

Weathering the Storm: Exploring Climate Strategies

Jennifer Bender, Ph.D.

Senior Managing Director and Director of Research
Global Equity Beta Solutions

Kushal Kumar Shah

ESG Investment Strategy & Research

Climate change is here and we will experience the impact of changing weather patterns, rising sea levels and deteriorating ecosystems on the real economy for decades to come. Globally, governments are showing greater commitment to address climate change, while the spirit of European regulatory initiatives to decarbonise looks likely to spread to the US and beyond.

Therefore, the question is no longer whether asset owners should act to address climate risks in their portfolios. It is *how* best to preserve and grow long-term returns in an environment where climate risks will only heighten and regulations will only become more onerous. This article outlines the options available for asset owners.

Climate Risks and Opportunities

Climate change and the multitude of its impacts pose a variety of direct and indirect risks to investors. These can be broadly categorised into two types of risk:

- **Physical risks** are tangible risks of climate change that could manifest through a rise in sea levels, droughts, flooding, extreme temperatures and increased frequency of extreme weather events. These phenomena could damage infrastructure, cause supply-chain disruption, result in raw materials scarcity or harm human health.
- **Transition risks** are risks to economic and business models that are associated with new carbon pricing or emissions trading schemes, and the risk that higher costs of carbon may lead to stranded assets. Transition risks include changing consumer habits and labour market shifts, as well as investment allocation decisions in companies and sectors better suited to a low carbon economy.

Like any form of disruption, climate change also presents opportunities for forward-thinking investors:

Green energy investments represent an opportunity to reposition toward “green” revenue sectors, including renewable energy generation, energy management and efficiency, and green environmental infrastructure.

Climate resilient investments represent an opportunity to benefit from the success of firms that are building in resiliency to the potential impacts of climate change. These companies are proactively adapting their business models, including how they deploy capital and where they grow their business lines in response to the climate threat.

An ideal solution would mitigate the impact of both physical and transition risks on the long-term value of an investor’s portfolio while taking advantage of opportunities by adding exposure to green and climate-resilient investment opportunities.

Integrating Climate Considerations

Armed with this knowledge, how can asset owners create sustainable and resilient portfolios that can weather the climate storm and generate attractive sources of green revenue?

While previously, the only choice for asset owners would be to invest token amounts in satellite allocations, the growth of climate investment strategies has meant there are now many more options available. Increasing evidence of climate change combined with regulatory action have resulted in rapid innovation in climate investing. Investors can now integrate climate considerations at the total portfolio level.

1. Climate-related Screening Negative screening involves excluding specific companies, industries, or countries from an investment portfolio based on ESG or climate-related factors or risks. Investments can be screened for poor ESG performance or because the investment violates the investor’s ethical principles. Norms-based screening involves exclusion investments based on minimum standards of business practice based on international norms such as the UN Global Compact.

One drawback to negative screening is that by excluding companies in the sectors like energy and materials, the investor can miss out on green revenues and opportunities associated with the energy transition. For index investors, excluding investment in whole groups of companies, sectors or countries can also result in high tracking error. In addition, by divesting, investors lose their ability to bring about positive change through engagement and voting.

2. Mitigation A more nuanced approach than blanket exclusions would be to minimise climate risks and maximise opportunities across the entire portfolio by targeting specific metrics. This is done by focussing on mitigation of current and future carbon emissions. Mitigation aims to reduce the flow of heat-trapping greenhouse gases into the atmosphere and increase exposure to new energy and green companies.

Climate risks can be mitigated by reducing the following three portfolio climate metrics:

- **Carbon emissions intensity** (CO₂ emissions per \$m of company revenues)
- **Fossil fuel reserves** (Total reserves of CO₂ emissions)
- **Brown revenues** (% revenues from extractive activities)

Rules-based approaches have the benefits of simplicity and transparency compared to optimisation, which is done algorithmically.

3. Mitigation and Adaptation In a decarbonising world, mitigation of carbon emissions is a very logical approach. Yet, it foregoes the investment opportunities associated with the move to net zero emissions and the energy transition. A mitigation and adaptation approach addresses both climate risks and opportunities.

This is the focus of the State Street Sustainable Climate Equity and Bond Funds, which allow investors to gain a desired equity exposure, while also managing climate risks and building long-term resiliency into their portfolios. In addition to reducing the above carbon metrics, both funds are structured to increase **climate adaptation** scores, which evaluate companies' climate change preparedness. Our Sustainable Climate Equity funds also benefit from allocation to sources of **green revenues**, while our Sustainable Climate Bond funds increase allocation to **green bonds** compared to the index.

Our analysis shows that substantial improvements in green revenue exposure and climate risk adaptation as well as significant reductions in carbon intensity, fossil fuel reserves exposure and brown revenue exposure are all achievable, while still being orientated towards the characteristics of the starting universe.

Figure 1 provides a summary of the three main climate investing approaches.

Figure 1
Key Characteristics of Climate Investing Approaches

Climate Investment Strategy	Description	Advantages	Disadvantages	Considerations
Screening	Exclude investments based on ESG factors or risks	Easy to understand	Uncertain impact on portfolio characteristics	Which screens are implemented?
		Straightforward to implement in theory	Leads to higher tracking error than other approaches	How will screens impact on tracking error?
		Allows for client-specific requirements	Divestment does not allow for engagement	
Mitigation	Achieve a specified reduction in carbon intensity, fossil fuels and brown revenues relative to the benchmark	Reduce exposure to companies contributing to climate change	Ignores the investment opportunities associated with the transition to net zero	What is the impact of reducing the investment universe?
		Reduce climate transition risk		What is the impact on tracking error?
				How is carbon intensity reduction measured?
Mitigation and Adaptation	Achieve a specified reduction in carbon intensity, fossil fuels and brown revenues, while also targeting an improvement in green revenues and climate adaptation	Reduce exposure to companies contributing to climate change	Applied models are sophisticated and require a high level of understanding	What is the impact of reducing the investment universe?
		Reduce climate transition risk		What is the impact on tracking error?
		Benefit from green opportunities and investment in companies that are successfully adapting to climate change		How is carbon intensity reduction measured?
				How are green opportunities evaluated?

Source: State Street Global Advisors.

Investors should carefully consider the benefits and drawbacks of each approach when evaluating which strategy to adopt. It's important to remember that screening and other more complex approaches are not mutually exclusive — they can be used in combination to achieve an investor's desired portfolio climate profile.

The Future of Climate Investing

That the world needs to transition to a low carbon future to avoid catastrophic climate change is no longer in doubt. Governments, industries and asset managers globally are all making net zero commitments by 2050 in line with the Paris Agreement. Even the International Energy Agency, historically a proponent of fossil fuels, has called for an end to fossil fuel expansion and huge investments in clean energy.

So the question is really how investors will maintain returns and portfolio resiliency amid stringent regulations the systemic impact of climate change on financial market and the real economy. In this article, we have outlined the characteristics of three broad investment strategies that investors can use to address climate risks.

We expect to see further innovations in the quality of climate data, climate finance research and portfolio-level techniques. In particular, there is work being undertaken around integrating climate metrics in traditional investment approaches, from the potential impact of climate change on portfolio tail risk, to whether carbon is priced into markets, and within which asset classes over various time horizons.

Investors today have a unique opportunity to ensure the long-term preservation and growth of their portfolios, while also contributing to the solutions we require to tackle climate change. The time to act is now.

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* Pensions & Investments Research Center, as of December 31, 2020.

[†] This figure is presented as of March 31, 2022 and includes approximately \$73.35 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

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