



MFS[®] 2025 Net Zero Progress Report

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Executive Summary

In a year shaped by geopolitical uncertainty, regulatory divergence, and accelerating climate impacts, MFS has remained consistent in integrating climate issues, where we believe it to be material, into our investment process. We view climate change as likely to produce financially material risks and opportunities that demand rigorous analysis, active ownership, and long-term thinking.

In this complex and fast-changing landscape, active management matters. Our ability to differentiate across companies, sectors, and geographies, as well as to engage constructively on issues including climate change, positions us to help clients navigate uncertainty and pursue long-term value.

This report outlines our 2024 progress toward our net zero targets, the evolution of our integration and stewardship model, and how we are adapting to a more complex investment landscape.

Key Highlights

- **Alignment Progress:** By year-end 2024, 49% of in-scope assets managed by MFS were aligning or aligned to net zero, up from 42% in 2023. The share of assets classified as “Not Aligned” fell by over five percentage points, from 29.43% to 24.38%, reflecting issuer-level progress and the impact of sustained engagement.
- **Scaled Stewardship:** Climate-related engagements at MFS have grown cumulatively since 2021, with a focus on transition plan credibility, emissions disclosure, and governance. We continue to prioritize high-emitting, strategically relevant sectors such as aerospace, defense, and nuclear.

Sectoral Depth: In last year’s report, we examined the **consumer staples sector**, highlighting its downstream environmental impacts, particularly emissions linked to **deforestation** and **plastic pollution**, as well as its interconnectivity with broader sustainability challenges. This year, our focus shifts to the **aerospace and defense sector**, a natural continuation of our deep-dive approach. These industries present distinct climate complexities, especially in terms of **upstream emissions** and their role in enabling decarbonization across adjacent sectors such as **transport, energy, and power generation**. We explore both the risks and opportunities shaping this strategically important sector.

Our Commitment to Net Zero

At MFS, our purpose is to create long-term value for our clients by allocating capital responsibly. We believe that climate change creates systemic and financially material risks and opportunities within the global economy that will impact the companies and issuers we invest in. As such, integrating climate considerations into our investment process is not only aligned with our fiduciary duty, but also essential to delivering long-term, risk-adjusted returns.

We recognize that progress is not linear. The path to net zero is shaped by policy shifts, technological advances, and market dynamics. But our conviction remains clear: integrating financially material climate risks and opportunities is critical to delivering positive, risk-adjusted returns for our clients.

We view climate change as a structural force that will shape future investment outcomes. The physical impacts of a warming planet, adaptation, the policy responses to mitigate those impacts, and the evolving expectations of consumers and regulators all have the potential to affect asset prices, capital flows, and business models. Our approach to climate integration is grounded in materiality, fundamental research, active ownership, and long-term stewardship.

Beyond Frameworks: Evolving Our Approach

MFS joined the Net Zero Asset Managers initiative (NZAM) in 2021, recognizing the value of shared frameworks. As our thinking and capabilities have matured, we have developed a proprietary approach that goes beyond the boundaries of any single framework.

Our alignment methodology is grounded in the Net Zero Investment Framework, which we have adapted to reflect MFS' role as active managers and our fiduciary responsibilities. This tailored approach allows us to maintain ambition in our climate commitments while ensuring alignment with our clients' long-term interests.

We remain focused on what matters most: integrating climate risks and opportunities into our investment process in a way that is analytically rigorous, investment-relevant, and aligned with our clients' long-term objectives.



We believe that frameworks are starting points — not endpoints. Our approach is ultimately defined by the insights of our global investment team as to materiality, the realities of issuer-specific transition pathways, and the evolving nature of climate-related risks and opportunities.

Our Targets and Scope

We have set the following interim targets for our in-scope assets, currently defined as all public equities and corporate fixed income holdings, which represent approximately 92% of our total assets under management (AUM) as of 31 December 2024:

- **By 2030:** 90% of in-scope AUM considered net zero aligned or aligning
- **By 2040:** 100% of in-scope AUM considered net zero aligned or achieving
- **By 2050:** 100% of AUM considered achieving net zero*

These targets are reviewed periodically and reflect our belief that engagement, not exclusion, is the most effective path to managing climate-related risk through real-world emissions reduction.

Stewardship-Driven and Focused on Financially Material Risks and Opportunities

Our approach is grounded in active ownership. We engage with companies to assess the credibility of their transition plans, and we encourage transparency and the development of plans that we believe can result in strong, long-term, risk-adjusted returns for our clients. Unless directed to by clients with separate accounts, we do not apply blanket exclusions or invest in “green” companies solely to reduce portfolio emissions. Instead, we focus on understanding the financially material risks and opportunities facing each issuer and how those dynamics affect long-term value creation.

We also recognize that regulatory expectations vary across jurisdictions. We are mindful of the evolving policy environment throughout the globe, as well as the importance of aligning our approach with our client's best long-term economic interest. Our climate strategy is rooted in our fiduciary duty to our clients and designed to be evidence-based and responsive to both financial materiality and client priorities.

* Our in-scope assets covered by our net zero engagement commitments include all public equities and corporate fixed income assets, approximately 92% of our AUM as of 29 December 2024.

2024 Progress

Net Zero Alignment Overview

Our Net Zero Progress Tracker provides a snapshot of the alignment status of our in-scope assets, currently defined as all listed equities and corporate fixed income holdings, representing approximately 92% of total AUM as of 31 December 2024.

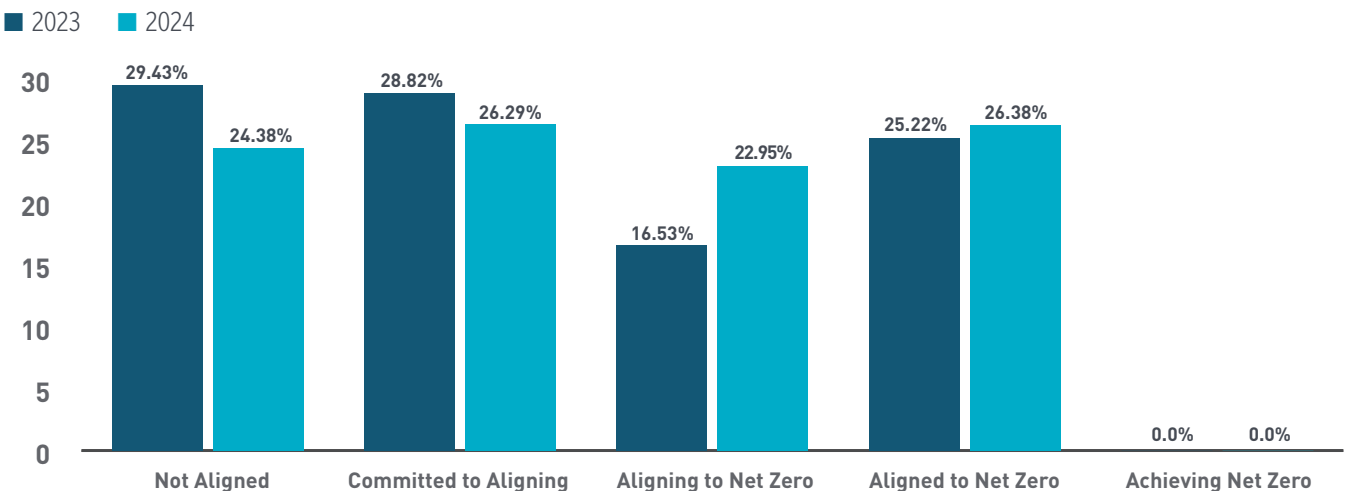
We assess issuer alignment using categories adapted from the Net Zero Investment Framework (NZIF) and based on Scope 1 and 2 emissions data. While Scope 3 data remains variable in quality, we continue to evaluate its relevance and will integrate it more fully as data quality improves.

Net Zero Progress Tracker (2024)

CATEGORY	2023 (%)	2024 (%)	CHANGE (PP)
NOT ALIGNED	29.43	24.38	-5.05
COMMITTED TO ALIGNING	28.82	26.29	-2.53
ALIGNING TO NET ZERO	16.53	22.95	+6.42
ALIGNED TO NET ZERO	25.22	26.38	+1.16
ACHIEVING NET ZERO	0.00	0.00	0.00

Note: 2022 data reflecting equities only is provided in the Appendix. From 2023 onward, alignment metrics include both listed equities and corporate fixed income, representing ~92% of total AUM. Please refer to the appendix for summary of NZIF alignment criteria.

MFS Net Zero Alignment Categories: 2023 vs 2024



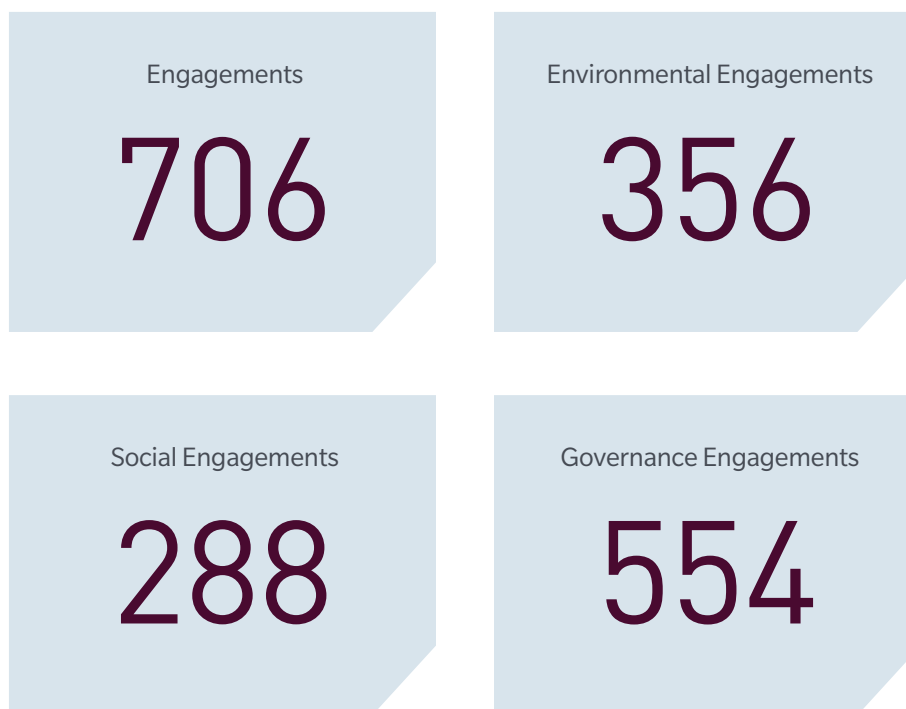
What Does This Mean for Clients?

The year-over-year shift in alignment categories reflects meaningful progress in how issuers in which we are invested are preparing for, and responding to, the transition to a low-carbon economy.

- **Fewer holdings are “Not Aligned,”** indicating that more of the companies we hold are beginning to take steps to address their climate-related risks. **This shift may also reflect deliberate portfolio construction choices, including increased allocation to companies with credible transition strategies.**
- **A growing share of assets are “Aligning to Net Zero,”** suggesting that transition plans are becoming more credible and measurable.

Engagement Dashboard highlights:

Cumulative ESG Engagements since 2021.



Source: MFS Engagement Dashboard. The data presented in our Engagement Dashboard is continuously updated to reflect the most current records of our interactions with issuers. This ensures our reporting remains accurate and aligned with the latest developments in our stewardship activities.

How We Integrate Climate Risk

Real-Economy Focus

We opted to frame our net zero targets as a **proportion of assets under management (AUM)** because we believe this approach best reflects our commitment to **real-world decarbonization**. Rather than focusing solely on portfolio-level emissions metrics — which can be influenced by short-term asset allocation decisions — we prioritize the actual progress of issuers in transitioning their operations. We also recognize that:

- Sectoral decarbonization pathways are often non-linear, particularly in hard-to-abate industries.
- Owning companies in high-emitting sectors may limit our ability to display consistent reductions in portfolio-level carbon metrics over certain periods of time.
- While some **advocate for exclusions**, our strategy is rooted in **engagement**, which we believe is the most effective tool for managing climate-related financial risks.

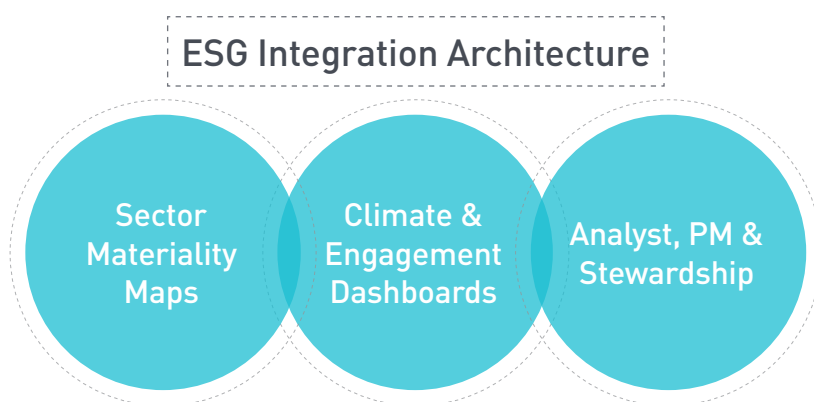
Integration Through Research and Stewardship

Climate integration is embedded across our global investment platform. Analysts, portfolio managers, and stewardship professionals collaborate to assess climate risk and opportunity in a manner consistent with our investment philosophy.

We support this work with:

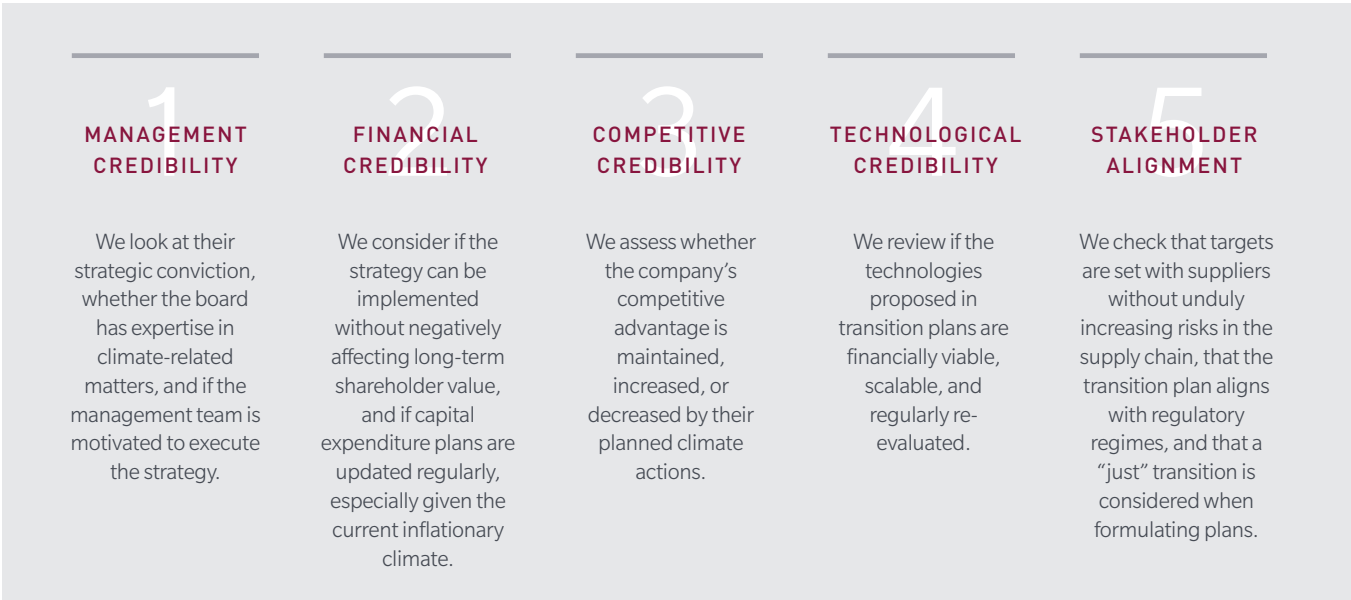
- **Issuer-level ESG expertise** that consolidates internal research, company-reported data, and engagement insights.
- **Cross-functional engagement** across asset classes and geographies.
- **Sector-based prioritization** of climate engagement based on emissions exposure, transition risk, and materiality.
- **Proprietary dashboards** that track our engagements with companies as well as climate-related metrics such as emissions intensity, target setting, and disclosure quality.
- **Sovereign and thematic analysis**, including our participation in the ASCOR (Assessing Sovereign Climate-related Opportunities and Risks) initiative to assess climate risk in sovereign debt.

While we remain cautious about the limitations of third-party models, we continue to evaluate tools that may complement our internal research.



Assessing Transition Plan Credibility

We believe that long-term-oriented asset managers who engage with companies and issuers can support executive teams and boards in their evaluation of the climate-related risks and opportunities facing their industries. We have developed a sector-based engagement program to assess the credibility of companies’ climate transition plans that factors in issuer-specific risks and opportunities. While our approach continues to evolve, we currently test issuers’ transitions plans across five dimensions:



This framework informs our engagement priorities and supports our broader investment decision-making process.

Sector Focus: Aerospace, Defense, and Nuclear

A Shifting Defense Paradigm: Opportunity in Complexity

Rising geopolitical tensions and a renewed focus on national security have triggered a structural recalibration of defense spending, particularly across Europe. The June 2025 NATO summit marked a historic shift, with member states committing to raise total defense investment to **5% of GDP by 2035**.¹ This surge in capital is reshaping the aerospace and defense sector, creating both strategic opportunities and operational challenges.

While this investment underscores the sector's importance, it also introduces distinct risks, including **product liability exposure** and **governance complexity, given the higher levels of state ownership and influence** of companies in the sector.

Strategic Context and Sector Relevance

The aerospace, defense, and nuclear sectors are uniquely positioned to support global decarbonization efforts while benefiting from the transition themselves. Climate change presents not only risks but also strategic opportunities for these industries:

Enabling Decarbonization Across Sectors

Aerospace and defense companies (i.e., companies embedded in complex supply chains and production processes) play a vital role in tackling upstream emissions by developing technologies —such as lightweight materials, advanced propulsion systems, and modular reactors — that help other sectors reduce emissions. For example, Babcock's innovations in naval engineering are accelerating decarbonization in shipping. By influencing decarbonization across adjacent sectors such as transport, energy, and power generation, we believe companies in the defense sector have the potential to drive real-economy impact far beyond their immediate operations.

Supporting National Climate Goals

Governments are increasingly integrating climate objectives into defense and industrial policy. In our view, companies that align with these goals are well-positioned to secure long-term contracts and funding. In Europe, rising defense budgets are being paired with sustainability mandates, creating a dual imperative for modernization and decarbonization.

Operational Efficiency and Cost Reduction

Energy-saving technologies and circular manufacturing practices are reducing operational costs and improving resilience. Innovations like electrified ground operations, using sustainable fuels in engine testing, and recycled titanium components are enhancing both sustainability and profitability.

Industrial Innovation and Competitive Advantage

Climate-driven R&D is unlocking new markets and reinforcing competitive moats. Companies investing in next-gen propulsion, modular nuclear reactors, and AI-powered energy systems are shaping the future of clean industrial infrastructure.

These dynamics are reshaping the investment thesis for aerospace and defense firms, positioning them as critical enablers of the climate transition.

¹ Source - NATO August 2025

ESG and the Climate Risk Landscape

These sectors present a unique ESG profile, shaped by their strategic importance, regulatory complexity, and product risk. Key considerations include:

- **Carbon Footprint:** The defense sector is estimated to account for up to **6% of global greenhouse gas emissions**,² yet these emissions are often excluded from national inventories under the Paris Agreement.
- **Product Governance:** Concerns around weapons exports, autonomous systems, and nuclear safety require robust oversight and transparency.
- **Labor and Supply Chain:** Rapid hiring and complex global supply chains introduce operational and reputational risks.
- **Governance Structures:** High levels of state ownership and other control-enhancing mechanisms can dilute minority shareholder influence.
- **Clean Tech Transition:** The defense sector is investing in innovation, from advanced propulsion and lightweight materials to small modular reactors (SMRs) and new, more sustainable fuel systems.

Sector Materiality Map



Source: Sector Map Summary, Invest - MFS Global Research Platform, 2025

² Critical Shareholding in the Defense Sector, June 2025

Nuclear Energy: Strategic Relevance and Investment Implications

Nuclear energy is re-emerging as a critical component of the energy transition. While legacy projects have faced cost and execution challenges, a new wave of innovation is underway.

Key themes in this space include:

- **Fuel Supply Chain Disruption:** Geopolitical shifts are exposing vulnerabilities in uranium supply, creating investment opportunities in domestic enrichment and fabrication.
- **Next-Gen Reactor Innovation:** Modular reactors promise faster deployment, lower costs, and co-generation capabilities, aligning with industrial decarbonization needs.
- **Nuclear Marine Propulsion and AI Demand:** Data centers and industrial users are driving demand for 24/7 clean power, positioning merchant nuclear operators for growth.

Stewardship Priorities in Aerospace & Defense

Our engagements across these sectors are guided by a focus on financial materiality and a commitment to long-term value creation. We prioritize:

- Governance and Oversight
- Product Use and End Markets
- Climate Disclosure and Transition Planning
- Innovation and Industrial Policy

Case Studies — Aerospace, Defense, and Nuclear

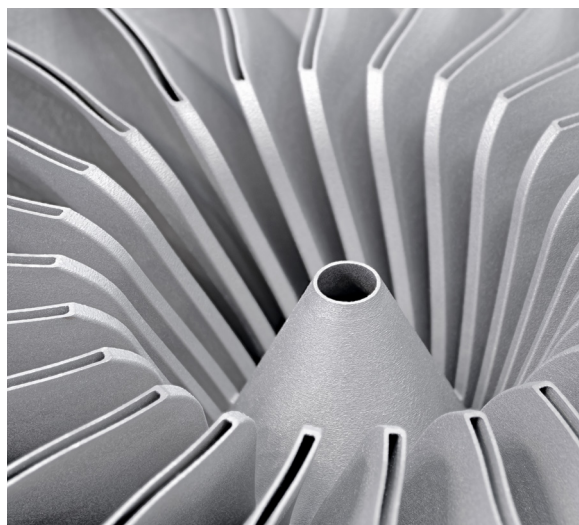
Howmet Aerospace, Inc (US)

Sector: Aerospace & Industrial Components

MFS' Holding (USD): \$2.6 billion**

Market Capitalization (USD): \$77.6 billion**

Howmet Aerospace is a global leader in engineered metal products, serving the aerospace, defense, and transportation sectors. The company operates across four segments: engine products, fastening systems, engineered structures, and forged wheels. With a strong presence in high-performance alloys and precision components, we believe Howmet plays a critical role in enabling next-generation aircraft and fuel-efficient transportation systems.



** As of 29th December 2024

Current Data and Historic Progress

Scope 1/2 GHG Intensity	Industry Avg. Scope 1/2 GHG Intensity	Scope 3 GHG Intensity	Scope 1/2 GHG Absolute	
128.5 ▼-13.7% vs 1 yr ago N/A-EST vs 3 yrs ago	24.5 ▼-14.8% vs 1 yr ago ▼-16.4% vs 3 yrs ago	169.2 5.4 Upstream Downstream	853.1K ▲1.2% vs 1 yr ago ▼-N/A-EST vs 3 yrs ago	Discloses GHG Emissions ✓ Evidence of Net Zero Plan X Science-Based Targets X Issues Sustainability Bond X Issues Sustainability Linked Bond X Issues Green Bond X
Fiscal Year 2023 Source TRUCOST	Fiscal Year 2023 Source TRUCOST	Fiscal Year 2023 Source TRUCOST	Fiscal Year 2023 Source TRUCOST	

Source: MFS ESG – Climate Dashboard 2024.

Net Zero Targets and Progress

Target	Updates
NZ Target Year	2050
Medium-Term Target	2030
Scope 3 disclosure?	Yes
Target/Disclosure Comments	In 2024, the company met its first climate-related three-year target of reducing greenhouse gas (GHG) emissions from its own operations and achieved a 21.7% reduction versus its 2019 baseline on its Scope 3 target setting. ³ The company caveats that it believes that the quality, assurance, and specificity of Scope 3 data has not yet achieved the level of maturity that justifies a credible target. Despite this, the company is engaging with key suppliers to analyze their contribution to these emissions. Howmet’s material Scope 3 GHG emissions are primarily upstream and related to emissions in purchased goods (primary metals).

³ MFS Investment Analyst Notes, Howmet ESG Report 2024

Climate Risk and Opportunity

Howmet has made measurable progress in reducing its operational emissions against its net zero targets and is actively engaging with suppliers to address upstream climate risks. However, the company has not yet committed to external validation of its goals.

Strategic Initiatives

■ Recycling and Circularity

Howmet is expanding its use of recycled aluminum and titanium to upstream emissions and hazardous waste. This supports broader goals around water use and waste reduction.

■ Energy Efficiency and Green Power

Over 100 energy-saving projects have been implemented, with continued investment in renewables and green power procurement to meet 2027 targets.

■ Technology Evaluation

Howmet is focused on deploying commercially available solutions such as heat pumps while evaluating the feasibility of hydrogen and oxygen-enriched furnaces. While Howmet does not currently track the share of its portfolio that enables emissions reductions, many of its products — such as lightweight aluminum wheels and advanced engine components — may contribute to downstream decarbonization.

Stewardship and Engagement

MFS has engaged Howmet on climate strategy, governance, and succession planning. Key areas of focus include:

■ Transition Plan Credibility

We discussed the structure and ambition of Howmet's short-term emissions targets and encouraged greater transparency around Scope 3 reduction pathways and product-level climate impact.

■ Value Chain Engagement

We explored how Howmet is engaging suppliers on emissions data and transition readiness, and we encouraged the company to set supplier-level targets and expand its circularity initiatives.

■ Board and Executive Succession

We met with the Chair and senior management to understand board succession plans and potential CEO candidates. While internal candidates are being rotated through leadership roles, no clear successor has emerged.

■ Executive Compensation

We continue to monitor how ESG metrics are integrated into incentive structures and whether they reflect material climate performance.

MFS Transition Plan Analysis

Transition Plan Analysis	Comments	Analysis
Technical Credibility	Not yet credible	We have not yet been able to confirm the technical credibility of the company's transition plan. As such, this remains a key area of engagement in which we are seeking further disclosures and evidence to assess the feasibility and robustness of their proposed approach.
Financial Credibility	Needs engagement	The company currently uses an internal carbon price but could benefit from disclosing its transition capex and potential revenue opportunities. Some estimates put its potential transition revenue at \$6.7bn by 2030. (Source – Bloomberg)
Competitive Credibility	Credible	The company supports the industry's drive to increase the use of sustainable aviation fuels (SAFs) and emerging engine technologies. The company invented the Green Concept Wheel, which reduces carbon dioxide equivalent (CO ₂ e) emissions by 80% compared to its standard counterpart. They have also developed materials and cooling techniques that enable aero engines to run hotter and under higher pressures, increasing fuel efficiency.
Management Credibility	Not yet credible	We could not establish whether there is Board oversight for the company's net zero commitments.
Stakeholder Alignment	Needs engagement	The company engages with stakeholders on GHG emissions from purchased goods. Additionally, the company participated in the development of an initiative that aims to improve ESG performance in the industry and its supply chain. Other participants included Airbus, ATR, Boeing, CAE, Leonardo, Raytheon Technologies, Lockheed Martin, Rolls-Royce, Thales, Safran, and Gulfstream. Additionally, we would like to understand the extend of the company's engagement with its supply chain in order to evaluate supply chain stability with a focus on upstream GHG emissions and carbon pricing.
Is there sufficient credibility to consider targets will be achieved?		Not currently, and the next focus for the company is making sure that there is strategic oversight of the company's net zero goals.

MTU Aero Engines AG (Europe)

Sector: Aerospace & Defense

MFS' Holding (USD): \$912.3 million**

Market Capitalization (USD): \$23.24 billion**

MTU Aero Engines AG is a leading German manufacturer of propulsion systems for military and commercial aircraft, as well as stationary gas turbines. The company operates through two core segments: original equipment manufacturing (OEM) and maintenance, repair, and overhaul (MRO). MTU is a long-standing partner of Pratt & Whitney, contributing key subsystems — such as low-pressure turbines and high-pressure compressors — to the V2500 and geared turbofan (GTF) engine families. It also operates the world's largest independent MRO network.



** As of 29th December 2024

Current Data and Historic Progress

Scope 1/2 GHG Intensity	Industry Avg. Scope 1/2 GHG Intensity	Scope 3 GHG Intensity	Scope 1/2 GHG Absolute	Discloses GHG Emissions	✓
16.6	24.5		96.2K	Evidence of Net Zero Plan	✓
▲ 6.5% vs 1 yr ago	▼ -14.8% vs 1 yr ago		▲ 10.0% vs 1 yr ago	Science-Based Targets	X
▼ -10.3% vs 3 yrs ago	▼ -16.4% vs 3 yrs ago		▲ 14.7% vs 3 yrs ago	Issues Sustainability Bond	X
Fiscal Year 2023 Source TRUCOST	Fiscal Year 2023 Source TRUCOST	Fiscal Year None Source None	Fiscal Year 2023 Source TRUCOST	Issues Sustainability Linked Bond	X
				Issues Green Bond	X

Source: MFS ESG – Climate Dashboard 2024.

Net Zero Targets and Progress

Target	Updates
NZ Target Year	2050
Medium-Term Target	2035
Scope 3 disclosure?	Yes
Target/Disclosure Comments	The company has a 2030 target to reduce Scope 1 and Scope 2 emissions by 60% (vs. base year 2019). The company had already achieved a reduction of 42.2% by the end of 2024, and due to this positive development, MTU set itself a new, even more ambitious goal: emissions are to be reduced by 63% by 2035 (vs. base year 2024). ⁴ In addition to actions aimed at reducing emissions in its own operations, the company has stated that it is committed to developing low-emission products under their Claire (Clean Air Engine) technology agenda. This includes specific, quantitative targets for reducing the overall climate impact of its products, addressing both CO ₂ emissions and non-CO ₂ effects that primarily arise from NOx emissions and contrails.

⁴ Source: MTU Aero Engines Sustainability Report, MFS Engagement Notes

Climate Risk and Opportunity

MTU acknowledges that long-term climate concerns may constrain aviation sector growth, but it is actively investing in cleaner propulsion technologies and operational efficiencies. The company's exposure to product use-phase emissions and supply chain complexity presents both risk and opportunity.

Strategic Initiatives

▪ Geared Turbofan (GTF) Engine Program

MTU is a key contributor to Pratt & Whitney's GTF engine, which delivers double-digit improvements in fuel efficiency and emissions reduction compared to previous-generation engines. In our view, this positions MTU as a critical enabler of lower-carbon commercial aviation.

▪ Modular Maintenance, Repair, and Overhaul (MRO) Capabilities

MTU's expansive MRO network supports lifecycle emissions reductions by extending engine life, improving fuel efficiency, and reducing waste. In our view, this service model aligns with circular economy principles and supports Scope 3 mitigation indirectly.

Stewardship and Engagement

MFS continues to engage MTU Aero Engines on key areas of climate risk management and transition readiness. Our ongoing dialogue is focused on the following areas:

- **Carbon Cost Exposure:** Assessing MTU's exposure to the EU Emissions Trading System (ETS). This includes the phase-out of free allowances, whether costs would be passed through to customers, the use of carbon hedging, and whether internal carbon pricing is used for scenario analysis.
- **Supply Chain Emissions:** Assessing how suppliers are prioritized, whether climate targets are set, and which suppliers may face higher transition risks due to decarbonization costs or ETS exposure.
- **Technology Readiness:** We also continue to assess MTU's progress on low-carbon propulsion technologies, including scalability and readiness on Sustainable Aviation Fuel (SAF), Water-Enhanced Turbofan (WET), and flying fuel cells.

MFS Transition Plan Analysis

Transition Plan Analysis	Comments	Analysis
Technical Credibility	Needs engagement	In order to decarbonize its direct emissions, the company is implementing new technologies across different parts of the business: - Increasing energy efficiency (e.g., modernizing machinery / building technology systems, LED lighting, eliminating compressed air leaks, optimizing the heating network, using heat pumps, and renovating buildings) - Expanding self-generation of renewable energy (e.g., installation of geothermal energy and photovoltaic systems) - Installing the company's largest photovoltaic system in Serbia, and completing deep geothermal drilling in Munich. (2024 Milestones) - Purchasing renewable energy (e.g., renewable gas and green electricity) - Use of sustainable aviation fuel (SAF) in test operation of its engines. This technology is at an early stage. - Development of components for sustainable commercial propulsion concepts, including the second generation of the geared turbofan (GTF), the Revolutionary Turbofan and the Flying Fuel Cell.
Financial Credibility	Needs engagement	We have not yet been able to confirm the financial credibility of the company's transition plan. As such, this remains a key area of engagement where we are seeking further disclosures and evidence to assess the feasibility and robustness of their proposed approach.
Competitive Credibility	Credible	The company has green opportunities: Green revenues up from 0% to 16% in FY 2024; \$148m in green capital expenditure, up from 3% to 17% in FY 2024; transition capex was \$80m in FY 2024. (Source Bloomberg)
Management Credibility	Credible	The company manages climate risk at the Board level, with executive compensation linked to climate-related goals aligned with its "EcoRoadmap" climate protection strategy. Sustainability KPIs account for 20% of both the Short-Term Incentive Plan (STIP) and the Long-Term Incentive Plan (LTIP), with the LTIP specifically focused on reducing residual CO₂ emissions.
Stakeholder Alignment	Needs engagement	The company does engage with key suppliers on their climate-related data, however further engagement is required to assess the credibility of its stakeholder alignment efforts.
Is there sufficient credibility to consider targets will be achieved?		Not currently, as achieving its targets is dependent on a host of technological factors that are out of the company's control.

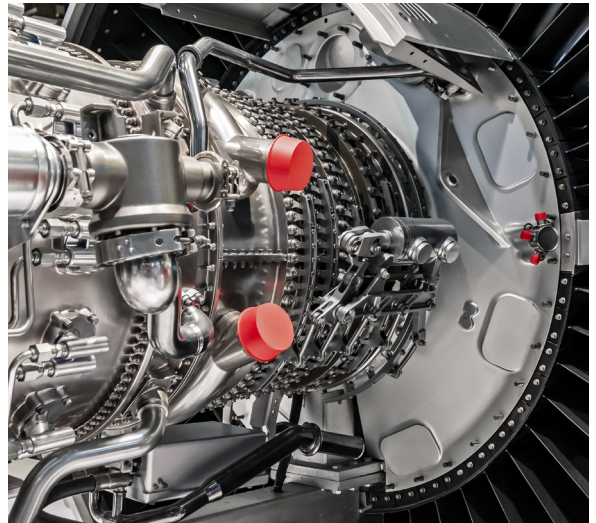
Rolls-Royce Holdings plc (United Kingdom)

Sector: Aerospace, Defense, and Power Systems

MFS' Holding (USD): \$2.2 billion**

Market Capitalization (USD): \$111.95 billion**

Rolls-Royce is a UK-based engineering company operating across civil aerospace, defense, power systems, and new markets such as small modular reactors (SMRs). The company has undergone a successful turnaround, improving margins and cost discipline under new leadership. Its large installed base of wide-body engines and expanding aftermarket services position it as a key player in aviation's transition to lower-carbon propulsion.



** As of 29th December 2024

Current Data and Historic Progress

Scope 1/2 GHG Intensity 15.9 N/A-Est vs 1 yr ago N/A-Est vs 3 yrs ago Fiscal Year 2024 Source TRUCOST	Industry Avg. Scope 1/2 GHG Intensity 25.7 ▲0.4% vs 1 yr ago ▼-23.8% vs 3 yrs ago Fiscal Year 2024 Source TRUCOST	Scope 3 GHG Intensity 106.8 Upstream Downstream Fiscal Year 2024 Source TRUCOST	Scope 1/2 GHG Absolute 384.6K N/A-Est vs 1 yr ago N/A-Est vs 3 yrs ago Fiscal Year 2024 Source TRUCOST	Discloses GHG Emissions ✓ Evidence of Net Zero Plan ✓ Science-Based Targets X Issues Sustainability Bond X Issues Sustainability Linked Bond X Issues Green Bond X
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Source: MFS ESG – Climate Dashboard 2024.

Net Zero Targets and Progress

Target	Updates
NZ Target Year	2050
Medium-Term Target	2030
Scope 3 disclosure?	Yes
Target/Disclosure Comments	The company has set a goal to achieve net zero greenhouse gas (GHG) emissions by 2050 or sooner. This ambition explicitly covers at least 95% of Scope 1 and 2 emissions and includes the most relevant Scope 3 categories for its sector, where applicable. In 2024, total Scope 1 and 2 emissions amounted to 301 ktCO₂e, representing a 50 ktCO₂e increase compared to 2023.⁵ This rise was primarily driven by product development testing, which contributed 55 ktCO₂e. The company's energy transition strategy is anchored in four key pillars: ▪ Decarbonizing Operations and Facilities: Through clean energy sourcing and efficiency improvements across its footprint. ▪ Enabling Net Zero-Compatible Products: - 100% of commercial aero engines are compatible with sustainable aviation fuels (SAF). - 80% of the Power Systems portfolio is SAF-ready. ▪ Developing New Low-Carbon Solutions: Including innovations such as small modular reactors (SMRs) and battery storage systems. ▪ Advocacy: Actively supporting market shifts toward climate goals through policy advocacy and regulatory engagement.

⁵ Source Rolls Royce Carbon Reduction Plan 2025, MFS Engagement Notes

Climate Risk and Opportunity

Rolls-Royce recognizes its strategic role in the global energy transition and has embedded climate considerations into its business strategy. In 2024, it completed the first phase of a sustainability strategic review focused on energy transition. The company has identified both operational and value chain emissions as critical areas for action.

Key risks and opportunities include:

- **SAF Dependency:** Rolls-Royce's Scope 3 emissions targets are highly dependent on the availability and economics of sustainable aviation fuel (SAF), which remains limited in supply, and cost-competitive alternatives.
- **Non-CO₂ Impacts:** The company is researching contrails and other non-carbon effects of aviation, which it estimates may double the climate impact of its products.
- **Carbon Pricing Sensitivity:** Rolls-Royce models carbon prices at \$50/t by 2030 and \$90/t by 2050, though these may be low relative to some UK and EU ETS price scenarios.
- **Sectoral Prominence:** As other sectors decarbonize faster, aviation's share of global emissions is expected to grow, increasing scrutiny and regulatory pressure.

Notable Initiatives

▪ **Small Modular Reactor (SMR) Development**

Rolls-Royce is advancing the development of SMRs through its new markets segment. These compact, factory-built nuclear reactors are designed to provide firm, low-carbon power and support industrial decarbonization. The SMR program is a cornerstone of the company's strategy to contribute to the broader energy transition beyond aviation, defense, and existing power systems.

▪ **SAF Compatibility Across Portfolios**

- All in-production civil and defense engines are now compatible with 100% SAF.
- 80% of their power systems portfolio is SAF-ready

▪ **Circular Economy Pilot**

In partnership with the UK Ministry of Defence, Rolls-Royce recycled titanium fan blades from retired engines into 3D-printed components, demonstrating circularity in aerospace manufacturing.

▪ **Operational Decarbonization Plan**

A detailed, costed roadmap to 2030 includes: decarbonizing electricity and heating, improving operational efficiency, reducing test emissions through SAF and digital testing, transitioning to low-carbon transport, on-site renewable generation, and long-term energy attribute certificate (EAC) strategy.

▪ **Policy and Industry Engagement**

Rolls-Royce is a member of 146 trade associations and engages in partnerships like the UK-Qatar climate technology initiative. It actively supports policy alignment and value chain collaboration to accelerate decarbonization.

Stewardship and Engagement

MFS continues to engage Rolls-Royce on:

- Finalizing and validating SBTi-aligned targets
- Enhancing Scope 3 transparency and methodology
- Scaling SAF adoption and advocating for supportive policy

MFS Transition Plan Analysis

Transition Plan Analysis	Comments	Analysis
Technical Credibility	Credible	Rolls-Royce continues to advance its climate technology portfolio through a series of targeted initiatives across propulsion, fuel innovation, and carbon removal. In sustainable aviation fuel (SAF), the company successfully conducted a transatlantic test flight using a Boeing 787 powered by Trent 1000 engines running on 100% SAF — demonstrating technical readiness and reinforcing its commitment to net zero-compatible products. In hydrogen propulsion, Rolls-Royce collaborated with EasyJet, Loughborough University, and the German Aerospace Center (DLR) to test a Pearl 700 engine operating on 100% hydrogen. This marks a significant milestone in the development of zero-emission aviation technologies. In carbon removal, Rolls-Royce launched a direct air capture (DAC) demonstrator project in the UK. Partnering with ASCO Carbon Dioxide and Landmark Power, the initiative aims to develop an integrated system that generates power, recovers heat, and captures CO ₂ for reuse in applications such as e-fuel production — supporting broader decarbonization goals.
Financial Credibility	Needs engagement	The company has green opportunities and has disclosed their transition capital expenditure of \$1.74 bn, however we need to test the impact of the EU Carbon Border Adjustment Mechanism on margins.
Competitive Credibility	Credible	The core contribution the company can make to the global energy transition is to ensure that Scope 3, Category 11 product use is sufficiently decarbonizing in order to help its customers in other sectors (transport, energy, and power generation) to transition. Scope 3, Category 11 emissions are approximately 97% of the company's emissions. The company's strategy includes a flagship technology R&D project called UltraFan, as well as the development and deployment of small modular reactors (SMRs). This technology can play a vital role in decarbonizing the global energy mix and in meeting increasing demand for clean electricity. In power systems, we see battery energy storage solutions as a growth area that complements the company's existing expertise in stationary power generation. Energy storage will play a critical role in stabilizing intermittent renewables as part of the global energy transition.
Management Credibility	Credible	10% of the company's 2025 long-term incentive plan (LTIP) will be linked to delivering progress on the 2030 reduction target for Scope 1 and 2 emissions.
Stakeholder Alignment	Credible	The company's ability to deliver on its climate strategy — and to support its customers and government partners in meeting their own climate goals — is highly dependent on a supportive external environment. Recognizing this, Rolls-Royce actively engages with policymakers, regulators, and industry coalitions to advocate for the necessary policy and economic frameworks that enable climate-aligned innovation. In 2024, this included participation in the land-mark UK-Qatar climate technology partnership. The company also joined the Americans for Clean Aviation Fuels (ACAF) coalition, strengthening its policy advocacy in the US alongside aerospace and energy industry peers.
Is there sufficient credibility to consider targets will be achieved?		Yes, but materially dependent on technological factors out of the company's control.

GE Aerospace (US)

Sector: Aerospace & Defense

MFS' Holding (USD): \$897.0 million**

Market Capitalization (USD): \$274.6 billion**

GE Aerospace, formerly part of General Electric (GE), is now a standalone company focused exclusively on aviation. Following the spin-offs of GE's health care and energy segments in 2023 and 2024 respectively, GE Aerospace has emerged as a leading player in commercial and military aircraft engines and services. The company benefits from deep intellectual property, a strong aftermarket services business, and a disciplined capital return strategy supported by a low-leverage balance sheet (1x net debt/EBITDA).



** As of 29th December 2024

Current Data and Historic Progress

Scope 1/2 GHG Intensity	Industry Avg. Scope 1/2 GHG Intensity	Scope 3 GHG Intensity		Scope 1/2 GHG Absolute	Discloses GHG Emissions X Evidence of Net Zero Plan ✓ Science-Based Targets ✓ Issues Sustainability Bond X Issues Sustainability Linked Bond X Issues Green Bond X
27.8 N/A-Est vs 1 yr ago N/A-Est vs 3 yrs ago	24.6 ▼ -14.7% vs 1 yr ago ▼ -16.3% vs 3 yrs ago	107.0 Upstream	4,640.3 Downstream	1,890.5K N/A-Est vs 1 yr ago N/A-Est vs 3 yrs ago	
Fiscal Year 2023 Source TRUCOST	Fiscal Year 2023 Source TRUCOST	Fiscal Year 2024 Source TRUCOST		Fiscal Year 2023 Source TRUCOST	

Source: MFS ESG – Climate Dashboard 2024.

Net Zero Targets and Progress

Target	Updates
NZ Target Year	2050
Medium-Term Target	2030
Scope 3 disclosure?	Yes
Target/Disclosure Comments	GE Aerospace has a goal to be net zero carbon for Scope 1 and 2 operational emissions by 2030 (from a 2019 base year). To achieve this goal, GE Aerospace focuses on energy efficiency, acceptance testing efficiency, and sourcing carbon-free energy. In addition, their goal is to be net zero by 2050 for Scope 3 carbon emissions from the use of products sold for commercial engines. The company only reports Scope 3 Cat 11 (product use) and is tracking additional data for other categories within Scope 3.
Sufficiently ambitious to consider committed to aligning?	No

Source: GE Aerospace 2025 Sustainability Report

Climate Risk and Opportunity

GE Aerospace is at the forefront of aviation decarbonization through its “Roadmap for the Future of Flight.” The company is investing in next-generation propulsion technologies and alternative fuels to reduce lifecycle emissions from aircraft engines. Key innovation pillars include:

- **Sustainable Aviation Fuel (SAF) and hydrogen compatibility**
- **Hybrid-electric propulsion systems**
- **Open Fan engine architecture**
- **Compact core designs**

These technologies are being developed under the RISE program (Revolutionary Innovation for Sustainable Engines), a joint initiative with Safran aimed at delivering a 20% improvement in fuel efficiency over current engines. GE is also exploring avoided emissions accounting but notes their current frameworks lack comparability.

Notable Initiatives

- **RISE Program:** Advanced propulsion R&D with Safran
- **SAF and hydrogen readiness:** Engine compatibility and testing
- **ISO 9001/AS9100 certifications:** Quality and safety standards
- **Industry collaboration:** Active member of the International Aerospace Quality Group

Stewardship and Engagement

MFS has engaged GE Aerospace on the credibility of its transition plan and the scalability of its decarbonization technologies. Key areas of focus include:

- Technical readiness of RISE technologies
- SAF availability and policy support
- Supplier engagement on climate
- Scope 3 emissions tracking and disclosure

GE’s governance practices include a detailed anti-corruption policy and whistleblower protections, though in our view, their staff training on ethics standards lags behind top peers.

MFS Transition Plan Analysis

Transition Plan Analysis	Comments	Analysis
Technical Credibility	Credible	GE Aerospace has made significant strides in advancing low-carbon aviation technologies and supporting the broader energy transition. The company certified one of the most fuel-efficient commercial engines and was the first to test high-power, high-voltage hybrid-electric components under simulated altitude conditions up to 45,000 feet, marking a major milestone in electrified propulsion. In sustainable aviation fuel (SAF), the company tested its 10th aircraft engine model with 100% SAF and conducted the first experimental passenger flight using 100% SAF in one of two LEAP-1B engines. Additionally, its research center, in collaboration with Aerospace Carbon Solutions , is working on technologies to close the cost gap between SAF and conventional jet fuel , helping scale adoption across the industry.
Financial Credibility	Needs engagement	GE Aerospace has an internal carbon price, and its green revenues were up by 29.8% YOY (2025). ⁶ However, its transition capex disclosure can be improved.
Competitive Credibility	Credible	GE Aerospace has introduced new engines across every market segment, each delivering double-digit improvements in fuel efficiency compared to their predecessors. This consistent innovation reinforces the company's position as an industry leader as well as its responsibility to help chart the future of flight. GE Aerospace's ability to deliver on this ambition is strengthened by its strategic partnerships with peer companies, aircraft manufacturers, and government entities — collaborations that are essential to advancing low-carbon technologies and supporting the aviation sector's transition toward net zero.
Management Credibility	Credible	At GE Aerospace, sustainability governance is overseen by the Board of Directors and its committees , which are responsible for guiding corporate strategy and monitoring execution. The company's senior leadership team develops the sustainability strategy, sets priorities, and manages performance, reporting regularly to the Board on progress and activities. Day-to-day sustainability efforts are coordinated by the company's dedicated sustainability function, which is led by the CEO of Aerospace Carbon Solutions and Sustainability . While the company has established clear leadership and oversight structures, it currently does not incorporate sustainability-related KPIs into the compensation packages of Named Executive Officers (NEOs) — an area that may evolve as sustainability performance becomes increasingly material to long-term value creation.
Stakeholder Alignment	Needs engagement	Achieving the aviation industry's net zero goal will require coordinated action across a broad ecosystem — including aircraft manufacturers, airlines, suppliers, fuel and energy producers, and policymakers. GE Aerospace recognizes this interdependence and actively engages with suppliers and other stakeholders to support the sector's decarbonization efforts. The company is focused on improving the fuel efficiency of its engines and enabling broader environmental progress across the industry. Operating in a hard-to-abate sector, GE Aerospace's success is closely tied to the development of supportive policy frameworks. As such, engagement with governments and trade associations is a critical part of shaping the regulations and legislation that govern both its business and the wider industry. Notable efforts in 2024 included participation in the UK-Qatar climate technology partnership, joining the Americans for Clean Aviation Fuels (ACAF) coalition, and contributing to ICAO's ACT-SAF webinar. However, greater transparency is needed around supplier engagement , particularly in how the company supports its supply chain in measuring, managing, and reducing emissions.

Is there sufficient credibility to consider targets will be achieved?

Yes, but materially dependent on better alignment with their capex plan.

⁶ MFS Engagement Notes

Looking Ahead: 2025-2026 Priorities

In 2015, the Paris Agreement set a goal to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and to pursue efforts to “limit the temperature increase to 1.5°C above pre-industrial levels.” Importantly, the temperature thresholds referenced in the Paris Agreement relate to sustained warming over decades, not point-in-time breaches. According to the World Meteorological Organization, the 10-year global average temperature (2014–2023) stood at approximately 1.2°C above pre-industrial levels, while the IPCC reported a 20-year average (2001–2020) of 0.99°C.

Between February 2023 and 2024, global data confirmed the first 12-month period during which average temperatures exceeded 1.5°C. While this does not signal the failure of the Paris Agreement’s long-term objective, it underscores the urgency of action and the importance of sustained efforts to limit warming and avoid the worst impacts of climate change.

We reject the notion that surpassing 1.5°C should lead to resignation or inaction. Instead, we recognize the complexity of the climate challenge, including the interplay between policy, social momentum, and corporate strategy, and we remain committed to engaging constructively with issuers and stakeholders to support credible, durable transition pathways.

Our Role as Active Managers

The uncertainties, divergences, and fast evolving context around the pursuit of net zero emissions reinforces the importance of active management. Our ability to differentiate across companies, sectors, and geographies — and to engage constructively on climate strategy — positions us to help clients navigate uncertainty and pursue long-term value.

We remain focused on:

- Enhancing stewardship and research tools
- Deepening issuer-level climate analysis, in particular transition plan assessments, and integrating this into our broader investment process and platform
- Prioritizing sectors with outsized potential climate risk and opportunity

The path ahead is complex, but our conviction remains clear: we believe the integration of financially material climate risks and opportunities is central to delivering strong long-term, risk-adjusted returns and fulfilling our fiduciary duty to our clients.

Industry Collaborations

At MFS, we regularly undertake a thoughtful and robust review of the third-party collaborations in which we participate. These reviews are guided by a single principle: ensuring that our time and resources are directed toward initiatives that enhance our ability to deliver investment excellence and uphold our fiduciary duty to clients.

Refining Our Collaborative Approach

As part of our most recent review, MFS made the decision to withdraw from Climate Action 100+, effective January 2025. This decision reflects a thoughtful reassessment of the value the initiative added to our investment due diligence process, as well as the growth and maturity of our internal stewardship capabilities since joining the initiative.

Separately, the Investor Stewardship Group (ISG) has formally disbanded, concluding our participation in that initiative. As we refine our collaborative efforts, we have rejoined the Council of Institutional Investors (CII), reaffirming our commitment to promoting strong corporate governance and representing the long-term interests of our clients.

Throughout our involvement in these efforts, MFS has always retained full control over its voting and engagement practices. We evaluate each engagement opportunity independently and differentiate our investment decision-making from peers. As a long-term active investor, this independence is a core tenet of our value proposition and our duty to clients.

Ongoing Commitments

We remain fully committed to the practice of constructive engagement with the issuers we choose to own on our clients' behalf. Our approach integrates financially material risks and opportunities, including those related to climate and sustainability.

MFS continues to support and maintain membership in several key initiatives that align with our investment philosophy and stewardship priorities, including:

- GRESB – Global Real Estate Sustainability Benchmark
- Ceres
- UKSIF – UK Sustainable Investment and Finance Association
- FAIRR Initiative
- FCLTGlobal: Focusing Capital on the Long Term
- IAST APAC – Investors Against Slavery and Trafficking Asia Pacific
- ASCOR – Assessing Sovereign Climate-related Opportunities and Risks

These collaborations provide valuable insights, data, and forums for dialogue that enhance our ability to assess long-term risks and opportunities.

Appendix

1. Net Zero Progress Tracker 2022

TIERS	TIERED BREAKDOWN - IN-SCOPE EQUITIES (as of 31 December 2022) ⁸	CLIMATE ENGAGEMENTS (aggregate, from baseline date, 1 July 2021)	AGGREGATE HOLDINGS WITH A SCIENCE-BASED TARGET COMMITTED TO OR SET	OTHER INDICATORS OF ALIGNING WITH NET ZERO - EMISSIONS ⁹	NET ZERO ALIGNED	NET ZERO
Tier 1	31	142	455	387	Not currently reported	Not currently reported
Tier 2	137				Not currently reported	Not currently reported
Tier 3	193				Not currently reported	Not currently reported
Total as % of in-scope AUM			49.04%	45.63%		

⁸ Figures are only shown for the public equity portion of our in-scope AUM and are as of 31 December 2022.

⁹ In our 2022 report, we defined holdings as “aligning” if they had science-based targets already set or were in the process of having their target verified by a recognized body. Other indicators of aligning refers to whether the company discloses scope 1, 2 and material scope 3 emissions.

*An engagement's tier may change year to year.

2. NZIF Criteria Summary

Criteria underpinning alignment assessment

CRITERIA	COMMITTED TO ALIGNING	ALIGNING TO A NET ZERO PATHWAY	ALIGNED TO A NET ZERO PATHWAY	ACHIEVING NET ZERO
Asset with emissions intensity required by the sector and regional pathway for 2050 and whose operational model will maintain this performance				✓
Emission performance: Current absolute or emissions intensity is at least equal to a relevant net zero pathway			✓	✓
*Capital allocation alignment: A clear demonstration that capital expenditures are consistent with a relevant net zero pathway.			✓	✓
*Decarbonisation plan: A qualified set of measures exists to achieve short and medium term science-based targets by reducing GHGs and increasing green revenues, when relevant.		✓	✓	✓
Disclosure: Disclosure of operational scope 1, 2 and material scope 3 emissions.		✓	✓	✓
Targets: Short and medium term science-based targets to reduce GHG emissions.		✓	✓	✓
Ambition: A long term goal consistent with the global goal of achieving net zero.	✓	✓	✓	✓

*Additional alignment criteria that a company within a high impact material sector needs to meet.

Source: NZIF.



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