruptions, affecting ecosystems, agriculture, infrastructure, supply chains, and human health.

Climate Risk – financial risks that are linked to climate change. There are two types of climate risks: Physical Risk and Transition Risk.

Climate scenarios - Climate scenarios are plausible, data-driven projections of future climate conditions based on different levels of greenhouse gas emissions, policy actions, and economic developments.

- **Climate scenario analysis** is a strategic planning tool that enables organizations to explore and prepare for a range of plausible future climate-related conditions. Scenario analysis allows organizations to assess how various combinations of climate-related risks, including both transition and physical risks, may impact their businesses, strategies, and financial performance over time

CO2 - carbon dioxide is a greenhouse gas (GHG) that is a major contributor to climate change. It is primarily emitted through the burning of fossil fuels (coal, oil, and natural gas), deforestation, and industrial processes.

Decarbonisation – The process of reducing carbon dioxide emissions.

Diversified (MySuper) – the investment option known as the "Diversified (MySuper)" investment option, which is the default investment option for NGS Fund accumulation members.

Emissions – Greenhouse gasses which are emitted into the atmosphere from various sources.

Engagement – the process of engaging with a company or other body to effect change.

Fund – NGS Super Pty Limited.

Glide path analysis – Analysis completed to assess the levers available to the Fund to decarbonise the portfolio while also assessing potential tracking error.

Global warming – Long-term heating of the Earth's climate system observed since the pre-industrial period (between 1850 and 1900) due to human activities, primarily via the burning of fossil fuels which increases heat trapping greenhouse gas levels in the Earth's atmosphere.

Impact on value - The percentage change in net present value (NPV) for the portfolio under analysis under each selected scenario. This is the aggregated discounted financial impact on investment portfolios of future climate risks as of today.

Indexed growth option – One of NGS Super Accumulation Investment Options. The NGS Indexed Growth investment option includes asset classes where a broad market index is available and investible. It aims to provide exposure to these asset classes through passive indexing strategies. There are no investments in unlisted assets.

Investment manager – A corporation that provides investment management and other services in relation to the assets of the Fund.

Investment portfolio – relevant investment portfolios of NGS Fund.

Investment option – The investment product that our members can choose to invest in.

NGFS – The Network for Greening the Financial System (NGFS) is a network of over 100 central banks and financial supervisors that aims to accelerate the scaling up of green finance and develop recommendations for central banks' role for climate change.

NGS Fund - NGS Super (ABN 73 549 180 515.

NGS Super – NGS Super Pty Limited (ABN (ABN 46 003 491 487, RSE Licence L0000567 and AFSL 233 154))

NPV - Net present value (NPV) is to assess the profitability of an investment or project by calculating the present value of future cash flows, discounted at a chosen rate (typically the cost of capital). Positive NPV means an investment deal or project can add financial value to the investor.

Physical risks - The risks associated with climate change like extreme heat, drought, water access as well as risks like bushfires, severe storm events and flooding (where companies are exposed to physical risks, their value may be affected, positively or negatively).

Responsible investing - A way of investing capital that seeks to generate both financial and sustainable investment returns while reducing ESG risks.

Restriction – NGS ESG Restrictions. NGS Super endeavours to apply investment restrictions on tobacco, controversial weapons, nuclear weapons, and fossil fuels for all investment options, except within Indexed Growth investment options. For detailed restricted business activities as well as how it is implemented across the investment portfolios, please refer to our Responsible Investment Policy.

Sector – NGS investment sector, commonly used from an investment operations perspective when setting up custodian accounts corresponding to specific asset classes.

Stranded asset - An asset that in our view cannot transition to the low-carbon economy.

Transition risk - The risks that may eventuate as we transition to the low-carbon economy. Examples include changes to land or water use policies, costs of energy, introduction of carbon pricing policies, technological change and evolving consumer behaviour or preferences. When companies are exposed to transition risks, their value may be affected, positively or negatively.

Important Information

This report has been created by NGS Super drawing on selected data provided by Planetrics, a McKinsey & Company solution (which does not include investment advice). This report represents NGS Super's own selection of applicable scenarios selection and/or and its own portfolio data. NGS Super is solely responsible for, and this report represents, such scenario selection, all assumptions underlying such selection, and all resulting findings, and conclusions and decisions. McKinsey & Company is not an investment adviser and has not provided any investment advice.

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Past performance is not a reliable indicator of future performance and any market projections and predictions are based on current assumptions and are subject to change. These are not guarantees of future results. Further, this update contains statements that are "forward-looking statements" (including, goals, glide paths or targets). These statements are based on the NGS Super's current beliefs and involve known and unknown risks, uncertainties and other important factors that could cause actual results to be materially different from the information set out in this update. Therefore, care should be taken before relying on statements in this update.

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Responsible investment (including environmental, social and governance issues) means different things to different people. Read the Responsible Investment Policy to find out what responsible investment means to NGS Super.

The information in this report is current as at 26 June 2025.

This information has been issued by NGS Super Pty Ltd ABN 46 003 491 487 as trustee of NGS Super ABN 73 549 180 515, RSE Licence L0000567 and AFSL 233 154.

Executive Summary

This report presents the summary results of NGS's 2024 annual climate scenario analysis, conducted as part of our Carbon Neutral Goal project.[3] While this year's analysis covered multiple NGS investment options, this report focuses primarily on a summary of the default investment option—Diversified (MySuper) —and its underlying investment sectors. All information and data presented are as of 30 June 2024, unless otherwise stated.

The objective of this report is to provide our members with summary of how NGS Super's investment portfolios are positioned in relation to climate-related risks and opportunities.

To quantify the potential impact of climate risks and opportunities on our portfolio, we use Net Present Value (NPV) impact (or simply, climate impact or impact), which is a discounted present value of all assessed future climate related effects on our asset value over a spanned time period from now up until 2050.[4] Although there are various climate scenarios based on different frameworks or standards, NGS Super assesses three climate scenarios developed by Network for Greening the Financial System (NGFS), which will be discussed later in this report.

Our 2024 climate scenario analysis indicates that the Diversified (MySuper) portfolio remains resilient to climate-related risks, with certain parts of the portfolio expected to benefit from climate transition, generating positive NPV impacts from climate-related opportunities. While the analysis does not indicate an immediate need for investment or investment strategy adjustments, NGS Super remains committed to integrating material climate risks and opportunities into our investment processes. This will be achieved through our existing environmental, social and governance (ESG) strategy, which includes engagement, restrictions, and a continued focus on climate-related investment opportunities, as guided by our scenario analysis and secular trends research.[5]

Additionally, we remain dedicated to transparency and adequate disclosure to our members regarding the Carbon Neutral Goal project. We will continue to enhance our methodologies and analytical approaches, ensuring continuous improvement in assessing and understanding the investment implications of climate-related risks and opportunities.

[3] In 2021, NGS Super set a target to deliver a carbon neutral (based on scope 1 and scope 2 emissions) investment portfolio for the Diversified (MySuper) investment option of the NGS Fund by 2030.
[4] For unlisted property, the discount time period is extended to 2080.
[5] You can find more details of our ESG restriction in our Responsible Investment Policy located here.

Introduction

NGS Super commenced its climate scenario analysis journey when we announced our goal of delivering a carbon neutral portfolio for Diversified (MySuper) option in 2021. This year is the third iteration of this analysis.

At its core, a climate scenario analysis evaluates how climate-related risks and opportunities could affect valuations of investment assets, considering a variety of future climate pathways. This type of investment analysis allows investors to examine a potential range of investment outcomes, allowing a better understanding of both risks and opportunities across investment portfolios. Specifically, Climate Risks are fundamentally financial risks that are linked to climate change.

Climate risk is broken down into two types of climate risks: physical and transition risks.

Physical Risk

Physical climate risks arise from the direct impact of climate change on the environment, infrastructure, and economies. These risks stem from rising greenhouse gas (GHG) emissions, leading to shifts in weather patterns and an increase in the frequency and severity of extreme climate events. Physical risks are categorized as:

- **Acute climate impacts**, such as floods, wildfires, and tropical cyclones, which cause immediate and often severe damage.
- **Chronic climate impacts**, including long-term shifts like sea level rise, prolonged heatwaves, and changing precipitation patterns, which gradually erode asset values and economic stability.

Transition Risk and Opportunities

Transition risks arise from the global shift toward a low-carbon economy, driven by policy changes, technological advancements, and evolving market expectations. Key transition risks include:

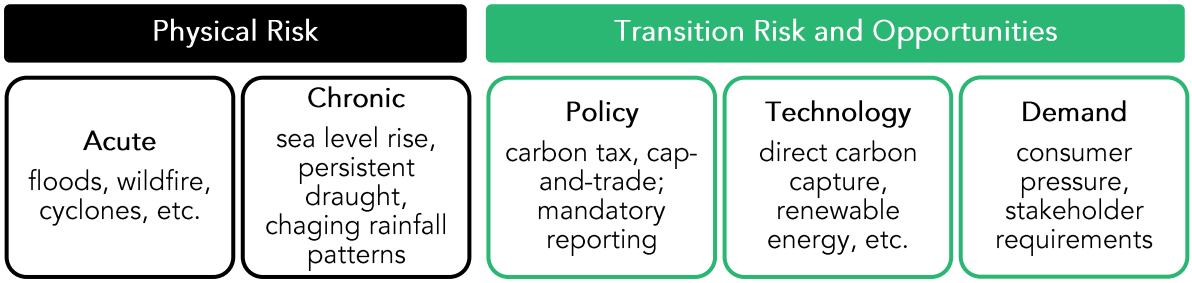
- **Regulatory and policy shifts**, such as carbon pricing, emissions caps, and mandatory sustainability disclosures, which may increase compliance costs for businesses.
- **Technological change**, including innovations like carbon capture, utilisation and storage (CCS) or advances in renewable energy, which can render traditional business models obsolete.[6]
- **Market and consumer demand changes**, influenced by investor and stakeholder expectations, such as pressure on corporations to reduce environmental impacts and adopt sustainable practices.

While climate transition poses financial uncertainties and operational challenges, it also presents significant opportunities. Companies that innovate in green technology, energy efficiency, and low-carbon solutions can gain a competitive edge as well as market share by meeting evolving demand from various stakeholders that are requiring more sustainable

[6] Carbon Capture, Utilization, and Storage (CCUS) refers to a set of technologies that capture carbon dioxide (CO_2) emissions from industrial processes or the atmosphere, either for permanent storage underground (carbon storage) or for reuse in commercial applications (carbon utilization). CCUS plays a crucial role in reducing greenhouse gas emissions, particularly in hard-to-abate sectors like cement, steel, and energy production.

business activities. We consider that investors, including asset owners such as NGS Super, play a critical role in accelerating this transition by directing capital toward businesses and assets that support the shift to a low-carbon and sustainable economy.

Figure 1. Understanding Climate-related Risks and Opportunities

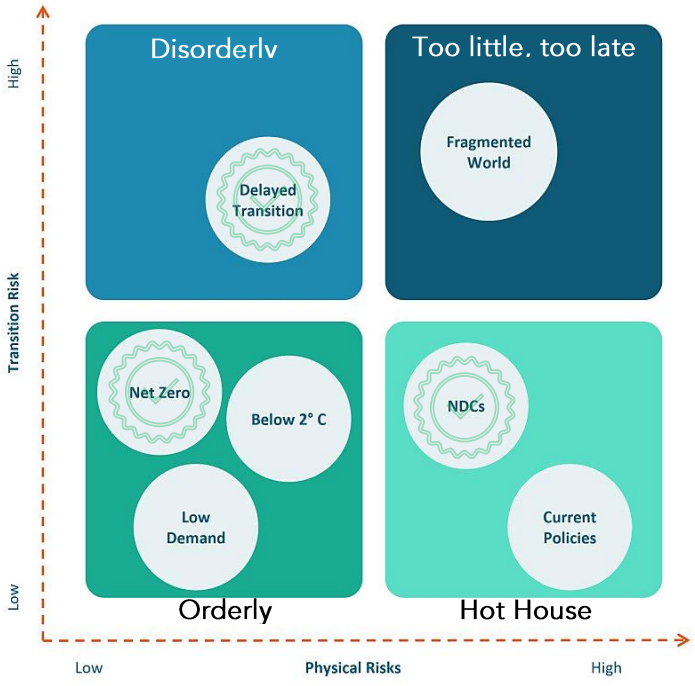


Climate Scenarios

Climate scenarios provide plausible pathways for how the future may evolve based on key factors such as greenhouse gas concentrations, temperature rise, economic shifts, policy responses, technological advancements, and carbon prices. They are not predictions but structured frameworks that help users explore potential outcomes, test assumptions, and evaluate possible actions. For investors, climate scenarios can be an essential tool for assessing climate-related risks and opportunities under different future conditions.

Since 2021, NGS Super adopted the NGFS developed Climate Scenarios for our Climate Risk analysis; these scenarios are tailored to the financial industry. The four-quadrant diagram in Figure 2 depicts how these scenarios are characterised by varying levels of Physical Risk and Transition Risk, respectively.[7] Each of the four quadrants is then further categorised into one or more scenarios, with each aligned with a future pathway of estimated

Figure 2 NGFS Climate Scenarios



[7] **Orderly scenarios** assume climate policies are introduced early and become gradually more stringent. Both physical and transition risks are relatively subdued.
Disorderly scenarios explore higher transition risk due to policies being delayed or divergent across countries and sectors. For example, (shadow) carbon prices are typically higher for a given temperature outcome.
Hot house world scenarios assume that some climate policies are implemented in some jurisdictions, but global efforts are insufficient to halt significant global warming. The scenarios result in severe physical risk including irreversible impacts.
Too little, too late scenarios assume that a late and uncoordinated transition fails to limit physical risks.

temperature rise ranging from 1.5°C to over 3°C.[8] Among all the seven NGFS scenarios shown in Figure 2, NGS has selected three focus scenarios, as shown below:[9]

Table 1 Climate Scenarios included in this Analysis

Scenario 1: Net Zero 2050

Net Zero 2050 limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero carbon dioxide (CO2) emissions around 2050. This scenario assumes that ambitious climate policies are introduced immediately. Carbon dioxide removal (CDR) is used to accelerate decarbonization but kept to the minimum possible and broadly in line with sustainable levels of bioenergy production. Net CO2 emissions reach net zero around 2050, giving at least a 50% chance of limiting global warming to below 1.5°C by the end of the century. Physical risks are relatively low, but transition risks are high.

Scenario 2: Delayed Transition

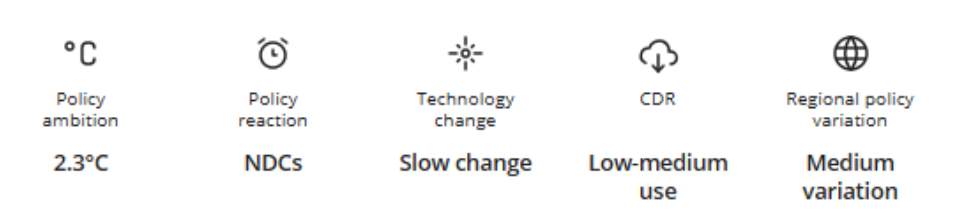
Delayed Transition assumes global annual emissions do not decrease until 2030. Strong policies are then needed to limit warming to below 2 °C. Negative emissions are limited. This scenario assumes new climate policies are not introduced until 2030 and the level of action differs across countries and regions based on currently implemented policies. The availability of CDR technologies is assumed to be low pushing carbon prices higher than in Net Zero 2050. As a result, emissions exceed the carbon budget temporarily and decline more rapidly than in Well-below 2 °C after 2030 to ensure a 67 % chance of limiting global warming to below 2 °C. This leads to both higher transition and physical risks than the Net Zero 2050.

Scenario 3: Nationally Determined Contributions (NDCs)[10]

NDCs include all pledged policies even if not yet backed up by implemented effective policies. This scenario assumes that the moderate and heterogeneous climate ambition reflected in the

[8] You can find how each scenario is linked to temperature rise on the official NGFS website.
[9] These are Scenario descriptions drawn from the official NGFS website.
[10] This vintage of the NDC scenario does not reflect the US leaving the Paris Agreement in 2025.

conditional NDC at the beginning of 2024 continues over the 21st century (low transition risks). Emissions decline but lead nonetheless to 2.3°C of warming associated with moderate to severe physical risks. Transition risks are relatively low.



Metrics and Factors

In 2024, NGS Super partnered with *Planetrics* to conduct the climate scenario analysis. Our portfolio level results are estimated drawing upon Planetrics modelling and analytics.

NGS Super focused on the "Impact on Value" or "NPV Impact" metric to evaluate how our investment portfolios are affected by future climate risk. Impact on value is a Net Present Value (NPV) measure that discounts all future climate effects over an extended period, i.e., from 2024 to 2050 or further towards the end of this century, and imposes that discounted impact on the asset value as of today in a percentage term. To further understand what factors are driving that overall NPV impact, we breakdown this measure into different dimensions, such as by industry and by economic factor (impact by channel). Table 2 below summarizes the key metrics within the analysis.

Table 2 Metrics used for Climate Risk Measurement

Risk Metrics	Description
Impact on Value/NPV Impact	This is the aggregated discounted financial impact on investment portfolios of future climate risks over a spanned period (e.g., from 2024 to 2050) as of today.
Impact by Economic Sector	The percentage change in NPV of the security or portfolio for the selected scenarios, disaggregated across industries.
Impact by Channel	The percentage change in NPV of the security or portfolio for the selected scenarios, disaggregated across impact channels (physical risks, adaptation, demand destruction, demand creation, direct carbon costs, abatement, market impacts, etc.). Impact by channel is important for understanding which fundamental economic or physical factor is driving the aggregate-level climate risk or opportunity for the portfolio.

Scope of 2024 scenario analysis project

Over the past three years, we have progressively expanded the coverage of our annual climate scenario analysis to include as much of the NGS Fund's assets under management (AUM) as possible. In 2024, our analysis covered over 80% of total AUM, spanning five listed investment sectors and four unlisted investment sectors. This year also marks the first time we have extended the analysis to the investment option level, assessing multi-asset options that comprise multiple investment sectors. In this summary, we focus on the Diversified (MySuper) option. The diagram below illustrates the composition sectors of the Diversified (MySuper) option, and which ones are included in this analysis.[11]

Table 3 Scope of Analysis

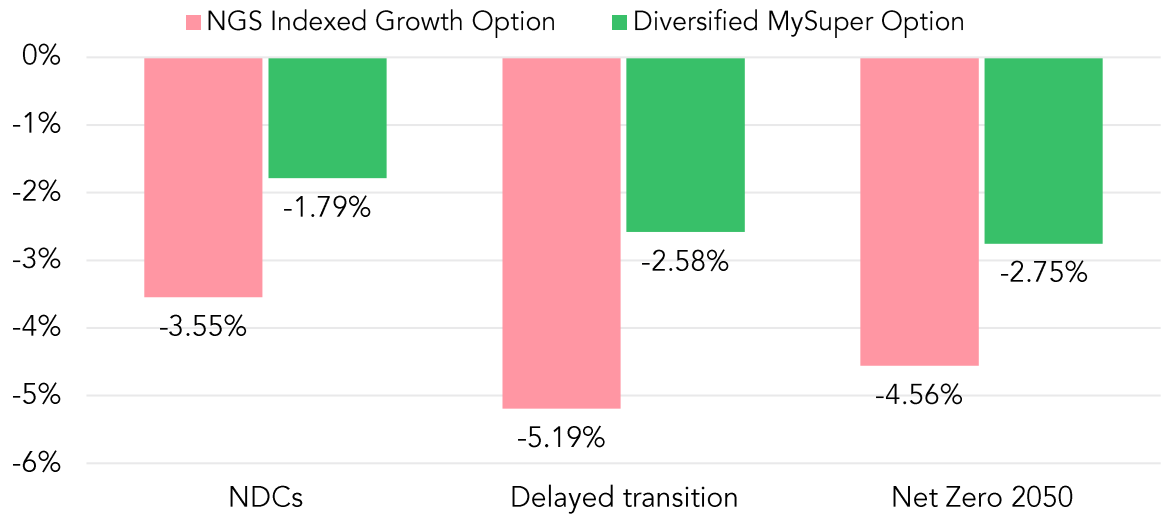
Investment sectors in Diversified (MySuper) Option	Listed/Unlisted	Covered/Not covered In 2024 Analysis	Results based on Actual or Proxy holdings
Australian Equities	Listed	Covered	Actual
International Equities	Listed	Covered	Actual
International Fixed Income	Listed	Covered	Actual
Private Equity	Unlisted	Covered	Proxy
Bond Alternatives[12]	Unlisted	Covered	Proxy
Property	Unlisted	Covered	Actual
Infrastructure	Unlisted	Covered	Proxy
Listed Property	Listed	Covered	Actual
Listed Infrastructure	Listed	Covered	Actual
Liquid Alternatives	Listed	Not covered	N/A
Cash	Unlisted	Not covered	N/A
Australian Fixed income[13]	Listed	Not covered	N/A
Real asset debt	Unlisted	Not covered	N/A
Commodities	Unlisted	Not covered	N/A

[11] You can find more detail about underlying investment for Diversified (MySuper) option and how they are allocated in our Product Disclosure Statement (PDS).
[12] Bond alternatives is an investment sector which include private fixed income assets such as private credit, direct lending).
[13] Most assets in Australian fixed income sector are sovereign bonds which currently are not covered by our scenario analysis capability.

Key Findings of Diversified (MySuper) Option

At the overall Diversified (MySuper) option level, the estimated aggregate impact of future climate risks remains relatively manageable, with projected losses not exceeding -3% across all three assessed scenarios. In the 2024 analysis, we also included the Indexed Growth option as a benchmark due to its passive management nature. By using it as a baseline—where no active climate actions are implemented, we can better assess the resilience of the actively managed Diversified (MySuper) portfolio and understand the impact of our climate transition strategies.

Figure 3 Diversified (MySuper) Option vs Indexed Growth Option



As shown in Figure 3, the Diversified (MySuper) portfolio shows around 2% less impact of climate risk on average compared to the Indexed Growth option across all three scenarios. We consider that this resilience reflects both the portfolio's broader diversification and the effectiveness of our climate strategy, which has been in place since the NGS Fund adopted its Carbon Neutral Goal in 2021. Key contributing actions include:

- **ESG restrictions on upstream oil and gas companies**, specifically those involved in extraction and production. *Please refer to the Fund's Responsible Investment Policy available on the Fund's website for the detail on the application of this restriction.*
- **Active carbon reduction across multiple investment managers**, including introducing a carbon emission glide path for some of our Australian Share Managers.
- **Using the NGS Fund's research-based approach, to position the portfolio for the low-carbon economy** by using the NGS Fund's secular trends research[14] to help inform and guide investment decisions.

[14] https://www.ngssuper.com.au/articles/sustainability/secular-trends-carbon-neutrality

Key Investment Sectors

Building on our analysis at the Diversified (MySuper) option level, we now examine two key investment sectors that make up a significant portion of the portfolio—Australian equities and International equities. Together, these two asset classes account for more than half of the Diversified (MySuper) option's total allocation. Figure 4 below presents the NPV impacts for both sectors, with bars representing our equity portfolios and dots indicating their respective benchmarks.[15]

As shown in the chart, both Australian and international equities exhibit lower climate-related risk impacts relative to their respective benchmarks. Australian equities remain a key focus for climate risk management due to a meaningful allocation within the NGS Fund and higher exposure to climate risks resulted from a relatively greater weight to materials and mining industries. Encouragingly, the sector has shown improved resilience, with the average NPV impact improving from around -5% in 2023 to approximately -4% in 2024.[16]

Similarly, our international equities portfolio also shows stronger resilience relative to its benchmark seen from all assessed scenarios. For example, under a Net-Zero 2050 scenario, the estimated impact remains below -2%, compared to -3% for the MSCI ACWI. This indicates that the portfolio is positioned more favourably in managing climate-related risks and opportunities compared to the broader global equity market.

Figure 4 Impact on Value: NGS Equities Portfolios vs Benchmarks

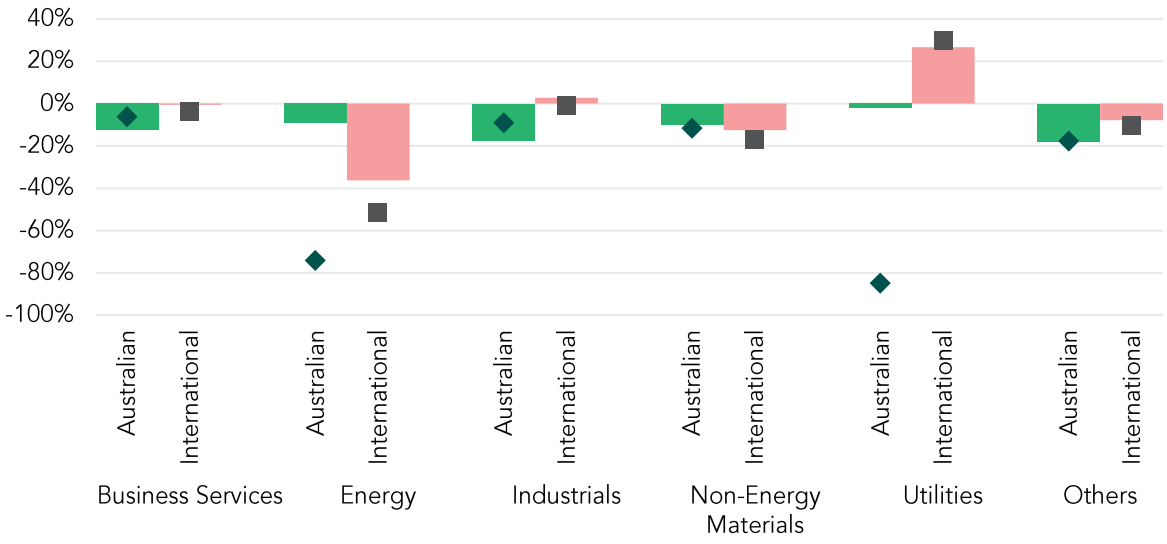
Figures 5 below breaks down NPV impact into different industries for both Australian equities and international equities sectors. To focus our discussion, we only show the result under Net Zero 2050 scenario.[17]

[15] Benchmark for Australian Equities is ASX300 total return index and for International Equities, benchmark is MSC ACWI index.
[16] Materials sector accounted for approximately 21% in ASX 300 total return index as of June 2024.
[17] NGS equities portfolios are represented in bars and benchmarks are shown as dots. Benchmark for Australian Equities is ASX300 total return index and for International Equities, benchmark is MSC ACWI index. Others including the following industries altogether:

Within the Australian equities portfolio, the negative impact is largely concentrated in the Industrials sector, primarily due to a single large company rather than broad-based sector exposure. In contrast, there is notable outperformance relative to benchmark in the Energy and Utilities sectors. This is especially pronounced in Utilities, where the benchmark suffers an almost -90% impact, while our portfolio experiences minimal loss. This divergence is largely attributed to our underweight positions in carbon intensive assets resulting from our ESG restrictions in the relevant high emission sectors.

In the International equities portfolio, both Industrials and Utilities exhibit positive NPV impacts, with Utilities showing a gain of over 20%. This is driven predominantly by large, low-carbon U.S. electricity companies that are well-positioned to benefit from increasing demand for electricity as transport and heat electrify. Additionally, low-carbon utilities benefit at the expense of high-carbon utilities which quickly have their earnings wiped out from rising carbon taxes. The strategic role of Utilities in enabling economy-wide decarbonisation supports their long-term growth potential under transition scenarios.

Figure 5 NPV Impact by Indsutry under Net Zero 2050 Scenario:
NGS Australian and International Equities vs Benchmarks

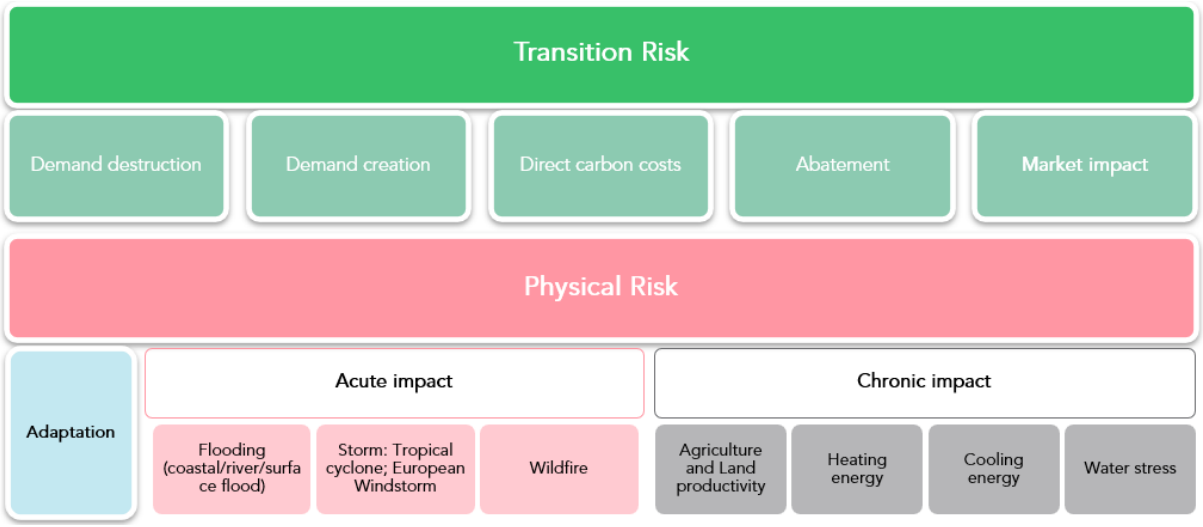


Case Studies

To help us understand what drives relative performance within an industry, in this section, we examine how climate-related risks and opportunities impact the value of individual assets and companies at a granular level. Discussion in this section accounts for company specific characteristics such as core business activities, revenue mix, etc.

To illustrate this, we present case studies of four companies and assets held within NGS Super's investment portfolios. As outlined earlier in this paper, climate impacts can be driven by fundamental economic factors—negatively, through financial losses, or positively, when companies capitalise on transition opportunities to drive growth. The four assets selected for this analysis represent different regions and industries, ensuring a relative sufficient demonstration of how risks and opportunities vary upon diverse market conditions. For each asset, we provide a waterfall chart that deconstructs the Net Present Value (NPV) impact, breaking it down into key underlying drivers. The diagram below (Figure 6) illustrates these factors and their connection to various climate risks and opportunities, as discussed in the first section. All figures presented reflect NPV impact, representing the aggregate discounted value of climate-related effects over several decades. To focus the analysis, we have chosen to present results under the Delayed Transition scenario only, which reflects a potential real-world pathway where climate policy tightening is deferred until 2030 following an additional five-year delay.

Figure 6 Transition and Physical Channels and Factors driving climate risk impact[18]



[18] Cooling energy, heating energy and water are only considered for real estate (property) and infrastructure in the modelling but not for listed companies.

An Australian Mining Company

Figures 7.1 and 7.2 illustrate the impact of climate-related risks and opportunities on an Australian listed mining company, comparing a business-as-usual scenario with one in which the company meets its current climate targets.

Under both scenarios, the total NPV impact is primarily driven by three factors: carbon costs (negative), and abatement and market impacts (positive). In the baseline case, the company experiences a significant net negative impact, largely due to high carbon costs associated with emissions-intensive operations.

When the company meets its climate targets, it benefits materially, with a stronger financial position primarily driven by lower exposure to carbon costs such as taxes or penalties. While the financial gains from abatement are smaller compared to a scenario where the company does not meet its targets, this reflects the reduced abatement potential remaining after early emissions reduction actions. Market impacts are also smaller but remain positive. Together, these outcomes highlight the financial advantage of proactive decarbonisation in a Delayed Transition scenario.

As for physical risk impact, it remains limited under the delayed transition scenario. This reflects both the effect of transition actions in moderating long-term climate outcomes and the "tragedy of the horizon"— where long-dated physical risks are heavily discounted in present-value terms despite intensifying over time.

Figure 7 NPV Impact by Channel: An Australian Company under Delayed Transition Scenario – Base case vs When Company meets its Climate Target(s)

Figure 7.1 Impact by Channel: Base Case

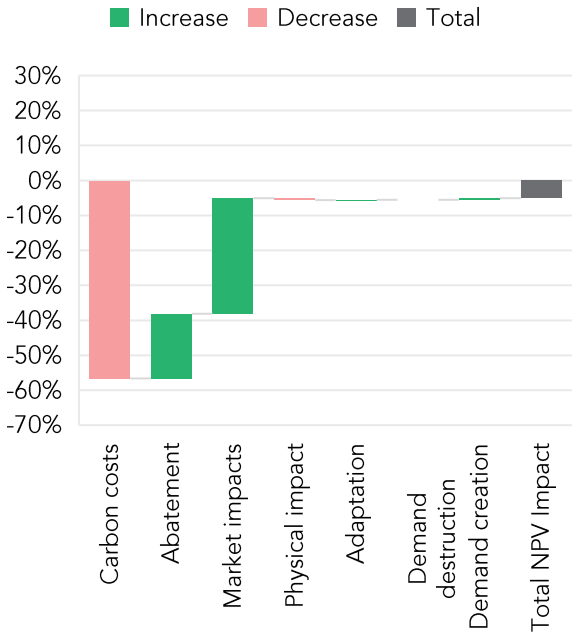
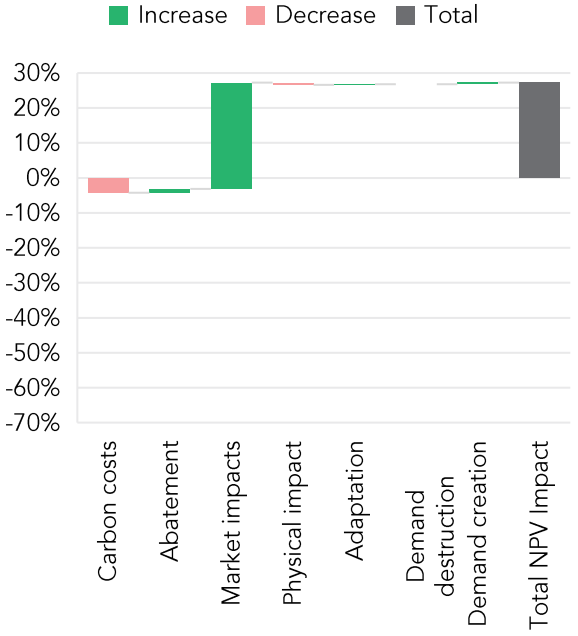


Figure 7.2 Impact by Channel: When Company Meets Targets



An International Energy Company

Similarly, below is another case presented in the same format for an international energy company. The charts below illustrate the impact of climate-related risks and opportunities on a large integrated oil and gas company, comparing a baseline scenario with a scenario in which the company meets its climate targets.

Under the baseline scenario, the company faces a significant overall negative financial impact, primarily driven by high carbon costs, declining fossil fuel demand, and physical climate risks. These factors reflect the financial burden of carbon pricing, regulatory pressures, and the longer-term shift away from hydrocarbons. However, companies are able to mitigate some of these climate risks by adapting to physical risk, undertaking abatement actions, and passing on rising costs through to consumers to reduce the impact of climate on earnings.

If the company meets its climate targets, the overall financial impact shifts from negative to positive. The most notable improvement comes from a substantial reduction in carbon costs, as proactive emissions reductions help mitigate exposure to rising carbon taxes and regulatory penalties. While the financial benefit of abatement decreases due to less abatement potential, the company's overall resilience and ability to navigate the energy transition improve significantly.

Another important observation is that demand destruction remains unchanged even when the company meets its climate targets. This suggests that the company's targets do not address Scope 3 emissions, which includes the downstream use of its products. As a result, while the company may reduce its own operational emissions, it remains exposed to revenue losses driven by declining demand for oil and gas as the broader economy decarbonises. Without a Scope 3 or revenue-based emissions target, the company continues to face long-term risks linked to structural shifts in energy demand.

Figure 8 NPV Impact by Channel: An International Company under Delayed Transition Scenario – Base case vs When Company meets its Climate Target(s)

Figure 8.1 Impact by Channel: Base Case

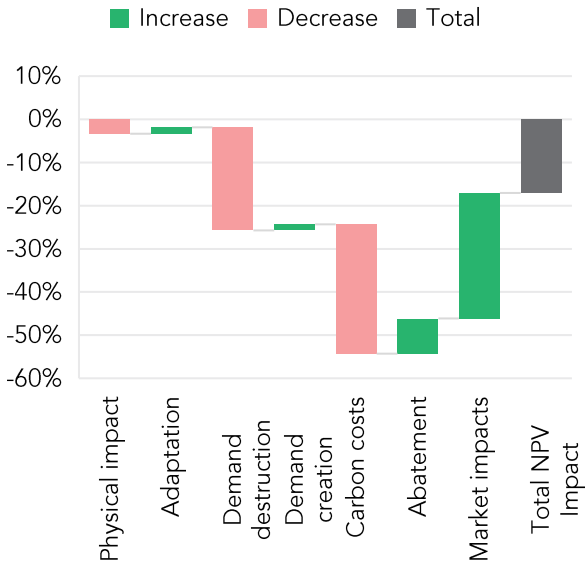
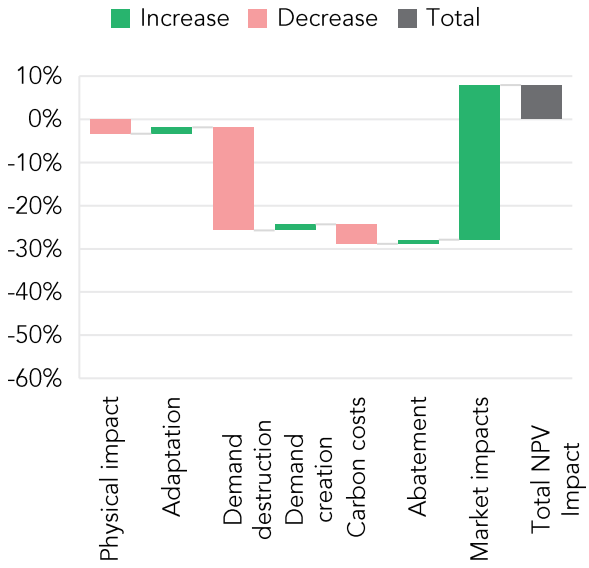


Figure 8.2 Impact by Channel: When Company meets Target

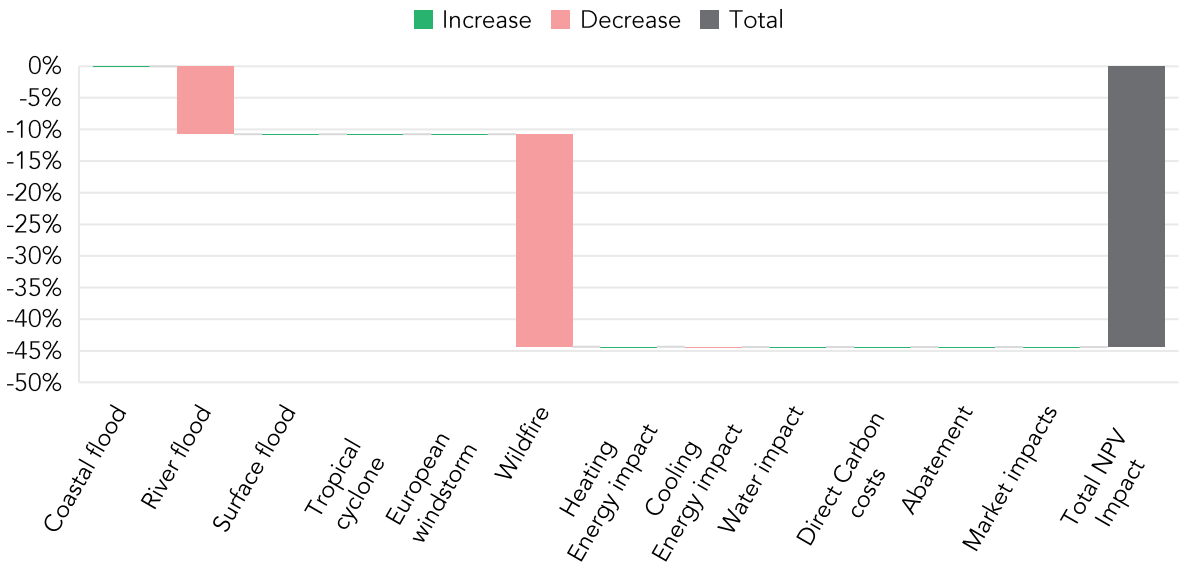


NGS Unlisted Property Asset

In this section and the next, we present two case studies from our unlisted property and infrastructure portfolios. While we continue to assess total NPV impact using attribution analysis, greater emphasis is placed on physical climate risks, such as wildfires, floods, and cyclones, as illustrated in the accompanying chart. For both property and infrastructure assets, physical risk is estimated by projecting changes in average annual damages from extreme weather events under a given climate scenario. These damages are translated into higher insurance costs, which are assumed to reduce net operating income and, in turn, asset values. Given the location-specific nature of these assets, we are able to conduct more precise assessments by evaluating climate risks at the individual asset level. This approach captures local weather patterns, regional climate projections, and exposure to extreme events, which vary significantly by geography.

Figure 9 below illustrates the potential impact of various weather events and transition risk factors, such as market impacts, on one of our overseas property assets. For this analysis, we have taken a conservative approach by assuming that these increased electricity costs and notably increased insurance costs from flood and wildfire risk which are incorporated by market impacts cannot be passed on to tenants. In practice, building managers may have some ability to transfer these costs; however, to ensure a prudent risk assessment, we assume that as the asset owner, we would bear the full financial impact, hence a 0% market impact.[19]The total NPV impact for this asset is approximately -44%, all coming from two weather events - wildfire and river flood – particularly relevant to the asset's inland location near the equator. It is important to note that the figures presented here reflect the impact on a single asset. Our extension of climate scenario analysis to real estate and infrastructure assets finds that physical risk impacts are highly concentrated in specific assets, such as the one shown below. However, the overall portfolio is resilient to climate risks, reflecting the well-geographically-diversified nature of our portfolio.

Figure 9 NPV Impact by Channel under Delayed Transition Scenario: An International Property Asset



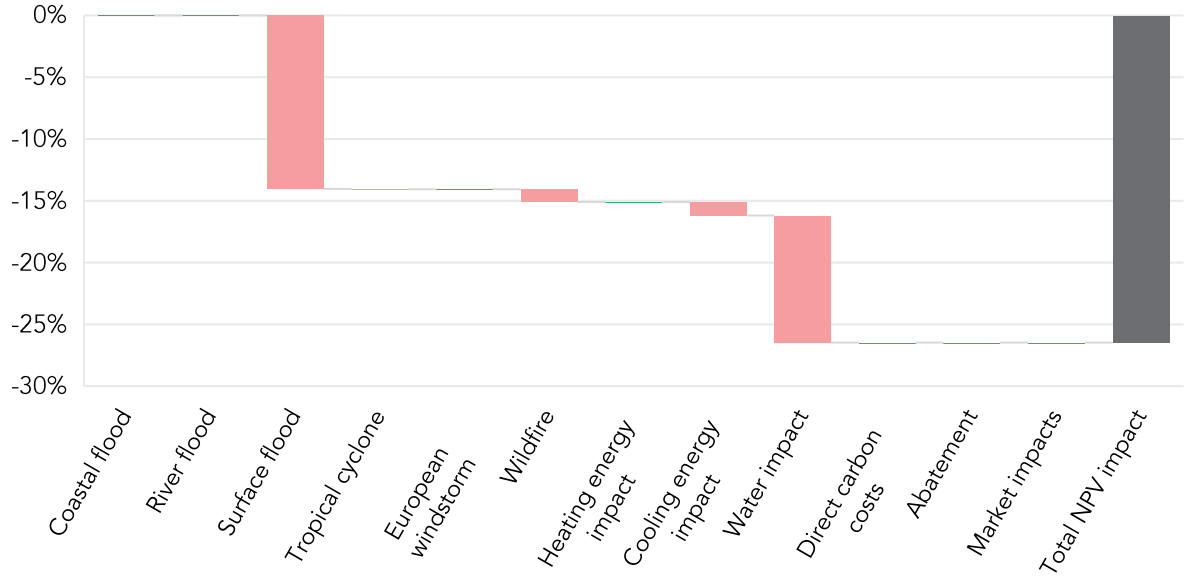
[19] Usually, market impact is positive as being a climate mitigation factor.

NGS Unlisted Infrastructure Asset

Similarly, the waterfall chart (Figure 10) below illustrates the contribution of various climate risk factors to the NPV impact of one of our Australia-located infrastructure sites. It is evident that surface flooding represents the most severe potential weather event for this asset, followed by wildfire. A large portion of potential financial cost is also associated with water impact, which reflects the increasing water stress caused by exacerbated climate change. This is particularly relevant in regions where water demand exceeds supply due to changing weather patterns, such as prolonged droughts or reduced precipitation. Lastly, the cooling energy impact reflects the increased demand for energy that would be most likely to occur in response to higher temperatures resulting in higher cooling needs.

As with the previous analysis, we assume that the rising utility costs, such as electricity and insurance costs (particularly for river flood risk), for managing a real asset and thus incorporated in market impacts, cannot be passed on to tenants and must instead be borne by the investor.

Figure 10 NPV Impact by Channel under Delayed Transition scenario: An Australian Infrastructure Asset



Investment Implications

Climate Risk Management

Any potential monetary losses associated with climate risk, while can appear notable, do not necessitate immediate or drastic changes to the current investment portfolio. We consider that these risks remain managed within the NGS Super's existing framework. NGS Super has a range of internal analytical tools including centralised dashboards and regular scenario analysis to identify and assess potential climate-related risks and opportunities. We can also utilise our current levers of Restrictions and Engagements to manage climate-related risks. Engagement is the NGS Super's preferred approach in the first instance as it allows us, with the assistance of specialist engagement partners, investment managers and resources at the underlying asset level to better understand the risk, opportunities and mitigants. If the NGS Fund is of the view that the risk seems too great, and better risk adjusted returns can be obtained elsewhere, the NGS Fund can use the Restriction lever. This structured approach ensures that the NGS Fund remains well-positioned to address climate challenges while maintaining alignment with our investment objectives.

Active Ownership and Engagement

Active ownership is a key component of our climate strategy. You can view the NGS Fund's approach to active ownership in our Active Ownership and Engagement Policy on the Fund's website.

Investment Opportunities

We incorporate climate-related opportunities into our investment decision-making process through a research-based initiative called Secular Trends, which identifies key themes with the potential to influence long-term investment performance while aligning with members' best financial interests. This approach is implemented through manager selection, co-investments, and allocations across various investment sectors. Examples of themes identified through this process include carbon neutrality, electronic and autonomous vehicles, and quantum computing. It is important to note that we do not apply a strategic portfolio tilt toward thematic trends, and achieving positive impact at the portfolio level is not our investment objective. Additionally, throughout the investment process we seek to incorporate ESG risks and opportunities as part of our investment selection and oversight activities. You can read more about the NGS Fund's approach to responsible investment in the Fund's Responsible Investment Policy available on the Fund's website.

Continuous Improvement of Analysis

We recognise that climate scenario analysis is an evolving discipline, and our approach is subject to inherent limitations (refer below), including policy and climate scenario uncertainties, data gaps and the need for estimations where complete information is unavailable. Each year, we seek to refine our methodology by working internally and collaborating with data providers to enhance data quality, expand the scope of our analysis, and deepen our insights. In addition, Planetrics also continuously update and enhances their modelling quality by refreshing scenarios, underlying methodologies, and data each year.

We remain committed to continuous improvement, striving to enhance the robustness of our assessments while maintaining transparency and clear communication with our members. By doing so, we aim to provide meaningful climate-related insights to support risk management and informed investment decision-making.

Model Limitations[20]

While we strive to conduct our scenario analysis as accurately and meaningfully as possible, we acknowledge certain limitations in the modelling, data inputs, and scenarios. A meaningful portion of the assessment of unlisted sectors relies on proxy data rather than specific holdings, and we are working to improve our data collection and validation processes.

Regarding climate risk itself, physical risks are expected to have important societal effects, including on health, migration and conflict. Whilst these might cause indirect impacts on investors, these complex dynamics are not included in this type of analysis.

Regarding the modelling itself, there are limitations in the assumptions and methodologies used. Firstly, we have to recognise the tragedy of the horizon limitation on physical risk, i.e., the end result of NPV impact is a discounted value of future climate effects over an extended period. And physical impact will intensify over time. Various climate-related macroeconomic effects, such as inflation, interest rates, and GDP fluctuations, can affect asset values but are not fully incorporated into our NPV impact modelling, given the evolving methodologies and associated uncertainty around how central banks will react to climate driven macroeconomic impacts. Additionally, when assuming that a company meets its climate targets, we treat each company's targets independently, without considering the potential effects on other companies in the same sector which could, in practice, limit the potential upside for the individual company. Moreover, it is assumed that companies will achieve their targets without incurring additional costs for emissions reductions or from changes in revenue shares if the company announced a revenue target (100% Electric Vehicle by 2040).

For location-level climate analytics for property and infrastructure assets, there are also several limitations occurring in the areas such as:

- Each climate scenario will have its own set of temperature, emissions and socioeconomic assumptions and results will be sensitive to these.
- Estimated average physical impacts could obscure changing tail risks, such as in the impacts of floods or droughts. Only direct impacts from physical risks are estimated. In addition to direct impacts in the form of damages and business interruption, physical hazards such as flooding may cause indirect impacts to surrounding infrastructure, such as roads, which can affect assets, leading to associated impacts which are not modelled here.
- Properties are assumed to remain fully insured within the model. If properties are not fully insured, then impacts would depend on what events occur in the future.
- Climate and economic impacts in surrounding areas not considered. Any climate and economic impacts in surrounding area which can indirectly affect assets are not considered by the model.

[20] Scenario analysis limitations include documented Planetrics modelling limitations.