Climate Investing Lose the Carbon, Keep the Returns

Lose the Carbon, Keep the Returns

We believe climate change is one of the biggest risks in investment portfolios today. These risks impact a vast number of segments and industries – not just the obvious polluters.

But with climate risk also comes tremendous investment opportunity, as the economy reworks against the impact of climate change.

We have developed a range of highly effective solutions to help investors make a material improvement to their carbon profile, while achieving the returns they need.

Our solutions can help transform your equity and fixed income portfolios, helping you lose the carbon and keep the returns.

Meeting the Climate Challenge

To construct a robust and future-proof climate strategy, looking at headline carbon footprint numbers alone is not enough.

In order to assess the real exposure to climate-related risks, including those further along the value chain, climate solutions should take a number of factors into account.

Carbon Intensity	A relative measure that considers a company's carbon emissions in relation to its output.
Fossil Fuel Reserves	Connecting a company's operations to the risks of stranded assets and associated potential write offs.
Brown Revenues	Exposure to activities associated with the extraction of non-renewable energy sources.
Green Revenues	Gives insights into a company's exposure to low- carbon technology activities.
Preparedness	Assessment of climate change preparedness.

When these factors are integrated, the portfolio structure can be changed to aligned with increasingly important standards, such as the Paris Accord.

Solutions That Deliver

Whether driven by regulation, a desire to reduce risk or by stakeholder pressure, investors around the world are increasingly looking to adopt solutions that enable them to improve the carbon profile of their portfolio.

But we know that carbon reduction alone is not sufficient. Investors are looking for solutions that not only deliver on carbon but also give them the returns they need.

With these requirements in mind, we've developed a range of solutions that give investors the tools they need to meet their objectives, whatever the stage of their ESG journey and without jeopardizing the return objectives.

Sustainable Climate Strategy

This breakthrough strategy offers the opportunity to effectively target climate change.

Achieves results through a powerful mix of mitigation of current climate risks and adaptation to future opportunities.

The Next Wave, Now

The State Street Sustainable Climate Strategy is a long-only investment approach that uses a mitigation + adaptation methodology to build climate change thematically into portfolios.

Designed from the ground up to be flexible, the customizable framework allows us to create client portfolios that target reductions in current and future carbon emissions, increase exposure to green revenues and increase resiliency to the physical risks posed by climate change.

The Strategy is aligned with the goals stemming from the landmark 2015 Paris Agreement — including limiting climate change to the 2° Celsius warming scenario over the 21st century.

It's designed for investors who wish to prepare their portfolios for the transition to a low-carbon economy, in a scalable and risk-aware way.

It's available now to meet those needs.

Addresses Climate Risk on Multiple Fronts

To target net carbon emission reductions in the portfolio, the Strategy uses both mitigation and adaption, reallocating capital away from companies with high current carbon emission intensity, embedded fossil fuel reserves and brown revenues, and towards companies that generate green revenues from low-carbon technology.

	Mitigation + Adaption					
Objectives	Minimize Carbon Emission Intensity	Minimize Fossil Fuel Reserves	Minimize Brown Revenues	Maximize Green Revenues	Build Resilient Portfolio	
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Metrics	CO ₂ Emissions / \$M Revenues	Embedded CO _{2/} Per Tonnes of CO ₂ Emission	% Revenues from Extractive Activities	% Revenues from Low-Carbon Technology	Score on Climate Change Preparedness	

Source: SSGA, as of September 2020. For illustrative purposes only.

Delivers Across the Board

Allocates Towards Adaption and Green Revenues In addition to its focus on mitigating the drivers of climate change, the Strategy also increases exposure to companies that are actively adapting to the actual or expected future effects of global warming and other environmental changes, helping investors to build more climate-resilient portfolios in the process.

Aligns with the Paris Agreement The Strategy aligns with the ambitious goals of the Paris Agreement and prepares portfolios for the possible introduction of a carbon tax and other regulatory initiatives that could accompany the transition to a low-carbon economy.

Leverages Multiple Data Sources Given the multifaceted objectives of the Strategy, our framework integrates data from leading providers: S&P Trucost (carbon emission intensity, fossil fuel reserves and brown revenues), FTSE Russell (green revenues) and ISS ESG (adaptation). The selected data helps isolate with precision the climate parameters we target.

Meets Client Objectives Flexibly We designed the Strategy framework so that it could be customized to meet each investor's needs in terms of climate priorities, desired benchmark, tracking-error budget and exclusions needed to meet other international norms or sustainability considerations.

+300%

Increased exposure to **Green Revenue** such as low-carbon technology.

-90%

Decreased **Brown Revenue** exposure and **Embedded Fossil Fuel Reserves**.

60-80%

Reduction on **Carbon**, such as those from ${\rm CO_2}$ emissions.

Source: SSGA, as of September 2020. The above targets are estimates based on certain assumptions and analysis made by SSGA. There is no guarantee that the estimates will be achieved. These are examples of the constraints applied to a World equity portfolio. These constraints are applied at the quarterly rebalance.

Low-Carbon Equity Framework

Fully customizable equity exposure.

Client-selected preferred carbon-reduction objective or tracking error target.

State Street's Low-Carbon Equity Framework uses advanced portfolio techniques that are designed to achieve the most efficient trade-off between carbon reduction and tracking error, while achieving long-term returns broadly in line with the underlying index benchmark.

This framework allows clients to customize their portfolios to align with their specific carbon goals and risk budgets. In addition to setting the level of targeted carbon emission reduction or tracking error, investors can pre-select the developed market equity benchmark that represents their chosen starting universe.

The Low-Carbon Equity Framework is designed to help investors make informed decisions about the trade-off between carbon reduction and tracking error — and determine their individual optimal solution.

Straightforward, Effective Carbon Reduction

As investors look to align their portfolios with the transition to a low-carbon economy and minimize potential exposure to climate risk — which could arise from regulation and carbon tax — the Low-Carbon Equity Framework provides a straightforward, effective way to take the first step.

Capturing the Full Carbon Picture

Quality climate data is essential for developing targeted investment solutions. Our data source for companies' carbon emissions uses a rigorous estimation methodology that helps account for when companies do not report critical carbon emissions information.

The data includes the emissions of the company's direct suppliers, thus giving a truer emissions picture by capturing a significant amount of relevant emissions data that other providers do not capture.



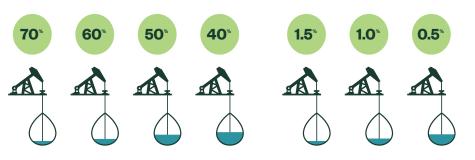
Source: SSGA, as of September 2020.

Flexible Approach to Reaching Desired Results

We can build customized portfolios that either maximize the level of carbon reduction for the client's targeted level of tracking error or minimize the level of tracking error for achieving the client's targeted level of carbon reduction.

1. Target Any Carbon Reduction Level while minimizing tracking error

2. Target Any Tracking Error Level while maximising carbon reduction



Source: SSGA, as of September 2020. For illustrative purposes. only.

Powered by SSGA's Highly Experienced Indexing Team

Our highly experienced indexing teams help manage these strategies. Clients benefit from our extensive global network, sophisticated trading capabilities and rigorous risk management processes.

Low-Carbon Corporate Bond Strategy

Fully customizable corporate bond exposure with clientselected carbon reduction target range.

Maintains benchmark characteristics while transforming the carbon profile of corporate bond portfolios.

We are helping investors understand, control and benefit from the quantifiable trade-offs between carbon reduction and tracking error in their fixed income portfolios.

Most importantly, we are demonstrating that significant improvements in carbon profile can be achieved with minimal impact to credit quality or interest-rate risk relative to corporate bond benchmarks.

The State Street Low-Carbon Corporate Bond Strategy seeks to create customized portfolios with a lower carbon footprint and similar returns to the performance of the client's selected fixed income benchmark.

The strategy is available now to help investors reach their goals for reducing carbon emissions without compromising their investment objectives.

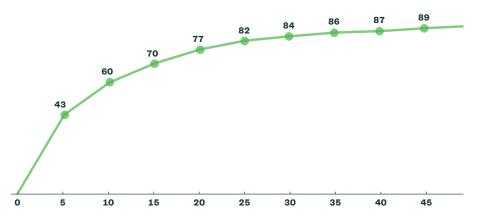
Reducing Carbon Without Compromises

The Low-Carbon Corporate Bond Strategy is the product of our extensive research into creating reliable, high-quality data about the carbon intensity of the corporate bond universe.

We've taken the best of our research and our new data framework to develop our Strategy into an effective tool for investors looking to transform the carbon profiles of their fixed income portfolio.

Hitting the Sweet Spot

Our Strategy can create customized portfolios that have significantly lower carbon footprints but nonetheless produce similar returns to their selected fixed income benchmarks.



Source: Sustainalytics, Trucost, POINT and State Street Global Advisors, as of September 2020. Baseline universe: Bloomberg Barclays Euro Corporate Bond Index. For illustrative purposes only.

Carbon emissions are concentrated among a relatively small percentage of bond issuers. This means that a corporate bond portfolio's carbon footprint can be reduced by more than 80% by excluding the top quartile of the heaviest polluters.

Based on our data, many investors have expressed interest in 15% screening, which results in a 70% reduction in carbon intensity with only minimal deviation from the Bloomberg Barclays Euro Corporate Bond Index. Within this range, there is also relatively low impact on credit quality and interest-rate risk exposure.

A Practical Approach

Customizable Based on the targeted carbon reduction, climate resilience objectives and the index used as the benchmark.

Bespoke Constraints We work with clients to add additional screens, such as non-compliance with the UN Global Compact.

Keeps Costs Down Liquidity, turnover and transaction costs are paramount. The Low-Carbon Corporate Bond Strategy aligns well with these concerns.

Low Administration Achieved with low levels of exclusions, investors don't need to renormalize and rebalance large portions of the portfolio.

New Issuances We look to minimise transaction costs by participating in new bond issuances where possible.

Rated

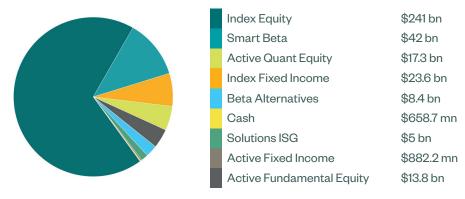
We're proud signatories of the UN Principles for Responsible Investing. Our latest PRI assessment ranks us at the highest achievable grade at the firmwide level.

Strategy & Governance	A+
Listed Equity Incorporation	А
Listed Equity Active Ownership	A+
Fixed Income SSA	В
Fixed Income Corporate Financial	В
Fixed Income Corporate Non-Financial	В

Source: PRI, as of 15 January 2020.

Trusted

We've been successfully managing ESG mandates for over 30 years. We're entrusted by our clients to manage over \$350 billion of ESG assets.



Source: State Street Global Advisors. As of Q2 2020.

Experienced

We launched our first ESG mandate in 1985 and were an early leader in low-carbon investing.

We're now the world's third-largest ESG manager.

Our research is leading the way in developing effective climate solutions for the industry and we're a recognized leader in asset stewardship and corporate governance.

Source of ESG global ranking, Willis Towers Watson, The World's Largest Asset Managers, 2019.

To learn more about how our climate-focused strategies can be customized for your investment goals please contact your State Street Global Advisors representative.

To discover our complete range of ESG solutions please visit ssga.com/esg

Questions? Please email emeaesg@ssga.com.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

Start with rigour Build from breadth Invest as stewards Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world.

Helping millions of people secure their financial futures.

This takes each of our employees in 27 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with \$3 trillion* under our care.

*This figure is presented as of June 30, 2020 and includes approximately \$69.52 billion 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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Important Risk Information

For a complete list of State Street Global Advisors Global Entities please visit: https://www.ssga.com/global/en/ our-insights/state-street-global-advisorsworldwide-entities.html

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The returns on a portfolio of securities which exclude companies that do not meet the portfolio's specified ESG criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's ESG criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole

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