

Manulife Investment Management

Whitepaper

The Paris Agreement as a long-term investment framework

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Key takeaways

- The planet is on a trajectory for a temperature rise of between 2°C and 4°C by 2100, which would have devastating impacts on ecosystems and human health.
- Current global commitments remain gravely inadequate to achieve the climate goals of the Paris Agreement and would lead to a temperature increase of at least 3°C by the end of the century; however, there's still a window of opportunity to mitigate the most severe impacts from climate change.¹
- Long-term investors can't afford to ignore these signals and significant tail risks. They have a vital part to play in ensuring corporations help meet these targets and, through doing so, can also enhance returns.
- Through the use of science-based targets, we believe achieving a net zero economy by 2050, in line with the Paris Agreement's goals, provides a suitable framework for investors seeking to align their portfolios with the overarching goal of curbing carbon emissions rapidly.

In a year turned upside down by a global pandemic, the world could be forgiven for momentarily losing sight of the greater, more insidious threat of climate change. But to do so would be costly: From shifting weather patterns that threaten food production to rising sea levels that increase the risk of catastrophic flooding, the impacts of climate change are global in scope and unprecedented in scale. Humanity presently finds itself at a crossroads: Do nothing and face the unthinkable or take meaningful action today while there's still time.

It was with hopes of achieving the latter that, in 2016, the Paris Agreement came into being.² The agreement is a framework for global climate action, including the mitigation of and adaptation to climate change, support for developing nations, and the transparent reporting and strengthening of climate goals. Central to the agreement's goals is research by the Intergovernmental Panel on Climate Change (IPCC), which calculated that the planet is on a trajectory for a temperature rise of between 2°C and 4°C by 2100.³ This would have a devastating impact on ecosystems and human health and well-being.

Change in average global temperatures above preindustrial levels by 2100



Source: Manulife IM and SBT. As of February 2021. For illustrative purposes only.

¹ Emissions Gap Report 2020, United Nations Environment Programme, December 2020.

²Learn more about the Paris Agreement here: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement. ³IPCC special report on global warming of 1.5°C, 2018. In order to achieve these milestones, the Paris Agreement² has several key aims, including:

- 1. To keep the increase in the global average temperature to well below 2°C above preindustrial levels and, if possible, limit any increase to 1.5°C—One of the IPCC's key findings was that limiting global warming to 1.5°C compared with even a 2°C increase would reduce the most challenging impacts from climate change, but would require "deep emissions reductions" and "rapid, far-reaching, and unprecedented changes in all aspects of society."³
- 2. To require that all parties report regularly on their greenhouse gas (GHG) emissions—also known as carbon emissions—and implementation efforts to assess collective progress
- Governments agree to take swift action in accordance with the best available science in order to achieve a balance between emissions and removals in the second half of this century

The pact requires nationally determined contributions or commitments in order to meet its goal. The European Union has committed to achieving net zero GHG emissions by 2050,⁴ while China, the world's largest carbon emitter, has pledged carbon neutrality by 2060.⁵ The Paris Agreement is a global effort and has been ratified by more than 190 countries. Although the United States made headlines around the world when it officially withdrew from the pact on November 4, 2020, its return to the accord was one of Joe Biden's first actions as president two months later.⁶

The Paris Agreement uses a ratchet mechanism, requiring each nation to set itself bolder targets for reducing emissions every five years. However, a report published by the United Nations Environment Programme in December 2020 warned that "the levels of ambition in the Paris Agreement must be roughly tripled for the 2°C pathway and increased at least fivefold for the 1.5°C pathway."¹

The Paris Agreement's ratchet mechanism: a framework for governments



Source: Manulife Investment Management, January 2021. For illustrative purposes only.

Using the Paris Agreement as an investment framework

How decision makers—including investors—respond today is key. In addition to increased allocations to climate solutions such as clean technologies, investors can also seek to decarbonize their portfolios. There's now sufficient evidence to support the idea that forward-looking climate risk analysis is an integral part of understanding the true scope of asset and investment risk or return scenarios. In an environment in which governments increasingly take regulatory action against climate change, we believe companies with a strong plan to reduce their GHG emissions will be best positioned to outperform the market. Over the long term, we expect these early adopters to generate higher sustainable free cash flows and cash flow return on invested capital. Moreover, early adopters are likely to increase their focus on innovation while strengthening their credibility among investors, customers, and employees and benefiting from stronger brand management.

The Paris Agreement was designed primarily as a framework for governments, but its philosophy and goals are just as valid for corporations. Indeed, corporates and investors are essential partners in the move toward a net zero global economy. Across the globe, particularly in developed economies, companies are already taking action to reduce carbon emissions in ever-increasing numbers.⁷ One initiative we're particularly supportive of is science-based targets.

Targets are considered science-based if they're in line with the latest climate science guidance on what's necessary to meet the Paris Agreement's goals of limiting global warming to well below 2°C above preindustrial levels and pursuing efforts to limit warming to 1.5°C. Science-based targets provide companies with a clearly defined and sector-specific path to reducing emissions, helping prevent the worst impacts of climate change while future-proofing business growth. Notably, they seek to achieve an "orderly transition" to a low-carbon economy.⁸ This approach can be defined by early action and structured decision-making with a target of achieving net zero emissions by 2050. Ensuring an orderly transition should help avoid risks such as sudden divestment in fossil fuel economies, market crashes due to high volatility and uncertainty, geopolitical and liability issues across sectors, and ongoing policy uncertainty.

⁴European Commission, 2050 long-term strategy, August 26, 2019.

^{5&}quot; China's historic announcement on net-zero emissions," London School of Economics and Political Science, September 25, 2020.

⁶"Biden, in a Burst of Climate Orders, Rejoins the Paris Agreement," The New York Times, January 20, 2021.

⁷ wemeanbusiness.org, January 2021.

⁸ Science Based Target initiative, https://sciencebasedtargets.org/faq, January 2021.

"In an environment in which governments increasingly take regulatory action against climate change, we believe companies with a strong plan to reduce their GHG emissions will be best positioned to outperform the market."

As measurable objectives aligned with the goals of the Paris Agreement, we believe science-based targets offer investors a viable process for supporting the slowdown in rising global temperatures. By consciously allocating capital toward companies that are implementing science-based targets as a means of improving their business and the environment, we're rewarding responsible business practices, investing in companies with long-term sustainable operations, and doing so without sacrificing potential returns. Industries as a whole are unlikely to change practices overnight, but even a small amount of investor influence has the power to make a significant impact. Persuading a handful of multinationals to address their GHG emissions now will cause a ripple effect through upstream and downstream supply chains and, ultimately, across industries.



Investor influence: stages of development toward climate change and Paris Agreement goals

Source: Science Based Target initiative, January 2021. For illustrative purposes only. The Greenhouse Gas (GHG) Protocol Corporate Standard classifies a company's GHG emissions into three scopes. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Active managers should also be active owners, and science-based targets provide asset managers with the tools to mitigate risks in certain instances by laying down actionable points on which they can engage with a company. Asset managers can help in the fight against climate change and at the same time be better investors by engaging with companies to assess their resiliency to climate risks, their adherence to or adoption of science-based targets, and their ability to take advantage of GHG emissions-reducing opportunities. Ultimately, engagement activities and capital allocation decisions are powerful levers for asset managers to influence companies to reduce carbon intensity.

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Performance within a climate-aligned framework

We'd hope that any lingering concerns about the ability of a climate-focused portfolio to perform well in a volatile market have long been settled, and the myth of environmental, social, and governance (ESG) strategy underperformance put to rest. We believe forward-looking climate risk analysis plays a central role in understanding the true scope of asset and investment risk or reward scenarios. As a result, we think asset managers can improve the risk or return profile of their funds by systematically incorporating an understanding of climate risks and opportunities into their investment process. Incorporating science-based targets within company research allows asset managers to understand risks and opportunities in a more holistic manner. By encouraging the adoption of science-based targets among investee companies. investors can play an important role in the move to a net zero economy. By merging this with more traditional forms of fundamental analysis, we think it can offer a better appreciation of the upside and downside potential offered by individual companies.

Furthermore, we believe that in an environment in which governments increasingly take regulatory action against climate change, companies with a strong plan and demonstrated activities to reduce their GHG emissions will outperform the market. These companies are likely to have a competitive advantage from a cost perspective because they're already on track to align with these regulations. We predict that markets will perceive early adopters as less risky and reward them for being better prepared for what the future may hold.

At Manulife Investment Management, we appreciate the importance of ESG analysis and have built out robust ESG capabilities. We have a large internal ESG research team that works both independently and in concert with our boutique asset management teams. As the fundamental equity team at Manulife, we've partnered closely with our ESG colleagues to better understand the risk or return potential of our companies, and we've integrated ESG analysis into our investment process. We believe that asset managers that invest the resources into building strong ESG research teams will be at a distinct advantage in the asset management industry of the future.



Case study: multinational making root and branch changes⁹

Some companies have moved quickly to reduce their GHG emissions, and it's our belief that the actions of a handful of large multinationals to address their GHG emissions now will ultimately cause a ripple effect through upstream and downstream supply chains and, ultimately, across industries. One such company that we like is a medical device manufacturer that has introduced new science-based CO_2 emission targets for 2020 to 2040. These targets will result in the company reducing total CO_2 equivalent (tCO_2e) emissions from its industrial and nonindustrial sites by 75% before 2025, and 90% before 2040, compared with its 2015 emissions.

The new targets are an extension of the company's earlier commitment to becoming carbon neutral in its own operations (such as industrial and nonindustrial sites, business travel, and logistics) by 2020. The multinational firm has also committed to reducing indirect GHG emissions across its entire value chain by 4% by 2025, and 11% by 2040, compared with its 2017 levels. Since last year, all of its sites have been powered by 100% renewable electricity sources, with most of that electricity sourced from wind farm projects the company itself helped create.

To reach 100% renewable electricity usage globally, the company purchases renewable electricity within local markets or through local utility providers. The company complements its initiatives with carbon offsets to achieve its net zero objective. Overall, it's committed to sourcing over 75% of its total energy consumption from renewable sources by 2025.

The company currently generates a free cash flow yield of 4.3%, and although cash flow return on invested capital (CFROIC) is currently at 10%, this is a result of past acquisition and divestiture activity.¹⁰ We expect the company to improve its capital efficiency going forward and believe CFROIC will rise to the low to mid-teens over the next few years.

⁹ For illustrative purposes. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.
¹⁰ Bloomberg, as of December 31, 2020.



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Margaret also works on global ESG integration projects and methodologies for ESG product development and represents Manulife Investment Management's ESG capabilities among the local investment community.



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We consider that the integration of sustainability risks in the decision-making process is an important element in determining long-term performance outcomes and is an effective risk mitigation technique. Our approach to sustainability provides a flexible framework that supports implementation across different asset classes and investment teams. While we believe that sustainable investing will lead to better long-term investment outcomes, there is no guarantee that sustainable investing will ensure better returns in the longer term. In particular, by limiting the range of investable assets through the exclusionary framework, positive screening and thematic investment, we may forego the opportunity to invest in an investment which we otherwise believe likely to outperform over time.

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