Insights
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Journey to Net Zero

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Amid greater awareness of the rate of anthropogenic climate change, net zero investing has taken centre stage. Recent years have seen various investor and regulatory bodies propose investment frameworks to reach net zero. To name a few, there are the European Union's sustainability-related regulations, the Net Zero Asset Owner's Alliance, the Net Zero Asset Manager Initiative and the Institutional Investors Group on Climate Change's Paris-Aligned Investment Initiative.

In this article, we examine these frameworks, their common threads and what they mean in practical terms for investors. In particular, we outline the concrete steps that investors can take to make their portfolios "net zero aligned".

We also explain State Street Global Advisors' offerings in the context of helping investors on their journey to net zero, through our investment solutions, portfolio reporting and asset stewardship capabilities.

What does "net zero" mean?

- "Net zero" means that the total greenhouse gas (GHG) emissions being emitted should be lower than or equal to the total GHG emissions being removed or absorbed. On a net basis, no additional emissions should be released into the Earth's atmosphere.
- Carbon neutrality is a related concept that means that an entity has offset its emissions by purchasing carbon credits or offsets equal to the amount of its emissions. This can be equivalent to "net zero" emissions, if and only if, the offsets are derived purely from removal of CO_2 emissions and not from "avoided emissions".
- Scientific models that target a temperature rise of less than 1.5°C over and above pre-industrial levels show that we need to achieve net zero emissions by the year 2050.

Major Net Zero Initiatives and Frameworks

In general, all the initiatives and frameworks seek to align investor goals with the Paris Agreement and achieve net zero emissions by a combination of:

- Decarbonising the portfolio
- Increasing investment in climate solutions or green technologies
- Improving reporting (what gets measured, gets managed)

There is recognition that transitioning to a low carbon world is a long and challenging process, and companies need to have the right incentives to make the required changes. The main options for investors with respect to their portfolio holdings are:

- Engagement with company boards and management
- Selective divestment from certain sectors or harmful activities
- Enhancing the carbon profile of portfolios via the integration of climate considerations
- Advocacy to encourage reporting

Most net zero frameworks will pull on these "levers" to varying extents to drive change in portfolio companies. In this section, we discuss some of these frameworks, with a specific focus on the Paris-Aligned Investment Initiative (PAII).

The IIGCC's PAII Framework

The Paris Aligned Investment Initiative (PAII) from the Institutional Investors Group on Climate Change (IIGCC) is an initiative involving over 110 investors and $33 trillion in assets. The IIGCC released their "Net Zero Investment Framework"[1] in March 2021. Being highly regarded and vetted by industry participants, this framework provides somewhat flexible guidelines to investors, along with recommended actions, metrics and methodologies to achieve the goal of net zero global emissions by 2050 or sooner.

The framework is intended to be adopted by asset owners or asset managers following a formal commitment. Initially, the framework covers four major asset classes — sovereign bonds, listed equities, corporate fixed income and real estate, with others to follow.

A summary of the major components of this framework can be found in the table below, along with an overview of where and how State Street Global Advisors can help investors implement the guidelines in their portfolios. Our climate investment, stewardship and reporting capabilities are discussed in more detail in the final section.

Figure 1
IIGCC Framework Steps and State Street's Role

(I) Governance and Strategy	How State Street Can Help
Commit to the goal of achieving net zero portfolio emissions by 2050 or sooner, and adopt an investment strategy consistent with the achievement of global net zero emissions by this date	We can act as a partner around setting up a net zero governance strategy.
Define beliefs, set investment strategy and mandates/performance objectives for portfolio managers, asset managers, and other relevant personnel	
Undertake climate financial risk assessment in line with Taskforce on Climate-related Financial Disclosure recommendations	
Publish a clear action plan, and disclose information on governance, strategy, metrics and targets, and management in relation to achieving alignment to net zero	

(II) Targets and Objectives	How State Street Can Help
Set medium-term emissions reduction and climate solutions reference targets to inform strategic asset allocation and monitor impact of strategy	Setting emission reduction targets is dependent on the respective book of business/capital pool of the respective investor.

(III) Strategic Asset Allocation	How State Street Can Help
Update capital market assumptions based on scenario analysis	Our Investment Strategy and Research teams have the capability to take explicit account of ESG considerations, including climate, in determining our outlook.
Optimisation with emissions and climate solutions metrics	
Set asset class mix with climate variants	
Review constraints to increasing alignment	

(IV) Asset Class Alignment	How State Street Can Help
a. Assess Assets and Set Targets	
Assess assets based on current and forward-looking alignment criteria, and investment in climate solutions	We can provide portfolio climate profile assessments.
Set goals for increasing percentage of assets under management invested in aligned assets	
Implement an engagement goal to ensure at least 70% of financed emissions in material sectors are either net zero, aligned to a net zero pathway, or the subject of direct or collective engagement and stewardship actions	Climate stewardship has been a priority for State Street since 2014.
b. Implementation	
Portfolio construction: Screening, positive and negative weighting, tilted benchmarks to allocate capital to support alignment and investment in climate solutions	We can help with the implementation across an entire spectrum of climate investing including screening, and positive and negative weighting, both utilising proprietary frameworks, as well as helping to select and manage against third-party climate benchmarks. State Street is also a leader in climate engagement aligned with net zero efforts.
Engagement: Criteria-based escalating engagement and voting strategy for non-aligned assets; Tenant and issuer engagement	
Selective divestment: Based on climate-related financial risk; engagement escalation; non-permissible activity thresholds	
Investment/management actions for directly-owned assets (e.g. real estate)	

(V) Policy Advocacy	How State Street Can Help
Net zero-aligned policy and regulation	We have a dedicated Regulatory Affairs team heavily involved in sustainability policy advocacy. We are happy to share our views with clients on request.
Disclosure; shareholder rights	
Collective and direct advocacy delivered through meetings, letters, responding to consultations, and media activity, as well as ensuring trade association advocacy is consistent with net zero goals	

(VI) Market Engagement	How State Street Can Help
Asset manager or client	State Street engages with a multitude of market actors on climate issues. We are happy to provide more information on request.
Market actors including credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants, and data and service providers	

Net Zero Asset Manager Initiative (NZAMI)

The NZAMI is an initiative launched in December 2020 by an international group of asset managers that aims to support the goal of net zero emissions by 2050 or sooner and to support investing aligned with the same goal. Founding partners of this initiative include the IIGCC, Carbon Disclosure Project (CDP) and the Principles for Responsible Investment (PRI), among others. At the time of writing, there are 87 signatories representing $37 trillion in assets under management. This initiative is closely tied to the PAII net zero framework in that asset managers adopting the PAII framework are also required to sign up to the NZAMI commitment. State Street Global Advisors is a proud member of this initiative.

UN-convened Net Zero Asset Owner Alliance (NZAOA)

The United Nations-convened NZAOA is an asset owner initiative to adopt net zero investing and currently consists of 42 institutional investors representing $6.6 trillion in assets under management. In January 2021, the NZAOA published its "Inaugural 2025 Target Setting Protocol"[2] which explicitly set out how individual members will set targets (related to portfolio emissions, engagement, advocacy etc) achievable in the next five years. While this initiative is separate from that of the IIGCC, the inaugural protocol nevertheless heavily leverages the IIGCC framework to build its recommendations. Many of our clients are members and we are in active dialogue to help them meet their goals.

EU Climate Benchmarks and Related Regulations

In a similar vein to the Net Zero framework above, the EU Technical Expert Group (TEG) on sustainable finance released methodologies related to climate benchmarks and related disclosures in January 2019. The TEG recommendations are prescriptive and lay out specific quantitative targets (e.g. carbon intensity reduction, green/brown share) for both equity and fixed income climate benchmarks, that are aligned to the goals of the Paris Climate Agreement, in addition to disclosure requirements for the same.

In addition to the above, the EU has also taken a more holistic approach to sustainability, and published more regulation to improve standardisation and reporting in the Green Taxonomy, Green Bond Standard, Non-financial Reporting Directive (NFRD) and Sustainable Finance Disclosure Regulation (SFDR). Our paper **EU Sustainable Finance Regulations: 2021 and Beyond** discusses the EU climate regulations in more detail.

How State Street Global Advisors Can Help You

State Street Global Advisors is a signatory to Climate Action 100+, a global initiative led by investors to foster the clean energy transition by engaging the companies and sectors with the highest greenhouse gas emissions.

Our climate stewardship approach is built around the understanding that climate change poses challenges to companies as they balance their strategic directions, commitments and goals. On the other hand, forward-thinking companies will have the opportunity to benefit both financially and reputationally from the transition to a lower carbon economy.

At State Street, our climate stewardship approach encompasses four pillars:

- **Company Engagement** We engage with companies to understand their approaches to mitigating and managing the physical and transitional impacts of climate change. Our engagement approach leverages the four dimensions of the Task Force on Climate-related Financial Disclosures (TCFD) framework: governance, strategy, risk management and metrics.

- **Proxy Voting** Our voting on climate change is typically prompted by shareholder proposals. However, we may also take voting action against directors even in the absence of shareholder proposals for unaddressed concerns pertaining to climate change. We endeavour to engage with the proponents of shareholder proposals to gain additional perspective on the issue, as well as with companies to better understand how boards are managing relevant climate risks. We are committed to providing transparency on our approach to evaluating environmental shareholder proposals and on our voting decisions.

- **Thought Leadership** At State Street, we aim to support our portfolio companies by publishing papers that provide insights into our thinking as well as sector-specific guidance on best practices related to climate-related disclosure. Our thought leadership is leveraged widely by boards, executives, clients, regulators, asset owners and other asset managers, thus advancing the conversation around climate action in the market.

- **Policy and Regulatory Efforts** We utilise voting and engagement as effective tools to shape climate disclosure and practices on a company-by-company basis. Certain issues, such as a universal carbon price, however, must be addressed at the market level. As one of the largest asset managers in the world, we actively participate in collaborative initiatives that help shape the policy and regulatory landscape.

Investment Solutions*

- **Sustainable Climate Equity and Fixed Income Strategies** The State Street Sustainable Climate Strategies are long-only investment approaches that use a mitigation and adaptation methodology to build climate change thematically into equity and fixed income portfolios.

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

- **Low Carbon Equity and Fixed Income Framework** State Street's Low Carbon Equity and Fixed Income Solutions use advanced portfolio construction 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.

  The Solution allows clients to customise 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 benchmark that represents their chosen starting universe.

- **Climate Integration in Active Quantitative Equity**

  — **Climate Enhanced Equity** Seeks to provide a return in excess of global developed equity markets, while targeting climate change considerations. It allows us to create client portfolios that target both a risk-adjusted return objective through our enhanced equity process and customisable climate objectives through reductions in current and future carbon emissions, increased exposures to green revenues, and increased resiliency to the risks posed by climate change.

  — **Climate Defensive Equity** Seeks to generate capital growth over the medium to long term through investment in global equity securities, while exhibiting lower volatility than standard market cap-weighted benchmarks and simultaneously targeting climate change considerations. The process allows us to create custom client portfolios that target both a return and a total volatility objective through our defensive equity process, and a climate objective through reductions in current and future carbon emissions, increased exposure to green revenues, and increased resiliency to the risks posed by climate change.

- **Climate Integration in Fundamental Equity** The team incorporates ESG considerations into the quality assessment of a company using a proprietary metric called the Confidence Quotient (CQ). This is based on our belief that companies that are strong on ESG are more likely to deliver the sustainable growth we seek. ESG considerations are therefore integral to our alpha thesis, and are not merely an overlay in the process.

  The team's overall ESG analysis includes both the direct impact of climate change on a company's business prospects and indirect impact through regulation and changing customer preferences. This is an integrated ESG approach results in portfolios that have a natural tilt toward better ESG and lower carbon intensities.

- **Investment Strategy and Research** In designing and managing multi-asset portfolios, we evaluate a client's ESG objectives as part of their broader investment objectives and constraints, and construct a portfolio aligned to these holistic objectives in as consistent and coherent a manner as possible.

  Within our long-term asset class forecasts, we take explicit account of ESG considerations, including climate, in determining our outlook. We have found that changes in a company's R-Factor™ (State Street's proprietary ESG score), can, at an aggregate level, influence the future risk prospects of a given asset, and thus, the overall asset allocation.

  We also take into account scenario analyses and stress tests when developing our portfolio recommendations. For these, we use a wide variety of data inputs and hope to include forward-looking climate projections when available. We believe that using forward-looking data, rather than relying solely on historical data better equips us to deal with the rapidly changing investment and environmental landscape.

* All solutions mentioned in this section refer to strategies only. They do not refer to any actual investment vehicle in a particular region.

Reporting and Assessment

We can provide reports and assessments of our clients' investment portfolios that include several ESG components, including TCFD metrics and climate profiles such as carbon intensity, weighted average carbon intensity, Scope 1 and 2 carbon emissions, and total reserves of carbon emissions. In the event that additional climate metrics such as green revenue and brown revenue share and/or climate adaptation scores are integrated, we can report on these as well.

Endnotes

1 Detailed guide can be found here: https://parisalignedinvestment.org/media/2021/03/PAII-Net-Zero-Investment-Framework_Implementation-Guide.pdf.

2 https://unepfi.org/publications/aoapublication/inaugural-2025-target-setting-protocol/.

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 rigor
- 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 30 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager* with US $3.90 trillion† under our care.

* Pensions & Investments Research Center, as of December 31, 2020.
† This figure is presented as of June 30, 2021 and includes approximately $63.59 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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