GOLDMAN SACHS ASSET MANAGEMENT ANNUAL STEWARDSHIP REPORT

Aligned with the principles of the UK Stewardship Code 2020

Our **Annual Stewardship Report for the year ended 31 December 2022** focuses on providing a detailed overview of the processes, policies, activities, and outcomes related to our responsibilities as stewards of the assets under our supervision. We have sought to provide a range of examples from across our investment teams from some of our relevant investment strategies. The processes, policies, activities, and outcomes reflected in this report may not be representative of all our investment activities. In this report, we highlight examples of our proxy voting and engagement initiatives, but there is no assurance that these activities alone directly caused the outcomes we describe.

For more information on our stewardship activities please visit our **website.**

This report has been reviewed and approved by the board of Goldman Sachs Asset Management International.

	28 April 2023
CEO of Goldman Sachs Asset Management International	Date

This report covers the public markets and private markets businesses of Goldman Sachs Asset Management. We have sought to identify which part of our business we are discussing under each principle where approaches differ.

For purposes of this document, “Goldman Sachs Asset Management” refers, collectively, to the Goldman Sachs Asset Management business of the following legal entities: Goldman Sachs Asset Management, L.P.; Goldman Sachs Asset Management International; Goldman Sachs Hedge Fund Strategies LLC; GS Investment Strategies, LLC; GSAM Stable Value, LLC; Goldman Sachs (Singapore) Pte.; Goldman Sachs Asset Management (Singapore) Pte. Ltd.; Goldman Sachs (Asia) L.L.C.; Goldman Sachs Asset Management Co. Ltd.; Beijing Gao Hua Securities Company Limited; Goldman Sachs (China) L.L.C.; Goldman Sachs (India) Securities Private Limited; GSAM Services Private Limited (f/k/a Goldman Sachs Asset Management (India) Private Limited); Goldman Sachs Participacoes Ltda.; Goldman Sachs Participacoes II LTDA. (f/k/a Goldman Sachs Asset Management Brasil LTDA); GS Investment Strategies Canada Inc.; Goldman Sachs Management (Ireland) Limited; Goldman Sachs Asset Management Australia Pty Ltd.; Goldman Sachs Trustee Company (India) Private Limited; Goldman Sachs Global Advisory Products LLC, Goldman Sachs Bank Europe SE, and Goldman Sachs Asset Management Fund Services Limited. References in this report to private markets refers to the private market business which is conducted out of Goldman Sachs Asset Management International since 1 April 2023 and certain affiliates.

Principle 1: Signatories' purpose, investment beliefs, strategy, and culture enable stewardship that creates long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society

Our purpose

At Goldman Sachs, our clients always come first. We serve them through a global network powered by partnership, integrity, and a shared purpose of advancing sustainable economic growth and financial opportunity. We serve a broad range of companies, organisations and institutions through our financing, investing, execution and advisory capabilities.

Our business model and strategy

Drawing on over 150 years of experience working with the world's leading businesses, entrepreneurs, and institutions, at Goldman Sachs we mobilize our people, culture, technologies, and ideas to advance the success of our clients, broaden individual prosperity, and accelerate economic progress for all.

Bringing together traditional and alternative investments, Goldman Sachs Asset Management provides clients around the world with a dedicated partnership and focus on long-term performance. As the primary investing area within Goldman Sachs, we deliver investment and advisory services for the world's leading institutions, financial advisors and individuals, drawing from our deeply connected global network and tailored expert insights, across every region and market - overseeing approximately $2.35 trillion in assets under supervision worldwide as of 31 December 2022[1].

At Goldman Sachs Asset Management, we are committed to promoting and exercising effective stewardship among the companies represented in the portfolios we manage on behalf of our clients.

Our culture and values

We aspire to be the world's most exceptional financial institution, united by our shared values of partnership, client service, integrity, and excellence. Drawing on over 150 years of experience working with the world's leading businesses, entrepreneurs, and institutions, we mobilize our people, culture, technologies, and ideas to advance the success of our clients, broaden individual prosperity, and accelerate economic progress for all.

Our purpose comes to life through our four core values: Partnership, Client Service, Integrity, and Excellence.

<u>Our core values</u>

- **Partnership:** We prioritize collaboration and believe in the strength of the collective, creating a culture that fosters teamwork and belonging in the pursuit of professional and personal growth.
- **Client Service:** We lead with a service mindset, working to earn our clients' trust and exceed their expectations by understanding and overdelivering on their goals.
- **Integrity:** We hold ourselves accountable to the highest ethical standards, insisting on transparency and vigilance from our people as we learn from our experiences and make decisions that instil a sense of pride in our firm.
- **Excellence:** We aspire to nothing less than excellence, striving for exceptional performance and superior results for our clients, our shareholders, and our communities.

[1] As of 31 December 2022. AUS includes assets under management and other client assets for which Goldman Sachs does not have full discretion.

Our 14 business principles:

1. Our clients' interests always come first. Our experience shows that if we serve our clients well, our own success will follow.
2. Our assets are our people, capital and reputation. If any of these is ever diminished, the last is the most difficult to restore. We are dedicated to complying fully with the letter and spirit of the laws, rules and ethical principles that govern us. Our continued success depends upon unswerving adherence to this standard.
3. Our goal is to provide superior returns to our shareholders. Profitability is critical to achieving superior returns, building our capital, and attracting and keeping our best people. Significant employee stock ownership aligns the interests of our employees and our shareholders.
4. We take great pride in the professional quality of our work. We have an uncompromising determination to achieve excellence in everything we undertake. Though we may be involved in a wide variety and heavy volume of activity, we would, if it came to a choice, rather be best than biggest.
5. We stress creativity and imagination in everything we do. While recognising that the old way may still be the best way, we constantly strive to find a better solution to a client's problems. We pride ourselves on having pioneered many of the practices and techniques that have become standard in the industry.
6. We make an unusual effort to identify and recruit the very best person for every job. Although our activities are measured in billions of dollars, we select our people one by one. In a service business, we know that without the best people, we cannot be the best firm.
7. We offer our people the opportunity to move ahead more rapidly than is possible at most other places. Advancement depends on merit and we have yet to find the limits to the responsibility our best people are able to assume. For us to be successful, our people must reflect the diversity of the communities and cultures in which we operate. That means we must attract, retain and motivate people from many backgrounds and perspectives. Being diverse is not optional; it is what we must be.
8. We stress teamwork in everything we do. While individual creativity is always encouraged, we have found that team effort often produces the best results. We have no room for those who put their personal interests ahead of the interests of the firm and its clients.
9. The dedication of our people to the firm and the intense effort they give their jobs are greater than one finds in most other organizations. We think that this is an important part of our success.
10. We consider our size an asset that we try hard to preserve. We want to be big enough to undertake the largest project that any of our clients could contemplate, yet small enough to maintain the loyalty, the intimacy and the esprit de corps that we all treasure and that contribute greatly to our success.
11. We constantly strive to anticipate the rapidly changing needs of our clients and to develop new services to meet those needs. We know that the world of finance will not stand still and that complacency can lead to extinction.
12. We regularly receive confidential information as part of our normal client relationships. To breach a confidence or to use confidential information improperly or carelessly would be unthinkable.
13. Our business is highly competitive, and we aggressively seek to expand our client relationships. However, we must always be fair competitors and must never denigrate other firms.
14. Integrity and honesty are at the heart of our business. We expect our people to maintain high ethical standards in everything they do, both in their work for the firm and in their personal lives.

This culture is an important part of how we think about and exercise our stewardship responsibilities.

You can read more about our culture in Code of Business Conduct and Ethics, available on gs.com.

Our investment beliefs

Goldman Sachs Asset Management is made up of distinct investment teams, aligned with the key asset classes that comprise our investment capabilities, which employ investment processes tailored towards the specific asset classes and in keeping with their own distinct investment philosophy and investment beliefs.

PUBLIC MARKETS

Our investment capabilities include the following teams: Fundamental Equity, Fixed Income, Quantitative Investment Strategies, Quantitative Equity Solutions and Alternative Investments and Manager Selection teams.

For purposes of this report, we will focus on the activities of our investment teams specialising in:

- Fundamental Equity
- Fixed Income
- Quantitative Investment Strategies
- Quantitative Equity Solutions

You can read more about our Alternative Investments and Manager Selection team's approach to stewardship in Principle 7. Where appropriate, we have also included some examples of stewardship-related activities performed by these teams.

Some examples of investment beliefs from our investment teams include:

Fundamental Equity
The Fundamental Equity team conducts bottom-up fundamental research across a broad range of country specific and multi-regional portfolios in choosing securities for an Advisory Account. The team also uses macro analysis of numerous economic and valuation variables to anticipate changes in company earnings and the overall investment climate. The team is able to draw on the research and market expertise of securities dealers, including affiliates of Goldman Sachs Asset Management. Equity investments in an Advisory Account will generally be sold when the team believes that the market price fully reflects or exceeds the investments' fundamental valuation or when other more attractive investments are identified. The team currently manages strategies across a broad range of capitalizations and styles, spanning U.S., global-developed, growth and emerging markets. Specifically, the team manages growth equity, value equity, core equity, global developed markets equity and growth and emerging markets equity strategies. The team's Advisory Accounts generally invest in common stocks, preferred stocks, interests in real estate investment trusts, convertible debt obligations, convertible preferred stocks, equity interests in trusts, partnerships, joint ventures, Special Purpose Acquisition Companies ("SPACs"), limited liability companies and similar enterprises, warrants and stock purchase rights and synthetic and derivative instruments that have economic characteristics related to equity securities. For certain strategies, the Fundamental Equity team may integrate Environmental, Social and Governance ("ESG") factors with traditional fundamental factors as part of its fundamental research process. The identification of a risk related to an ESG factor will not necessarily exclude a particular security or sector that, in the Fundamental Equity team's view, is otherwise suitable and attractively priced for investment. The relevance of specific traditional fundamental factors and ESG factors to the fundamental investment process varies across asset classes, sectors and strategies. The Fundamental Equity team may utilize data sources provided by third-party vendors and/or engage directly with issuers when assessing the above factors. The Fundamental Equity team employs a dynamic fundamental investment process that considers a wide range of factors, and no one factor, or consideration is determinative. *Fundamental Equity – Energy & Infrastructure (including MLPs)* The Energy and Infrastructure team conducts both top-down sub-sector analysis through the evaluation of overall energy trends and their implications for energy infrastructure, as well as in-depth and proprietary bottom-up company selection with special focus on risk management via balance sheet and cash flow analyses. The team's Advisory Accounts generally invest in securities structured as both common stocks, Master Limited Partnerships ("MLPs") and/or SPACs engaged in, among other sectors, energy, oil and gas, and renewables.

Fixed Income

The Global Fixed Income team seeks to capitalize on investment opportunities across countries, currencies, sectors and issuers. The team offers single-sector, multi-sector, short duration and government and municipal/tax-free strategies and uses independent specialist teams for bottom-up and top-down analysis, and for generating strategies within their areas of expertise. The Global Liquidity Management team within Global Fixed Income helps clients to construct liquidity management solutions that encompass commercial and government securities as well as multicurrency options. The team's investment process is generally based on four basic elements:

- Developing a long-term risk budget. The team establishes a "risk budget" or range that a particular Advisory Account may deviate from its respective benchmarks with respect to sector allocations, country allocations, securities selection and, to a lesser extent, duration. Following analysis of risk and return objectives, the team allocates the overall risk budget to each component strategy to seek to optimize potential return;
- Generating investment views and strategies. The strategy teams generate investment ideas within their areas of specialisation. Generally, there are top-down strategy teams responsible for cross-sector, duration, country and currency decisions and bottom-up strategy teams that formulate sub-sector allocation and security selection decisions;
- Portfolio construction. The strategy teams collaborate to build a diversified portfolio of individual securities consistent with each client's overall risk and return objectives; and
- Dynamic adjustments based on market conditions. As market conditions change, the volatility and attractiveness of sectors and strategies can change as well. In seeking to optimise an Advisory Account's risk/return potential within its long-term risk budget, the portfolio managers dynamically adjust the mix of top-down and bottom-up strategies. At the same time, the strategy teams adjust their strategies and security selections in an effort to seek to optimise performance within their specialty areas.

The Global Fixed Income team also invests in privately issued debt securities ("Debt Private Placements") across a broad spectrum of issuers, sectors, geography, and maturities. These securities are primarily of investment grade credit quality (BBB- or above) and may be unrated or rated by a nationally recognized statistical rating organization. Debt Private Placements may be issued in U.S. dollars or other currencies. The team utilizes bottom-up analysis to evaluate investment opportunities through specialist teams dedicated to specific sectors within the Debt Private Placements market. Sector specialties include, but are not limited to, infrastructure and project finance (renewable energy, transportation, social infrastructure), Real Estate Investment Trusts ("REITs"), corporates, financial institutions, utilities, credit tenant leases and private asset-based securities. Investment opportunities are originated through agent bank relationships, issuer and sponsor contacts, and advisors.

The Global Liquidity Management team uses a combination of active duration management, term structure, and sector and security selection decisions. Duration and term structure decisions reflect the team's view on the timing and direction of monetary policy, as well as an Advisory Account's immediate and near-term cash requirements. Sector and individual security selection decisions also depend on Advisory Account guidelines, as well as on fundamental and quantitative sector research that seeks to optimise the risk/return profile of the portfolio. Security selection is restricted to issuers that meet certain credit standards.

For certain strategies, as part of its fundamental investment process, the Global Fixed Income and Liquidity Management team may integrate ESG factors with traditional fundamental factors. The identification of a risk related to an ESG factor will not necessarily exclude a particular fixed income security and/or sector that, in the Global Fixed Income and Liquidity Management team's view, is otherwise suitable and attractively priced for investment. The relevance of specific traditional fundamental factors and ESG factors to the fundamental investment process varies across asset classes, sectors and strategies. The Global Fixed Income and Liquidity Management team may utilize data sources provided by third-party vendors and/or engage directly with issuers when assessing the above factors.

The Global Fixed Income and Liquidity Management team employs a dynamic fundamental investment process that considers a wide range of factors, and no one factor, or consideration is determinative.

Quantitative Investment Strategies

The Quantitative Investment Strategies ("QIS") team manages portfolios across a wide variety of equity alpha, alternative risk premia, and rules-based factor investing. The team uses a quantitative style of management which features factor-based security selection, thoughtful portfolio construction and efficient execution. The QIS team members focused on Equity Alpha strategies attempt to forecast expected returns on a global universe of stocks on a daily basis using proprietary models developed by the QIS team. These models are based on certain investment themes including, among others, Fundamental Mispricings, High-Quality Business Models, Sentiment Analysis and Market Themes & Trends.

- Fundamental Mispricings. The team seeks to identify high-quality businesses trading at attractive prices relative to their intrinsic values and peer groups, which the team believes leads to strong performance over the long-run.
- High-Quality Business Models. The team seeks to identify companies that are generating high-quality revenues with sustainable business models and aligned management incentives.
- Sentiment Analysis. The team seeks to identify stocks experiencing improvements in their overall market sentiment.
- Market Themes and Trends. The team seeks to identify companies positively positioned to benefit from themes and trends in the market and macroeconomic environment.

The QIS team members focused on Alternative Risk Premia strategies create portfolios comprising liquid hedge fund beta and alternative risk premia strategies, including volatility and trend strategies. The methods and techniques that are utilized in the team's investment processes include:

- A customizable solution for implementing a hedge fund beta program as well as practical tools for analyzing and attributing an existing hedge fund portfolio;
- Construction, risk-management, and implementation of long/short alternative risk premia portfolios across asset classes; and Customized options-based overlay solutions for equity portfolios. The QIS team members focused on Rules-Based Factor Investing strategies design rules-based equity portfolios that seek exposure to common investment factors. The methods and techniques that are utilized in the team's investment processes include:
- ActiveBeta™ equity portfolios that employ a transparent, rules-based and patented methodology for constructing benchmark-aware factor portfolios that aim to achieve efficient exposure to a diverse set of investment factors; and
- Rules-based ETFs that provide exposure to certain common factors, market beta and/or other thematic investment strategies.
- The team also offers customized multi-asset class allocations, risk management strategies, tactical investments and investment advisory solutions.

For certain strategies, the multi-factor models used by QIS assess a wide range of indicators, which may include certain ESG indicators. These ESG indicators may include, but are not limited to, emission intensity, labour satisfaction, reputational concerns, governance and management incentives. QIS also may also seek to address certain environmental risks, such as climate transition risk by weighting stocks based, in part, on certain proprietary emissions metrics. The relevance and weightings of specific ESG indicators to or within the investment process vary across asset classes, sectors and strategies and no one indicator is determinative.

QIS in its sole discretion may periodically update the indicators used in the investment decision-making process. The indicators applied by QIS are assessed in reliance on one or a number of third-party ESG vendors.

QIS, in its sole discretion, retains the right to disapply data and/or ratings provided by third-party vendors where it deems the data and/or ratings to be inaccurate or inappropriate.

Quantitative Equity Solutions
The Quantitative Equity Solutions ("QES") team designs and builds personalised portfolios and investment solutions tailored to the investment goals and objectives of individual investors, including tax-managed, factor-based, income-oriented, value aligned, and environmental and socially responsible portfolios. The QES team offers a comprehensive and customizable platform for implementing portfolios that provide broad and diversified global equity market exposure while incorporating client goals. The methods and techniques that are utilized in the team's investment processes include: • Customized equity market exposure to domestic, international and global markets; • Tax management techniques including year-round tax-loss harvesting; and • Risk management and values alignment solutions, such as through applying customized portfolio screens.

PRIVATE MARKETS

At Goldman Sachs, we provide investment management solutions across all major asset classes to a diverse set of institutional and individual clients. We believe that stewardship extends beyond our public markets activities and has relevance across all the asset classes in which we operate. The Private Markets Investing business from Goldman Sachs Asset Management ("Private Markets Investing Business") is made up of investment teams that, while they work closely together on many issues, are separate, and employ distinct investment processes in keeping with their own distinct investment philosophy and investment beliefs.

Our global investment teams bring local market and industry-specific expertise to source, evaluate and execute investments across a range of direct private market investment strategies. For the purposes of this report, we will focus on the activities of our investment teams specializing in:

- Corporate Private Equity
- Growth Equity
- Sustainable Investing
- Private Credit
- Infrastructure
- Real Estate

The application of our investment activities, policies and frameworks varies across our Private Markets Investing business, reflecting varying degrees of influence and/or control across asset classes.

Corporate Private Equity
For decades, the Corporate Private Equity team has been deeply embedded and integrated within Goldman Sachs, which has a significant culture of collaboration across groups. The Corporate Private Equity investment teams leverage the expansive base of Goldman Sachs' relationships to identify unique opportunities and create value for our portfolio companies as differentiated owners. Management teams view the Corporate Private Equity team as a partner of choice because of the team's ability to offer a breadth and depth of resources not broadly available to companies in the size range we target. In addition, the Goldman Sachs Value Accelerator offers best-in-class capabilities to help our portfolio companies identify additional revenue opportunities and execute transformations. For further detail on the Value Accelerator please see page 13. The Corporate Private Equity team makes investments in equity, equity-related and similar securities, or instruments, including debt or other securities or instruments with equity-like returns or an equity component, of portfolio companies and includes strategies such as leveraged buyouts.

Growth Equity

The Growth Equity team is advantaged by Goldman Sachs' unparalleled network of global relationships with leading entrepreneurs and Chief Executive Officers ("CEOs"), empowered by the deep sector, geography, and technology expertise of one of the world's largest financial institutions. The Growth Equity team works together to build enduring companies, accelerating their growth into the future, and implementing the team's proven investment strategy that focuses on capital preservation and asymmetric risk-return outcomes for investors.

The Growth Equity team invests in equity, equity-related and similar securities or instruments, including preferred equity, debt or other securities or instruments with equity-like returns or an equity component, in growth-stage companies with the potential for revenue growth, or that is otherwise characteristic of a growth equity opportunity. The Growth Equity team seeks investments across four primary industries - enterprise technology, financial technology, healthcare and consumer - but is not restricted from investing in other industries.

Sustainable Investing

The Sustainable Investing Group ("SIG") seeks to partner with clients through its Horizon platform for direct impact investing in private markets via a series of funds that focus on key trends in sustainability across climate transition and inclusive economic growth. SIG invests across the equity risk spectrum, focusing on areas where the team has observed compelling macro tailwinds and sectors in which the team has demonstrated expertise. As SIG deploys capital and seeks to grow its impact portfolio, Goldman Sachs' global brand and scale grants the team the ability to convene like-minded corporates, investors and industry stakeholders on key topics related to ESG and impact.

Private Credit

The Private Credit team is one of the largest alternative credit investors in the world, focused primarily on direct origination to financial sponsor-backed companies. Combining deep expertise and a long-standing program dating back to 1996, the Private Credit platform invests globally and across the capital structure, seeking to identify attractive risk-adjusted return opportunities across the credit spectrum, having invested across different market conditions, interest rate environments and macro backdrop since inception. The Private Credit platform is comprised of three main pillars: Senior Direct Lending, Mezzanine Debt and Hybrid Capital. The Private Credit team proactively engages with sponsors and borrower management teams to help add value and create customized solutions to support many different types of financing.

The Private Credit team invests in debt instruments across industries, geographic regions, economic cycles and financing structures. The team employs a "lend and hold" investment strategy that focuses on (i) provision of large-sized commitments to drive enhanced economics and terms, (ii) disciplined investment selection with robust due diligence and credit analysis and (iii) portfolio monitoring.

Infrastructure

The Infrastructure team invests in the infrastructure sector by making equity and equity-like investments primarily in transportation and logistics, energy transition and renewables, digital infrastructure and other essential services.

The team partners with experienced operators and management teams across multiple sectors, focussing on value-add, operating businesses with defensive, long-term cash flows, strong market position, and in assets and services that are critical to society. The Infrastructure team seeks control positions, and value creation through operational, financial and ESG improvement. The team's investment process has consistently navigated the evolving infrastructure asset class – be it thematic trends, market dislocations or opportunities that are underappreciated by the wider market.

Real Estate

The Real Estate team is one of the largest and longest-standing investors in private real estate, with three decades of experience investing through cycles. The team navigates complex markets, dislocation and change, driving value through innovative investment, asset management and risk management strategies across acquisitions, development and platform building. The Real Estate team invests across the risk spectrum (including equity and credit) with a focus on sourcing and executing investments with attractive risk-adjusted returns.

The Real Estate team employs development, portfolio aggregation and build-up strategies, leveraging in-house real estate and operating expertise to build and exit scaled real estate portfolios and platforms. In-house teams are responsible for acquisitions, asset management, construction management, debt financing and ESG, and also leveraging the broad-based resources and capabilities of Goldman Sachs to source, underwrite, manage, finance and exit investments.

How we ensure our investment beliefs, strategy and culture enable effective stewardship

You can read about how our governance and oversight processes seek to ensure that our investment beliefs, strategy and culture enable effective stewardship in Principle 2.

PUBLIC MARKETS

To guide our approach, our Global Stewardship Team serves as a dedicated resource to our investment teams globally, with professionals in New York, London, The Hague and Tokyo.

PRIVATE MARKETS

We have a dedicated Sustainability and Impact team and ESG Business Leads that support our investment teams globally, with professionals in New York, London and Tokyo.

How our purpose and investment beliefs have guided our stewardship, investment strategy and decision-making

Within Goldman Sachs Asset Management, we believe that ESG factors can be material to investment performance. ESG is increasingly important to some of our clients who are seeking to build portfolios that integrate ESG considerations while maintaining the rigour and risk-return standards of investment management.

For more information on how effective stewardship has been achieved across our investment teams, please refer to Principle 7.

You can read more about the Global Stewardship Team's stewardship framework, which sets out our key stewardship objectives and explains how our voting and engagement efforts help us meet them, in Principle 9.

Serving the best interests of our clients and beneficiaries

We believe that our long-standing client relationships reflect our ability to serve our clients effectively. You can read more about how we listen to our clients' feedback and communicate with them in Principle 6.

Principle 2: Signatories’ governance, resources and incentives support stewardship

How we resource stewardship

We believe the strength of our culture, our ability to execute our strategy and our relevance to clients depend on a diverse workforce and an inclusive environment that encourages a wide range of perspectives. We are a full-service asset manager comprising diverse investment teams. Goldman Sachs Asset Management is headquartered in New York and has offices around the world. Our investment professionals bring their diverse experience and insights to their respective roles in our investment processes, analysis, integration and engagement. We firmly believe that investment ideas are enriched by global expertise and local insights and that proximity to clients in various regions creates strong working relationships.

PUBLIC MARKETS

About the Global Stewardship Team

Within the public markets investment business, the Goldman Sachs Asset Management Global Stewardship Team drives the continued enhancement of our approach to stewardship and serves as a dedicated resource to our public markets investment teams globally. The work of the Global Stewardship Team is centered around three core activities:

- **Engagement** with company management of a subset of companies we are invested in on behalf of our clients
- **Proxy voting** at companies where we have voting authority on behalf of our clients
- **Industry leadership** to share insights and build best practices across the stewardship space.

The Global Stewardship Team is led by Catherine Winner and has an additional 10 team members located in New York, Tokyo, The Hague and London. The team is further supported by the broader Goldman Sachs Asset Management platform, that includes coordination among investment teams, legal, compliance and operations.[2]

Our Global Stewardship Team has members with a wide range of experiences drawn from a variety of professional backgrounds. The team’s proxy voting expertise is supported by a member with over 10 years of experience advising corporate issuers and hedge funds on corporate governance matters. Two members of the team have over 22 years of combined research experience, who joined from the Goldman Sachs Global Investment Research division, most recently working as part of the sustainability-focused research team, GS SUSTAIN. The team’s ESG reporting and regulatory expertise is aided by a member with over 4 years of experience at the UK Financial Reporting Council and previous experience in auditing and advising companies on ESG reporting. Other team members also have a range of experience including risk, audit, insurance broking and NGO fundraising.

[2] As of December 2022.

The organizational structure supporting our stewardship

<table>
<tr><th colspan="6">Global Stewardship Team</th></tr>
<tr><th colspan="6">Our Investment Teams</th></tr>
<tr><td colspan="1">Fixed Income</td><td colspan="1">Fundamental Equity</td><td colspan="1">Alternative Investments and Manager Selection</td><td colspan="1">Quantitative Equity Solutions</td><td colspan="2">Quantitative Investment Strategies</td></tr>
<tr><th colspan="6">Additional Resources</th></tr>
<tr><td colspan="2">Legal</td><td colspan="2">Compliance</td><td colspan="2">Operations</td></tr>
<tr><td colspan="2">Advise on engagement initiatives and proxy proposals
Assist in annual Stewardship Policy/Guideline review</td><td colspan="2">Maintains internal policies and procedures designed to ensure integrity of information barriers and mitigate conflicts of interest
Advises on reputational, regulatory and policy matters</td><td colspan="2">Proxy voting execution by Asset Servicing / Trade Management teams
Client reporting via Institutional Fund Reporting team</td></tr>
</table>

The above table describes how our organizational structure supports our stewardship activities. Our Global Stewardship Team works alongside our investment teams as appropriate in different ways according to different investment strategies and is supported by additional resources including from compliance, legal, operations and risk as needed. Alongside our approach of integrating stewardship into the activities of our investment teams, this structure allows us to appropriately resource our stewardship activities in a flexible and responsive way.

How the Global Stewardship Team works with our public markets investment teams

Our Global Stewardship Team works closely with our public markets investment teams to foster collaboration on key stewardship issues. The team works directly with our equity portfolio managers to carry out proxy voting activities. You can read more about our proxy voting process in Principle 12.

With respect to engagement, several of our thematic engagements are executed across multiple public markets investment teams at Goldman Sachs Asset Management. For example, the Global Stewardship Team works closely with the Head of Responsible Investment in our Fixed Income business on our engagements on board diversity and material greenhouse gas (“GHG”) emissions. We also engage companies alongside our members of our Fundamental Equity investment team. You can read more about this in Principle 9. In addition, for certain portfolios, members of the Global Stewardship Team work directly with the Fundamental Equity and Fixed Income investment teams to engage with companies on material issues. You can read more about these engagements in the Portfolio-Specific Campaigns section of this report, in Principle 9.

Global Stewardship Team governance structure

The Goldman Sachs Asset Management senior leadership team and the various relevant fund Boards have the ultimate responsibility for all of our stewardship related activities. The GSAMI Board have reviewed this report and we update it on our stewardship plans and activities as required.

In 2022, our Global Head of Stewardship reported to the Chief Investment Officer (“CIO”) of the Fundamental Public Equities business. Our Global Stewardship Team also contributes insights to the Sustainable Investing and Innovation Platform which was created in late 2022 as part of the acquisition of NN Investment Partners. The Sustainable Investing and Innovation Platform works with various teams across the investing businesses to create frameworks and best practices in sustainable investing. The platform is led by the Global Head of Sustainability for the public market investing businesses.

To govern our proxy voting responsibilities, we have created an Asset Management Public Markets Business Proxy Voting Council, comprised of stakeholders from the Global Stewardship Team, equity investment teams, divisional management, legal and compliance. The purpose of the Proxy Voting Council is to bring together key stakeholders to annually review and recommend potential policy changes, discuss any potential changes to the voting process, and convene on voting topics that may arise during the year. Please refer to Principle 12 for further information.

We continue to seek to ensure that our investment beliefs, strategy and culture enable effective stewardship via a range of mechanisms. These include but are not limited to our annual performance review process, meetings with the relevant mutual fund boards and the discussions with our investment teams. Additionally, our annual review of policies and internal audit reviews also support this process. Further information on the review process can be found in Principle 5.

We believe that this governance structure supports effective stewardship and we intend to keep it under review as our business continues to grow and develop over future periods. We may seek to add additional dedicated resources or additional internal support resources as needed over time. As our business changes and develops, we may also seek to adjust our internal governance structures.

PRIVATE MARKETS

Overview: How we resource stewardship

First-line	Second-line
Investment Teams	Legal, Compliance, Operations, Risk
Additional Resources	
Investment Committees Sustainability and Impact team Sustainability Leadership Council Value Accelerator	

Within the Private Markets Investing business, the process of investing in or lending to a company or asset is primarily carried out by the investment team, overseen by the respective investment committee(s) and with input from other Goldman Sachs committees or working groups, as may be applicable. Investment teams may also hire external advisors and consultants.

Investment teams: With the oversight and support of our senior leadership, investment teams are responsible for ensuring that relevant stewardship considerations are integrated into the deal lifecycle. The Private Markets Investing business has ESG Business Leads who are embedded in the Corporate Private Equity, Private Credit, Infrastructure, Sustainable Investing Group and Real Estate businesses. They are responsible for integrating and implementing applicable stewardship and sustainability best practices into the investment process for their business unit.

Second line functions: Advice and counsel is provided by second-line control side functions, such as Legal, Compliance, Operations and Risk**.** For example, Environmental, Health and Safety ("EHS") factors are considered as part of our sustainability program and are captured as part of our ESG due diligence. The Operational Risk Environmental Group is an in-house team of environmental professionals with strong technical expertise, who conduct in-depth due diligence on EHS issues to identify and mitigate transactional risk for business teams. In addition, the firmwide Goldman Sachs' Physical Commodities Review Group ("PCRG") ensures that Goldman Sachs has a consistent approach to evaluating and managing EHS risks associated with engaging in, investing in, or providing financing to, physical commodity-related activities.

Investment Committees: Each Private Markets Investing business has its own Investment Committee comprised of the senior professionals and other control-side professionals of Goldman Sachs.

Sustainability and Impact Team: The Sustainability and Impact team supports our investment teams in their role as responsible stewards of our clients' capital. Leading the team is Letitia Webster, who is Global Head of Sustainability for our Private Markets Investing business. She joined Goldman Sachs as a managing director in 2020, having previously served in a number of Chief Sustainability Officer roles at other firms. The team also includes experienced professionals based in New York and London with ESG expertise across the following areas: governance, sustainability strategy, climate, reporting and communications, ESG regulations and frameworks, and ESG data. The Sustainability and Impact team is focused on integrating sustainability and responsible investing practices across our Private Markets Investing business, enhancing data collection and monitoring, implementing and reporting to new regulatory regimes and codes, and communicating with the business about updates in the sustainable finance space.

Sustainability Leadership Council: The Sustainability Leadership Council for the Private Markets Investing business meets to discuss key sustainability initiatives for the Private Markets Investing business. Members include the Global Head of Sustainable Investing for Private Investing, Business Unit Leaders and Chief Operating Officers for each asset class, and representation from second line. The Council helps drive the sustainability strategy and key sustainability initiatives for the Private Markets Investing business.

Value Accelerator: The Private Markets Investing business supports a number of our portfolio companies by facilitating access to the wider Goldman Sachs network and our highly distinguished operating advisors and sector experts through the Goldman Sachs Value Accelerator. The Goldman Sachs Value Accelerator is a centralized platform that partners with our portfolio companies to build enduring businesses and create incremental value. Working with over 300 portfolio companies worldwide, the Value Accelerator delivers support to management teams. Focusing on equity investments, the Value Accelerator seeks to drive value for portfolio companies in five key areas:

1. Scaling Revenue
2. Operational Excellence
3. Technical, Digital and Data Transformation
4. Talent and Organizational Strategy
5. ESG Training, Data Collection, and general best practices.

For an example of how the Value Accelerator has supported a portfolio company, please see our case study on page 73.

Training and development

PUBLIC MARKETS

Each investment team focuses on the ongoing development of its investment professionals. As an example of a training and development initiative, we hold investor meetings called “The Forum” where leading experts, both internal and external to the organization, meet to discuss the global trends and events that will shape our investments in the ever-changing macro and policy environment. The inputs that we derive from “The Forum” allow our portfolio managers and research analysts to keep abreast of the latest developments in the market, and meaningfully enrich our investment processes across each investment team. This series has featured some dedicated sessions on material ESG topics. Some examples from 2022 include:

- **Corporate Governance and ESG Reforms in Asia** featuring the Head of the Asia Corporate Governance Association, moderated by a member of our Global Stewardship Team
- **Goldman Sachs’ Sustainability Report and Goldman Sachs’ Taskforce on Climate-related Financial Disclosures (“TCFD”) Report** with members of Goldman Sachs’ Executive Office
- **Corporate GHG Emissions** with a member of the GS SUSTAIN team, moderated by a member of our Global Stewardship Team
- **Biodiversity – The Ecosystem at the Heart of Business** with members of Citi Research

Further, we aim to attend a variety of conferences and seminars, including, but not limited to: UN Principles for Responsible Investment (“UN PRI”) events, US Sustainable Investment Forum events, Ceres conferences, International Corporate Governance Network events and the Council of Institutional Investors. Additionally, members of the Goldman Sachs Asset Management team have been invited to speak at numerous conferences and events, and we host panels at Goldman Sachs events, such as our Institutional Client Symposium and a number of Sustainable Finance events.

Our Global Stewardship Team also shares insights with professionals across Goldman Sachs Asset Management through a bi-weekly email update, which is sent to more than 1,000 professionals to share relevant news, trending topics, research and outcomes from stewardship activities.

PRIVATE MARKETS

Where relevant, the Sustainability and Impact team provides bespoke briefings and training on ESG considerations and processes, focusing on diligence topics and opportunities for engagement on sustainability-related matters. Investment teams are specifically trained to understand that transactions which may have significant environmental/ social and/or reputational risks should be elevated for enhanced review. More broadly, investment teams may also be posted on stewardship and sustainability best practices at townhall events. This can include presentations from either internal or external experts, who may present on relevant themes and trends to develop awareness. For example, in 2022, a member of the Sustainability and Impact team attended a Private Credit Townhall and provided an update on ESG priorities.

ESG Business Leads also provide training to their respective investment teams as necessary. As an example, in 2022, the Real Estate ESG Business Unit Leads provided a 'Steps to Decarbonization' training for global Real Estate investment teams which covered priority actions, industry best practice and case studies for decarbonizing assets.

Performance management and reward

We recognize the importance of celebrating the success of our personnel by ensuring good practice is identified, highlighted and rewarded. As part of our ongoing efforts to ensure we unlock our people's potential and the collective capability of our firm, we continue to invest in our people's development, including by ensuring that each colleague receives robust, timely and actionable feedback to help them grow and make a bigger impact. We also recognize the importance of using remuneration and incentives to encourage appropriate behaviours and to discourage excessive risk taking and other practices. Our compensation practices encourage a firm-wide orientation and culture through a framework that establishes a direct relationship between the longer-term evaluation of performance and an appropriately matched incentive structure. The success of our business is tied to investment performance, advice and client satisfaction. The ability of our portfolio and client teams to bring ESG expertise to bear may be an important component to one or more of these dimensions, the success of which may, where appropriate, factor into resourcing, compensation, and promotions relevant to certain investment strategies. You can read more about our approach to performance management in our People Strategy report, available on our website.

Diversity and inclusion

Our people are our greatest asset – we say it often and with good reason. It is only with the determination and dedication of our people that we can serve our clients, generate long-term value for our shareholders and contribute to the broader public. At the crux of our efforts is a focus on cultivating and sustaining a diverse work environment and workforce, which is critical to meeting the unique needs of our diverse client base and the communities in which we operate. We are committed to making progress toward racial equity, advancing gender equality, and increasing representation at every level of our firm. Our commitment to creating and sustaining a diverse work environment is absolute. We share our reasons for this commitment and our aspirations:

For the Firm: We strive for excellence. To achieve it, we must have the best people, and the best people are drawn from the broadest pool of applicants. The people we need can be found only by looking across the full spectrum of race, colour, religion, creed, sex, age, national origin, citizenship status, disability, qualified veteran status, genetic information, marital status, sexual orientation and gender identity.

For Our People: Ours is a culture of teamwork. For our groups to excel, all members must feel that they are operating in an inclusive environment that welcomes and supports differences, and that encourages input from all perspectives. Our people have the right to expect a workplace in which the richness of their lives and experience is welcomed and valued by their team and by the firm.

For Our Clients: Their interests always come first. To continue providing our clients with creative ideas and solutions for operating effectively in a complex global economy, we must be fully capable of dealing with different cultures in an informed and nuanced manner. Experience has shown us that we can best serve our clients' interests by tapping the insights, talents and judgments of a diverse workforce.

Within Goldman Sachs Asset Management, investment teams comprise diverse professionals based in our offices around the world.

Systems, processes, research and analysis

PUBLIC MARKETS

We have invested and continue to invest in technology to support our stewardship activities and initiatives. Our investment teams are able to leverage sophisticated proprietary systems and tools to better understand our investments and better serve our clients' needs. Systems and processes in place for certain investment teams in 2022 included:

- **Goldman Sachs Asset Management ESG Assessment Framework:** For certain portfolios, our investment teams aim to conduct ESG analysis as a core component of fundamental research, utilising our proprietary ESG assessment framework. This helps our research analysts to parse ESG data and assess material risks and opportunities at the issuer level in a standardised manner. We seek to leverage the Sustainability Accounting Standards Board ("SASB") sector guidance and our own proprietary views to focus on ESG factors that we believe are material to a company's growth, profitability and risks. The assessment framework captures both quantitative and qualitative analysis, which is built upon thousands of research meetings each year, including meetings with company management, customers, suppliers and competitors.
- **Fluent:** Where applicable our investment teams utilize a centralized research platform that, among other things, houses our proprietary ESG assessment framework, which includes proxy voting records, engagement information and company-specific ESG data, as well as in-house views for select companies based on our ESG assessment framework where applicable.
- **Concert:** Where applicable our investment teams are able to leverage a proprietary portfolio management tool that leverages MSCI data to run portfolio diagnostics, assess carbon intensity attribution, and analyze product involvement, among other functions.

PRIVATE MARKETS

The Private Markets Investing business has invested and continues to invest in tools to support our investment teams and their stewardship activities, as well as to support our portfolio companies. These include but are not limited to:

- **Integration of sustainability risks and ESG:** As outlined under Principle 1, our Investment Committees consider investments assessing the collective information from the investment teams and other firm resources. As part of the due diligence process, the Investment Committee is typically presented with a memorandum which seeks to outline key risks for the investment informed by the due diligence process and also based on the nature of the opportunity. The memorandum will also generally include an ESG due diligence template.
- **Climate Risk Heatmaps:** During 2022, a number of private equity investment teams, such as Corporate Private Equity, Infrastructure and the Sustainable Investing Group, and external advisors assessed sectors' and individual investments' exposure to physical and transition climate risks. The assessment of individual investments was focused on sectors which were deemed higher risk. For these sectors, investment teams conducted a detailed review by answering sector-specific questions about a company's operating model and mitigation efforts to reduce risk. The outputs of this exercise were then aggregated into sector-level heatmaps that allowed select investment teams to identify concentrated climate-related risk.
- **GHG Emissions Accounting:** The Private Markets Investing business has partnered with a carbon accounting platform to help certain portfolio companies with their GHG emissions accounting through the use of a software tool, as well as dedicated advisory services to support their climate strategies and emission reduction initiatives.

  Utility Data Collection: The Real Estate investment team uses a utility data collection platform for real estate that collects energy, water and waste data on an asset level, allowing the Real Estate investment teams to track operational carbon emissions.

You can read more about how different investment teams use these processes and their research and analysis in Principle 7.

Using third party service providers

We use a variety of third-party service providers to support our stewardship activities as needed, you can read more about our approach in Principle 8.

Principle 3: Signatories manage conflicts of interest to put the best interests of clients and beneficiaries first

Potential conflicts we face

We face a range of potential conflicts in our business, which are disclosed in our regulatory filing with the Securities and Exchange Commission ("SEC") on "Form ADV". Some of the potential conflicts are connected to our stewardship responsibilities. These include the possibility, for example, that Goldman Sachs (and where applicable Goldman Sachs & Co personnel) may have multiple advisory, transactional and financial and other interests in investments that may be purchased, sold or held by Goldman Sachs Asset Management on behalf of our clients; hence, these activities could in theory influence our decisions regarding trading, shareholder voting and other interactions with investee companies such as engagement. Potential conflicts could also arise where the investee company, or a related party, such as its pension scheme, is itself a client of Goldman Sachs Asset Management.

Our conflicts policy and mitigation procedures

The arrangements put in place by Goldman Sachs Asset Management to seek to manage its conflicts of interests include:

- Information barriers / separation of functions
  Both Goldman Sachs & Co among its various divisions, and Goldman Sachs Asset Management between certain businesses, have established certain physical, procedural and electronic information barriers. These barriers are designed to restrict the flow of information and to achieve arms-length interaction among different parts of Goldman Sachs & Co and Goldman Sachs Asset Management. This enables business to be carried out within the firm while minimizing the possibility of that business being influenced by any conflicts that may exist.
- Policies and procedures (building on regulatory requirements)
  There are many different laws and regulations to which Goldman Sachs and Goldman Sachs Asset Management are subject around the world that prohibit or require Goldman Sachs / Goldman Sachs Asset Management to manage situations where a conflict of interest may arise. Goldman Sachs Asset Management has policies and procedures, including escalation protocols, designed to ensure compliance with these laws and regulations and, in Goldman Sachs Asset Management's case as an investment management agent or advisor, designed to ensure that it manages its conflicts in a way that is compatible with its duty to act as trusted agent or advisor of the client.
- Governance and control oversight
  Through compliance monitoring, review oversight and targeted testing, as well as governance oversight by relevant committees and management bodies including boards, and internal audit reviews of key areas on a rolling basis Goldman Sachs Asset Management seeks to ensure that the practice of its business operations are carried out in line with its information barriers, policies and procedures, and duties to clients.
- Compensation / rewards structure
  Goldman Sachs Asset Management's compensation policy seeks to align employee, shareholder and Goldman Sachs Asset Management client interests to the extent appropriate while not encouraging excessive risk-taking by employees.
- Disclosure / client understanding
  Whilst disclosure is not itself a substitute for the appropriate management of conflicts in all respects, it is important that in deciding to partner with Goldman Sachs Asset Management, clients understand the potential conflicts to which Goldman Sachs Asset Management is subject and why, so that they understand the context in which Goldman Sachs Asset Management operates its business.

PUBLIC MARKETS

Stewardship specific applications

We have implemented processes designed to prevent conflicts of interest from influencing our proxy voting decisions. Our investment teams generally cast proxy votes consistently with the guidelines and the recommendations of our Global Proxy Voting Policy. For more information on how we set our Goldman Sachs Asset Management Global Proxy Voting Policy, please refer to Principle 12.

Each investment team, however, may on certain proxy votes seek approval to diverge from the guidelines or a recommendation by following a process that seeks to ensure that override decisions are not influenced by any conflict of interest. For voting policy overrides initiated by Fundamental Equity, each request is approved by the Fundamental Equity CIO, compliance and legal. As a result of the override process, different investment teams may vote differently for particular votes for the same company. In addition, the Global Stewardship Team may on certain proxy votes also seek approval to vote differently from our guidelines. Certain delegates of the Quantitative Investment Strategies investment team also approve the request and the Global Stewardship Team will follow the override process described above.

Additional information on our conflict of interest policy is available in Our Approach to Stewardship which you can find on our website.

Addressing conflicts - Voting on Goldman Sachs Group Inc. or a Goldman Sachs Asset Management managed fund

To mitigate conflicts of interest when a proxy is for shares of The Goldman Sachs Group Inc. or a Goldman Sachs Asset Management managed fund, we will generally instruct that such shares be voted in the same proportion as other shares are voted with respect to a proposal, subject to applicable legal, regulatory and operational requirements. In 2022 we voted in line with this policy.

Conflicts arising in 2022

Goldman Sachs Asset Management has not encountered any other material conflicts of interest in relation to our stewardship activities over the last 12 months.

PRIVATE MARKETS

Within the Private Markets Investing business, conflicts of interest can arise in a number of circumstances as part of our investment and stewardship activities. Certain procedures are followed to manage actual or apparent conflicts of interest, including for example when the Firm provides investment banking or other services to Private Markets Investing portfolio companies. In such instances, relevant conflicts may be managed with board recusal and documentation of fees.

Principle 4: Signatories identify and respond to market-wide and systemic risks to promote a well-functioning financial system

Risk management is an essential element of our investment philosophy and forms an integral part of our investment process and culture. We place considerable emphasis on maintaining a disciplined, industry-leading risk management framework and supporting the ongoing development of risk-management methods and technology. Managing our risks, and the risks in our portfolios, is a part of how we contribute to supporting a well-functioning financial system.

PUBLIC MARKETS

How we identify market-wide and systemic risks

Our investment risk management process and culture entails first-line ownership within the portfolio management teams. The investment risk management process includes an effort to monitor and manage risk but does not imply low risk.

Our risk management approach seeks to identify, monitor and manage market-wide and systemic risks that we consider to be most relevant to the funds and portfolios that Goldman Sachs Asset Management manages and which are considered to potentially have a material negative impact on the value of these portfolios, either on an absolute basis, or on a relative basis versus a stated benchmark, where relevant. This may include the potential impacts of climate risk and risk around pandemics, as examples, where these are relevant to the portfolios.

Our approach seeks to ensure that market-wide and systemic risks are appropriately considered and addressed at the various stages of the product life cycle. Most notably by seeking to ensure that investment management processes are in place to identify, monitor, manage and mitigate market-wide and systemic risks across funds and portfolios on an ongoing basis.

There may be differences in how each investment team identifies and responds to market-wide and systemic risks, as appropriate to each business and the relevant asset classes.

For example, our investment teams may adopt the below approaches (depending on the asset class, strategy and client preferences, among other factors) in the integration of sustainability risks, inclusive of climate risks, into investment decision making, many of which they will aim to evolve over time and in response to further regulatory requirements and market developments:

- Use of external data providers to assess material impacts of sustainability factors and risks at the individual investment level, where data is available;
- Development of proprietary overlays and scoring methodologies on sustainability at both the investment level and the aggregate portfolio level;
- Investment in a proprietary set of platforms and dashboards to equip our investors with access to ESG information for risk management, research, monitoring and client reporting; and
- Use of guideline control processes to assist with the monitoring of investment decisions and portfolio composition with respect to sustainability risks, where both possible and applicable.

Whilst sustainability risk integration may play an important part in our investment approach, we generally may consider sustainability risks, including climate risks, alongside all other risks relevant to the portfolio and take a holistic view on the composition of the portfolio or the holding of specific investments from a risk perspective. In line with existing risk management processes, where we are not comfortable with the level of risk posed by an investment, we expect to take steps to mitigate and manage that risk, which may include divestment from a particular investment. We also have certain products that do not include sustainability risk considerations.

Additionally, the Asset Management Risk Management team ("AM Risk") operates independently of the portfolio management teams and is responsible for the overall risk governance framework and establishing appropriate risk management best practices for the Goldman Sachs Asset Management business, across the individual business lines.

The independent risk governance framework overseen by AM Risk includes the identification, measurement, monitoring, escalation and remediation of applicable risks. The AM Risk team reports to the Goldman Sachs Asset Management Chief Risk Officer and the Heads of Asset Management. The Asset Management Risk Working Group is globally responsible for oversight of financial risks associated with the activities of the division, and reviews market, liquidity, counterparty credit and operational risk in respect of client portfolios, as applicable, and may establish governance standards as appropriate.

Some examples of market wide and systemic risk identified in 2022 include:

- Climate risk
- Pandemics, for example Covid-19
- Geopolitical risks
- Interbank Offered Rates ("IBOR") Transition risk
- Sustained periods of elevated inflation

Monitoring risks

Across Goldman Sachs Asset Management there are a variety of systems, processes and activities in place to support our monitoring of market-wide and systemic risks. These include but are not limited to:

- The independent AM Risk team defines, measures and monitors appropriate risks across client portfolios including market risks such as currency risks, interest rate risks and equity factor risks, liquidity risks such as redemption risk and cash event risks, and operational risks. AM Risk monitors market-wide and systemic risks through a variety of metrics and analyses including performance monitoring, concentration monitoring and stress testing, with further details on each provided below.
- AM Risk regularly and routinely reviews performance drivers across portfolios in order to understand performance attribution, risk drivers and ultimately to underlying single name holdings. This review leverages relative performance tools (e.g., tracking error, excess return, normalised return, relative account performance by composite, etc.), and performance attribution tools. Market-wide themes identified via this analysis drive further deep dives into portfolio exposures and into single names that meaningfully contribute to portfolio performance and risk exposures on an active weight basis, as measured relative to benchmark. To the extent that exposures identified are associated with weak climate scores or have particular sensitivities to global pandemic risks, as examples, these factors could form part of the analysis and challenge when reviewing risk positioning with portfolio managers.
- Concentrations across portfolios are also monitored to ensure that aggregate exposures are not outsized. AM Risk monitors aggregate country and single name exposures on a weekly basis as well as reviewing aggregate exposures versus the Firm-wide Risk Division's Country Watch list. The Country Watch list highlights countries in crisis or with a higher likelihood of being in crisis and AM Risk has set governance thresholds to ensure that aggregate exposure to such countries and their debt issuances are within risk tolerances. The Country Watch list would also include a view on the potential for a given country to be susceptible to a variety of macro factors, such as geopolitical risks, the impacts of a global pandemic or shift in climate risks. At a portfolio level, concentrations to countries, sectors, sub-industries and single names are also highlighted. To the extent that a sub-industry or single name identified is associated with weak climate scores or has particular sensitivities to global pandemic risks, as examples, these factors could form part of the discussion and challenge when reviewing risk positioning with portfolio managers.
- AM Risk runs hypothetical stress testing on a weekly basis which computes the impact of various severe loss scenarios on the active risk held by each fund. These severe scenarios include a number of key concentration scenarios (e.g., issuers, industries, countries etc.). Our weekly governance process reviews the most severe outcome from these scenarios against internal thresholds, typically set with reference to the target tracking error for the fund. Where the stress test results (including for concentration scenarios) are in excess of these thresholds, these overages are investigated and escalated to AM Risk and the portfolio manager to manage the risk. Actions may include immediate risk reduction or a temporary increase in the internal threshold where AM Risk are comfortable with risk being run and the business rationale behind the exception. To the extent that overages highlight sub-industry or single names associated with weak climate scores or has particular sensitivities to global pandemic risks, as examples, these factors could form part of the discussion and challenge when reviewing risk positioning with portfolio managers.
- AM Risk frequently conducts ad-hoc stress scenarios to assess vulnerabilities in our client portfolios to potential market risk scenarios, for example inflation, negative interest rates, global pandemics, etc. Scenarios are identified through monitoring of

news flow, engagement with industry forums, discussions with our investment teams and interactions with Firm-wide Risk, including the Scenario Stress Testing team within Enterprise Risk Management. Ad-hoc stress scenarios involve the calibration and application of asset shocks to our client portfolio holdings, the results of which are reviewed at the portfolio level as well as taking an aggregate view across the various business areas. The results are reviewed with embedded risk teams where relevant and the portfolio managers, where relevant.

- Regular reports to management on the development of the framework and the embedding of climate change risk assessment in business-as-usual processes.

How we respond to risks and align our investments

We work to identify additional and emerging risks across the industry and broader market. Once identified, we seek to ensure investments are aligned with the risks accordingly. We seek to monitor and control risk exposure through a risk and control framework encompassing a variety of separate, but complementary financial, credit, operational, compliance reporting systems, internal controls, management review processes and other mechanisms. Whilst we employ a broad and diversified set of risk monitoring and risk mitigation techniques, those techniques and the judgements that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. Thus, we may, in the course of our activities, incur losses.

As an example, investment teams may use a number of different styles to embed sustainability considerations, including climate risks, into asset selection for certain investment strategies or products, which may include:

- The use of ESG analysis to seek to inform how we evaluate companies and issuers and to make investment decisions based on these evaluations;
- The use of exclusionary screens on companies or sectors, via guideline management processes, that do not meet certain sustainability criteria. This can range from the removal of all companies in a particular industry to the removal of companies with more than a prescribed percentage of revenue derived from certain products or activities, or where Board compositions do not meet certain criteria;
- Tilting certain portfolios towards ESG factors and selecting companies that we believe screen better than industry competitors in the desired metric (for example, carbon intensity) and are therefore likely to be less exposed to sustainability risks. These factors can also be combined into an overall ESG score, utilising either external vendor or internal proprietary models, to aid portfolio construction and compare scores across factors and relative to the relevant benchmarks.
- Investing in companies, organizations or funds with the intention to generate a measurable, positive social or environmental impact along with financial return, with a view to also mitigating the impact of sustainability risks within the portfolio. For example, investing in green, social or sustainability bonds.

Where appropriate, use of these styles may be reviewed by Goldman Sachs Asset Management during both the asset selection and ongoing portfolio construction processes. This allows us to consider sustainability risks at the micro selection level as well as at the overall portfolio level. In addition to the absolute weighting of the overall sustainability risk profile of a portfolio, regard may also be given, where relevant, to the relative weighting of the sustainability risk profile of a portfolio to that of the stated benchmark to that portfolio.

You can read more about how we integrate ESG and stewardship in various investment teams in Principle 7.

Some examples of how we have sought to align our investments include:

FUNDAMENTAL EQUITY

The significant outperformance of the Energy sector in 2022 was both unforeseen and presented challenges to portfolio construction. In Emerging Markets, our Fundamental Equity investment team has historically maintained an underweight position in commodities. Given the strong challenges to both performance and tracking error, the Team sought ways to align our investments that could hopefully benefit from the 2022 commodities boom, while at the same time providing a climate friendly alternative as part of the energy transition. In this regard, within our Emerging Markets Equity and Emerging Markets Equity ESG Strategies, the Team initiated two new positions.

Firstly, in March 2022 a position was taken in a pure play Brazilian sugar and ethanol ("S&E") producer and amongst the lowest cost producers globally. Brazilian cars are mostly flexi-fuel, meaning that they can use both gasoline and ethanol interchangeably, providing a ready local market for the company's products, alongside a lower emissions intensity solution as part of the climate transition. Moreover, ethanol contributes significantly to Brazil's energy mix while utilizing a significantly smaller portion of the country's land for the purposes of growing sugarcane.

Secondly, in April 2022, the team similarly took a position in a Middle Eastern and North African nitrogen fertilizer producer. Although the company's products produce GHG emissions, they offer strong impact credentials in a challenging sector. The company particularly stood out given its position at the forefront of producing blue/green ammonia. Given that the United Arab Emirates and Egypt have abundant solar/wind energy, the company will soon start producing green ammonia that can help decarbonize the shipping industry via its critical importance to the transportation of hydrogen.

FIXED INCOME

The materiality of environmental factors relating to the climate transition is rising. We seek to understand both physical and transition risks:

- Transition risks are related to the changes in policy and the market in response to the climate transition. We recently enhanced our methodology to evaluate the transition risk of a country by taking into consideration Nationally Determined Contribution ("NDC") plans that outline medium-term climate policies. Our transition risk analysis also looks at a country's carbon emissions gap, namely the gap between current greenhouse gas emissions and an emissions reduction target.
- Physical effects of climate change can be event-driven such as extreme weather events like hurricanes or flooding, or longer-term shifts in weather variability like a rise in sea level. Our sovereign ESG framework seeks to incorporate the only known dataset matching physical climate risk exposure to the distribution of population, agricultural production and overall GDP creation within countries.

ALTERNATIVE INVESTMENTS AND MANAGER SELECTION

Our Alternative Investments and Manager Selection ("AIMS") team continued to monitor the unfolding effects of the pandemic on our funds and our people. As part of this effort, we maintained an active dialogue with the fund managers with whom AIMS invested on how management teams planned on supporting their portfolio companies. Furthermore, within our AIMS Imprint team (the ESG focused vertical within AIMS), we engaged with the managers with whom AIMS invests across our sustainability themes, including climate transition, to further understand potential risks and opportunities across managers and portfolios.

QUANTITATIVE INVESTMENT STRATEGIES

Our Quantitative Investment Strategies Equity Alpha team seeks to incorporate climate transition risk in the management of certain of its active equity portfolios. This feature reflects the investment team's belief that the potential transition to a low-carbon economy may have a material impact on companies' financial performance. While we believe the market has already begun to incorporate climate transition risk in stock prices, this price-adjustment process is not yet complete, and we believe downside risk to equity valuations remains. This strategic climate-aware tilt is designed to seek to deliver positive excess returns over the long term and thereby complement the team's short to medium-term alpha model.

Furthermore, our Equity Alpha team has extensive experience in managing risk related to emerging geopolitical concerns. When we see significant areas of idiosyncratic macroeconomic or geopolitical risk, the goal of our risk management philosophy is to reduce our portfolio's exposure to these risks. In 2022:

- As concerns over the potential for a Russian invasion began to heighten materially in January 2022, we identified a prudent course of action that would address both the investment risk posed by a war and the potential operational risk to the portfolio. In late January 2022, we decided to keep our exposure to Russian equities close to benchmark weight, such that any significant return moves (on either the positive or negative side), would not significantly impact the overall excess return of the portfolio. Additionally, we restricted the magnitude of the active weights that our portfolios would take on individual Russian stocks. The aim of this measure was to limit idiosyncratic risk at the company level that may be driven by events in Russia and Eastern Europe more broadly. We also shifted most of our exposure to Russian names from locally-listed shares in Russian markets to Russian stocks that were trading outside of Russia - as ADRs or GDRs. The intention of this step was to reduce the impact of potential financial sanctions, capital controls or other steps taken by Western governments that could limit our trading flexibility or materially impact liquidity in Russia-listed equities.

- Compared to 2021, the positions of central banks started to converge in 2022 and bringing down inflation became the top priority for most large economies globally. We continued to use our framework in the US and European regions to monitor our portfolios' exposure to inflation factors actively. In a manner consistent with how we manage other geopolitical and macroeconomic risks, we observed the active exposure of our portfolios to the respective beta factors relative to the benchmark and, when appropriate, contained the sensitivities of our portfolios to these types of macroeconomic risks.

Informing our Global Stewardship Team's engagement work:

We've long believed the transition to a more sustainable economy would be a decades-long effort; to advance that transition, more risk capital must be invested in developing new, clean technologies, especially for the highest-emitting sectors; and in solving such a complex problem lies enormous opportunity for the companies we are investing in on behalf of our clients. We believe that engagement on these opportunities can promote long term value creation for shareholders. Our Global Stewardship Team has partnered with our debt and equity investment teams to establish a framework for engagement on key risks and opportunities related to environmental matters. You can read more about this in Principle 9.

You can read more about how our various investment teams have integrated climate and stewardship in Principle 7, including information about our various ESG integrated and aligned investment strategies.

How we have worked with other stakeholders to promote continued improvement of the functioning of financial markets

We play a part in industry-wide initiatives that seek to promote continued improvement of the functioning of the financial markets, including improvements to disclosure frameworks, and international initiatives. Some examples include:

- United Nations Development Programme ("UNDP") – We joined the UNDP Sustainable Development Goal ("SDG") Financing Technical Committee to assist in the development of SDG impact standards, financial instruments, and innovative business models in 2019
- IFRS International Sustainability Standards Board ("ISSB") - We have been a member of the Sustainability Accounting Standards Board Investor Advisory Group since 2018 and continue to support their work as part of the ISSB. We currently hold two seats on the ISSB Investor Advisory Group ("IAG").

Goldman Sachs Asset Management professionals have at various times also served as advisors or board members to a diverse set of organizations in the ESG space, including groups such as the U.S. National Advisory Board ("NAB") of the G8 Social Impact Investing Task Force, the U.S. Alliance on Impact Investing, the Global Impact Investing Network's ("GIIN") ImpactBase initiative, the Global Social Venture Competition ("GSVC"), McKinsey's working group on Social Impact Bonds, Global Giving, the Sustainable Food Lab, the UN Capital Development Fund, the International Interfaith Investment Group, and a range of others.

We participate in a wide variety of market wide initiatives; you can read more about our industry leadership work in Principle 10.

Assessment

We believe that our processes and actions as described in this section have been effective in seeking to identify and respond to market-wide and systemic risks and promote well-functioning financial markets. We continue to keep these activities under review.

PRIVATE MARKETS

How we identify market-wide and systemic risks

Our investment risk management process and culture involve first-line ownership with our investment teams, who work together with second line to conduct due diligence before making an investment. Information collected during pre-investment diligence is used to consider and assess the risk profile of proposed investments and may identify relevant market-wide and systemic risk issues that could impact the investment. Where appropriate, we may enhance our due diligence process to ensure that Investment Committees are informed of relevant market-wide and systemic risk considerations as they deliberate on new investments. For example, in 2022, we updated the due diligence questionnaire to include additional climate-related questions.

The Private Markets Investing business may also engage third-party consultants to provide educational resources to our investment teams on certain market-wide and systemic risks. For example, in 2022, a number of investment teams received training on climate-related risk assessments and the global path to decarbonization. These involved sessions covering physical and transition risk impacts on portfolios, climate scenario analysis and decarbonization goals.

An example of how we have identified climate-risk in our Real Estate investments:

Leveraging the various departments and expertise of the Firm, the Real Estate team has integrated a formal physical climate risk assessment that is now required in the due diligence process for new investments. This process will inform resiliency adaptations that can protect and enhance asset value as physical climate risks become more severe. Since September 2021, before being presented to the Investment Committee, all investments are assessed for physical climate risk along with suggested measures for resilience and adaptation for the asset, where necessary. The assessment assigns risk scores for potential future climate impacts such as heat and water stress, extreme weather and sea level rise. To support identification of potential adaptation and mitigation strategies, the Real Estate team has developed an internal tool to translate risk scores and asset physical conditions into practical solutions. The team uses this tool alongside the risk assessment to make recommendations for various design, construction and retrofits that will prevent damage or mitigate risk.

Monitoring risks

The independent Private Markets Investing business' Risk team monitors appropriate risks across third-party capital exposures. Examples of risks that are monitored by the Private Markets Investing business' Risk team include:

- **Market Risk:** Market risk is the risk of financial loss in the value of our assets due to fluctuations in market conditions. The Risk team manages market risk by diversifying our portfolio exposures, controlling position sizes and establishing economic hedges. The Risk team uses a variety of risk measures to estimate the size of potential losses for both moderate and more extreme market moves over both short-term and long-term time horizons. This includes leveraging asset class-specific top sheets to assess the evolution of potential financial impacts of a range of standardized shocks of varying severity.
- **Credit Risk:** Credit risk represents the potential for loss due to the default or deterioration in the credit quality of our counterparties. The Risk team manages credit risk by conducting analysis of the capacity and willingness of a counterparty to meet its financial obligations, which informs the level of credit risk we are willing to take. The Risk team evaluates the use of credit risk mitigants to reduce exposure, including collateral and hedging. The Risk team measures credit risk based on the potential loss in the event of a non-payment by a counterparty.
- **Liquidity and Funding Risk:** Liquidity risk is the risk that we will be unable to fund the firm or meet our liquidity needs in the event of firm-specific, industry or market liquidity stress events. Liquidity Risk within funds is managed by Portfolio Managers with support from the Fund and Info Management Group and thresholds and limits are overseen by the Risk team as needed.

The Goldman Sachs Asset Management Private Risk Council ("RC") is responsible for providing ongoing monitoring and review of financial and non-financial risks associated with the Private Markets Investing business activities of Goldman Sachs Asset Management. The RC is co-chaired by the Asset Management Chief Risk Officer ("CRO") and President of the Alternatives business. RC membership includes senior Goldman Sachs Asset Management leaders representing the various investing businesses, geographies and functional areas of the division, and a representative from the Firm's Risk division. Some members of the Goldman Sachs Asset Management Risk Council are also members of the Firmwide Risk Committee. The RC generally meets monthly, although meetings may occur more or less frequently. Certain duties and responsibilities are to:

- Monitor financial and non-financial risks associated with the Private Markets Investing business of Goldman Sachs Asset Management
- Review overall risk exposure and establish governance standards
- Review currency exposure and hedges
- Establish, review, and monitor FX and non-FX hedging exposure and guidelines

Where appropriate, risks or potential risks to our Private Markets Investing business are escalated to the CRO based on the nature or type of risk. Any market-wide and systemic risks that are identified by the control areas that are escalated to the CRO as well as senior management, as appropriate.

An example of how the Private Markets Investing business has worked with other stakeholders to promote continued improvement of the functioning of financial markets

Across our Private Markets Investing business, we partner with other private markets stakeholders to establish and promote market best practices, and continued improvement. For example, we have signed onto the Institutional Limited Partners Association ESG Data Convergence Initiative, which convenes leading General Partners and Limited Partners in an effort to standardize ESG data collection, including climate-related data, in the private equity sector.

Principle 5: Signatories review their policies, assure their processes and assess the effectiveness of their activities

PUBLIC MARKETS

How we review our policies

Our Approach to Stewardship and our Global Proxy Voting policy are annually reviewed and updated as necessary to ensure they enable effective stewardship. This process is led by our Global Stewardship Team and involves seeking input and feedback from a range of investment professionals and teams across our business. The annual review of these policies ensures that our stewardship activities are aligned to our priorities and investment beliefs.

- We have a robust, global engagement effort that combines the expertise of our dedicated Global Stewardship Team with that of our fundamental investment teams. Please see Our Approach to Stewardship document on our website for information related to our approach to engagement. In this document, we present our stewardship framework, which describes our key stewardship objectives and explains how our voting and engagement efforts aim to help us meet them. The Global Stewardship Team updates this framework annually. You can read more about our 2022 Stewardship Framework in Principle 9.
- Our Global Proxy Voting Policy is annually approved by the various investment teams to ensure that our guidelines support effective stewardship. You can read more about our 2023 updates in Principle 12.

Compliance Testing

Our internal assurance process leverages the systems already in place at Goldman Sachs. Goldman Sachs has a dedicated Firm-wide Compliance Testing Group ("CTG") that reviews and tests the effectiveness of Goldman Sachs Asset Management's compliance program. CTG's testing plan consists of reviews selected based upon an assessment of compliance and reputational risks across Goldman Sachs Asset Management and considers prior testing of particular areas or subjects. At least annually, CTG will consult with or obtain information from Compliance and other firm staff to identify and prioritise areas for CTG testing. CTG also considers regulatory expectations and guidance, new business initiatives, as well as the results of Goldman Sachs Asset Management Compliance's risk assessments when developing its testing plan.

The last formal review covering the Global Stewardship team took place in 2020, when CTG completed a review examining Goldman Sachs Asset Management's policies, procedures and controls concerning proxy voting which included the following topics:

- Proxy voting decision-making, including the adjustment/override process;
- Due diligence and vendor management of service providers; and
- Supervisory oversight and governance

Seeking continuous improvement

Based on the results of CTG's review, as set out in the scope above, we modified our policies and procedures to enhance our oversight of proxy voting decisions in client portfolios that have requested their own custom voting policies.

PRIVATE MARKETS

Policy owners are responsible for maintaining and administering each policy document. In general, policies are reviewed once every three years, unless required by law, rule or regulation to be reviewed more frequently, or new business activity and change in rules and regulations require changes to be made outside of the normal policy review cycle. The policy owner should ensure that all appropriate parties, including any required committee or board, have been involved in and signed-off new policies.

As a Firm-wide group, CTG is also responsible for reviewing and testing the effectiveness of Goldman Sachs Asset Management's Private Markets Investing business.

Ensuring our report is fair balanced and understandable

In drafting this report, we have sought contributions from a range of investment teams across Goldman Sachs Asset Management and sought to present our activities fairly and in an understandable and clear format. We have sought to give balanced examples from across our investment teams and to represent the range of our stewardship activities with respect to the relevant investment strategies. In addition to the investment teams and members of senior management, the report has been reviewed where appropriate for certain content by representatives from Legal, Compliance and Risk. This drafting and review process seeks to ensure that the report is fair, balanced and understandable.

Principle 6: Signatories take account of client and beneficiary needs and communicate the activities and outcomes of their stewardship and investment to them

A Diverse Business – Total Assets Under Supervision: $2.35tn[3]

Assets under Supervision as of 31 December 2022

Assets Under Supervision ("AUS") includes assets under management and other client assets for which Goldman Sachs does not have full discretion.

AUS Split by Asset Class

Asset Class	$mm
Alternatives	259,098.9
Equity	481,031.1
Fixed Income	998,833.0
Money Markets	613,869.3
Grand Total	**2,352,832.3**

Source: Goldman Sachs Asset Management as of 31 December 2022 AUS includes assets under management and other client assets for which Goldman Sachs does not have full discretion.

AUS Split by Geography

Region	AUS $mm
Americas	1,655,086.9
EMEA	517,128.5
APAC	180,616.9
Total	**2,352,832.3**

Source: Goldman Sachs Asset Management as of 31 December 2022 AUS includes assets under management and other client assets for which Goldman Sachs does not have full discretion. Region indicates where the client is domiciled.

AUS Split by Client Type

Client Type	AUS $mm
Institutional	1,549,695.3
Retail	803,137.0
Total	**2,352,832.3**

Source: Goldman Sachs Asset Management as of 31 December 2022 AUS includes assets under management and other client assets for which Goldman Sachs does not have full discretion.

Our investment time horizon

Each portfolio management team employs different practices, and as such different portfolios may have different investment time horizons.

PUBLIC MARKETS

For example, investment time horizons differ across our Quantitative Investment Strategies team depending on the investment strategy, investment signal or tilt. For our equity alpha strategies, we aim to both deliver strong relative performance over a shorter time horizon and maintain a long-term outlook. We seek to deliver attractive excess returns above portfolios' stated benchmarks over a 6-12-month

[3] As of 31 December 2022. AUS includes assets under management and other client assets for which Goldman Sachs does not have full discretion.

period via our stock selection model. We also incorporate a climate transition framework, within these portfolios, seeking to potentially reduce exposure to climate transition risk in the long-term. For alternatives, we seek to deliver differentiated returns through strategies that employ quantitative and qualitative tools to meet investors needs for diversification. The portfolios investment time horizons are adapted to each strategy individually in order to achieve their investment objectives. For smart beta strategies, we aim to offer simple and transparent exposures to four common equity factors (value, momentum, quality and low volatility) as academic research has shown that such factors may offer higher risk-adjusted returns than market-capitalization weighted portfolios in the long run.

For the Quantitative Equity Solutions team, our tax-aware strategies are designed to provide core equity market exposure for clients over the long term. We aim to create portfolios with similar risk characteristics to the broad market.

In Fundamental Equity, we seek to achieve capital appreciation over 3-5 years, with strong relative performance, by investing in quality companies with the hallmarks of excellent businesses that are not fully reflected in the share price. Moreover, in our investment research, we seek to understand how a business might evolve over the next 3, 5 and 10 years from now and acknowledge the fact that some areas of ESG research may not be able to be captured by numbers alone.

In Fixed Income, each portfolio management team employs different practices and as such has different investment time horizons, including consideration within the context of a particular strategy, for example:

- **Buy and Maintain:** As the transition to a low carbon economy gathers pace, we anticipate that regulatory reforms will increase business risk for high impact sectors such as energy companies. We have long held concerns over stranded asset risk for our Buy and Maintain portfolios, especially for longer duration bonds. We tailor our portfolio construction to mitigate this risk, for example we may limit exposure to individual energy issuers and lower-rated IG names in this sector, and/or apply a cap on maturity for energy bonds.
- **Active:** Given the long-term risks to credit quality for energy producers, we generally run a structural underweight to the sector. However, we recognise that cyclical factors such as a rally in oil prices due to supply and demand constraints could influence valuations in the near-term.
- **For certain portfolios ESG analysis** is integrated within our investment process. From a top-down perspective, our portfolio managers can, for some portfolios, consider the value-add from the incorporation of ESG factors in portfolio construction and risk management. ESG is a significant component of our bottom-up fundamental research process where we have developed and may utilise proprietary ESG scores across sectors including corporate credit and sovereign debt. Our portfolio management process allows us to customize ESG investment solutions to our clients' investment preferences and guidelines.

PRIVATE MARKETS

Across our Private Markets Investing business our typical investment hold periods range from 1-8 years, varying from a number of factors such as the asset class and investment strategy, business planning practices and macro factors that may impact industry volatility. Within our equity investing businesses we seek to maximise exit value, combining a long-term approach that incorporates value creation, planning and positioning with a willingness to be flexible and take advantage of market "windows" or other opportunistic dynamics. Meanwhile, across credit strategies, we aim to work with each borrower to determine a mutually beneficial investment time horizon to ensure maximum value, with many borrowers returning to our team for debt refinancing, extensions, and add-ons.

Seeking our clients' views

At Goldman Sachs, one of our four core values is client service. We lead with a service mind-set, enabling us to anticipate and adapt to the needs of our clients and consumers by delivering thoughtful, innovative solutions. We strive to anticipate the rapidly changing needs of our clients and to develop new services to meet those needs. Our values and principles inform our approach in Goldman Sachs Asset Management to seek our clients' views, and we regularly meet with clients to hear their feedback.

Alongside our client coverage teams' ongoing dialogue with their respective clients, regular engagement with clients can take the form of formal portfolio review meetings (annual, semi-annual, quarterly and monthly depending upon client preference) alongside ad-hoc updates via calls, meetings or written materials. In the process of these interactions, clients can raise areas of internal importance for our consideration and/or potential implementation. We believe regular dialogue and continual feedback from clients helps us establish and maintain long-term relationships, as well as develop products to meet their needs.

PUBLIC MARKETS

Our Fixed Income Team is working with clients to help them understand the green bond market and the potential opportunities. The market has transformed from niche impact segment to a potential opportunity for a broad universe of fixed income investors in the last five years. We believe that green bonds will be an increasingly important tool for financing the investment need to advance the energy transition and build a sustainable economy. As the green bond universe grows and becomes more diversified, we see green bonds providing investors with an opportunity to make a positive environmental impact while generating similar potential returns as traditional bonds.

For Quantitative Investment Strategies, in August 2022, in line with evolving client ESG expectations, the Equity Alpha team introduced a set of ESG exclusions to certain products, which help us to reflect our clients' sustainability focus.

Our Global Stewardship Team regularly meets with clients to share developments on proxy voting and engagement practices and to understand client priorities. As a result of these discussions, we have taken a variety of actions. For example, in 2022 we continued to evolve our stewardship approach and as a result published "Our Approach to Stewardship", which describes our key stewardship objectives and explains how our voting and engagements efforts aim to help us meet them. We hope this messaging helps clients to better understand our approach. We have also expanded our engagement efforts around biodiversity, an area of interest to clients which we believe may where applicable relate to material shareholder value creation risks and opportunities and have continued to evolve our approach to engaging with companies around potential Global Norms violations, please refer to Principle 9 for further information.

PRIVATE MARKETS

Across our Private Markets Investing business, we listen carefully to our investors, among whom are some of the largest, most sophisticated, and successful institutional investors globally. The Client Solutions Group ("CSG") is the primary group for partnering with our clients to develop solutions that enable them to meet their investing goals. CSG is the key point of contact for our clients and engages regularly to understand clients' financial and sustainability objectives, to ensure our suite of products are designed with clients' priorities at the forefront, while also sharing market insights and best practices.

CSG engages with our clients in a number of different ways through a combination of live meetings, ad hoc email exchanges and written reports. Where clients express a need or interest in receiving updates on topics which are not addressed within our standard reporting, we work to accommodate such requests where possible. For example, in 2022 following a number of client requests for TCFD-aligned data, we sought to obtain and share additional data on investment GHG emissions in order to facilitate our clients' own reporting requirements, including both investment-specific and fund-level metrics related to GHG emissions.

CSG also partners closely with each investment team and the Sustainability and Impact team to feed client views into the development of both our investing strategies and processes, working to ensure that we can provide transparency back to clients on how we are working towards expectations and goals.

Managing assets in alignment with clients' stewardship and investment policies

PUBLIC MARKETS

The Global Stewardship Team's stewardship framework (see Principle 9) takes account of feedback provided by clients on engagement topics. Where clients provide us with their own list of engagement priorities or stewardship policies, these are discussed with the client and, as appropriate, reflected in our stewardship efforts. For example, our Global Stewardship Team and Fundamental Equity investment team are working with a client's internal team on an engagement strategy for a subset of holdings in their portfolio. For these holdings, the client has identified specific material ESG issues for which we have sought to do additional research and then engage with the companies in 2022.

Our investment teams have also taken action based on client conversations. Some examples include:

In Fundamental Equity, clients' stewardship and investment policies continue to advance, notably in relation to credible and measurable outcomes. We have been in dialogue with clients that are identifying companies with low third party ESG scores based upon their own internal assessment. As such, we are now working with clients on specific engagement plans and seeking to address material issues that have been identified at the clients' request. In 2022, specific topics of engagement with companies were executed to ensure alignment with a Dutch Pension Fund client's investment policies. The material issues included: disclosure of supplier standards and their management, money laundering policies, improvements in standards and disclosures on Human Rights, whistleblower programs alongside bribery and corruption policies. As part of this work, in order to manage these assets in alignment with our client requirements, we are able to produce dedicated engagement tracking covering engagement issues, topics of discussion, outcomes thus far, alongside next steps. In tandem with such client requests, we are also seeking to enhance our internal research system 'Fluent,' to incorporate further detail, tracking and transparency around specific ESG topics covered alongside engagement outcomes tracked.

Our Quantitative Equity Solutions team works with clients to develop customized solutions across various dimensions: investment universe, risk/return considerations, factor exposures, ESG considerations, and tax goals among other areas. We may collaborate with our investors to create tailored portfolios using thematic, sector, industry and single names screens. For example, in 2022, we collaborated with an Australian airline client to develop a climate-aware strategy for both their global and Australian equity portfolio. The climate-aware strategy aims to reduce an equity portfolio's climate transition risk by a targeted amount relative to its benchmark. We have also collaborated with other global institutional clients to develop other beta equity climate-aware approaches to meet their financial and climate objectives. We also work with high-net worth-individual clients to create broad-market equity portfolios with customized divestment programs to incorporate their value-alignment goals around environmental, social or religious considerations via third party data.

In Fixed Income, we partner with our clients to design bespoke portfolios that deliver on their unique objectives and constraints, including the integration of ESG characteristics alongside traditional bond features such a duration, volatility, sector, and fundamental risk. In 2022 we had discussions with certain large clients to understand their net zero goals.

PRIVATE MARKETS

While CSG takes a leading role in seeking clients' views, across our Private Markets Investing business, investment teams are focused on managing assets in accordance with clients' expectations to generate transformative impact and returns. Our investment framework is designed to capitalize on bespoke opportunities, enabling us to seek to deliver on commercial and sustainability objectives while leveraging our scale to help influence and drive growth.

Where clients have specific objectives, CSG works with them to better understand their needs and reflect the key principles in our own investing process as appropriate, in some cases making uplifts to our framework in response. For example, we have seen an increasing client focus on transparency regarding sustainability-related data. Clients are increasingly demanding quantitative data and metrics to inform investment decisions. In response, the Sustainability and Impact team updated our ESG Data Collection template to capture additional sustainability metrics from a number of portfolio companies across Infrastructure, the Sustainable Investing Group, and Corporate Private Equity. The ESG Data Collection template also includes questions on targets and reduction initiatives for GHG emissions, diversity in the workforce, and employee engagement, among others. The template is designed to provide select portfolio companies with a robust framework for sustainability tracking and reporting.

In addition, where appropriate, we may implement client-specific stewardship requirements (through side letters or negotiation of the fund documentation) such as investment exclusions (e.g., weapons manufacturing, deep sea drilling or underground mining) or client-specific reporting to ensure that clients' needs are addressed throughout the life of their investment. We will always aim to accommodate our clients' requests, however there may be instances where we are unable to manage assets in alignment with our clients' specific stewardship requests. For example, when we are dependent on external processes which we have no control over; in such circumstances we will seek to work with our clients to find the most suitable solution.

Communicating with our clients

PUBLIC MARKETS

In addition to the client communications described earlier, we communicate our stewardship activities to our clients in a number of ways. Our Stewardship Report outlines the efforts of the Global Stewardship Team, which focuses on proxy voting and engagement initiatives. The report is released annually on our website. We disclose our voting publicly each year in a filing with the US Securities and Exchange Commission and on our website for all our US registered mutual funds. We also generally disclose our voting publicly on a quarterly basis on our website for company proxies voted according to our guidelines and recommendations (see Principle 12).

Additionally, we are able to provide clients with portfolio-specific proxy voting and engagement reporting on a quarterly, semi-annual or annual basis upon request. We have the ability to automate and customize these reports and welcome the opportunity to discuss the content and frequency of these reports with our clients' subject to their needs.

PRIVATE MARKETS

Our clients receive regular updates on fund activity and performance through quarterly and annual reports specific to the funds they are invested in, and one-on-one update meetings, as appropriate. The Private Markets Investing business is also often asked to complete client due diligence questionnaires and periodic questionnaires regarding our overall approach to sustainability and stewardship. To support this, the Sustainability and Impact team have created consistent content that is used to inform clients and prospective clients about our ESG efforts.

For certain investment strategies, we also provide ESG specific reporting to our investors. For example, for our environmental and climate strategy, we publish an annual impact report for investors which includes impact key performance indicators ("KPIs") for each portfolio company.

Responding to client feedback on reporting

PUBLIC MARKETS

The Stewardship Report and related reporting on our stewardship activities include enhancements each year that we believe are in-line with client preferences as well as updates to various stewardship codes and regulations, which our Global Stewardship Team monitors on an ongoing basis.

Some examples from 2022 include:

- We published both a Stewardship Report and a Bondholder Engagement report for 2021 and intend to continue to evolve this with a combined report for 2022.
- We developed client specific engagement reporting functionality and intend to roll this out in 2023.
- We added summary documents to help clients understand "Our Approach to Stewardship" and "Our Approach to Proxy Voting" which are available on our website.

In 2022, our Fundamental Equity Team worked to provide further detailed and customized engagement reporting for their Separately Managed Account ("SMA") clients. In-line with our clients' required templates, this has focused upon providing detailed engagement metrics and spotlighting notable engagements that are linked to our Stewardship Framework. The Fundamental Equity Team worked with one particular client to establish a suitable cadence of reporting to adequately capture meaningful engagements, with the expanded reports incorporating specific details regarding the client's portfolio.

Our Quantitative Investment Strategies team offers climate-related reporting for the Equity Alpha portfolios. We have also seen increased client demand for a number of ESG metrics which we provide to our clients on an as-requested basis. We seek to evolve and expand our ESG capabilities to further embed ESG evaluation into our reporting.

Our Quantitative Equity Solutions team can provide reporting for select clients.

In 2022, we provided certain Fixed Income clients with additional transparency on portfolio level engagement as well as additional reporting on proprietary ESG ratings. Within Fixed Income, we seek to constantly evolve and expand our ESG reporting.

PRIVATE MARKETS

While the Private Markets Investing business has not yet been included within Goldman Sachs Asset Management's UK Stewardship Code submission to the UK Financial Reporting Council, we have responded to feedback and recognized the importance of providing a holistic UK Stewardship Code submission which now covers both public markets and private markets stewardship activities. More broadly, our Private Markets Investing business has ramped up its efforts to provide investors with transparent sustainability reporting this year, with inaugural fund-specific sustainability-related reporting due to be released across a number of our products in 2023.

Principle 7: Signatories systematically integrate stewardship and investment, including material environmental, social and governance issues, and climate change, to fulfil their responsibilities

How we integrate stewardship and investment

We believe material ESG factors may be important tools for identifying investment risk and capturing opportunity. Our investment teams may analyze material ESG information in a manner consistent with their investment style and specific strategy guidelines. ESG factors may be utilized to set exclusions, drive tilts, or seek to select securities. In addition, for our clients who focus their investments toward greater sustainability, we are committed to helping our clients deploy their capital in a manner that we believe is impactful and financially sound.

We devote considerable resources to sustainability capabilities and have certain investment professionals who spend the majority of their time on sustainability related research, portfolio management, stewardship, data, analytical tools, and risk management. These professionals are generally embedded within our investment and advisory teams. We have also made a substantial investment in a proprietary set of platforms to equip our portfolio managers with access to ESG information and portfolio construction techniques (see Principle 2).

Among our investment offerings, there is a range of practice in terms of how ESG factors may be integrated. In certain strategies we may not integrate ESG factors. Where applicable, our ESG integration may take a range of approaches, which may include analysis, screening and portfolio construction considerations.

Key issues we prioritized in 2022

The issues prioritized vary by investment strategy, you can read more below about how these issues have been identified and assessed by each investment team. In addition, you can read about our Global Stewardship Team's Stewardship Framework, which sets out our key stewardship objectives and explains how our voting and engagement efforts help us meet them in Principle 9.

Differences across investment teams

We are committed to strong stewardship across all of our investing activities. There are some differences in how we achieve this across investment teams. The following sections outline both how our investment teams may integrate stewardship and material ESG factors as part of our traditional investment approaches, as well as how our investment teams manage dedicated ESG strategies:

PUBLIC MARKETS

Fundamental Equity

ESG AND STEWARDSHIP INTEGRATION

Driven by our long-term investment horizon and focus on management quality, we believe integrating material ESG factors, where relevant, across certain of our portfolios may improve risk-adjusted returns by reducing sustainability risks and/or uncovering compelling potential investment opportunities. Proxy voting and company engagement are an important part of our holistic focus on active ownership integration within the investment process.

When integrating ESG considerations into our stock level due diligence, we may rely on an analyst's knowledge and analysis, and engagement efforts with company management. In addition, we have created proprietary tools that provide access to key ESG related information that analysts may deem relevant to the analysis of a company. This may include:

- Governance and compensation factors, including but not limited to those associated with board quality (e.g., board independence and board term) and minority shareholder rights (e.g., controlling shareholder and/or unequal voting rights).
- Environmental factors, including but not limited to water usage, waste generation, energy intensity, CO_2 emissions footprint and CO_2 intensity.
- Social factors, including but not limited to gender diversity of the company's workforce and UN Global Compact compliance.

This additional information might help inform, challenge or validate the assumptions that an analyst has used in their valuation models. The dashboard is currently housed in Fluent, our centralized investment research platform, alongside ESG news, and engagement and proxy voting records. In Fluent, research can be stored and retrieved in a variety of ways, including by ticker symbol, analyst name, investment theme, source, sector or country, making it possible for our team members to share and retrieve information on a company, sector or topic and further enhancing the communication lines within our teams.

Our investment professionals draw further insights from thousands of company management meetings each year. These meetings provide a forum to evaluate a company's commitment to shareholders and consider how it compares against its industry and regional peers and opens up the opportunity to unlock shareholder value[4].

ESG ENHANCED OFFERINGS

While ESG integration may be part of our investment approach across many of our strategies, we also manage ESG Enhanced portfolio solutions which is designed to offer a more focused approach to sustainable investing.

Across our ESG Enhanced portfolio solutions, we seek to incorporate the analysis of key ESG characteristics into our company assessment and that analysis may flow through our portfolio construction discussions (i.e., sizing decisions and risk management framework at the stock and portfolio level). Investment decisions for our ESG Enhanced portfolios are further informed by our proprietary ESG views. These views provide a framework for conducting a baseline assessment of a company's key ESG characteristics relative to peers. However, this is merely the starting point for a more holistic assessment of a company. Analysts are encouraged to address data gaps, challenge third party inputs and use their company knowledge derived from direct engagements to enhance their fundamental analysis. Our analysts' views can have implications on a stock's inclusion in the final portfolio.

As a direct outcome of our focus on sound ESG practice and sustainability of returns, we would generally expect all our ESG Enhanced portfolios to naturally gravitate away from unsustainable areas of the market. To give clients additional insights that certain industries and activities will not be part of the investment universe for our ESG Enhanced solutions, we have implemented an exclusionary framework generally covering the following: alcohol, tobacco, adult entertainment, gambling, for-profit prisons, palm oil production and trading, arctic oil and gas, oil sands, thermal coal mining and power generation, civilian firearms, weapons, oil and gas exploration and production, nuclear and controversial weapons[5].

There are currently six strategies that are managed in-line with the above outlined approach:

- US Equity ESG
- Global Equity Partners ESG
- Europe Equity Partners ESG
- Japan Equity Partners ESG
- International Equity ESG
- Emerging Markets Equity ESG

During 2022, within certain ESG Enhanced portfolios, our Global Stewardship Team has increased concerted efforts to further engagement with the holdings around areas linked to the Global Stewardship Framework. In particular, the process generally looks like:

- Global Stewardship Team meets with the Fundamental Equity analysts to discuss holdings and identify material topics and engagement objectives for companies

[4] Engagements with management teams may include discussions on ESG matters along with other topics, whereas in other cases we may conduct meetings focused specifically on ESG topics.

[5] Exclusions are determined based on revenue thresholds which may vary from any involvement to 5% depending on the respective area. ESG scorecards are only one among many available tools that Fundamental Equity's analysts may leverage to conduct a proprietary ESG assessment where relevant. There is no guarantee that these objectives will be met. For ESG Integrated and Impact Strategies, ESG scorecards might not be completed for all holdings of the portfolio. For ESG Enhanced Strategies, research analysts aim to complete ESG scorecards for all portfolio holdings. Goldman Sachs Asset Management in its sole discretion and without notice may periodically update or change the process for conducting its ESG assessment and implementation of its ESG views in portfolios, including the format and content of such analysis and the tools and/or data used to perform such analysis. Accordingly, the type of assessment described here may not be performed for every portfolio holding. No one factor or consideration is determinative in the fundamental research and asset selection process. Goldman Sachs Asset Management may invest in a security prior to completion of the ESG scorecard. Instances in which ESG scorecards may not be completed for a specific security prior to investment include but are not limited to IPOs, in-kind transfers, corporate actions, and/or certain short- term holdings.

- The Global Stewardship Team engages, often alongside the Fundamental Equity analysts, and seeks to monitor for progress and potential outcomes

Driven by our clients' desire to increasingly integrate sustainability aspects into their asset allocation and leveraging our growing experience in offering leading solutions, we are continuously working on broadening our platform.

Fixed Income

ESG AND STEWARDSHIP INTEGRATION

For certain portfolios, ESG analysis may be integrated within our investment process. From a top-down perspective, our portfolio managers may consider the value-add from the incorporation of ESG factors in portfolio construction and risk management. ESG may be a significant component of our bottom-up fundamental research process where we have developed and may utilise proprietary ESG scores across sectors including corporate credit and sovereign debt. Our portfolio management process allows us to customize ESG investment solutions to our clients' investment preferences and guidelines.

Our ESG investing philosophy is founded on the belief that ESG factors can affect the risk profile and performance of fixed income investments. We seek to understand how ESG related factors are reflected in valuations, and actively engage with policymakers and corporate management teams on topics that impact credit risk, including ESG related factors.

Where appropriate and material, ESG integration may be a key consideration and input into investment decision making. There is a focus on ESG materiality, across E, S and G pillars. The majority of Fixed Income's ESG assessments is conducted in-house. Our Fixed Income research analysts apply internal ESG ratings across the majority of our corporate credit and sovereign coverage. These ESG ratings are applied by and the responsibility of the analysts and economists.

Our ESG ratings provide differentiated insights that enhance our assessment of credit risk in several ways:

- We focus on material ESG factors. We have identified and assessed material ESG issues for corporate credit that are performance indicators for key themes like climate change and human capital, to develop a credit materiality matrix, which maps specific sustainability themes across industries. Industry weights are determined for each of the E, S, and G pillars. For sovereigns we believe that governance indicators, such as the quality of institutions and policymakers, send the most important signal on sovereign credit risk. Social factors can signal the level of social cohesion and are highly correlated to Governance. The impact of environmental factors is expected to increase over time, particularly in relation to climate change.
- Our ratings can uncover market inefficiencies. As a global fixed income manager, we invest in all corners of the world, including high yield ("HY") and emerging market ("EM") companies for which exposure to ESG risk may be greater but visibility can be lower. This is because larger, developed market ("DM") companies—that are often investment grade rated—tend to exhibit greater transparency on ESG issues. By contrast, while disclosure among HY and EM companies is rising, it may not be as well-articulated or robust. Through fundamental research and engagement with bond issuers we can exploit these market inefficiencies.
- Bondholder engagement activities serve a number of important roles in ESG integration. Given the recurring nature of debt issuance, we seek to communicate regularly with management teams and this ongoing dialogue provides us with an opportunity to encourage issuers to strengthen their ESG performance on factors that may present as credit risks. We also seek to influence positive outcomes through these engagements. As a component of our ESG integration, engagements focused on material ESG issues may help to strengthen the investment team's convictions. Engagements are generally tracked, recorded and made available to investment professionals. For additional information see also the section on Stewardship.

In our approach to investing in Securitized Credit and US Municipal Bonds, consideration of ESG factors may also be integrated into our research and investment approach where relevant and material. In both of these asset classes, we have identified what we believe to be robust third party ESG scores that can be utilised for analysis. For Agency MBS, we utilise a 'Social Score' which helps us score pools based on the underlying demographics and census metrics of the unpaid loan balance of the given pools. For Municipal bonds we utilise physical risk and social impact scores to evaluate 'E' and 'S' attributes, covering the majority of the municipal universe encompassing over 50,000 issuers.

Our dedicated Green, Social and Impact Bond team is part of the Fixed Income Credit team. ESG factors may be considered in the GSS selection process. We seek to apply eligibility criteria in order to mitigate the risk of exposure to issuers and bonds that may present high levels of ESG risk.

OUR ESG PRODUCTS

In addition to the above mentioned fundamental ESG Integration process that may be utilized, we also offer a range of ESG solutions focused on Climate Transition and Inclusive Growth as well as bespoke solutions that are tailored to the globally diverse nature of our clients' needs. These solutions span:

- Investment Grade Corporate Fixed Income
- High Yield Corporate Fixed Income
- Emerging Market Corporate Fixed Income
- Sovereign Debt
- Core and Core Plus Fixed Income (US and Global Aggregate)
- Securitized
- Municipals (Taxable and Tax Exempt)
- Liquidity Solutions
- Multi-sector Green, Social, and Impact Strategies

Quantitative Investment Strategies

The Quantitative Investment Strategies team uses data driven techniques to systematically seek to uncover sources of alpha, replicate hedge fund strategies/risk premia and implement smart beta strategies that seek to incorporate client goals around ESG. We believe ESG considerations can play an important role in identifying attractive investments.

EQUITY ALPHA – ESG INTEGRATED

The Equity Alpha team within QIS uses data-driven investment models that aim to objectively evaluate public companies globally through fundamentally-based and economically-motivated investment themes. Our proprietary risk model seeks to ensure that risk is actively managed and allocated according to our investment criteria.

For certain portfolios ESG considerations are expressed through four primary and complementary mechanisms:

1) A climate transition framework across QIS portfolios in an effort to seek to reduce exposure to climate transition risk relative to their benchmarks
2) Short to medium-term alpha drivers in our Alpha Model
3) Engagement with the Global Stewardship Team to identify and exclude companies in violation of AMD Global Norms
4) Product and revenue based ESG Exclusions for select Equity Alpha portfolios

The QIS team has incorporated a Climate Transition Framework since December 2020 across its actively managed Equity Alpha portfolios in an effort to reduce exposure to climate transition risk.

The medium-term alpha drivers may include considerations around a company's reputational risk, employee reviews, environmental damage. Strong governance is also a key component in identifying attractive companies from an alpha perspective.

The QIS team has also introduced a set of ESG exclusions in certain portfolios, these may include:

- Operational-based exclusions and Product-based exclusions

- Operational: Exclude companies in violation of AMD Global Norms
- Exclude companies involved with controversial weapons, tobacco, thermal coal extraction, tar/oil sands.

Additionally, for separately managed accounts within Equity Alpha, along with climate transition framework and AMD Global Norms, the QIS team can partner with clients to customize the investible universe to align with their values and targets. The team also offers to manage portfolios for separately managed accounts against customized ESG benchmarks (or ESG benchmarks from third party providers if they allow for sufficient breadth) as per client ESG requirements.

SMART BETA - ESG INTEGRATED

- QIS Paris-Aligned Benchmark: For clients seeking to align their portfolio more clearly with the goals of the Paris Agreement or for those interested in lower carbon portfolios, the QIS team provides these product offerings through Smart Beta (Active Beta) strategies.
- QIS Custom: The QIS team offers customized global and regional Active Beta strategies managed with a range of thematic, sector, industry and individual company ESG screens and/or climate approaches.

Quantitative Equity Solutions

Our Quantitative Equity Solutions (QES) business employs quantitative methods to design and build investment solutions for customized investment objectives. QES manages personalized SMAs and solutions-based funds including Exchange-Traded Funds (“ETFs”) and mutual funds. We offer two avenues to achieve values alignment: values aligned market exposure and thematic screens.

VALUES ALIGNED MARKET EXPOSURE:

We collaborated with S&P Dow Jones Indices to create and launch the S&P Environmental & Socially Responsible indices, designed to offer investors enhanced exposure to securities meeting sustainability investing criteria while maintaining a risk and performance profile similar to the broad market. The indices exclude companies deriving revenue from weapons, tobacco and select parts of the fossil fuels supply chain and are re-weighted according to Environmental and Social scores within sectors. Investors can select these market exposures for their SMAs.

We also manage an ETF that seeks to track an index created by JUST Capital, a non-profit that uses a survey-based approach to track the business behaviours of companies, including how they treat their workers and how they impact the environment.

In 2022, we launched an ETF that seeks to track a Paris-aligned Index.

THEMATIC SCREENS:

We also offer the ability for investors to apply personalized themes and screens on SMAs. The portfolios are designed to deliver broad market exposure while meeting individual needs and objectives. We offer a variety of themes that can achieve alignment across environmental, social, and religious values.

We welcome the opportunity to work with clients to design and implement customized strategies to meet their objectives. Our ESG framework is continually evolving to reflect the latest client considerations regarding ESG risks, to capture new and differentiated data, and to refine the investment process underlying the team’s ESG strategies.

Alternative Investments and Manager Selection

ESG AND STEWARDSHIP INTEGRATION

For certain portfolios our Alternative Investments and Manager Selection (“AIMS”) team generally seeks to evaluate the approach to ESG integration for the managers in which it invests where applicable to the strategy and/or product. Leveraging our specialist ESG investment knowledge and proprietary framework, for certain portfolios we are in the process of integrating ESG assessment into our investment processes across asset classes, seeking to create an ESG process that leverages our experience across public and private markets. The framework may consider asset class-specific nuances but aims to focus on the following factors:

- Firm Ethos: The extent to which the firm is committed to ESG and incorporates sustainable practices into the management of its business.
- Investment Philosophy: The degree to which ESG is viewed as a material driver of risk and returns.
- Investment Process: The degree to which ESG-related factors are formally incorporated into the investment process with the objective of enhancing risk-adjusted returns.
- Team and Resources: The depth, breadth, and organization of the team incorporating ESG; the level and use of other / external resources.
- Engagement: The level and type of engagement with portfolio companies on ESG; ability to add value post investment and degree to which this is reflected in outcomes.

TARGETED ESG AND IMPACT INVESTING SOLUTIONS

As part of Alternative Investments and Manager Selection, our Imprint team is committed to working with clients to develop and manage custom ESG and impact investment programs and portfolios across impact themes and asset classes, focusing on investments made with the intention to potentially generate social and environmental impact alongside a financial return. Selectively, Imprint works with external managers to design and/or seed new dedicated ESG and impact investing strategies to address market gaps.

For impact investment managers, we also seek to evaluate impact factors alongside the ESG factors, mentioned above. Impact factors aim to assess the manager on its ability to have direct social and/or environmental impacts, alongside potential financial return. The team has worked with clients to create a range of customized ESG and impact investing solutions, drawing particularly on our deep experience and resources devoted to private market impact investing.

Working with the Global Stewardship Team

Our Global Stewardship Team works closely with our investment teams to continue to foster cross-team collaboration on key material stewardship issues. For example, starting in 2020, our Global Stewardship Team and members of our equity and fixed income investment teams formed the Goldman Sachs Asset Management Engagement Working Group. The group continued to meet throughout 2022 to develop and execute a framework for identifying companies for meaningful engagement based on our commitment to the climate transition.

Please refer to Principle 9 for more information on this initiative, as well as other objectives and outcomes with respect to engagement.

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Across the Private Markets Investing business and its differing investment strategies, depending on the ESG commitments of any given fund, investing teams may use techniques such as exclusions, ESG scoring, and thematic strategies, as well as active engagement and monitoring of assets, to integrate ESG throughout the investment process. Below we provide examples of the different ways in which our investment teams may integrate stewardship and ESG across a range of investment strategies. For the purposes of this report, we focus on strategies which are actively investing, fundraising, or being launched.

Corporate Private Equity and Growth Equity

For certain ESG integrated strategies managed by the Corporate Private Equity team and Growth Equity team, information collected during pre-investment diligence may be used to consider and assess the sustainability risk profile (among other relevant considerations) of the proposed investment. As part of the investment process for certain strategies, each Investment Committee memorandum generally includes an ESG due diligence template for the potential investment to be used for Investment Committee review. The template includes broad questions concerning the prospective portfolio company’s ESG policies and procedures, as well as specific questions regarding environmental, social and governance individually.

Sustainable Investing Group

The Sustainable Investing Group believes that the ability to drive positive impact is directly correlated to business success, and that positive financial, environmental and social impacts are interdependent. For that reason, the team seeks to invest only in businesses that offer market-based solutions to sustainability and inclusivity challenges, making investments which are underpinned by the firmwide strategic priorities – advancing climate transition and driving inclusive growth.

For certain Impact strategies, a defined "impact thesis" supports each investment, demonstrating the impact of each investment and its alignment with both the relevant sustainability themes and how it contributes to at least one of the UN Sustainable Development Goals. This is evidenced through the development and tracking of impact KPIs which are collected for each investment to quantify portfolio companies' impact. The Sustainable Investing Group Investment Committee review proposed investments, with memoranda including various sustainability-focussed templates to ensure relevant considerations are taken into account within investment decisions. Once the Sustainable Investing Group makes the investment, the investment team works with portfolio companies to integrate a broader ESG lens to seek to improve their operational efficiency, reduce their overall environmental impact, improve their social contribution, and implement proper governance mechanisms and reporting practices. For example, the Sustainable Investing Group's environment and climate solutions strategy aims to invest in climate and environment-related opportunities that drive creative solutions and enable a sustainable future.

Private Credit

For certain ESG focused strategies, the Private Credit team actively integrates environmental and social diligence when assessing potential investment opportunities through the use of standardised ESG due diligence questionnaires, applied consistently for each investment. For certain funds, information gathered through the ESG due diligence questionnaire is used alongside publicly sourced data to complete an ESG Profile, a proprietary tool used to score portfolio company ESG performance. In some cases, the investment team will hold discussions covering ESG topics with sponsors and/or management teams, and/or seek advice from expert advisers for particularly nuanced industry and company-specific considerations, to ensure that material ESG risks and opportunities are taken into account.

Where applicable, the ESG due diligence findings and output of the ESG Profile are included within the Private Credit Investment Committee memoranda, to enable senior business stakeholders to review and consider the ESG performance as part of the investment decision. Additionally, the investment team has begun to seek ways to influence ESG through credit documentation as part of the commitment process – this includes the introduction of "ESG margin ratchets" that reduce and/or increase the interest margin that is owed depending on achievement and reporting of certain ESG-related KPIs.

Infrastructure

For new investments, the Infrastructure team embraces the responsibility of integrating ESG factors into its investment and asset management processes, typically focusing on topics such as:

i. environmental – measurement and reduction of GHG emissions (Scopes 1, 2 and 3) and non-renewable energy consumption (as a percentage of total energy consumption); as well as "material" water, waste, biodiversity, and supply chain KPIs; Furthermore, the team is pursuing commercially reasonable efforts to cause each controlled portfolio company to adopt a decarbonization plan which is aligned with a 1.5 degrees pathway.

ii. social – improving the availability of education and training for employees, reducing the number of fatalities and injuries of individuals, and increasing the representation of women and minority groups in management.

iii. governance factors - enhancing policies and procedures relating to environment, health and safety, outsourcing, improving internal escalation processes and the governance practices of third parties engaged by the operators of the investments or their operating companies.

The investment team generally carries out a post-closing review of each investment, followed by a post-closing action plan setting out a multiyear program to improve and monitor the performance of each investment. Where improvements may be required, through the post-closing action plan, the investment team may look to implement a combination of incremental improvements, strategic changes and sustainability growth initiatives (depending on the nature as well as existing and potential ESG capabilities).

Real Estate

The Real Estate team's globally consistent ESG Framework is designed to integrate ESG considerations throughout the investment lifecycle and across regions, product types and asset classes. The team's approach aims to evaluate each investment's ESG potential, with the goals of enhancing risk management, generating positive, non-beta oriented returns and improving environmental and social outcomes in the communities in which they invest. The ESG Framework is anchored by nine ESG dimensions that can have a material impact on real estate valuations, including but not limited to, energy efficiency, water efficiency, Diversity, Equity and Inclusion ("DEI"), community engagement, governance and certification.

As part of due diligence for every asset, investment teams undertake a comprehensive ESG survey and review the asset's ESG goals and associated costs and revenue. The ESG Framework allows for ESG initiatives identified during due diligence to be tracked throughout our ownership. Alongside regular engagement, in 2022, the team established a process to distribute ESG surveys to all assets at least bi-annually (equity positions) or annually (tax credit equity or credit positions) to track progress against any commitments made, with the first round of reporting beginning in 2023. Tracking of initiatives and progress with a regular cadence will enable the team to evaluate and identify key sustainability risks and opportunities, monitor performance and progress against objectives and benchmarks, and provide sustainability reporting aligned with industry standards.

How information gathered through stewardship has informed acquisition, monitoring and exit decisions

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Our Global Stewardship Team and our investment teams work collaboratively to drive better outcomes for our clients, including sourcing enhanced material ESG data, sharing thematic insights, identifying more useful metrics to assess performance on material ESG factors, and developing sophisticated proprietary systems and tools that may enhance our ability to integrate material ESG factors and stewardship insights into the investment process.

Our Global Stewardship Team aims to regularly present to our investment teams on recent research and trending topics, as industry best practices continue to evolve. The team also shares a bi-weekly email update to share relevant news, trending topics, research and potential outcomes from stewardship activities.

We maintain a record of our voting, engagement, and other stewardship activities using our internal tech platform, Fluent (please refer to Principle 2) which all direct investing investment teams have access to. Fluent allows users to track ESG views, company engagements and potential proxy voting outcomes overtime.

In cases where repeated engagement does not lead to improvement, we may leverage the full toolkit available to an active manager, including proxy voting, other forms of active engagement (e.g., letter writing), and active buying/selling to substantiate our viewpoint. At this time, the escalation process is case-by-case.

Some examples of actions taken in 2022 as a result of our stewardship activities that we believe drive better outcomes for our clients include:

Global norms monitoring and assessment process
• In 2022, we further developed our proprietary framework for evaluating violations of the United Nations Global Compact, expanding the process to consider a wider variety of global norms. You can read more about this process in Principle 9. • Select strategies within the equity businesses, specifically QIS's Equity Alpha strategies and certain strategies within the Fundamental Equity platform, sought to exclude companies that were determined to have violated global norms according to our UN Global Compact's ("UNGC") framework. • In addition, the tiering assigned to each company in the monitoring and assessment framework is used in certain strategies to test for good governance as part of our Sustainable Finance Disclosure Regulation ("SFDR") frameworks.

Choosing not to Invest (Fixed Income)
• In 2022, the Green, Social and Impact Bond Team met with a European based chemicals company to discuss the credentials of their green bond new issuance. There were a number of potential use of proceeds for the bond sale: green ammonia, premium fertilizer production assets and carbon capture and storage ("CCS"). • The team welcomed the company level initiative reduce GHG emissions. The CO_2 emissions from the production of ammonia and the N2O emissions from the production of nitric acid are the main GHG emissions from fertilizer production. The issuer uses nitrous oxide abatement catalysts to reduce around 90% of N2O emissions from its plants. The issuer also started its pilot project on green ammonia production. • Although the issuer has initiatives at the company level to address the most GHG intensive production processes, it was not clear after the engagement with the issuer if and when these initiatives (green ammonia and nitric acid production projects) will be included in the bond allocation. Premium fertilizer production will receive the green proceeds allocation. However, there is not sufficient scientific evidence that those projects (the production of calcium ammonium nitrate ("CAN") and the production of NPKs could provide significant environmental benefits. This concern meant that we did not participate in the new green bond issuance.

Choosing not to Invest (Fundamental Equity)
• The importance of our stewardship duties were emphasised during 2022 in relation to our assessment and engagement with a retail chain. • The company operates both traditional stores alongside a growing e-commerce presence – they are rated AA by MSCI. Given share price appreciation resulting from growth in their e-commerce platform, our Fundamental Equity Emerging Markets Team had been monitoring the business with a possible attractive entry point in 2022. • However, our research analysts retained reservations based upon their financial analysis and met with the company CEO and CFO in November 2022 to discuss these topics in further detail as part of their investment research and monitoring – in light of this meeting, the Team did not receive sufficient comfort around the findings of our internal analysis vs messaging from the company, and a decision was made not to invest. • At the start of 2023, the company filed for bankruptcy protection as revelations of one of the largest fraud cases in Brazil's capital markets came to light. These revolve around the company's accounting "inconsistencies". These totalled multiple billion dollars and sparked an immediate dramatic sell-off in their market value.
Adding to our positions (Fundamental Equity)
• Within Fundamental Equity's Global Environmental Impact Equity Strategy, we have long held a position in a leading US sustainable beverage can manufacturer. • Beverage cans have the highest recycling rate of all beverage packaging options, and the company's aluminium product is helping to reduce plastic waste and increase recycling efficiencies. • Company financials had suffered with challenging results in 2022, alongside growth in perceived risk that the secular trend of beverage containers shifting from plastic to aluminium, was not as real as first thought. • In the wake of these events, the Fundamental Equity Global Team met with the company in August 2022 as part of their investment research and monitoring, with conversation focused on ESG topics including plastic-waste and recycling. • The company presented detailed information around the market, and the resilience and growth in certain markets contrary to perceived weakness – they would be providing further information at their investor day shortly after the meeting. • Further to the information discussed at the positive engagement meeting, our Global Equity Team added further to our position within the Impact Strategy in September 2022.
Investment (Fundamental Equity)
• In May 2020, there was a significant incident at a Korean battery manufacturer and high-quality chemicals business, resulting in employee fatalities at a company factory in in India. • The Fundamental Equity Team engaged with the company on multiple occasions in the aftermath of the 2020 event, and three times in 1Q22. • The company announced a major project to advance and invest in environmental safety, soliciting industry technology experts and encompassing each of their business sites both in Korea and abroad. • From January 2022, the company announced a new position – "Chief of Safety and Environment Officer," appointed individual Environment Health & Safety Managers for each business site, alongside forming a technical policy and diagnosis body. • Based on the company's financial information and comprehensive discussion of all remedial efforts and company focus on these topics, our Emerging Markets Equity franchise initiated a position in July 2022.

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Based on the analyses, investment thesis, results of due diligence, reputational considerations and recommendation presented at the Investment Committee meeting, the Investment Committee determines whether Goldman Sachs should make an investment, which may be subject to certain conditions. If the Investment Committee decides to pursue the opportunity, the investment team, in conjunction with internal and external advisers, completes business, accounting, legal and other due diligence on the investment opportunity, helps structure the transaction, including any associated financing, and finalizes definitive agreements relating to the transaction.

Investment teams monitor the performance of the investment after closing, with a focus on value creation. Members of the investment team may also serve on the board of directors of a portfolio company after the investment is made. As directors, these members will be in a position to monitor and focus on the company's performance and strategy. In this regard, having a director also helps investment teams monitor the company's risk profile and potential reputational risk, including environmental, health and safety risks and compliance issues.

During internal meetings, the investment team discusses the potential exit timing of an investment. Typical exit methods for equity interests may include: (i) sale through a public offering or a private placement; (ii) sale to a strategic or financial buyer; and (iii) recapitalization. For credit investments, the exit process may also be completed through repayment or refinancing with a third party. Throughout the exit process, the investment team, in conjunction with the respective Investment Committee, typically negotiates the sale price, structures the exit of the investment and coordinates with internal and external advisors involved in the exit process.

Some examples of actions taken in 2022 as a result of our stewardship activities that we believe drive better outcomes for our clients include:

Pre-Investment
• In September 2022, during diligence on a portfolio company, questions related to ESG were discussed with the target company. While no significant issues were discovered, the Sustainable Investing Group made several recommendations to strengthen and enhance the company's ESG program. • As part of the pre-investment conditions, the team amended the composition of the board of directors, including the creation of a board seat for an independent diverse candidate. Recruiting is ongoing and on track to meet the pre-agreed deadline. • Following investment in the company, the team engaged the company, together with external advisors, to develop an uplift plan with activities including scope, action, primary responsibility, prioritisation and cost of implementation. • The investment team is supporting the implementation of these actions to improve the sustainability performance of the company. For example, as part of the agreed post-investment uplift plan, the company developed and implemented ESG and EHS policies that were hitherto missing.
Post-Investment Review
• After the company was acquired, during 2022, members of the investment team undertook a post-closing review of the portfolio company and found that while the company had taken steps to advance sustainability initiatives, they were still at the beginning of their ESG journey. • Previously, ESG relevant topics were handled independently by individuals within their departments, and there was no leadership from the senior management level on the broader topic of sustainability. • Following this review, the portfolio company worked with a third-party consultant to conduct a materiality assessment and create an ESG action plan which consisted of specific impactful ESG uplifts for the organization. In order to move forward the items addressed in the ESG action plan; the organisation has since appointed a new ESG leader at the senior level.
Ongoing Monitoring
• In May 2022, to support the sustainability objectives of its investments, the Sustainable Investing Group worked with a portfolio company in the energy storage sector to finalize impact KPIs, establish impact KPI targets, and support data management and reporting. • The investment team undertook engagement with the portfolio company to understand its approach to measuring and managing the sustainability impact of its business to establish a meaningful and verifiable impact KPI target for the investment team to track. • The investment team engaged a third-party impact investing management and reporting consultancy to support these conversations and ultimately recommended the impact KPI targets for the portfolio company. • To finalize the KPIs, the investment team conducted internal auditing with members of the team with expertise in sustainability metrics and reporting to ensure the impact attributed to the company was fair, balanced, and traceable. In particular, the team sought to ensure that, as the industry scales up and additional providers come online in the space where the company operates, the diverted CO2 emissions that the portfolio company calculates are rightly attributed and not double counting those of other providers. The team also verified that the company's approach to diverted emissions calculations was consistent with the GHG Protocol.
Choosing not to Invest
• In 2022, the investment team chose not to pursue an investment due to a lack of clarity around the company's decarbonization plans. • Following diligence on the company's projections on the uptake of electric, hydrogen or other low carbon fuel vehicles, the investment team assessed that the company had insufficiently captured the opportunities around decarbonization and that the company had not adequately mitigated transitional climate risks. • Additionally, due diligence highlighted risk areas related to how the company addressed certain social issues. Given the rapidly evolving and competitive nature of the sector, in addition to increased regulatory scrutiny, the company's inability to provide certainty in these areas led to a decision not to invest.

Using third party service providers

We use a variety of third-party service providers to support our stewardship activities. Please refer to Principle 8 for more information.

Principle 8: Signatories monitor and hold to account managers and/or service providers

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Proxy advisor services

We have retained a third-party proxy voting service, Institutional Shareholder Services ("ISS"), to assist in the implementation of certain proxy voting-related functions including, without limitation, operational, recordkeeping and reporting services. We retain the responsibility for proxy voting decisions, and we set our own proxy voting policy and do not rely on the proxy voting service house policy. Among its responsibilities, the proxy service prepares a written analysis and recommendation of each proxy vote that reflects the proxy service's application of our guidelines to the particular proxy issues. In addition, in order to facilitate the casting of votes in an efficient manner, the proxy service generally prepopulates and automatically submits votes for all proxy matters in accordance with such recommendations, subject to our ability to recall such automatically submitted votes.

If the proxy service or Goldman Sachs Asset Management becomes aware that an issuer has filed, or will file, additional proxy solicitation materials sufficiently in advance of the voting deadline, we will generally endeavour to consider such information where such information is viewed as material in our discretion when casting our vote, which may, but need not, result in a change to the recommendation, which may take the form of an override or a revised recommendation issued by the proxy service.

Using third party data

In some instances, external ESG data providers are used in addition to internal proprietary research. With all of these third-party data providers, we accept their limitations and use them in various ways to help inform our research process.

Teams across Goldman Sachs Asset Management use a wide variety of external data sources, including but not limited to:

Data Set	Description
427	Physical risk data for sovereigns
Bloomberg ESG	Company reported E, S, G metrics and carbon emissions estimates
Bloomberg (GSS)	GSS bond classifications for companies
Carbon Tracker	Non-profit that evaluates stranded asset risk for the Energy sector
Glass Lewis	Proxy voting research
ISS	Proxy voting execution and research, ESG raw data
ISS-Ethix	Used for cluster munitions screening
Influence Map	Non-profit that provides insights on company's climate lobbying efforts
Kestrel	GSS bond evaluation for municipal securities
Level 11	Physical risk data for securitized assets as well as socioeconomic and demographic data
MSCI	E, S and G related metrics and ratings
ND Gain	Countries ability to adapt to climate change
risQ	Physical risk data on municipal securities
Sustainalytics	ESG ratings, product involvement (screens), and controversies
Trucost	Environmental metrics
World Bank/UNDP	Over 17,000 indicators (we use a subset in our proprietary sovereign ESG scores)
WRI	Water stress, drought and flood risk
Maplecroft	Sovereign climate data

How we set our expectations of service providers

When we initially on-board data from a vendor, we complete a comprehensive on boarding process, which generally includes (but is not limited to) setting the following expectations:

- Data transmission mechanism, file format details and/or API limitations if applicable
- Data transmission details (full or delta)
- Expectations on data lag
- Frequency of data updates (including potentially setting data delivery times)
- Establish expectations with respect to changes in transmitted files / APIs (including how much forewarning of changes and sample files/APIs to test beforehand)
- Data/security coverage expectations (including different types of security or company identifiers provided and which security masters are used)
- Historical data (if any) on boarding. (If historical data is provided, establish whether the historical data uses current identifiers or the identifier that was present at that historical point in time.)
- Data dictionaries and schemas as well as methodology documents
- Understanding which data is reported versus estimated
- What internal checks are performed on the data prior to being released / how are corrections released / how long for corrections we identify to be reflected in the data
- Contacts for file/API issues as well as general questions (and establish expected turnaround time on responses)

How we monitor our service providers

We conduct due diligence meetings with select service providers as necessary to review the processes they follow and to discuss any material changes in the services, operations, staffing or processes. These meetings are led by various teams across Goldman Sachs Asset Management, so that teams who are using the services are able to seek to ensure that the service providers are meeting their needs and providing services that help support our stewardship activities.

For example, in 2022, we conducted our annual due diligence meeting with ISS to review the processes and procedures they follow when making proxy voting recommendations based on our custom Global Proxy Voting Policy and to discuss any material changes in the services, operations, staffing or processes.

We perform both systematic and ad-hoc data quality control checks on the data we receive from our service providers. At times, we identify issues with the data we receive from vendors. For example, in a previous year, the E, S, and G pillar weights provided by one of our service providers or some companies did not add up to 100%. As a result, we subsequently asked the vendor to implement quality control checks to identify (and resolve) this particular issue. In 2022, we continued to perform quality control checks to monitor data integrity. As another example of a systematic control, we have checks to monitor the number of securities in a file from one data provider and if the number of securities changes by more than a certain threshold, we prevent the updated data from flowing through our systems until we understand if there is a valid reason. At times, vendors have inadvertently sent us incomplete files and subsequently we have worked with the vendor to help ensure the issue does not occur again. We also perform more ad-hoc checks where we engage with vendors if we believe their data to be incorrect, incomplete and/or stale. One example of an ad-hoc check was when we found one issuer to have an incorrect amount of reported water use. After engagement with the vendor, it turned out the data was incorrectly registered, after which it was corrected in the vendor’s database.

We will continue to keep our service providers under review.

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Use of Consultants and Technical Advisors

The Private Markets Investing business may engage specialist advisers and consultants, both as part of the due diligence process and as part of our post-investment portfolio company engagement, where appropriate. For example, a full-time consultant has been appointed who helps to drive the data collection approach across our global Real Estate portfolio.

GHG Emissions Accounting Provider

The Private Markets Investing business is committed to ongoing engagement with our chosen GHG Emissions Accounting Provider to continue to build the necessary capabilities for portfolio companies to report decision-useful data in a consistent and verifiable manner. Our chosen provider updates its methodologies and emission factors regularly. The sources of these emission factors vary by region and were verified by a third-party engaged by our partner in October 2022 to conduct an independent validation of the methodology for Scope 1, 2 and 3 carbon emissions.

Using third party data

Teams across our Private Markets Investing business use a wide variety of external data sources, including but not limited to:

Data Set	Description
427	Physical climate risk assessments
EnergyStar	Energy efficiency
Glassdoor	Used to calculate employee satisfaction

The Private Markets Investing business seeks to collect primary ESG data directly from portfolio companies where appropriate, working closely with portfolio companies in scope for our ESG data collection effort to educate and support management teams to collect robust data. When primary data is not available, we may rely on third party carbon emissions estimates, typically modeled with portfolio company or asset financials, investment data, and information on the investment's country and industry. In 2022, we partnered with our chosen GHG Accounting Provider for such estimates for select portfolio companies and worked with a third-party provider to obtain proxy-based emissions estimates for certain real estate investment.

How we set our expectations of and monitor our service providers

Goldman Sachs has a Code of Conduct which describes our expectations of how vendors conduct business. Where appropriate, service providers are expected to act in accordance with the Code, including aligning guidelines, policies, and practices, and communicating and enforcing the Code provisions throughout their organization and across their supply chain, including to subcontractors. Where appropriate, service providers are required to understand the requirements of this Code, operate in accordance with the expectations outlined in the Code and comply, at a minimum with all applicable laws, rules, regulations, and standards within the geographies in which they operate.

Oversight of service providers is important to ensure that our chosen service providers meet the expectations that we have set for the engagement. For example, in 2021, we engaged a consultant to help work through various strategic items. The engagement was an important deliverable given the output was to materially influence the framework in-place to support our investment, reporting and portfolio company engagement processes. Following onboarding, the consultant interacted with members of the Private Markets Investing business through a centralized taskforce.

After a number of months, taskforce participants felt that there was a lack of direction from the consultant. Senior members of the taskforce reached out to the consultant's Relationship Manager to discuss progress, key priorities and feedback points. We clarified our expectations and shared observations. It was agreed that a dedicated workshop session would be helpful to ensure focus and alignment. A multi-day in-person workshop was held which was valuable to progress the engagement and the assignment. Following the discussion and workshop, we noticed an improvement in the consultant's performance especially with additional resources added to the team. Being proactive, open and transparent on our requirements was valuable. This led to the successful delivery of the engagement and overall assignment.

An example of how the Real Estate team monitors service providers:

The Real Estate asset management team, in partnership with third party operating partners, is responsible for monitoring and evaluating each property's individual strategy and performance through frequent onsite inspections and regular communication with the onsite property managers and leasing teams. They measure progress made with respect to the business plan and to identify any potential concerns, allowing us to take swift corrective actions. Asset managers may visit properties more frequently depending on the status of projects or any ad-hoc issues that may arise. Furthermore, the asset manager establishes, with the oversight and support of the investment and portfolio management teams, the annual budget, the annual and quarterly hold/sell analysis and recommends important strategic capital investment opportunities that may maximize value above and beyond the original business plans. The Real Estate asset management team is encouraged to take an entrepreneurial approach to each property to enhance its performance.

The asset management team is also responsible for hiring, monitoring and supervising any third-party property managers and leasing agents. These managers are typically highly experienced real estate firms who can demonstrate knowledge and expertise in property operations and leasing as well as a deep understanding of the local market. The asset management team also works closely with the Real Estate ESG team to identify ESG opportunities, explore their implementation and mitigate any ESG-related risks.

Principle 9: Signatories engage with issuers to maintain or enhance the value of assets

PUBLIC MARKETS

Our approach to engagement

Communication with companies and issuers is a key component of our approach to stewardship. We classify and report on this activity using the definitions below:

Engagements		**Interactions**	
Instances where active dialogue or exchange of written communication with a company or issuer has occurred		Other types of interactions where we are not actively participating in an exchange of views	
Type	**Example**	**Type**	**Example**
Company 1x1	A meeting between one company and members of Goldman Sachs Asset Management only	Conference	Attending an industry conference without meeting with a company 1x1 or in a small group meeting
Company meeting (multiple investors)	A meeting between one company and members of Goldman Sachs Asset Management alongside other asset managers or analysts from other firms.	Investor Day	Attending an issuer's investor day to hear presentations
Company Field Trip	Company organised field trip attended by Goldman Sachs Asset Management	Annual Meeting	Attending or listening to a company's Annual General Meeting

In this report, we focus on our approach to engagements as defined above.

Categories of Engagements

Our engagements with companies generally fall into one of the below four categories.

Thematic engagements	Proxy Related discussions	Providing Feedback	Investment Research and Monitoring
• Thematic engagements from our stewardship framework or portfolio specific engagement plans • Examples include our engagements on biodiversity and addressing global norms violations or targeted portfolio specfic engagements	• Intended to help inform our proxy voting decisions • Examples include meetings to discuss compensation plans and/or shareholder proposals	• Conducted generally at the request of issuers to provide feedback on reporting or other matters • Examples include questions from companies on our preference on ESG frameworks such as SASB or TCFD	• Undertaken primarily to seek information or inform our investment decisions • Examples include analysts engaging with companies on earnings, ESG or other strategic matters

Our thematic engagements are reviewed, enhanced, and monitored on an ongoing basis in an effort to ensure they incorporate our clients' and investment teams' feedback on current issues and evolving views about key material topics. We seek to listen to feedback from our clients and gather feedback internally via our Engagement Working Group to help us to develop our engagement themes.

Methods of Engagements

We use three broad methods for engagement:

Single Team	Multiple Team	Industry Initiatives
• Engagement with a company conducted by members of a single team within Goldman Sachs Asset Management • For example, a call between a Fixed Income analyst and an issuer regarding the issuer's ESG score	• Engagement with a company conducted by members of more than one team within Goldman Sachs Asset Management • For example, a call with an Fundamental Equity analyst and the Global Stewardship Team about a proxy related matter	• Engagement with a company as part of an industry initiative • For example, the Global Stewardship Team participating on a call with a company and alongside others

Modes of Engagements

We can engage with issuers in various ways depending on specific circumstances. We generally classify our engagements in the following ways:

Active Engagement	Written Communication
• Active engagements with an issuer in person, on video, or by telephone	• Instances where we have had a substantive exchange of views over email, similar in content to an engagement meeting. • For example, where a company responds to our questions in writing and/or acknowledges our positions and requests, but we do not then follow up with an in person discussion

In cases where we exchange written communications and also meet with the issuer, we will generally classify this as an active engagement for the purposes of reporting.

We also track instances where the Global Stewardship Team attempted to engage, for example by sending a letter or a meeting request but received no response from the company. We do not report unacknowledged outreach attempts as engagements.

For further information, please refer to our Approach to Stewardship.

Our Stewardship framework

The framework sets out our key stewardship objectives and explains how our voting and engagement efforts help us meet them.

	Our thematic engagements[1,2]	Engagement objectives	How we vote to promote our objectives[3]	Other engagement areas
Climate Transition	• Material GHG emissions data • GHG emissions reduction targets • Climate transition strategy • Biodiversity	• Promote disclosure of material GHG emissions • Discuss companies' goals to reduce GHG emissions • Identify and address adverse impacts on biodiversity, resulting from deforestation and plastics in the supply chain	• We vote case by case on all environment- related management and shareholder proposals • We may vote against board members for failure to disclose material climate-related information	• Encourage the use of the SASB standards and TCFD frameworks
Inclusive Growth	• Board diversity • Workforce diversity in Japan	• Focus attention on both gender and ethnic diversity on corporate boards globally • Promote best practices and disclosure with respect to diversity and inclusion within the workforce • Encourage best practices related to labor rights	• We vote against members of the nominating committees of boards that have fewer than 10% women or fail to meet higher local market standards. • We vote against members of the nominating committees of S&P 500 and FTSE100 boards that lack at least one diverse director from a minority ethnic group, in addition to meeting our gender expectations.	• Encourage the publication of workforce diversity data using EEO-1 forms or similar • Encourage the use of best practices for diversity and inclusion initiatives
Corporate Governance	• Global norms violations[4] • Regional governance best practices	• Identify and address the impacts of controversial business practices and violations of global norms • Strengthen shareholder rights and commitments to best governance practices	• We may vote against certain board members at companies, that in our view, may have violated global norms. • We may vote against certain board members at companies, that in our view, do not meet the governance expectations stated in our Proxy Voting Policy. • We may vote against companies, that in our view, do not meet our expectations on cross shareholdings or capital allocation in Japan.	• Encourage alignment between executive compensation and shareholder interests • Gather information to make informed proxy voting decisions

[1] Our engagement objectives are reviewed, enhanced, and monitored on an ongoing basis in an effort to ensure they incorporate current issues and evolving views about key ESG topics.

[2] In addition to thematic engagements driven by the Global Stewardship Team's objectives, for select portfolios we may perform additional targeted engagements.

[3] This is a high-level summary of examples of some of our relevant voting activities, for further information please refer to our Global Proxy Voting Policy.

[4] Based on our internal proprietary Global Norms assessment and tiering process

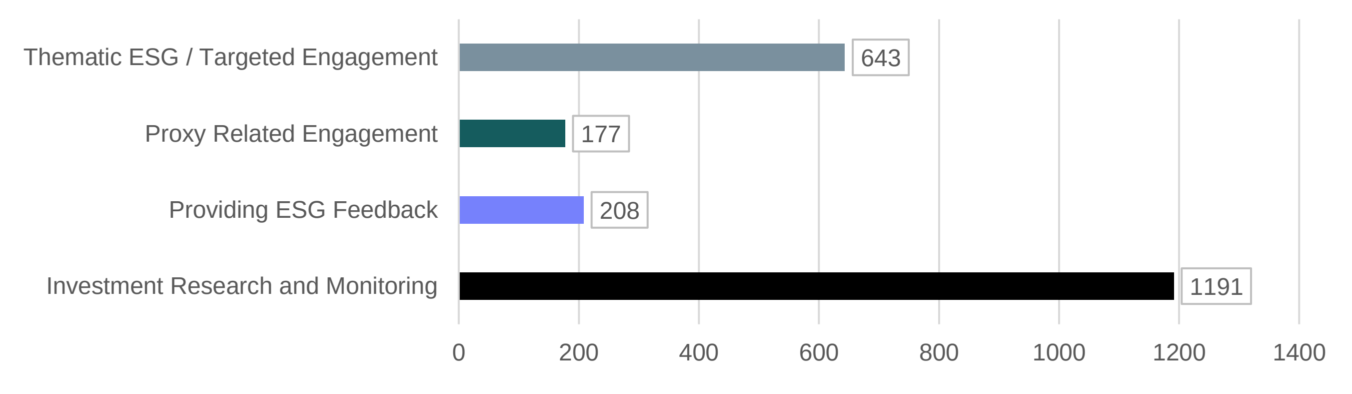
How we engaged in 2022

The below only includes engagements which included discussion of E, S or G issues. Our investment teams may conduct additional engagements that do not cover these topics; these engagements are not included.

Engagement Summary	
2,219 Engagements Conducted	**1,587** Unique Issuers Engaged

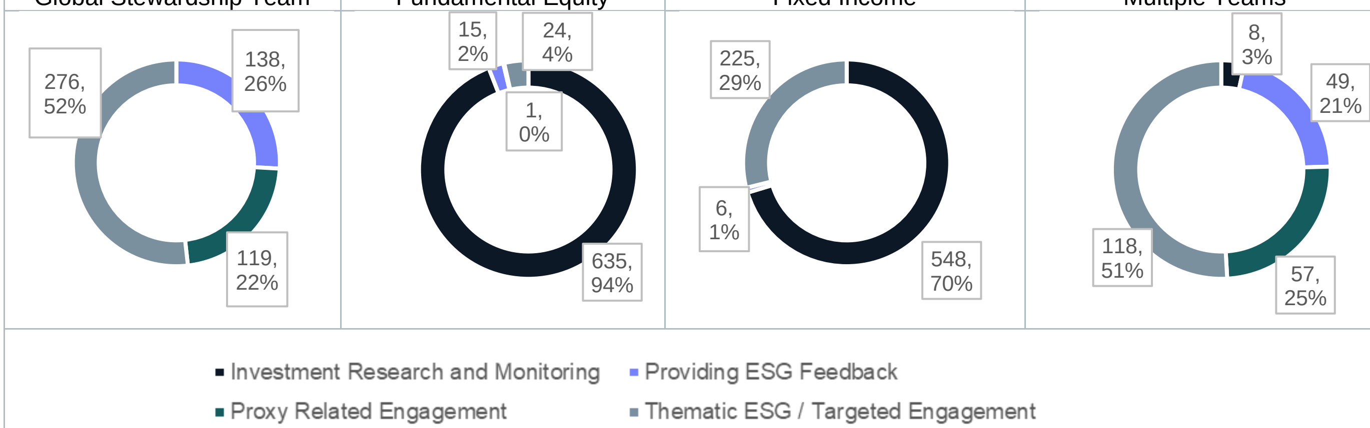
Engagements by Issuer Type		
2,183 Corporate	**16** Sovereign	**20** Supranational, Municipal or Agency

Number of Engagements by Category

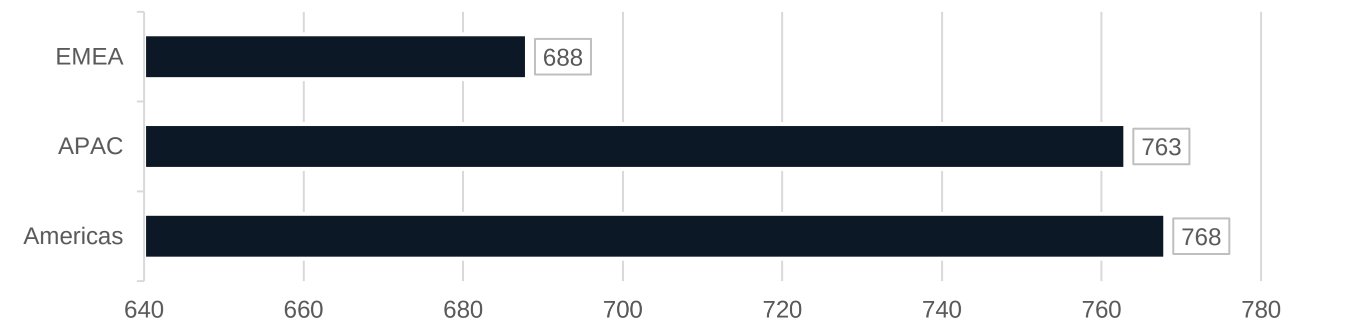


Modes of engagement	
Written communication	348
Active engagement	1871
	2219

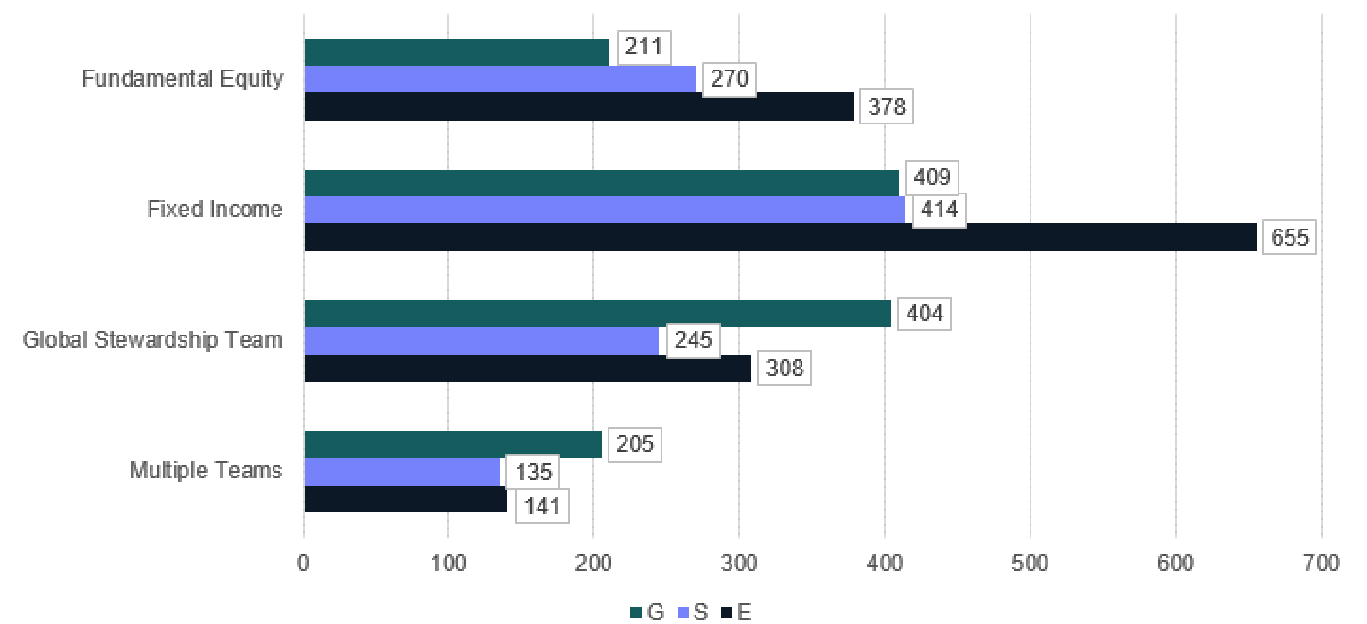
Engagements by Team			
533 Global Stewardship Team	**675** Fundamental Equity	**779** Fixed Income	**232** Multiple Teams



Number of Engagements By Region



Number of Engagements covering E, S and G topics[6]



[6] Most of our engagements cover more than one E, S or G topic and so the sum of engagements per topic will generally be larger than the total number of engagements.

Examples of some of our 2022 engagement campaigns

THEMATIC ENGAGEMENTS

CLIMATE TRANSITION

Our Stewardship approach to the climate transition:

Engagement

- Engage with issuers on current GHG emissions, reduction of emissions and transition strategy
- Engage with issuers on their impacts on biodiversity

Proxy Voting

- Vote on a case-by-case basis on environment-related shareholder proposals
- Vote against directors at companies identified through our engagement framework that disclose no material emissions data

Industry Initiatives

- Promote disclosure through the SASB standards
- Encourage reporting in line with the TCFD

We've long believed the transition to a more sustainable economy would be a decades-long effort; to advance that transition, more risk capital must be invested in developing new, clean technologies, especially for the highest-emitting sectors; and in solving such a complex problem lies enormous opportunity for the companies we are investing in on behalf of our clients. We believe that engagement on these opportunities can promote long term value creation for shareholders.

Our Global Stewardship Team has partnered with our debt and equity investment teams to establish a framework for engagement on key risks and opportunities related to environmental matters.

Specifically, this framework has the following three primary objectives for portfolio companies:

1 **Disclose Material Data**

Promote disclosure of material GHG emissions data considered material to a company's business

2 **Set Targets**

Encourage companies to set and disclose a target to reduce GHG emissions, where relevant and material

3 **Execute Strategy**

Engage with companies in high-impact industries on the implementation of a robust and quantifiable net zero strategy

We designed these objectives by partnering with our investment teams and our Engagement Working Group, which brings together individuals from various investment teams to discuss engagement plans and share progress, to understand what data would aid in their investment process and help them make informed investment decisions on behalf of our clients. Lastly, we considered global established frameworks such as the TCFD.

Objective #1: Disclose Material Data

Material data on GHG emissions can be a useful tool for our investment teams to incorporate into their investment process and for our clients who want to understand the material emissions associated with their investment portfolio.

How We Engaged

In 2020, we identified 271 companies across 30 markets that were not disclosing emissions data but whose emissions were considered material to their business under the SASB standards. Using third party data of company emissions, we identified the companies with the highest carbon intensity contribution to our portfolios that were not disclosing material emissions data. We then conducted due diligence to review whether the third-party data was correctly capturing company disclosures, as in some cases, companies were in fact disclosing data that was not being captured by third parties.

GHG emissions are divided into three categories based on how they are produced:[7]

- Scope 1 emissions are direct emissions from owned or controlled sources;
- Scope 2 emissions are indirect emissions from the generation of purchased energy; and
- Scope 3 emissions are all indirect emissions not included in scope 2 that occur in the value chain of the reporting company. Scope 3 can be broken down into upstream emissions (for example, the emissions produced by a company's suppliers) and downstream emissions (for example, the emissions produced by the use of a company's sold products).

For each company, we identified which scopes we consider material under the SASB standards and sought to engage with companies that were disclosing none or some, but not all, the material categories of emissions.

CASE STUDY:
Category: Thematic
Theme: Climate – Disclose Material Data
Country: Japan
Sector: Industrial Machinery

- Our Global Stewardship Team engaged with the company's Investor Relations team in June 2022 to discuss the company's progress on climate related disclosures.
- We engaged with the company in 2021 to discuss the disclosure of material emissions data. During this follow up, the company shared key progress to-date, which included calculating its scope 1 and 2 emissions. The company plans to disclose this data and announce their support for TCFD.
- The company stated its intention to set a long-term GHG target within the fiscal year.

Progress To-Date

We have engaged or attempted to engage with these 271 companies since 2020, either directly or via written communication, and we have seen significant progress. In 2022, we conducted 97 engagements with 94 companies as part of this initiative.

We classify the companies into three categories:

- **Non-disclosing**: companies that disclose no material emissions data
- **Partially disclosing**: companies that are disclosing some but not all material categories of emissions data
- **Fully disclosing**: companies that are disclosing all material categories of emissions data

Since 2020, 39% are now fully disclosing material emissions data.[8]

[7] Source: Greenhouse Gas Protocol, 2022. Please see the Greenhouse Gas Protocol website for more information.
[8] Source: MSCI and Goldman Sachs Asset Management research, as of year-end 2022, compared to October 2020.

We recognize that many of the companies in the partially disclosing category are reporting scopes 1 and 2 but not disclosing either scope 3 upstream or downstream emissions, which can be more challenging for companies to disclose owing to methodological complexity, extensive supply chains or lack of visibility into customers' emissions. We will continue to monitor the disclosure of material emissions data, where appropriate.

We have also integrated this objective into our proxy voting policy – beginning March 2022, we updated our policy to vote against board directors of relevant committees at identified companies that had not made progress on disclosing material emissions data where it is material to their business.

During 2022, we voted against 22 directors at 16 companies that were disclosing no material emissions data. We were encouraged by the progress made by several companies that published material emissions data ahead of their annual meetings, which allowed us to support the directors.

CASE STUDY:
Category: Thematic
Theme: Climate – Disclose Material Data
Country: USA
Sector: Consumer Discretionary

- During an engagement with the company's Investor Relations team and General Counsel in October 2021, we discussed their plans to disclose scope 2 emissions, which are material to the company, and to use SASB to guide disclosures. They noted they had not evaluated any ESG frameworks and were not publishing any quantitative emissions metrics.
- As the company was still not reporting any emissions data by their 2022 annual meeting, we voted against the Chair of the Corporate Governance and Nominating Committee, which oversees ESG-related issues at the company.
- We engaged again with the company in November 2022. The company had made progress in publishing its first sustainability report but was still not disclosing quantitative emission data.
- While the company has not yet published its emissions data, we discussed their progress in working with their original equipment manufacturer ("OEM") partners and utility companies to prepare the grid for the infrastructure needs of Electric Vehicles. For example, the company recently produced a study in partnership with one of their OEMs to benchmarking energy usage and related costs over the past six years.

CASE STUDY:
Category: Thematic
Theme: Climate – Disclose Material Data
Country: Israel
Sector: Energy

- We identified the company as not disclosing any material emissions data. After attempting engagement in 2020 and 2021, we voted against members of the board in 2022 to express our view.
- Later in 2022, the company released an ESG report which disclosed material scope 1 and 2 emissions and described key governance and climate strategy initiatives.
- We engaged with the company's Sustainability Officer and ESG team in December 2022 to give our feedback and to understand their approach to disclosing material emissions and key reduction initiatives. We encouraged the company to set a long-term emissions target and to disclose material emissions.

Objective #2: Set Targets

For companies in industries where GHG emissions are material, we believe disclosure of an emissions reduction target can serve as an important data point for use in our investment process. Further, we believe companies, where GHG emissions are material, without targets may face risks relating to failing to manage their GHG footprint.

How We Engaged

Since 2021, we have engaged or attempted to engage with 70 companies whose GHG emissions are material under SASB but which have no targets to reduce emissions.

Through these conversations we encourage companies to set and disclose emissions reduction targets and to report in line with TCFD guidance, which recommends that organizations consider the following with respect to targets:[9]

- Whether the target is absolute or intensity-based
- Time frames over which the target applies
- Base year from which progress is measured
- Key performance indicators used to assess progress against the targets

Other key areas for consideration include which emissions categories (scopes 1, 2 or 3) and what portion of operations is included in the targets.

CASE STUDY:
Category: Thematic
Theme: Climate – Set Targets
Country: Canada
Sector: Materials

- In February 2022 our Global Stewardship Team engaged with the Investor Relations team at the company to discuss their climate transition strategy, focusing on the company's lack of emissions reduction targets.
- We discussed the company's projects underway to reduce emissions, setting a quantitative target, as well as disclosing climate-related risks and opportunities in line with the TCFD recommendations.
- Later in 2022, the company announced targets to reduce absolute scope 1 and 2 emissions by 35% by 2030 across their operations versus a 2019 baseline. The company also aligned its climate-related disclosures to the TCFD recommendations.

CASE STUDY:
Category: Thematic
Theme: Climate – Set Targets
Country: Brazil
Sector: Industrials

- In June 2022, our Fixed Income Emerging Market credit research analyst and ESG team engaged with the issuer's sustainability officer and Investor Relations team to discuss GHG emission targets.
- We acknowledged the 2045 target that the company had set along with evidence of plans to upgrade its fleet to "Next Generation," reducing emissions and improving energy efficiency.
- The issuer does not currently set short- or medium-term targets.
- The Fixed Income team informed the company that setting such targets is becoming the norm for companies where GHG emissions are material, and that best practice increasingly includes third-party scientific validation of targets.

[9] Task Force on Climate-related Financial Disclosures, Metrics and Targets guidance

Progress To Date

We have been engaging with companies on target setting for several years now and have seen some progress in companies setting targets, for example, seven of the 21 (33%) of the companies we engaged with in 2021 have since set targets to reduce emissions.[10] We conducted 29 engagements through this framework in 2022.

Objective #3: Execute Strategy

Through these engagements, we seek to engage with a targeted universe of companies in high-impact industries, whose GHG emissions are material to their business, on the implementation of a robust and quantifiable climate transition strategy.

These engagements are highly varied, reflecting the unique challenges facing each industry, region, and company.

In general, we encourage a company to disclose an emissions reduction target that has short- and medium-term elements in support of a longer-term goal, covers 95%+ of scope 1 and scope 2 emissions, includes intensity metrics and assessment against geographic or sectorial pathways, is supported by a clear plan and milestones, and is aligned with science-based methodologies.

We also encourage companies to disclose the board oversight of their climate transition strategy, disclose a quantified plan to meet their GHG targets and disclose how capital expenditure plans align to achieving their targets.

How We Engaged

Our Global Stewardship Team and investment teams conducted 115 engagements with 112 companies on their climate transition strategies in 2022, and we plan to continue this work in 2023.

These engagements cover three key items:

1. **The quality of the company's emissions reduction targets;**
2. **How these targets fit into a broader climate transition strategy at the company,** and
3. **The extent to which the company's governance, operational performance, and reporting support its climate transition strategy.**

CASE STUDY:
Category: Thematic
Theme: Climate – Execute Strategy
Country: France
Sector: Energy

- In November 2022, members of the Global Stewardship Team engaged with the company's investor relations team to discuss their climate transition strategy, capital allocation and performance.
- We discussed the company's long-term plans for net zero 2050, including their spending on research and development ("R&D") as well as the tests applied for approval of new capital projects. We also discussed the company's climate-related financial accounting and overall sustainability disclosures.
- We noted that the company's reporting format is strong and encouraged continued annual progress reporting. We also encouraged greater clarity around milestones for the climate plan between 2030 and 2050 and the linkage to planned capital expenditure and R&D spending.
- We suggested to the company that bringing its response to these issues and the wide range of related public information related to it together in one place on the website to make it more easily accessible and to help investors understand the response.

[10] As of December 2022, third party and Goldman Sachs Asset Management research.

CASE STUDY:
Category: Thematic
Theme: Climate – Execute Strategy
Country: USA
Sector: Industrials

- In June 2022, our Fixed Income High Yield credit research analyst and Fixed Income ESG team met engaged with the company's Sustainability Officer and Investment Relations team to discuss its climate transition strategy.
- This engagement followed a positive engagement in 2021 where the issuer explained its focus on net zero. We had a follow-up discussion in 2022.
- The Fixed Income teams discussed the existence of a long-term net zero target and a SBTi-verified interim target with a trajectory well below 2°C and sought to understand if the issuer was now driving capital expenditure off this ambition.
- We also discussed shadow pricing, which is being used to communicate to the board and discussed the setting of helped the company to set targets around sustainable aviation fuel.

CASE STUDY:
Category: Thematic
Theme: Climate – Execute Strategy
Country: India
Sector: Materials

- In June 2022, our Fixed Income Emerging Market credit research team engaged with the company's investor relations team to discuss its climate transition strategy.
- The Fixed Income team had met previously with issuer in 2020, 2021 and 2022 to discuss GHG emissions reduction. While the issuer has a 2050 net zero target for some of its locations, it faces challenges elsewhere because of its aging blast furnace fleet.
- In 2022, our engagement continued to focus on how these challenges could be addressed, including plans to use carbon capture technology. Despite concerns in previous years on the viability of the use of hydrogen as a fuel source, the issuer remained open to exploring this further.
- The Fixed Income team discussed the issuer's plans to expand reduction targets to its operations in other locations, including setting more ambitious targets than other steel producers in the region.

Progress To Date

We conducted 115 engagements with 112 companies on their climate transition strategies in 2022, and we plan to continue in 2023.

Engaging on Biodiversity

Biodiversity loss can represent a key investment risk related to climate change. Biodiversity has a role in ensuring the resilience of natural capital assets – which society and business depend on – and securing them for the future. However, land use change, climate change, exploitation and pollution are driving biodiversity and ecosystem loss. This loss creates risks and opportunities for society, business and investors[11].

Recognizing this risk, we seek to engage with a targeted group of Fast Moving Consumer Goods ("FMCG") companies, a sector which includes companies having a significant impact on total global plastics and packaging waste and pollution. Through engagement, our goal is to understand the company's approach to managing risks associated with biodiversity and to promote accountability and best practices

In 2022, we focused our stewardship work related to biodiversity on two themes:

[11] https://www.unpri.org/sustainability-issues/environmental-social-and-governance-issues/environmental-issues/biodiversity

- **Plastics**: Encouraging companies to disclose plastics usage and waste and to set high quality targets for plastics waste reduction
- **Land Use**: Engaging with companies facing severe controversies relating to the impacts of land use in their operations focused on plastics packaging and waste.

  Our Global Stewardship Team conducted 28 thematic engagements with companies on biodiversity topics in 2022.[12]

Plastics

In our view, FMCG companies can have a significant impact on total global plastics and waste.

Our Global Stewardship Team has engaged with some of the largest FMCG companies on how they are approaching key risks and opportunities related to plastics, packaging and waste.

The goal of these engagements is to seek to encourage companies to disclose their plastics usage and to increase disclosure of plastics waste and pollution resulting from their operations. We also seek to encourage them to set and disclose high quality targets for plastics waste reduction.

CASE STUDY:
Category: Thematic
Theme: Biodiversity – Plastics
Country: UK
Sector: Consumer Staples

- In December 2022, the Global Stewardship Team engaged with members of the company's Global Sustainability team and Investor Relations team. This meeting built on our 2021 conversations with the company on plastics and packaging.
- We discussed the company's progress toward meeting its plastic-reduction targets and plan to mitigate risks, including R&D related to reducing virgin polyethylene terephthalate ("PET") given the challenges in obtaining recycled PET.
- We asked about the timing of disclosures because the company's current plastics disclosures run on a July-June reporting year, with the result that in December 2022 public disclosures were still related to 2021 performance. We encouraged more timely reporting where possible and suggested that it would be helpful to show alignment with the financial reporting year and links to strategic priorities.
- We also encouraged more clarity in public reporting on planned steps to meet the targets, suggesting that the company lay out clearly what the key elements of the plan are, the relative contribution of each, and the related R&D investment.
- We intend to continue monitoring implementation of the company's environmental program and engage as needed.

[12] Many of our engagements cover more than one topic or theme.

CASE STUDY:
Category: Thematic
Theme: Biodiversity – Plastics
Country: USA
Sector: Consumer Staples

- In November 2022, members of the Global Stewardship Team engaged with the company's Sustainability and Global Impact counsel to discuss efforts in reducing plastics in packaging and biodiversity.
- The company said a materiality assessment was underway for a new report that would address biodiversity issues we had raised in a meeting the year before.
- We asked about progress made in plastics and packaging disclosure, advocating for quantitative disclosures of total packaging by weight, percent recyclable and percent post-consumer recycled content. The company plans to roll this out in 2023 and include information on biodegradable products.
- We acknowledged these plans and recommended targets and segmented reporting where appropriate.

Land Use

Land degradation, or the decline of economic and biological productivity of land due to human treatment, costs the world $6.3 trillion annually.[13]

In response, our Global Stewardship Team has been engaging with companies facing controversies relating to the impacts of land use in their operations. These conversations address key issues such as deforestation, ecological impact of manufacturing and end products, and sustainable agriculture.

CASE STUDY:
Category: Thematic
Theme: Biodiversity – Land use
Country: Singapore
Sector: Consumer Staples

- In February 2022, the Global Stewardship Team engaged with the company's chief sustainability officer and ESG team to discuss its biodiversity management and remediation plan after a deforestation incident at a group company.
- The company had received criticism concerning palm oil plantation operations, and in 2021 it acknowledged that a group company had not done enough to compensate local residents for poor business practices that included razing part of one of the planet's richest biodiversity regions.
- The company explained its social and environmental policy to conserve biodiversity and cultural value as well as to protect High Conservation Value areas. It conducts biodiversity assessments internally and also utilizes external resources such as Roundtable on Sustainable Palm Oil Radar Alerts for Detecting Deforestation in their assessments.
- The company explained its remediation response to the deforestation grievance and the implementation of a "No Deforestation" framework across its supply chain. The company has also begun providing training to increase education and communication with employees on its code of conduct. It has also taken steps to improve senior oversight of operations.
- We will continue to monitor the status of the remediation and restoration plan related to the deforestation incident.

[13] University of Cambridge Institute for Sustainability Leadership, 2020.

INCLUSIVE GROWTH

Our Approach to Board Diversity

We believe diverse teams have the potential to outperform and we expect our portfolio companies to demonstrate diversity at board level. Based on our belief that diversity is a business imperative, we have evolved the expectations of board diversity in our proxy voting policy over several years to promote board diversity at portfolio companies. Please refer to Principle 11 for further information.

Japan - Promoting Diversity Throughout the Workforce

Japan ranks 120th out of 156 countries for gender equality, far behind other G-7 nations.[14] We aim to narrow the gender gap at Japanese companies through constructive engagement by selecting diversity laggard companies through constructive engagement.

Our approach includes:

- **Diversity Engagement Screening:** Using data points including the ratio of women in directorships, executive and management roles, along with gender mobility gap and child-care leave rates for men, we aim to capture the lowest performers in diversity. We seek to review the companies' status annually and engage until we see material improvements.
- **Best Practice Presentation:** We have created a presentation outlining best practices in diversity initiatives from Japanese companies. We generally share this presentation with our portfolio companies in diversity engagements, and it can act as a great source for companies to strengthen their diversity programs.

CASE STUDY:
Category: Thematic
Theme: Workforce Diversity
Country: Japan
Sector: Materials

- In March 2022, the Global Stewardship Team engaged with the company's CEO and president to discuss board and workforce diversity. We informed the company that we had voted against top management at the 2021 annual meeting based on the lack of board diversity, and we advocated for women representation at board level.
- The CEO appreciated our recommendation and recognized that this issue needed to be resolved. Following engagement earlier in the year, the company added a woman director at its next annual meeting in 2022.
- During the engagement, the CEO also made a strong commitment to promote diversity in the workplace, because he believes diversity is essential for the company's transformation from commodity chemical to specialty chemical provider.
- He also discussed the company's various diversity initiatives they have implemented to help achieve their 2030 target to reach 15% women managers, up from the 2020 level of only 2.8%.
- We will continue to engage with this company as it pursues its diversity initiatives.

STRONG CORPORATE GOVERNANCE

We believe that sound corporate governance can create a framework within which a company can be managed in the interests of its shareholders. We seek to hold boards accountable for actions and results related to their governance responsibilities.

Topic	Our Expectation
Independence	Boards demonstrate independent oversight
Diversity	Directors represent diverse skill sets and backgrounds
Director Commitments	Directors can devote sufficient time and are not overboarded
Tenure and Refreshment	Boards include a variety of tenures and strong succession planning
Attendance	Directors attend at least 75% of meetings

[14] World Economic Forum, Global Gender Gap Report.

When directors do not meet our expectations, we may seek to hold them accountable through proxy voting. Please refer to Principle 12 section of this report for further details.

Proxy-Related Engagement

Proxy-related engagement is intended to help inform our proxy voting decisions. It is primarily conducted by our Global Stewardship Team, in many cases alongside our Fundamental Equity investment teams, and gives us the opportunity to discuss the proposals on which we vote. For example, we may discuss the election of directors, matters relating to executive compensation or shareholder proposals. During 2022, our Global Stewardship Team conducted **176 proxy-related engagements.**

CASE STUDY:
Category: Proxy Related
Topic: Board Independence
Country: Spain
Sector: Real Estate

- Our Global Stewardship Team and members of our Fundamental Equity investment team engaged with two non-executive directors the company in February 2022 to discuss the company's board independence and recent issues arising between management and the board. In April, we met with another independent non-executive director to discuss our concerns further.
- The company has a large shareholder that controls four board seats, including the chair, and has close ties with several other directors. We believe that this level of influence impairs the independence of the board and is not in shareholders' best interests.
- We communicated our concerns to the company and at the annual shareholder meeting we voted against two directors we did not consider independent. We expect to continue to engage with the company on these issues.

CASE STUDY:
Category: Proxy Related
Topic: Shareholder Proposals
Country: Japan
Sector: Utilities

- The Global Stewardship Team engaged with the company's Investor Relations team in June 2022 to discuss three shareholder proposals that were scheduled for a vote at the 2022 annual meeting.
- The proposals called on the company to disclose a business plan aligned with the Paris Agreement, to evaluate the consistency between capital expenditure plans and reduction targets, and to disclose if and how executive compensation is linked to its transition strategy.
- During the call, we primarily discussed the company's climate transition strategy, which is detailed and mainly focused on carbon capture technologies and carbon-free energies. We noted, however, that the strategy only pertains to the company's domestic business, even though 26% of its capacity is overseas.
- We voted in favor all three shareholder proposals and intend to continue engaging with the company on these issues.

CASE STUDY:
Category: Proxy Related
Topic: Compensation
Country: USA
Sector: Real Estate

- In May 2022, the Global Stewardship Team engaged with the company's CFO and Finance team to discuss its executive compensation scheme ahead of the company's annual meeting.
- The Compensation Committee had granted significant one-time retention awards to the Named Executive Officers, and we discussed the rationale for these awards. The company, like many in the sector, had been affected by the COVID-19 pandemic, and the executives' regular performance shares had not vested, or vested in small amounts, because of the poor share price performance.

- We recognize the importance of maintaining and attracting talent through compensation programs. We were concerned, however, that the one-time awards were entirely time-based. We would have preferred for the committee to issue performance-based awards that set performance goals that must be reached before the awards vest. This creates greater alignment between management and shareholders.
- We ultimately voted against the "Say on Pay" proposal, which received 80% opposition.

For more information on our proxy voting process, please see Our Approach to Proxy Voting on our website.

Our Approach to Global Norms Violations

The Global Stewardship Team has developed a process for evaluating companies that have been identified by third-party data providers as being in violation of Global Norms including the UNGC and the Guidelines for Multinational Enterprises developed by the Organization for Economic Co-operation and Development ("OECD"), as well as companies that, in our view, exhibit poor governance practices.

Our process centers on four primary steps:

- **Identify:** We leverage multiple third-party data providers to generate a list of potential violators of Global Norms.
- **Review:** Using the vendor generated list, we evaluate each of the issues raised at the companies, considering the external data providers' assessment as well as additional sources to create an assessment.
- **Evaluate:** Using the results of the review, we assign each company to one of three tiers:
    - **Tier 1:** In our view, this company has an ongoing global norms violation with insufficient remediation
    - **Tier 2:** The company may have had a global norms violation, but some remediation has taken place OR there is a serious allegation of wrongdoing where the situation is still developing
    - **Tier 3:** The company is not currently considered a global norms violator
- **Monitor:** We review and re-tier the list on a semi-annual basis and seek to conduct ongoing monitoring to identify potential new issues.

Following the tiering process, the Global Stewardship Team seeks to take appropriate stewardship actions related to the companies, for example seeking to engage with companies or take voting action as appropriate. In 2022 we engaged with 24 companies in relation to issues identified through this assessment process.

CASE STUDY:
Category: Thematic
Theme: Global Norms
Country: UK
Sector: Energy

- In September 2022, our Global Stewardship Team and members of our Fundamental Equities team engaged with the company's CEO to discuss issues surrounding ongoing oil spills and the sabotage of pipelines.
- We have been engaging with the company over the past several years to understand how they have been dealing with potential spills and attempted theft from pipelines.
- Although the company has made significant progress in spill response and prevention, and is systemically reducing its footprint, which it has already shrunk by more than half, we will continue to monitor and engage with the company as their plans evolve.

CASE STUDY:
Category: Thematic
Theme: Global Norms
Country: USA
Sector: Industrials

- In October 2022, members of the Global Stewardship Team engaged with the company's CEO and CFO.
- We first identified the company through our framework based on human rights concerns in their prison facilities. We engaged with the company in 2021 to learn more about what action it was taking on this issue and provide our feedback.
- During our latest call, the company updated us on its most recent human rights report. Over the past year, the company conducted four facility-level human rights assessments, and we discussed their methodology, key findings and next steps from this process. We also discussed roadblocks to measuring the efficacy of training and development programs for the company's employees and inmates.
- We recommended tracking attendees who re-enter training programs to better understand the success rates of previous programs. The company is now considering such metrics as they hire a full-time research analyst to understand program efficacy.
- We will continue to monitor and engage with the company on this issue.

CASE STUDY:
Category: Thematic
Theme: Global Norms
Country: India
Sector: Materials

- In February 2022, the Global Stewardship Team engaged with the company's CFO and members of the Investor Relations to discuss the environmental remediation progress after a warehouse fire and leakage incident in South Africa that had occurred in July 2021.
- The company was identified under our framework because of the chemical spill's significant impact on the environment and local residents as well as questions about risk governance. We engaged with the company on why unlicensed chemicals were stored in that location, how the company was managing remediation and governance and risk management mechanisms to prevent recurrence.
- The company explained that it had permits for storing the chemicals and that a criminal investigation had not led to any charges against the company. They also said that most of the water and soil clean-up was now complete, and that local residents were being offered medical treatment, though few have been impacted.
- The company initiated a risk assessment audit of all its facilities and warehouses and is conducting training for employees at all sites.
- The main disagreement regarding this incident between the company and the government centers on whether the company had permits for storing chemicals in the warehouse. We will monitor for any update from the government's investigation.

PORTFOLIO-SPECIFIC CAMPAIGNS

In addition to regular engagement carried out by our investment teams and by our Global Stewardship Team, for certain portfolios we conduct additional engagement. For these portfolios, members of the Global Stewardship Team work directly with portfolio managers in the Fundamental Equity and Fixed Income investment teams to engage with companies on what we identified as material issues.

In 2022, the Global Stewardship Team partnered with these portfolio managers to engage with companies in our ESG-enhanced equity portfolios, working with the research analysts to identify material issues for engagement on each portfolio holding, and then engaging with the companies in these portfolios to provide feedback and encourage improvements.

We conducted 76 engagements in 2022 through these portfolio specific initiatives.

CASE STUDY:
Category: Thematic
Theme: Portfolio Specific Campaigns
Country: South Korea
Sector: Consumer Staples

- Our Global Stewardship Team and members of the Fundamental Equity investment team engaged in October 2022 with the company's Investor Relations team to discuss its governance, dividend policy and ESG practices and disclosures.
- We voted against a director at the 2022 annual meeting based on the lack of board gender diversity. The company will consider diversity in its next director election at the 2024 annual meeting. We also discussed the company's low dividend payout and current excess cash and encouraged them to increase the dividend payout ratio. The company is now considering a dividend increase for 2023.
- The company established an ESG committee in January 2022 that is responsible for managing its climate plan and goal-setting, as well as scope 3 disclosures for the first time. We recommended that the committee expand oversight to other ESG areas such as gender diversity and supply chain labor risk management.

CASE STUDY:
Category: Thematic
Theme: Portfolio Specific Campaigns
Country: Spain
Sector: Consumer Discretionary

- In May 2022, members of the Global Stewardship Team and of our Fundamental Equity investment team engaged with the company's chief information security officer and Investor Relations to discuss its approach to cyber security and climate.
- We discussed the governance structure underpinning cyber security at the company, strategic and compliance priorities, and learnings from near breaches and training exercises. We noted that while the company does have some public reporting, it has not been as clear as it could be on the multiple processes and controls in place or on the scale of investment made in this area.
- We also discussed the company's climate-related reporting, encouraging the disclosure of material GHG emissions data. While it has some reporting and targets, we noted the need for more transparency in scope 3 disclosures, including upstream and downstream granularity splits. We also encouraged transparency on the company's new expanded plans, with clear milestones. We encouraged the company to consider using the SASB framework and disclosing full TCFD reporting, noting that scenario analysis is an important element the company is currently missing.

CASE STUDY:
Category: Thematic
Theme: Portfolio Specific Campaigns
Country: USA
Sector: Consumer Staples

- In December 2022, our Global Stewardship Team and members of our Fundamental Equity investment team engaged with the Investor Relations team at the company to discuss its approach to GHG emissions and human capital management.

- We had supported a shareholder proposal on climate earlier in the year that called on the company to report on its GHG emissions targets. The measure passed with 70% support.
- The company has since released an updated set of emissions reduction targets, which include reducing scope 1 and 2 emissions by 39% by 2030.
- The company is one of the largest employers in the country, and we discussed how it is able to maintain an industry-leading retention rate and ensure that benefits, health and wellness programs, and training and development efforts meet the needs of a diverse workforce.

Starting in 2020, our Fixed Income Investment Teams partnered with our Global Stewardship Team to develop an engagement strategy focused on diversity and inclusion for some of our funds. In 2022, these teams continued to engage with corporate and financial issuers held by the relevant funds that have been identified as not meeting our expectations of gender diversity at board level.

This approach reflects our firm's focus on diversity and inclusion and signals the potential for other diversity-related challenges. We seek to use a combination of external data sources to assess the percentage of women on the board at individual issuers. The team will typically contact the board, company management, investor and human relations and/or other relevant contacts to engage.

CASE STUDY:
Category: Thematic
Theme: Portfolio Specific Campaigns
Country: Singapore
Sector: Financials

- In March 2022, our Fixed Income ESG Investing Team and our Global Stewardship Team engaged with members of the company's Investor Relations team and Secretariat's office to discuss board diversity.
- We had previously met with the company in 2021, when we identified it as having no women on the board. The company agreed that the points on diversity were substantive and committed to discuss a plan of action internally and update us when agreement was reached on substantive changes.
- During this most recent meeting, the company shared updates on its recent board appointments, which had increased gender representation from zero to 20% women on the board. We acknowledged this progress and encouraged the company to continue focusing on this metric, broader board representation and senior management diversity.

PROVIDING FEEDBACK

One of our four engagement categories is providing feedback, which refers to engagement conducted usually at the request of issuers to provide feedback on their reporting, for example, or to explain our preferences regarding ESG frameworks such as SASB and TCFD.

During 2022, the Global Stewardship Team conducted 176 feedback discussions.

CASE STUDY:
Category: ESG Feedback
Topic: Corporate Governance
Country: Japan
Sector: Information Technology

- In November 2022, members of the Global Stewardship and Fundamental Equity investment teams engaged with a director of the company to discuss key governance topics and improvement in disclosure.
- While the company has improved its remuneration policy this year to align with long-term company value, we encouraged more detailed disclosure on the key performance indicators and targets to increase transparency.
- We also recommended areas of improvement regarding board composition such as increasing independence and the diversity of gender, skills and experiences. The company agreed that these are important to enhance board effectiveness.

CASE STUDY:
Category: ESG Feedback
Topic: Remuneration
Country: The Netherlands
Sector: Financial Services

- Members of the Global Stewardship team engaged with the chair of the Remuneration Committee Chair and members of the Investor Relations team at the company in September 2022 to give feedback as it revises its remuneration policy.
- We have discussed remuneration with the company on numerous occasions, consistently explaining our belief that compensation should be clearly aligned to long-term shareholder interests and promote the attraction and retention of key executives. In our view, that transparency is critical to enable us to evaluate the plan against these criteria.
- We encouraged the company to provide clarity on performance measures, weightings and outcomes in the remuneration policy and to demonstrate clear long-term linkage to shareholder value.

Engaging across asset classes and geographies

Our engagement efforts with investee companies reflect region-specific considerations. For example, in conversations surrounding disclosure of racial and ethnic diversity at the board or workforce level, we consider regional variation in terms of self-identification practices, privacy regulation, and market trends.

We also view proxy voting as a form of engagement with all publicly traded equities for which we have voting power. Our Global Proxy Voting Policy outlines Americas, EMEA, Asia-Pac and Japan items, allowing us to take a nuanced approach that is region and country-specific. Please refer to Principle 12 for more information on our proxy voting activities this year.

INVESTMENT RESEARCH AND MONITORING

Fundamental Equity

Our Fundamental Equity investment teams incorporate engagement with management into their research process, and this can inform investment selection. Interaction with management teams can give our investment teams insights into management quality, business model, financial performance and strategy and future business prospects. During these meetings our investment team members typically discuss a range of issues, seeking a better understanding of the business, including strategy, financial and non-financial performance. Some of these meetings can focus on ESG practices, helping us develop a deeper understanding of a company's performance.

Our investment professionals draw insights from thousands of company management meetings each year. These meetings provide a forum to evaluate a company's commitment to shareholders and to consider how a company compares with its industry and regional peers; they also open up the opportunity to encourage positive corporate change.[15]

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Environmental health and safety
Country: South Korea
Sector: Materials

- Our Fundamental Equity team has been engaging with the company for several years following an employee fatality incident in 2020, after which we exited the security for failure to remediate the causes of the incident.
- Since then, the company has significantly improved its safety programs, and we have engaged to follow its progress, meeting with the company four times in 2022 to confirm its intentions and commitment to progress.
- We reinitiated a position in the company following its remediation efforts, which included expanding environmental safety initiatives through internal environmental safety and process technology experts as well as external agencies. The company completed an emergency diagnosis on high-risk processes and equipment for its business sites around the world and identified cases for improvement. It added the position of chief of safety and environment officer and gave the role autonomous and final responsibility and authority in the field of environment and safety. Finally, it appointed an Environment, Health and Safety manager for each business site to ensure consistent policies and strengthen field response competences and actions.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Labor relations
Country: USA
Sector: Industrials

- In December 2022, our Fundamental Equity investment team engaged with the company to discuss how it was managing union demands considering a potential strike over wages and sick days.
- Our investment teams also met with the company's peers on this issue, using these engagements to gain insights into how companies were managing union relationships and what steps they were taking to improve the situation.
- The company highlighted that it had launched a stock purchase program for train and engine personnel that had greater participation rates than management had anticipated. This could potentially increase employee engagement and goodwill, both important factors in running an effective rail network.
- These engagements help inform our investment process and industry understanding as we look to assess management quality and key risks and opportunities.

[15] Engagements with management teams may include discussions on ESG matters along with other topics, whereas in other cases we may conduct meetings focused specifically on ESG topics.

Fixed Income

Our corporate credit teams engage regularly with the companies they cover on topics ranging from corporate strategy, leverage and balance sheet management to ESG performance. These discussions can provide insights into the sustainability of future cash flows and the resulting ability of the issuer to meet its interest and debt obligations. The ESG focus of these discussions is driven by the materiality of such factors for the sector; for example, the environmental performance of energy companies is a priority. Governance assessments may include sector-related issues such as the strength of conduct and culture risk controls for banks, but governance concerns may also arise in the form of poor merger-and-acquisition decisions or questionable accounting practices that may have an immediate impact on the creditworthiness of a corporate issuer.

Direct engagement can provide our investment teams with additional granularity that can strengthen or diminish the conviction underlying their investment recommendations. They may also use the process to encourage companies to improve performance on ESG issues that can affect credit risk. The regular and open communication with issuers in our fixed income process also enables analysis and discussion of sector trends, which is critical to our efforts to be positioned ahead of credit risks materializing.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Climate and water
Country: Spain
Sector: Utilities

- The Fixed Income Green, Social and Impact ("GSI") analyst team engaged in December 2022 with the issuer's Investor Relations team to discuss transition plans and eligible green assets.
- The issuer was one of the first utilities to issue green bonds. This engagement was a continuation of discussions with this issuer on its green bond issuance that began in 2017.
- In 2022, the engagement was focused on a plan for sustainable water use. The issuer plans a 50% cut in water consumption by 2030 driven by the decommissioning of its water-intensive nuclear power plants. The Fixed Income GSI team also discussed the issuer's use of stress testing analysis as part of its climate adaption plans.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Climate
Country: Canada
Sector: Construction

- In December 2022, our Fixed Income High Yield credit research analysts engaged with the issuer's Investor Relations team to discuss its emissions-reduction targets.
- The issuer currently has lower GHG emissions than other homebuilders in the region, so the Fixed Income team discussed the setting of future targets and the strategy to achieve them.
- The issuer said it plans to publish a sustainability report in 2023 that will include further transparency on carbon, energy, waste, social and governance factors. The Fixed Income team said it expects to see best practice on other ESG disclosures, including product affordability.

Sovereign, Supranational, Municipal and Agency engagements

There are fewer direct channels for engagement with sovereign, supranational, agency and municipal issuers compared with corporate issuers, but we seek to meet with the policymakers responsible for monetary and fiscal decisions, including those in treasury departments, government agencies and debt management offices. We also seek to express our views to supranational entities such as the International Monetary Fund, World Bank and OECD. We are committed to engaging with sovereigns on environmental policies. We aim to engage on the enhancement of climate-related metrics and disclosures and information-sharing on industry best practices.

Our sovereign engagement can also serve to evaluate opportunities to allocate capital to ESG investments. Government roadshows organized by debt management offices to launch green, social and sustainability bond issuances are a useful setting for dialogue on how a country can achieve sustainable growth.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Climate
Region: Europe
Organization type: Supranational Organizations

- In March 2022, our Fixed Income Macro Rates and Fixed Income ESG investment team engaged with the organization's treasurer to discuss its plans for financing climate action and sustainability.
- The issuer intends to channel most of its investments over the next three years toward sustainability and climate action, including allocations to sustainable energy, natural resources and sustainable cities. The Fixed Income team welcomed this plan, but encouraged the issuer to begin disclosing annual metrics on progress.
- The Fixed Income team also encouraged the continued use-of-proceeds format issuance and discussed the issuer's potential role in social projects.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Climate
Region: Europe
Organization type: Agency

- In March 2022, our Fixed Income Macro Rates and Fixed Income ESG investment team engaged with the Treasurer and Investor Relations team of an agency to discuss climate risks and guidelines for high-impact sectors.
- The Fixed Income team welcomed the high-impact sector guidelines that were rolled out in 2021 across shipping, automotive, steel, power generation, buildings and aviation, and encouraged the issuer to expand this guidance to other sectors including oil and gas.
- Discussions also included details on how the issuer plans to keep its guidance up to date and the influence of the EU Taxonomy and industry best practices.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Climate and Green Bonds
Region: Europe
Organization type: Sovereign Issuer

- The Fixed Income GSI team has been engaging with the issuer on green bonds since its inaugural issuance in 2019.
- In June 2022, the Fixed Income GSI investment team discussed this sovereign issuer's transition plans and green bond offering.
- The 2022 engagement focused on EU Taxonomy alignment, especially the "do no significant harm" assessment for each eligible project.

CASE STUDY:
Category: Investment Research and Monitoring
Topic: Social Inclusion
Region: North America
Organization type: Government Sponsored Entity (Ginnie Mae)

- In December 2022, our Fixed Income Securitized Debt and Fixed Income ESG team engaged with a Government Sponsored Entity's President and Vice President to discuss racial inclusion in the housing market.
- The discussion recognized the challenges faced with disclosure around data and focused on some of the data and initiatives that aim to promote access and equity to US homeownership.

Outcomes of our engagement work

The case studies above describe some of the company actions taken following our engagement work. Not all company actions are based solely on our engagement efforts and there may be a multitude of other factors which influence investee companies. Many of our engagements with issuers seek to encourage positive change. The outcomes can be seen in a variety of ways, including:

- Companies may increase disclosure
- Companies may address and remedy negative impacts on the environment and/or people
- Companies may develop and implement sustainability policies
- Changes may be made to board composition and structure
- We may learn information about stewardship related issues which may support our investment process
- We may escalate our engagement activities or inform our proxy voting

PRIVATE MARKETS

Active monitoring of and engagement with our portfolio companies, sponsors and asset managers, where applicable, is an important aspect of our Private Markets Investing business and we take our responsibility as active owners and / or lenders very seriously. We work in partnership with our portfolio companies, sponsors and asset managers, where applicable, to find value-add opportunities in our engagement efforts. In contrast with publicly listed companies, which can often have thousands of shareholders our investment teams work alongside the management team, where appropriate, to strengthen the management / running of the company or asset in which we have invested. However, methods and frequency of engagement will vary across investment strategies and / or asset classes due to the nature of the investment and degree of influence that we have. We have included a number of examples and case studies from across our diverse business to show the different ways in which our approach may be put into practice.

Our objectives for portfolio company engagement are generally identified during the due diligence process for a new investment and may be updated during the ownership period. We generally conduct our engagements via meetings (in person or virtual). Management and engagement activities may be discussed in the respective Investment Committee on a periodic basis, where appropriate.

A key component of our engagement efforts in 2022 was the collection of ESG data, which can be challenging to obtain, especially for private markets. Recognizing the need for decision-useful data and analytics, the Private Markets Investing business undertakes a bi-annual data collection process to collect primary ESG data, including climate-related metrics, from portfolio companies across Infrastructure, Sustainable Investing Group, Corporate Private Equity and Growth Equity. This effort is led by a dedicated ESG data specialist on the Sustainability and Impact team. Throughout 2022, the Sustainability and Impact team provided guidance and trainings to portfolio companies in-scope for the data collection process. These portfolio companies benefitted from numerous discussions with the Sustainability and Impact team on how to collect data, as well as detailed customized analysis of the data provided which suggested areas for improvement and an overview of a company's maturity relative to peers. Some areas for improvement included onboarding a suitable GHG accounting tool, assessing supply chain management, reviewing employee compensation, improving energy efficiency, evaluating physical risk, and other resiliency recommendations.

As described on page 13, we also support certain portfolio companies through the Goldman Sachs Value Accelerator, a centralized platform that partners with our portfolio companies by leveraging the Goldman Sachs network, our differentiated resources, and our highly distinguished operating advisors and sector experts.

Examples of how we engage as a private shareholder:

For certain ESG impact strategies, following investment, the Sustainable Investing Group engages with portfolio company management to implement and monitor ESG-related recommendations identified during the due diligence process. Team members conduct quarterly monitoring calls and an annual review of portfolio companies to ensure continued alignment and progress against ESG indicators. Where the investment team becomes aware of a material issue at the portfolio company, the investment team will take remedial action that may include enhanced engagement with the company, appointment of a third-party consultant and/or implementing a remediation plan.

For new investments in certain Infrastructure strategies, working with the support of a third-party technical consultant, the investment team conducts a post-closing ESG assessment and develops an ESG Action Plan for each portfolio company. Once an ESG Action Plan has been developed the investment team then works with management to drive and track implementation of the identified material measures.

An example of how we engage as a board member:

When we hold an equity position in a company, individuals from our investment teams may also serve as members of the board of directors of portfolio companies. In this capacity, we may have the ability to participate in and guide general corporate strategy, particularly on important matters such as the company's commitment to observing best practices with respect to ESG risks. This structure enables us to closely monitor issues that may impact the value of our investment and address them, as appropriate.

An example of how we have engaged as a lender:

For certain Private Credit strategies, the Private Credit teams' engagement efforts with borrowers includes regular communication with sponsors and/or borrower management teams on indicators relevant to credit quality and, when relevant, the sharing of best ESG practices. During the investment hold period, the investment team seeks to ensure ongoing borrower reporting and monitoring on ESG risks where appropriate. For example, the investment team will engage with the sponsor/borrower for each portfolio company on ESG at least annually, with the aim of encouraging the borrowers to maintain or improve their ESG performance and program.

CASE STUDY:
Industry: Renewable Electricity

In December 2021, the Sustainable Investing Group invested in a provider of long-duration energy storage ("LDES") technology and developer of utility-scale energy storage projects. During 2022, the company continued to build out its ESG programs, expanded its sustainability-aligned corporate governance mechanisms and engaged with several resources at Goldman Sachs, including the Value Accelerator. On behalf of the company, the team engaged a management consultancy to run a comprehensive search for diverse directors with relevant power market experience; the company onboarded the former CEO of an electric power company as an independent director in Q2 2022. The Goldman Sachs Value Accelerator remains actively involved in executive coaching and recruiting for a number of key roles.

CASE STUDY:
Industry: Renewable energy storage

Following the investment in and establishment of a utility-scale battery energy storage operating company in April 2022, the Sustainable Investing Group has been supporting the company in developing its sustainability strategy and governance. Working with the support of a third-party technical consultant, the team is in the process of conducting a post-closing review and developing an ESG post-close uplift action plan to formalise the company's sustainability framework, including the various policies to underpin the core ESG values. The team is also working with the consultant to develop a training program for the company management team on how to use and implement the new tools and processes. The investment team's engagement during 2022 has resulted in substantial progress including, but not limited to the establishment of several environmental procedures, evaluation of all sites for proximity to biodiversity-sensitive areas, adoption of an EHS policy and development of EHS practices at the project level.

CASE STUDY:
Industry: Real Estate

In November 2022, the Real Estate team, through proactive engagement, discovered that there were opportunities for improvement within a US retail / multifamily investment. Following an internal review conducted by the team, discussions were held with the sponsor to discuss ESG initiatives to enhance the sustainability and operational performance of the investment. The Real Estate ESG team identified three key measures that could be implemented and worked with the sponsor to agree an implementation timeframe for (i) tracking diversity and inclusion ("D&I") vendor spend; (ii) procuring renewable energy and (iii) tracking energy consumption through metering. The investment team leveraged their relationship with the sponsor to influence a property where the team did not have direct control of the property.

CASE STUDY:
Industry: Food Services

In late 2022, the Corporate Private Equity team, with the support of the Sustainability and Impact team, worked with a Food Services company to engage our chosen GHG Accounting Provider. The portfolio company has over 140 locations across the US and was not tracking its GHG emissions in 2021. The investment team and members of the Sustainability and Impact team held a call with the company to understand if our chosen GHG Accounting Provider would be the right solution to support the company in their emission measurement, to streamline their data collection and carbon footprint calculations. The Sustainability and Impact team organized a second call with the company and our chosen GHG Accounting Provider for a demo of the software and to respond to any additional questions. Following this engagement, the portfolio company onboarded our GHG Accounting Provider.

Outcomes of our engagement work

The case studies above describe some of the actions taken by our portfolio companies following our engagement work. Not all company actions are based solely on our engagement efforts and there may be a multitude of other factors which influence portfolio companies.

Principle 10 Signatories, where necessary, participate in collaborative engagement to influence issuers

PUBLIC MARKETS

How we have worked with others

Leveraging resources and knowledge across Goldman Sachs helps make the Global Stewardship Team a thought leader for our clients. The team represents Goldman Sachs Asset Management at various conferences and industry forums and supports strategic industry initiatives.

We participate in numerous forums and media events each year to gain perspective on the evolving corporate governance and sustainability landscape across different regions. Goldman Sachs Asset Management seeks to build industry influence and promote best practices in stewardship through its memberships and affiliations.

Some Highlights of Our Work in 2022

- **30% Club**

In 2020, we joined the Japan chapter of the 30% Club, a group dedicated to promoting gender diversity throughout all levels of an organization. Comprised of investors and companies, the 30% Club aims to achieve corporate diversity comprehensively and efficiently, with the ambition of reaching 30% women officer representation at TOPIX100 companies by 2030.[16] We have taken a leadership role in the group, with our APAC Head of Stewardship, Chris Vilburn, serving as a board member for the 30% Club Investor Group and co-head of the Thought Leadership sub-group, and a Global Stewardship Team member, Mayu Nishimura, serving as Co-Secretariat of the Investor Group.[17]

Spotlight: Supporting the Development of Future Women Leaders

The 30% Club Japan Thought Leadership group hosted a training event in December 2022 for approximately 40 senior women leaders from 30% Club member companies to help develop the pipeline of future women executives and directors. The event providing training on corporate governance, board director roles, and best practices for developing workforce and leadership diversity.

- **Climate Action 100+**

In 2021, to further our support of industry initiatives to address the climate transition, we joined Climate Action 100+. As part of our membership, in 2022 we joined engagement meetings organized through the initiative, engaging with select companies across a range of industries.

Case Study: A Czech Utilities Company

The Global Stewardship Team along with other Climate Action 100+ signatories met with the sustainability and investor relations team at a Czech Utilities company in November 2022 to discuss updates on the company's climate strategy and capital allocation. The company has steadily been moving away from coal, increasing generation from gas and renewables. However, the recent energy crisis has reaffirmed the need for energy security and supply to meet energy demands across Europe. While the recent energy situation has impacted the company's short-term strategy and extended the life of some coal projects, the company has not changed its long vision and aims to have fully decommissioned coal by 2038, replaced by renewables and gas, aligned with the EU Taxonomy.

[16] 30% Club Japan Chapter website, 2021.
[17] As of December 2022.

We encouraged greater disclosure around how the company's capital expenditure plans support this strategy, including disclosing the methodology for how they determine whether spend is aligned. We also encouraged them to disclose how the capital expenditure plans will translate into a lower carbon energy mix over time.

- **Council of Institutional Investors**

Jen Sisson, EMEA Head of Stewardship, served as a member of the Corporate Governance Advisory Council ("CGAC") for the Council of Institutional Investors ("CII") in 2022. Prior to Jen's joining, Catherine Winner served a three-year term on the CGAC and in 2021 served as its Chair.

The CGAC provides input to the CII board and staff on corporate governance developments and trends, including thought leadership on best practices. It also advises on CII activities that can best promote effective corporate governance and enhance the value of CII membership. Finally, the CGAC shares insights relevant to CII policy development and recommends speakers and topics for CII events, policies and other initiatives.

- **IFRS International Sustainability Standards Board (ISSB)**

We have been a member of the Sustainability Accounting Standards Board Investor Advisory Group since 2018 and continue to support their work as part of the ISSB. We currently hold two seats on the ISSB Investor Advisory Group (IAG).

Spotlight: Sharing Our View on Disclosure:

Members of the Global Stewardship Team and the Fundamental Equity investment team presented at a webcast for the Energy Infrastructure Council ("EIC"), a non-profit trade association for energy infrastructure companies.

More than 50 participants attended the event, including midstream energy companies, buy-side investors and sell-side analysts. The webinar highlighted the release of a reporting template designed to help guide midstream energy companies in identifying and disclosing material ESG data. We highlighted the importance of material ESG disclosure and shared information on how we approach ESG integration.

PRIVATE MARKETS

For information on how we have sought to partner with other private markets stakeholders, please refer to Principle 4.

Select list of initiatives

Goldman Sachs and Goldman Sachs Asset Management seek to build industry influence and promote best practices in ESG and stewardship through various memberships and affiliations. Below, find a select list of our affiliations/memberships:

Corporate Governance
Council of Institutional Investors-We have been a member since 2017 and hold a seat on their Corporate Governance Advisory Council.
ESG Disclosure Study Group-We became a founding member of the EDSG in June 2020. EDSG is a Japan-based organization focused on carrying out research related to ESG information disclosure best practices to enhance corporate value and growth as well as the sustainable development of society.
International Corporate Governance Network ("ICGN")- We became a member of the ICGN in January 2020. Established in 1995 as an investor-led organization, the ICGN's mission is to promote effective standards of corporate governance and investor stewardship to advance efficient markets and sustainable economies worldwide.
Japan Stewardship Initiative ("JSI") – We were a founding member of the JSI launch in 2019 and continue to contribute as a steering committee member.

Asia Corporate Governance Association (“ACGA”) – Goldman Sachs Asset Management joined the ACGA in 2022 and is a member of the China Working Group.
Environmental
CDP – GS has been a signatory to the CDP climate change survey since 2006 and has made our climate change-related disclosures publicly available since 2010.
WRI Corporate Consultative Group – Since 2014, we have been members of the advisory board for the World Resources Institute’s Corporate Consultative Group.
Banking Environment Initiative (“BEI”) – Since 2014, we have been members of the BEI.
RE100 – GS has been a member since 2015.
Climate Bonds Initiative – Goldman Sachs Asset Management became a Climate Bonds Initiative Partner in 2015.
TCFD – GS is a supporter of the TCFD standards which can be found on their official website.
One Planet Sovereign Wealth Fund Framework – Goldman Sachs Asset Management became a member of the Asset Manager Working group within the One Planet Sovereign Wealth Fund Framework in 2018.
ICMA – Goldman Sachs Asset Management joined ICMA’s Green, Social & Sustainability Bond Committees in 2019.
Climate Finance Leadership Alliance – GS joined the Climate Finance Leadership Alliance as one of the six founding member institutions in 2019, which will help facilitate the private financing objectives included in the Paris Agreement.
United Nations Environment Programme Finance Initiative (“UNEP FI”) – In 2019, Goldman Sachs Asset Management was selected to join the UNEP FI Reference Group for “A Legal Framework for Impact”. This initiative publishes legal analysis and recommendations for investors seeking to account for sustainability impact in the investment process.
Institutional Investors Group on Climate Change (IIGCC) – Goldman Sachs Asset Management has been a member of the IIGCC since 2019.
Climate Action 100+ – Goldman Sachs Asset Management became a member of Climate Action 100+ in 2021.
Social
30% Club Japan – Goldman Sachs Asset Management became a member of the 30% Club’s Japan Investors Group in 2020.
Industry Standards and Initiatives
Principles for Responsible Investment (“PRI”) – Goldman Sachs Asset Management has been a signatory to the UN PRIsince 2011.
SASB– Goldman Sachs Asset Management has been a member of SASB since 2018.
United Nations Development Programme (“UNDP”) – Goldman Sachs Asset Management joined the UNDP SDG Financing Technical Committee in 2019.
Stewardship Codes and Statements
Japan Stewardship Code – Goldman Sachs Asset Management has been a signatory since 2014.
Singapore Stewardship Principles – Goldman Sachs Asset Management has been a supporter of the Singapore Stewardship Principles since 2016.
UK Stewardship Code – Goldman Sachs Asset Management is a signatory to the 2020 UK Stewardship Code, previously a signatory to the 2012 code.
Investor Stewardship Group (“ISG”) – Goldman Sachs Asset Management became a signatory of the ISG in 2018.

Principle 11: Signatories, where necessary, escalate stewardship activities to influence issuers

PUBLIC MARKETS

How we select and prioritize issues for escalation

We decide on appropriate escalation on a case-by-case basis. Where repeated engagement does not lead to improvement, we may leverage the full toolkit available to an active manager, including but not limited to:

- Evolving our proxy voting to reflect our developing views on issues
- Escalating our voting on specific issues at specific company meetings
- Using other forms of active engagement (e.g., letter writing)
- Seeking to engage with member of the Board or other more senior company representatives
- Actively buy or sell shares

As well as escalations related to engagements with specific issuers, we also seek to escalate our engagement on our thematic engagement topics over time (please refer to Principle 9). Some examples of thematic issues we have prioritized for escalation in 2022 include but are not limited to:

- Evolving our expectations of Board Gender Diversity
- Based on discussions with our investment teams, we have increased our activities around engagement on material emissions reporting expectations of companies and added to our proxy voting policies to reflect material emissions reporting expectations, please refer to Principle 9 for further details.
- Voting on executive compensation

Examples of our escalation activities and outcomes in 2022, including activities differing by region

Evolving our expectations of Board Gender Diversity

We believe diverse teams have the potential to outperform and we expect our portfolio companies to demonstrate diversity at board level. Based on our belief that diversity is a business imperative, we have evolved the expectations of board diversity in our proxy voting policy over several years to promote board diversity at portfolio companies.

Evolution of our policies:

- 2019: Vote against the Chair of the Nominating Committee at US companies with no women on the board.
- 2020: Vote against the members of the Nominating Committee at companies globally with no women on the board.
- 2021: Vote against the full board in the US and against the members of the Nominating Committee outside the US at companies with no women on the board. Further, vote against the members of Nominating Committee at companies in the US that do not have one woman and one additional diverse director, which includes diversity in terms of gender, race/ethnicity and sexual orientation.
- **2022: We expect all boards globally to have at 10% women on the board or meet higher local market requirements. Further, we expect that S&P 500 and FTSE 100 boards should have at at least one diverse director from a minority ethnic group.**

Our Voting in 2022

We voted against 1,224 companies in 2022 for lack of board diversity.

Companies voted against for lack of board diversity by region

Sector	# of companies
US	465
Americas es US	29
EMEA	121
Japan	355
APEJ	254

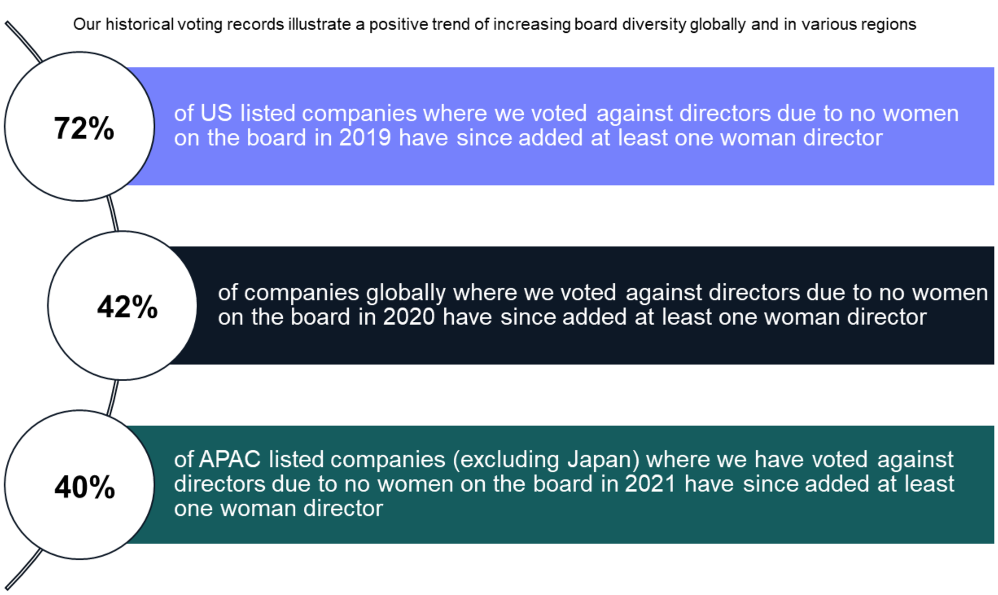
Companies voted against for lack of board diversity by sector

Sector	# of companies
Communication Services	62
Consumer Discretionary	138
Consumer Staples	61
Energy	54
Financials	140
Health Care	169
Industrials	226
Information Technology	151
Materials	113
Other[18]	6
Real Estate	71
Utilities	33

Progress in Promoting Board Diversity

We see our vote as a way to share our views, and we have seen progress in increasing levels of board diversity.

Source: Goldman Sachs Asset Management and FactSet as of December 31, 2022



[18] Primarily incudes UCITS fund meetings

Taking a regional approach: US - Escalating Our Stewardship Efforts on Board Diversity

During 2022, we identified 24 US companies which we had voted against members of the board consistently over the past four years due to lack of board diversity.

- We found that six of those companies had added a gender diverse board member since our last vote against the board at the annual meeting.
- A total of 18 of the 24 companies still lacked gender diversity at the board level, and we subsequently sent letters and emails requesting engagement with the Chairman of the board of each company.
- We engaged with four of the 18 companies about the importance of diverse perspectives on a board and throughout an organization.

CASE STUDY:
Category: Thematic
Theme: Board Diversity
Country: USA
Sector: Energy

- In November 2022, members of the Global Stewardship Team engaged with the company's Chairman and CFO to discuss the lack of gender diversity on the board.
- We had voted against members of the board for four consecutive years because the company has had no women directors, including voting against the full board in 2021 and 2022. To escalate our concern, we mailed the Chairman a letter signed by the Global Head of Stewardship and the CIO of AMD Public, noting we would appreciate the opportunity to discuss the issue further.
- During our engagement, we noted that the board of directors is made up of seven men with no new members added in the past five years, and we advocated for board refreshment and emphasized the importance of board diversity and diversity of thought.
- The company contacted us in January 2023 to announce the election of two new women independent directors with diversified skill sets within the oil and gas industry.

Taking a regional approach: UK - Engaging with UK Companies on Board Ethnic Diversity

The Parker Review is an independent review commissioned by the UK government to look into how to improve the ethnic and cultural diversity of UK boards to better reflect their employee base and the communities they serve.[19] The report sets out objectives and timelines to encourage greater diversity and provides practical tools to help business leaders address the issue.

The first main target set out in the review was for FTSE100 companies to have at least one diverse director from a minority ethnic group by the end of 2021. We engaged with eight companies in 2021 and four in 2022 that did not meet the Parker Review target to discuss their approach to board diversity and succession planning and to encourage them to improve the diversity of their boards.

In 2022, our proxy voting policy was to vote against the nominating committees of boards in the FTSE 100 that do not meet the Parker Review guidelines. As a result, we voted against three companies that failed to meet these standards.

We intend to continue our focus in this area. The next phase of Parker Review targets will apply to companies in the FTSE350, with the expectation that they have at least one diverse director from a minority ethnic group on their boards by the end of 2024.

[19] Please see the Parker Review for more information.

CASE STUDY:
Category: Thematic
Theme: Board Diversity
Country: UK
Sector: Communications Services

- Members of the Global Stewardship Team engaged with the company's Investor Relations team in July 2022 to discuss the lack of board diversity ahead of its 2022 annual meeting. The company is a member of the FTSE 100, so we expect the board to have at least one diverse director from a minority ethnic group under our 2022 proxy voting policy.
- The company added three new directors in 2022, but none that self-identify as ethnic minorities. The company said it planned to add three more directors in 2023 as part of its normal succession plan, and we encouraged them to seek a diverse range of candidates, particularly given the international scale of the company.
- While the company committed to increasing the ethnic diversity of the board, we voted against the current members of the Nominating Committee in line with our policy and intend to continue engaging with the company on this issue.

Taking a regional approach: EMEA – Increasing Our Gender Diversity Expectations

We updated our policy in 2022 to reflect our expectation that all public company boards globally have at least 10% women directors or meet a higher local market standard. This new policy allowed us to address boards of various sizes and increased our expectation for markets with higher local thresholds; for example, some EMEA markets set targets of 30% to 40% women director representation. France has a market quota requiring 40% of each sex at board level; other markets with quotas include Italy, Spain, the Netherlands, Norway and Portugal.

Based on our policy, we voted against directors at 121 companies in EMEA in 2022, compared with 47 a year earlier.

Addressing Key Governance Issues Through Proxy Voting in Japan

To encourage portfolio companies in their governance development, we have a Japan-specific governance engagement program focused on a wide range of ongoing concerns. We integrate engagement with our proxy voting efforts and incorporate Japan-specific governance issues into our Proxy Voting Policy and implementation. We conduct in-house case-by-case analysis on companies' return on equity ("ROE"), dividend payout and cross-shareholdings to ensure that our decisions reflect each company's situation and are made in the best interests of shareholders.

	Return on Equity	Dividend Payout	Cross Shareholdings
Issue	Structurally low ROE at many Japanese companies	Some Japanese companies are reluctant to pay dividends and may retain excess net cash levels, even when the business is performing well	Strategic shareholdings (i.e., cross-shareholdings) are typically shares a company holds in other companies for the sake of business relations. They can create conflicts of interest with transactions, and hinder minority shareholder rights
Our Voting Policy	Vote against management if 5-year average ROE is below 5% without recovery. During COVID-19, we conduct case-by-case due diligence to ensure we do not vote against companies with low ROE purely due to recent COVID-19 impact	Consider a vote against companies with payout ratios below 20%, after considering balance sheet and fundamental business strength	Vote against companies with excessive strategic shareholdings, after considering the companies' most recent disclosure materials

We strengthened our criteria for cross-shareholdings in 2022, and as a result the number of companies we voted against based on excessive cross-shareholdings increased from 35 in 2021 to 105 in 2022.

We are encouraged by the progress we are seeing from many companies, including broad-based reductions in holdings. Some companies are also starting to disclose numerical reduction targets for their cross-shareholdings. For companies with excessive cross-shareholdings, we conduct individual due diligence to assess their holdings and any quantitative reduction targets, and we take these targets into consideration as we apply our voting policy.

CASE STUDY:
Category: Thematic
Theme: Regional governance best practices
Country: Japan
Sector: Financials

- In May 2022, members of the Global Stewardship Team engaged with the bank's CEO to discuss their new strategy. We have been engaging with the current CEO for four years to discuss strategies to improve ROE.
- In April 2022, the bank announced March 2022 full-year earnings and an updated medium- to long-term management strategy that included a capital realignment and shareholder return policy. The company outlined several measures to enhance corporate value and ROE including closing an overseas branch to reduce required regulatory capital, conducting share buybacks and implementing a stock-based compensation system linked to ROE for executives.
- We are particularly encouraged to see the bank committing to zero cross-shareholdings and view this as proof that companies can pursue growth strategies without relying on cross-shareholding relationships.
- The bank's trailing ROE was below 5% over the past 5 years (FY0 at 3.5%), which normally triggers a vote against the CEO. However, we are supportive of the CEO's revitalization plan, and believe it is in the best interest of shareholders to support the current CEO as the transition strategy moves forward. At the AGM we voted in favor of the election of the CEO and will continue to monitor progress going forward.

Our Approach to Executive Compensation

Executive compensation plan structures are generally an important element of the corporate governance framework. We expect good compensation plans to have characteristics that can attract and retain key executives and align management's compensation with long-term shareholder value creation and shareholder's best interests. We believe that compensation committees are best placed to oversee the executive compensation plan and we will generally be supportive of plans that broadly meet the characteristics we consider important.

During 2022, we voted on 4,557 management-sponsored "Say on Pay" proposals and voted against 16% of them. Voting against "Say on Pay" is one way to express our views. In cases where we have persistently voted against compensation and the board has not instituted sufficient changes, we may seek to escalate our view by voting against members of the Compensation Committee. For example, in the US if we are voting against "Say on Pay" for the second consecutive year and "Say on Pay" met with significant opposition the previous year, we will generally vote against incumbent members of the Compensation Committee. We voted against ~533 directors at ~258 companies in the US for reasons related to executive compensation.

Please refer to Principle 9 and Principle 12 for further information on our escalation efforts in engagement and voting.

PRIVATE MARKETS

Our Private Markets Investing business escalation process has been designed in the context of nature of our investment, our relationships with management and, in certain circumstances, through the seats held on a portfolio company's board, which enable direct discussions at senior levels of the companies in which we invest. Investment teams overseeing portfolio companies must internally escalate certain matters to relevant supervisor(s) and relevant control side personnel, such as Legal, Compliance, Risk and Corporate Communications. Matters which should be escalated may include but are not limited to health and safety and compliance issues.

Principle 12: Signatories actively exercise their rights and responsibilities

PUBLIC MARKETS

How we exercise our rights and responsibilities

Fixed Income

For Fixed Income assets, we employ an engagement approach when seeking amendments to terms and conditions in indentures or contracts, and, when reviewing prospectus and transaction documents. This is described in more detail below:

SEEKING AMENDMENTS TO TERMS AND CONDITIONS IN INDENTURES OR CONTRACTS

We employ a member of the investment team to assist in the engagement on amendments to terms and conditions as warranted. Our focus is generally on provisions that are deemed ‘off-market’ relative to documents for similar levels of credit or structure risk. In addition to legal expertise on the investment team, we maintain access to in-house legal counsel as well as third party legal counsel if deemed necessary.

REVIEWING PROSPECTUS AND TRANSACTION DOCUMENTS

For certain portfolios and as appropriate, the investment team generally aims to review relevant documents for issuances with a focus on diversions from market norms. To support this effort, we may in some circumstances leverage a third-party consultant and historical database of prospectus terms to identify anomalies. We may engage directly with debt capital markets and the Issuer (or Issuer counsel) in situations where the investor protections are deemed weak or inadequate.

We mainly invest in marked-to-market traded bonds where there is limited option to influence corporate action on impairment rights or seeking access to information provided in trust deeds.

Equities

Our Approach to Proxy Voting

Exercising our clients’ shareholder rights via proxy voting is an important element of the portfolio management services that we provide to our advisory clients who have authorized us to address these matters on their behalf. As a fiduciary, our guiding principle in performing proxy voting is to seek to make decisions in the best interest of our clients by favoring proposals that, in our view, maximize a company’s shareholder value. This reflects our belief that sound corporate governance can create a framework within which a company can be managed for the long-term benefit of shareholders.

For our public markets investment businesses, Goldman Sachs Asset Management has developed a customized Global Proxy Voting Policy (“the Policy”), to execute our voting responsibilities where clients have delegated proxy voting responsibility to us. We seek to update the Policy annually to incorporate current issues and evolving views about key governance topics. The Policy is customized regionally and allows us to take a nuanced approach to voting that is specific to regions and countries. Please refer to the Policy in full for more details on our approach.

To govern our proxy voting responsibilities, we have created a Goldman Sachs Asset Management Public Markets Business Proxy Voting Council, comprised of stakeholders from the Global Stewardship Team, equity investment teams, divisional management, legal, and compliance. The purpose of the Proxy Voting Council is to bring together key stakeholders to annually review and recommend potential policy changes, discuss any potential changes to the voting process and convene on voting topics that may arise during the year.

For more on our approach to voting, please see Global Approach to Proxy Voting on our website.

Our Expectations of our Portfolio Companies

Approach to Governance

We generally believe companies should seek to comply with commonly accepted corporate governance best practices as well as the corporate governance standards that are applicable in their jurisdiction of incorporation.

Shareholder Rights

All shareholders should be given the opportunity to participate effectively and on an informed basis in shareholder meetings. Companies should facilitate the exercise of ownership rights by all shareholders, including by giving shareholders timely and adequate notice of all matters proposed for a shareholder vote. Generally, "one-share-one-vote" structures are preferable.

The Board of Directors

We seek to hold the Board of Directors accountable for actions and results related to their responsibilities. The Board of Directors should be accountable to shareholders and stakeholders and should base their decisions on what is in the best long-term interests of the company, its shareholders, and its stakeholders.

Boards should be made up of a majority of independent directors or meet local market best practices. We generally believe diverse teams have the potential to outperform and we expect the directors of public companies to have diverse skill sets and experiences. Diversity of ethnicity, gender, and experience are important considerations in Board composition. Boards should generally consist of directors with varied tenures and focus on succession planning for refreshment of directors over time.

Boards should establish committees to oversee areas such as audit, executive and non-executive compensation, director nominations and risk oversight as required by their local market best practices or as is appropriate for the company's circumstances and operations. The responsibilities and membership of these committees should be publicly disclosed.

Board members should ensure that they have sufficient time available to discharge their duties and should attend Board and committee meetings regularly.

Executive Compensation

Executive compensation plan structures are generally an important element of the corporate governance framework. Good compensation plans have characteristics that seek to attract and retain key executives and align management's compensation with long-term shareholder value creation and shareholder's best interests. We generally believe that compensation committees are best placed to know what is needed for the plans they are responsible for and will generally be supportive of plans that broadly meet the characteristics that we consider important.

Reporting and Audit

Companies should provide high quality, reliable and transparent financial and non-financial reporting. An independent, high-quality audit is important for shareholders. Auditors should be independent, and any non-audit related fees paid to the audit firm should therefore not be excessive. The Board (or it's appropriate committee) should take steps to ensure that company reporting is reliable, fair and balanced and understandable and that the external auditor delivers a robust and high-quality audit.

Our Approach to Shareholder Proposals

Our approach is focused on voting to maximize shareholder value on behalf of clients, and our voting decisions on shareholder proposals are considered on a case-by-case basis. We recognize that many factors can affect investment performance, expose potential investment risks and provide an indication of management excellence and leadership. When evaluating shareholder proposals, we seek to assess the purpose and impact of each proposal considering the long-term overall benefit to shareholders, and may take into consideration factors such as:

- The company's current level of publicly available disclosure
- If the company has implemented or formally committed to the implementation of a reporting program based on the SASB materiality standards or a similar standard
- Whether the proposal is likely to enhance or protect shareholder value

Some highlights of our 2022 policy updates:

	Region	2022 Policy	2023 Policy	Rationale
Dividend Policy	Japan	Vote FOR approval of the allocation of income, unless: • The dividend payout ratio is less than 20%, and is not appropriate or sufficient when considering the company's financial position; or • The company proposes the payments even though the company posted a net loss for.	Vote FOR approval of the allocation of income, unless: • The dividend payout ratio has been consistently low without adequate explanation; or • The payout is excessive given the company's financial position.	Strengthening our approach on low dividend payments to promote capital allocation in the best interest of shareholders
Equity Plans	US	Generally vote case-by-case on management proposals on equity based compensation plans	Generally FOR management proposals on equity based compensation plans	Based on our voting record, we generally support management proposals on equity plans. In addition, we added to the public policy quantitative and qualitative metrics related to the plan features and grant practices that may lead to a vote against the proposal
Director and Officer Exculpation	US	None	Generally vote in favor of management proposals to amend the company's certificate of incorporation to reflect new Delaware law provisions regarding officer and director exculpation	Delaware recently enacted legislation that enables Delaware companies to limit the liability of certain officers and directors in limited circumstances. The proposed amendment would only permit exculpation for direct claims, as opposed to derivative claims made by shareholders on behalf of the corporation and would not apply to breaches of the duty of loyalty, or to acts or omissions not in good faith or that involve intentional misconduct.

	Region	2022 Policy	2023 Policy	Rationale
Advisory Vote on Executive Compensation	US	Generally vote case-by-case management proposals on executive compensation	Generally FOR management proposals for an advisory vote on executive compensation. Pay practices that may result in a vote AGAINST management proposals for an advisory vote on executive compensation may include: • A disconnect between pay and performance based on a quantitative assessment of the following: pay vs TSR ("Total Shareholder Return" and company disclosed peers; • Lack of transparent disclosure of compensation philosophy and goals and targets, including details on short-term and long-term performance incentives; • Long term incentive awards consisting of less than 50% performance-based awards; • Long term incentive awards evaluated over a time period of less than three years; • The Board used discretion without sufficient disclosure; • The Board changed the targets and/or performance metrics during the pay period; • The Board awarded a multi-year guaranteed cash bonus or non-performance equity award; • The Board retested performance goals or awarded a pay for failure pay plan; • Lack of the Board's response to failed MSOP vote the previous year; • The plan allows for the single trigger acceleration of unvested equity awards and/or provides excise tax gross ups; • The Board has adopted other pay practices that may increase risk to shareholders.	Based on our voting record, we generally support management proposals on executive compensation. In addition, we added to the public policy quantitative and qualitative features that may lead to a vote against the executive pay plan

Monitoring our voting rights

We send an account and positions file to our proxy services provider, ISS, on a daily basis. ISS uses this file to look for upcoming meetings and to reconcile against ballots received from the respective custodians. We review exception reports to seek to ensure ballots are getting voted in line with our instructions.

Differences at a fund level

Individual funds do not generally set their own voting policies. Investment teams generally cast proxy votes consistently with the guidelines and the recommendations. Each investment team, however, may on certain proxy votes seek approval to diverge from the guidelines or a recommendation by following a process that seeks to ensure that override decisions are not influenced by any conflict of interest. As a result of the override process, different investment teams may vote differently for particular votes for the same company.

Our approach to stock lending

In certain circumstances, such as if a security is on loan through a securities lending program, the investment teams may not be able to participate in certain proxy votes unless the shares of the particular issuer are recalled in time to cast the vote. A determination of whether to seek a recall will be based on whether the applicable investment team determines that the benefit of voting outweighs the costs, lost revenue, and/or other detriments of retrieving the securities, recognizing that the handling of such recall requests is beyond our control and may not be satisfied in time for us to vote the shares in question.

Disclosing our votes

We disclose our voting publicly each year in a filing with the US Securities and Exchange Commission and on our website for all our US registered mutual funds. We also generally disclose our voting publicly on a quarterly basis on our website for company proxies voted according to our guidelines and recommendations. For more information on our voting activities please visit our website.

Clients voting preferences

Where clients have investments in segregated accounts, they can choose to delegate their proxy voting authority to us, or to do their own voting.

Clients with investments in pooled accounts are not able to direct votes.

How we voted

We aim to vote at all shareholder meetings for companies held in all portfolios. From time to time, our ability to vote proxies may be affected by regulatory requirements and compliance, legal or logistical considerations. As a result, from time to time, we may determine that it is not practicable or desirable to vote proxies.

In 2022, we voted at 98.8% of votable meetings. While we endeavour to vote all our shares, there are some instances where this is not practical. For example, in instances where there is share blocking or a power of attorney is required to vote, we may determine that the costs outweigh the benefits of proxy voting.

Proxy Voting Snapshot

We implemented new and enhanced global voting policies for 2022 that included increasing our expectations for levels of board diversity and climate related disclosures.

STAT[20]	
Meetings voted	11,677
% Of meetings with at least one vote against management	49%
Proposals voted	112,562
% Proposals voted against management	13%
Meetings voted by market	
Americas ex US	9%
APEJ	31%
EMEA	18%
US	31%
Japan	11%
Proposals voted by topic	
Audit related	6%
Capitalization	8%
Compensation	11%
Director related	52%
Routine business	11%
Company articles	3%
Strategic transactions	2%
Shareholder proposals	2%
Other	4%

We continued to hold boards accountable for their actions by voting against the election of directors where appropriate.

Director elections	
Number of directors voted against	8,174
Percentage of directors voted against	16%

In 2022 we voted against 8,174 directors globally for the reasons illustrated below:

Rationale for vote against a director(s)[21]	
Lack of board diversity	37%
Independence	20%
Overboarding	3%
Attendance	1%
Lack of climate data disclosures	0.3%
Other governance concerns	38%

In addition to using our voting on director elections to promote our governance expectations, we promoted strong corporate governance by supporting shareholder proposals that ask companies to implement governance improvements that meet our policy expectations.

In 2022, we voted in favor of 100% of shareholder proposals asking for declassification of the board of operating/holding companies, a reduction in the supermajority vote requirement, and/or a majority vote for election of directors.

[20] *Percentages may not sum to 100% due to rounding.*
[21] *Percentages may not sum to 100% due to rounding.*

Shareholder Proposal Snapshot

STAT[22]	
Number ESG-related shareholder proposals voted	2,680 (2% of total proposals voted)
% supported	52%
% shareholder proposals voted by topic	
Environmental	7%
Social	6%
Governance	87%
% supported by topic	
Environmental	34%
Social	31%
Governance	57%

Please see the Appendix for more details on our voting activity during 2022.

Shareholder Proposals

Following record levels of support by investors for environment-related shareholder proposals in 2021, the volume of proposals submitted to a vote increased substantially in 2022.[23] The nature of the proposals submitted was often more demanding or prescriptive than in previous years. For example, proposals in 2021 called on companies to publish reports on climate-related risks and opportunities. In 2022, we saw proposals specifically requesting detailed scope 3 emissions reduction targets and Science Based Target initiative ("SBTi")-approved targets. Voting results show that support for environment-related shareholder proposals decreased in 2022, partly because of increased scrutiny by investors of the calibre of proposals and proponents, the prescriptive nature of the proposals and the geopolitical climate.

During the 2022 proxy season, we supported 34% of environmental related shareholder proposals.

"Say on Climate" Resolutions

Shareholder proposals calling for a "Say on Climate" began to appear in late 2020. The proposals encourage companies to develop and implement climate transition plans aligned with the Paris Agreement and to allow shareholders to vote on these plans at annual shareholder meetings. While relatively few such proposals came up for a vote in 2022 compared with the previous year, many companies, particularly in Europe and Australia, voluntarily adopted some form of management-proposed "Say on Climate" vote. In 2022, we updated our proxy voting policy to vote case-by-case on management-proposed climate transition plans. In 2022, we voted on:

- Management-sponsored climate transition plans at 47 companies, supporting 94%
- Six shareholder proposals requesting companies adopt "say on climate," supporting none

[22] *Percentages may not sum to 100% due to rounding.*
[23] https://corpgov.law.harvard.edu/2022/06/07/an-early-look-at-the-2022-proxy-season/

Please see the exhibit below for a case study on our "say on climate" engagements and voting.[24]

Company	Energy company A	Energy company B
Engagement	Met with IR team	Met with Climate and IR team
Company's Response	• In its 2022 Climate Change Report, the **company set new 2030 targets** (enhanced Scope 1 and 2 emission reduction & intensity targets, CCS utilization etc.) while reiterating **commitment to its 2040 target of net-zero Scope 1 and 2 emissions**.[25] • At the engagement meeting, we discussed the company's climate long-term strategy aimed at transitioning the company into a clean energy/clean fuel company, utilizing CCS to produce green hydrogen. They are now **on-ramping their first large-scale CCS project**. • For scope 3 they have committed to **1) helping their customers reduce emissions by at least 1.5 m tons CO2 per year via clean fuel provision by 2030,** and 2) to only accept customers in countries with net zero targets / Paris-aligned policies. We encouraged the company to strengthen their strategy with commitment to an overall scope 3 emissions reduction target.	• Their 2021 Climate Report provides **Scope 1 and Scope 2 emissions reduction targets for 2030 (30%) and 2050 (net zero)**. Additionally, they plan to **invest several billion dollars in new energy products and lower carbon services by 2030**. However, their 2030 target is **highly dependent on the purchase of carbon offsets**, rather than operational reductions or abatement. • In 2020, a shareholder proposal requesting Scope 3 targets received majority support, but the **company has not yet set a target**. We encouraged the company to strengthen their strategy with commitment to a Scope 3 target, and to increase the transparency in their climate plan with details on transition plans for existing assets, and details on expected climate investments and capital allocation.
Action from Global Stewardship Team	Voting Decision for "Say on Climate" Proposal: **FOR** Taking into consideration the company's strong commitment and detailed disclosures, we voted in favor of management's Say on Climate proposal, believing this to be in shareholders' best interest. The plan received 63% support.[26]	Voting Decision for "Say on Climate" Proposal: **AGAINST** We voted against the management's Say on Climate proposal due to the company's overreliance on offsets, lack of transition plan details, and lack of responsiveness to the 2020 shareholder proposal. Though the proposal passed, almost 50% of the company's shareholders voted against its climate transition plan.

[24] For illustrative purposes only. Performance results vary depending on the client's investment goals, objectives, and constraints. There can be no assurance that the same or similar results to those presented above can or will be achieved. Please see our Stewardship Report for additional information and case studies.
[25] Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company. Please refer the Greenhouse Gas Protocol for more information.
[26] The engagement/proxy voting highlights presented here outline examples of Goldman Sachs Asset Management initiatives, there is no assurance that Goldman Sachs' engagement/proxy voting directly caused the outcome described herein.

Rationale for most significant votes

For Sustainable Finance Disclosure Regulation ("SFDR") purposes, the criteria of votes we believe are most significant is based on: (i) the absolute value of the shareholding; (ii) areas of focus as stated in the Engagement Policy; and (iii) where we have voted against management company recommendations. These are as follows:

Company	Proposal	Management Recommendation	Goldman Sachs Asset Management Vote	Vote Rationale	Vote Outcome (%For)
Chularat Hospital PCL	Election of incumbent Nominating Committee members	For	Against	A vote against these directors is warranted because the board does not meet the governance requirements of our proxy voting policy.	Item 6.1: Elect Kumpol Plussind as Director (86.5%) Item 6.2: Elect Yanyong Amornpitakkul as Director (88.7%) Item 6.3: Elect Somyos Yan-ubol as Director (86.5%) Item 6.4: Elect Pinit Kullavanijaya as Director (84.4%)
Kunlun Energy Company Limited	Election of incumbent Nominating Committee members	For	Against	A vote against these directors is warranted because the board does not meet the governance requirements of our proxy voting policy.	Item 3A: Elect Liu Xiao Feng as Director (78.3%) Item 3B: Elect Sun Patrick as Director (83.7%)
Weimob Inc.	Election of incumbent Nominating Committee members	For	Against	A vote against these directors is warranted because the board does not meet the governance requirements of our proxy voting policy.	Item 2A1: Elect Fang Tongshu as Director (90.9%) Item 2A2: Elect You Fengchun as Director (87.8%) Item 2A3: Elect Tang Wei as Director (90.4%)
Bank of Communications Co., Ltd.	Election of incumbent Nominating Committee members	For	Against	A vote against these directors is warranted because the board does not meet the governance requirements of our proxy voting policy.	Item 7.03: Elect Li Longcheng as Director (97.0%) Item 7.06: Elect Liao, Yi Chien David as Director (98.1%) Item 7.11: Elect Woo Chin Wan, Raymond as Director (99.1%) Item 7.12: Elect Cai Haoyi as Director (98.5%) Item 7.13: Elect Shi Lei as Director (99.1%)
CSPC Pharmaceutical Group Limited	Election of incumbent Nominating Committee members	For	Against	A vote against these directors is warranted because the board does not meet the governance requirements of our proxy voting policy.	Item 3A4: Elect Wang Bo as Director (63.0%) Item 3A5: Elect Chen Chuan as Director (66.1%)

PRIVATE MARKETS

How we exercise our rights and responsibilities

Our Private Markets Investing business primarily invests in private assets (and not listed equity) and we therefore do not consider the disclosure of a formal voting policy to be appropriate or proportionate for this business. On rare occasions that our Private Markets Investing business may hold listed equity, for example when a portfolio company goes public, we will exercise our shareholder rights and engage with the company in a manner that we consider to be appropriate.

The very nature of our Private Markets Investing business model means that we seek to exercise our rights and responsibilities in order to support the growth of our portfolio companies and assets for the long-term benefit of our clients. As outlined throughout this report, where we exercise our rights and responsibilities, where appropriate. Please see our disclosures under Principles 6, 7 and 9 for examples of how we undertake our stewardship activities.

Appendix

PUBLIC MARKETS

Engagement Data for CY2022

The below only includes engagements which included discussion of E, S or G issues. Our investment teams may conduct additional engagements that do not cover these topics; these engagements are not included.

Number of Engagements By Region					
	Team				
	Global Stewardship Team	**Fixed Income**	**Fundamental Equity**	**Multiple Teams**	**TOTAL**
Americas	204	329	137	98	**768**
APAC	239	72	353	99	**763**
EMEA	90	378	185	35	**688**
TOTAL	**533**	**779**	**675**	**232**	**2,219**

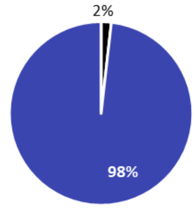
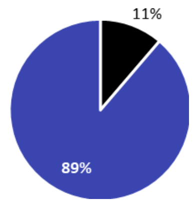
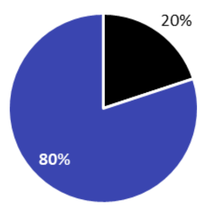
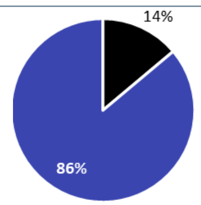
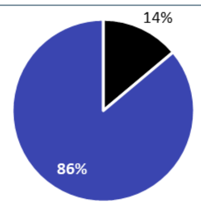
Number of Engagements By Topic[27]	
Environmental	
Greenhouse Gas Emissions	861
GHG reduction targets and / or execution plans	513
Green Product / Business Opportunities	323
Energy Management	272
Pollution (Air Quality, Hazardous Materials, Waste & Packaging)	256
Water & Wastewater	244
Ecological Impact & Land Use	141
Raw Material Sourcing	79
Physical Climate Risks	37
Product Environmental Contribution	17
Social	
Human Capital & Workforce Management	478
Employee Diversity & Inclusion	463
Health & Safety	238
Supply Chain Management & Materials Sourcing	185
Cyber Security & Data Privacy	179
Human Rights & Labor Rights	156
Product Positive Impact	138
Product Quality & Safety	128
Community Development and Relations	40
Governance	
Compensation	529
Board Composition	271
Board Structure	270
Corporate Behavior	238
Board Diversity	185
Proxy-Related	114
Board and Management Quality	106
Disclosure	104
Capital Allocation	98
Board Independence	96

[27] Most of our engagements cover more than one E, S or G topic and so number of engagements per topic will generally not sum to total number of engagements.

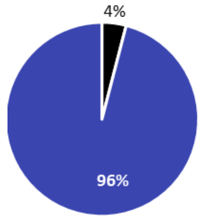
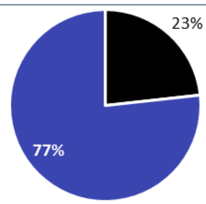
Strategic Shareholdings	60
Group Governance	46
Shareholder Rights	42
Shareholder Returns	37
Controversies	36
Other	45

Proxy Voting Data for CY2022

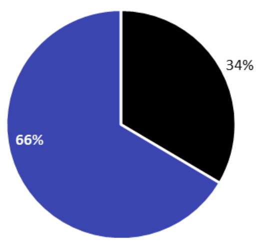
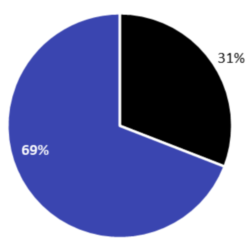
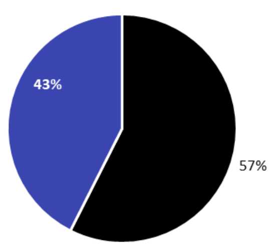
Global Voting Statistics by Proposal Category – Management Proposals[28]

Proposal Category	Number of Proposals Voted	
Audit Related	7,211 (7%)	
Capitalization	8,654 (8%)	
Compensation	12,692 (12%)	
Director Related	58,489 (53%)	
Other	8,185 (7%)	

28 Percentages may not sum to 100% due to rounding.

Routine Business	12,074 (11%)	
Strategic Transactions	2,577 (2%)	
TOTAL	**109,882**	■ With Management ■ Against Management

Global Voting Statistics by Proposal Category – Shareholder Proposals[29]

Proposal Category	Number of Proposals	
Environmental	188 (7%)	
Social	163 (6%)	
Governance	2,329 (87%)	
TOTAL	**2,680**	■ Voted FOR ■ Voted AGAINST

29 Percentages may not sum to 100% due to rounding.