Goldman Sachs Asset Management

FUNDAMENTAL EQUITY

Impact Equity Report 2024

Goldman Sachs Global Environmental Impact Equity Portfolio
Goldman Sachs Global Climate & Environment Equity
Goldman Sachs Global Social Impact Equity
Goldman Sachs Global Equity Impact Opportunities

Executive Summary

At Goldman Sachs Asset Management, we are committed to helping our clients achieve their sustainable investing objectives. Our impact funds are designed to promote the transition to a low-carbon economy and support inclusive growth by investing in listed companies that provide innovative solutions to pressing environmental and social challenges. The funds' aim to generate measurable impact and a potentially attractive financial return over the long term.

In this report, we present the impact results achieved by the portfolio companies of our four impact funds:

Global Environmental Impact Equity Portfolio

Global Climate and Environment Equity

Global Social Impact Equity

Global Equity Impact Opportunities

We are pleased that the businesses we invest in within our impact funds continued to make positive impacts on the environment, people and communities around the world as of the latest available company data reported at 31 December 2023, due to lagged publication timelines.

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Key Numbers[1]

Goldman Sachs Global Environmental Impact Equity

Clean Energy

203 **gigawatts (GW)** of renewable energy capacity installed

Resource Efficiency

1.2 **billion** metric tons of CO_2e avoided

Sustainable Consumption

225,738 metric tons of waste reduced

Circular Economy

45.0 **million** metric tons of material recycled

Water Sustainability

4.6 **million** megaliters of water saved

Goldman Sachs Global Climate and Environment Equity

Clean Energy

255 **gigawatts (GW)** of renewable energy capacity installed

Resource Efficiency

1.0 **billion** metric tons of CO_2e avoided

Sustainable Consumption

170,000 metric tons of waste reduced

2 **million** meals using fresh food produced per day

Circular Economy

40.4 **million** metric tons of material recycled

Water Sustainability

5.9 **million** megaliters of water saved

1 Data refers to the Portfolio companies' impact generated over the fiscal year 2023, as disclosed for each company's reporting cycle. In many cases this will refer to 1 January 2023 – 31 December 2023, but given differences in reporting cycles, certain companies could refer to other 12-month periods, for example, 1 April 2022 – 31 March 2023.

Our methodology for calculating impact is explained in greater detail in Section 3 of this report – Impact Assessment and Accounting for Negative Impacts. Source: Company Reported Information, as of the latest available reported company data. Data refers to the Portfolio companies' impact generated over the fiscal year 2023, as disclosed for each company's reporting cycle. In many cases this will refer to 1 January 2023 – 31 December 2023, but given differences in reporting cycles, certain companies could refer to other 12-month periods, for example, 1 April 2022 – 31 March 2023.

Goldman Sachs Global Social Impact Equity

Thriving Communities

3.2 **million** people reached with water services

Economic Empowerment

35 **million** entrepreneurs and SMEs provided with digital solutions

Good Health and Well-Being

159 **million** people reached in 2023 across various segments of the healthcare industry.

Safe Society

300,000 people protected by gas sensors every day

Goldman Sachs Global Equity Impact Opportunities

Clean Energy

25 **gigawatts (GW)** of renewable energy capacity installed

Resource Efficiency

312 **million** metric tonnes of CO_2e emissions avoided

Sustainable Consumption

2 **million** meals containing fresh food produced per day

Circular Economy

941 **million** liters of fuel saved

Water Sustainability

2.7 **million** megaliters of water saved

Thriving Communities

800,000 **households** in India provided with finance, of which 64% are people in lower- and middle-income groups

Good Health and Well-being

2.3 **million** patients equipped with a continuous glucose monitor

Safe Society

300,000 **people** protected by gas sensor products annually

Economic Empowerment

18 **million** people provided with health insurance products in Asia

Introduction and Overview of the Reporting Period

Private capital is important for solving the world's most pressing environmental and social challenges, and this is critical to help achieve our dual return objective – achieving positive financial returns and impact. As stewards of capital, our role is to guide companies' sustainability journeys, share best practices with them, track their progress and engage with them on any weaker areas. Our ultimate aim is to help strengthen the business models of companies making a positive impact to ensure they are attractive to other long-term investors.

The reporting year we cover in this report was difficult for impact investors, and especially for the climate-related part of the sustainable investment universe. For most of 2023, growth stocks struggled, and Renewables in particular were out of favor, especially in the final months of the year. In October 2023, the environmental investing space suffered as 10-year yields peaked around 4.9% – growth stocks (which many environmental-related stocks are) tend to perform poorly when bond yields are high. 12-month outflows from Morningstar equity sector categories such as Ecology, Alternative Energy and Water totalled ~$16bn.[2]

But the broader sustainable investing market performed better than perceived at the time. In fact, assets under management (AUM) flows of sustainable funds exceeded those of conventional funds in 2023.[3] According to Morningstar, despite being hit by outflows in Q4, global ESG funds still gathered $63 billion over the year.[4] Much of the inflows, however, were into broader ESG, often passive, portfolios. Sustainable funds' median return was +12.6% over the year compared with +8.6% for traditional funds.[5] The underperformance was largely contained within the renewable energy space, which had hit the headlines.

In terms of the European SFDR regime, we observe that the minimum disclosure standard for ESG funds seems to have converged on Article 8. [6]This disclosure regime has been adopted by 48% of cross-border UCITS funds, covering 54% of their AUM.[7] Article 9 – the disclosure regime adopted by all our impact equity funds – accounts for a much smaller part of the market at 5% of the number of funds and 4% of AUM. Only 63 funds were launched in 2023 under Article 9 disclosure regime, down from 105 in 2022. This was in response to the European Securities and Markets Authority (ESMA) tightening its guidelines. Launches of thematic (such as 'Paris-Aligned Benchmark' and 'Climate') funds, which had increased in number in recent years, tailed off due to impending EU regulation on naming conventions and minimum requirements.

Perhaps what was most significant in 2023 was the stark realization of just how far away the world is from achieving its ambition of creating a greener and more equitable society by the end of this decade. 2023 marked the midpoint of the 2030 Agenda for Sustainable Development and the -United Nations (UN) Sustainable Development Goals (SDGs). A UN report on the state of the SDGs issued in the middle of 2023 explained how progress towards the goals has been hindered by inflation, geopolitics and changes in the political landscape. It stated that, "Progress on over 50% of SDG targets is insufficient, on 30%, it has stalled or reversed. These include key targets on poverty, hunger and climate".[8]

2 GSAM and Morningstar. Data as of 1Q24. Data includes UCITS Luxembourg / Ireland domiciled active mutual funds and ETFs and excludes money market funds.
3 ISS Insights, Sustainable Funds Continue to Outgrow Peers in 2023, March 19, 2024.
4 Morningstar, Global ESG Funds Hit With Outflows for First Time in Q4, February 2, 2024.
5 Morgan Stanley Institute for Sustainable Investing, Sustainable Reality Sustainable Funds Show Continued Outperformance and Positive Flows in 2023 Despite a Slower Second Half, February 29, 2024.
6 Broadridge, Morningstar and Goldman Sachs Asset Management. As of March 2024.
7 Source: GSAM, Morningstar. Data as of February 2024. 1 FBF Broadridge Fun Selector Survey, as at February 2024.
8 The Sustainable Development Goals Report: Special Edition, June 2023.

In 2023 we launched the Goldman Sachs Global Social Impact Equity Fund. It seeks to help achieve 12 of the 17 UN SDGs that largely reflect social themes. As Goldman Sachs Asset Management Fundamental Equity, we believe that companies providing solutions to social problems will experience continued growth in demand and benefit from strong competitive advantages over the coming years. We see increasing investor awareness that social themes and social solution providers can provide the next step in the evolution of impact investing. We believe that investors are beginning to recognize the potential of the social space to diversify their environmentally focused portfolios, in terms of sectors, themes, and UN SDGs. These are the beginnings of a strong secular theme.

Last but not least, as a fiduciary, Goldman Sachs Asset Management's Fundamental Equity business, which includes our impact equity strategies, is committed to promoting and exercising effective stewardship among the companies we invest in. We exercise shareholder rights through proxy voting, engaging with company management teams and participating in conferences and industry forums. In seeking to create value over the long term we evaluate companies' corporate strategies, investment and financing activities, management incentives, use of resources, regulatory policies and impact on the environment, as well as their impact on consumers, workers and the communities in which they operate.

Alexis Deladerrière
CFA, Head of International Developed Markets Equity
Co-Portfolio Manager of Goldman Sachs Global
Environmental Impact Equity Portfolio

Impact Assessment and Accounting for Negative Impacts

At Goldman Sachs Asset Management, we regularly assess the environmental and social impacts of the companies that our impact portfolios invest in. Measuring these impacts in their entirety is a complex process that presents many challenges and inevitably involves making some general assumptions[9] about the comparability of different datasets.

As impact investors, we only measure and monitor positive impacts that are intentional in that they are deliberately pursued by the management team as part of its corporate strategy. Negative impacts, on the other hand, can either arise as a result of the company's operations (examples include CO2 emissions, pollution or work accidents) or be an unintended consequence of a product or service on society (biodiversity and community considerations when sourcing materials that are essential for energy transition) – neither of which is likely to be intentional. We seek to expand our awareness and understanding of these impacts as much as possible.

We use the "theory of change" approach to inform how we measure impact. We set out the impact goals of a portfolio and explain how the selection and management of its investments contribute to progress toward these goals.[10] Using this approach enables us to determine the type of companies we should look to invest in for each investment theme. We go on to look more specifically at the positive contributions to the environment and society a company's products and services can make and establish their alignment with the impact aims of our funds. This enables us to determine appropriate KPIs that we aim to measure. We also refer to the UN SDGs in this process.

We take a conservative and transparent approach in measuring positive impacts, relying exclusively on data reported or provided directly to us by the companies our funds invest in: our methodology understates the total impact of companies in our portfolios, as we explain below. For example, Thirty-eight of the companies within our Global Environmental Impact Equity Portfolio reported relevant impact data in 2023. That represents ~83% of the portfolio by weight, up from 77% in 2022. The remaining companies in the portfolio (17) did not provide quantifiable or readily available impact data. We do not attempt to estimate companies' impact in such cases; instead, we assign them a zero positive impact score for the purposes of our impact calculation. It is important to note that we strive to engage with such companies, making recommendations about how to measure and disclose relevant indicators, sharing best practices and setting out our expectations.

To determine any negative impacts, we start by determining a company's alignment with Goldman Sachs Asset Management's Sustainable Investment Framework. The screening process that we apply to each company includes an evaluation of its contribution to an environmental or social objective, ensuring that it does not significantly harm other such objectives, and considering whether the company follows good governance practices.

Understanding the balance between positive and negative impacts requires in-depth knowledge of a company's business model. A rigorous approach should incorporate qualitative considerations alongside quantitative metrics. If we believe that the potential negative impacts outweigh the positive impact, we do not generally invest in a company or, if we already invest in it, consider whether we should remain invested.

9 If any assumptions used do not prove to be true, results may vary substantially.
10 GIIN defines the theory of change concept as follows: "A theory of change describes a sequence of cause-and-effect actions, or occurrences that the investor believes will accelerate as a result of their actions, which will contribute to a set of targeted social and environmental results. It provides the conceptual framework for how an organization expects its approach to designing and managing a portfolio will lead to an intended set of impacts." See "Guidance for Pursuing Impact in Listed Equities," GIIN. As of March 2023.

CASE STUDY

Using the SDGs to Unlock Positive Social Impacts[11]

We use the UN SDGs as a basis for identifying social issues that may be overlooked or underfunded – areas where we can potentially find interesting investment opportunities. The UN goals cover the whole spectrum of social issues, among others through SDG 1 (No Poverty), SDG 6 (Clean Water and Sanitation) and SDG 11 (Sustainable Cities and Communities). Within each SDG, the UN identifies specific targets that contribute to achieving that goal. For example, the targets for SDG 3 (Good Health & Well-Being) include reducing mortality from disease and improving access to essential healthcare.

We use these specific targets to identify relevant criteria for measuring a company's potential positive impact. To arrive at KPIs for each investment theme, we link the specific categories within the theme – for example, the "digital inclusion" category within our Thriving Communities theme – to one or more of the SDG targets and consider the related impact objectives set out by the UN. We go on to look at these objectives from an investor's perspective and adjust them where necessary to ensure they reflect what companies can achieve and disclose. We then set this objective as a reporting KPI for the companies we invest in.[12]

For our Global Social Impact Equity Fund, whenever possible, we measure the number of products sold or people a service reaches in order to aggregate numbers for inclusion in our impact reporting. This approach does not capture the full extent of a company's positive social impact, however. For this reason, we delve into the details to provide more granular information. Yet granular data are harder to aggregate. This is why we provide a more diverse and nuanced impact story for our funds with a social focus. ■

11 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.
12 There is no guarantee that objectives will be met.

Impact Signaling

From a theoretical perspective, a core pillar of impact investing frameworks is 'investor contribution', of which 'signalling that impact matters' is one of several common strategies that impact investors may employ. As committed impact investors, we see it as our responsibility to champion the continued importance of, and opportunity resulting, from allocating capital to critical environmental and social solutions. Similarly, it is also crucial to increase dialogue among like-minded investors. As mentioned above, since over two-thirds of investors compare their impact data with their own targets,[13] it is difficult to compare their impact results with those of their peers due to, for example, use of differing methodologies and estimations. There is a significant opportunity for impact investors to help the broader industry directly, as third-party data and tool providers further develop relevant analytic tools.

Within Goldman Sachs Asset Management's Fundamental Equity business, there were several highlights through the year where we have sought to contribute to the growth and highlight the importance of the impact industry. There has been further evidence of the maturing impact investing market via the development of a formal impact investing analysis examination by the CFA Society of the United Kingdom. We were pleased that two of the impact and sustainability professionals in Fundamental Equity team participated in the pilot programme of the CFA UK's Certificate in Impact Investing.

Members of our impact team also took part in several conferences, webinars, media engagements and events dedicated to impact and sustainability investing during the year. It was pleasing to see the topics being discussed broaden from climate to take in social investing in listed equities. Notable subjects discussed included: Investment Opportunities in Inclusive Growth, How to Create a Successful Environmental Transition and Where Underserved Markets Meet Financial Opportunity: Financial Inclusion.

Goldman Sachs Asset Management also participates in a range of external organizations and initiatives that seek to promote impact investing. As such, we are delighted to report that our firm formally joined the Global Impact investing Network (GIIN) in the first half of 2024. The GIIN is the leading nonprofit dedicated to increasing the scale and effectiveness of impact investing. Our membership signifies a commitment to deepening our engagement in the impact investing industry. As a member we hope to further contribute to thematic workstreams that the organization operates, network with relevant peers, exchange best practices and lessons learned.

GIIN®
MEMBER

13 Source: 2023 GIINSIGHT - Emerging Trends in Impact Investing.

Environmental Impact

The past year has seen a number of challenges for those concerned about the environment, including global temperatures hitting new highs[14], more restricted access to capital in a high-interest-rate environment and the increasing politicization of certain climate initiatives. Biodiversity has also been in the spotlight.[15]

In the view of our public equity impact investment team, climate change represents one of the largest societal problems and monetary opportunity in modern history. Achieving net zero by 2050 will require $150tn of investment in green infrastructure, including as much as $5tn in climate solutions per year.[16] We believe the case for investing in the green economy has never been stronger.

Energy and associated sectors are responsible for 86% of global greenhouse gas emissions, and transforming energy systems is vital if the world is to limit global warming given they also represent the fastest-growing source of emissions.[17] As highlighted in recent research, even though most emissions come from the Global North (92%), the sustainable energy transition must be global in nature.[18] Emerging markets only receive a fifth of all energy transition investments, and energy investment in these areas can lead to significant social and economic benefit.[19]

We firmly believe that many of today's climate solutions are viable and that investments in them will accelerate. Proven clean technology solutions can already decarbonize large parts of the global economy, and capital may continue to flow into the areas providing the most attractive risk-adjusted returns. This can be seen in the way that investors are currently allocating more to, for example, electric vehicle charging infrastructure than hydrogen capabilities.

Due to the rise in geopolitical tensions, governments are investing in economic independence, which involves faster adoption of renewable energy and domestic manufacturing of critical climate solutions. [20]The private sector, and impact investors in particular, may play an important role in channelling capital toward climate action given the scale of the funding that is necessary.[21]

As noted in GIIN's latest annual GIINSIGHT report, the most common sector allocation across surveyed organizations was to food and agriculture (over 60% of investors have that exposure), while over half also target climate change mitigation and / or climate adaptation and resilience.[22] Energy is still the sector with the largest proportion of impact AUM at 17%; in terms of actual AUM allocated, Energy has grown at a compound annual growth rate (CAGR) of 24% between 2017 and 2022.[23]

14 https://wmo.int/news/media-centre/climate-change-indicators-reached-record-levels-2023-wmo.
15 https://stateofnature.org.uk/; https://www.weforum.org/stories/2023/04/five-nature-trends-to-watch-out-for-davos-2023/; https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en.
16 Source: International Renewable Energy Agency, as of December 2023.
17 Source: Ritchie, H, Rosado, P., Rose, M. (2024). Emissions by sector: where do greenhouse gases come from? Our World in Data.
18 Source: Hickel, J. (2020). Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. The Lancet Planetary Health, 4 (9).
19 Source: (2021). Financing Clean Energy Transitions in Emerging and Developing Countries. International Energy Agency.
20 https://am.gs.com/en-nl/advisors/insights/article/2024/trade-routes-realigned-from-integration-to-fragmentation.
21 Climate Action Tracker, Our World in Data and NOAA, as of December 2023.
22 Source: 2023 GIINSIGHT Impact Investing Allocations, Activity and Performance.
23 https://thegiin.org/publication/research/2023-giinsight-series/#section-a.

Goldman Sachs Global Environmental Impact Equity Portfolio

The Goldman Sachs Global **Environmental Impact Equity** Portfolio seeks to create positive and measurable environmental impact alongside financial return over the longer term. The Fund generally focuses on global, all-market-cap exposure to companies that are aligned with key themes associated with environmental problems. The companies the Fund invests in help create products, services or technologies in areas including clean energy, resource efficiency, sustainable consumption and production, the circular economy and water sustainability. The Fund is concentrated and may have significant exposure to specific sectors, such as information technology and consumer sectors.[24]

24 Full information about the fund can be found in the literature available on the Goldman Sachs Asset Management website. There is no guarantee that objectives will be met. Your capital is at risk and you may lose some or all of the capital you invest. Further information in relation to the sustainability-related aspects of the Fund can be found at https://am.gs.com/en-fr/advisors/funds/detail/PV103525/LU2106860021/goldman-sachs-global-environmental-impact-equity-portfolio.

Clean Energy

One of the quickest and most accessible ways to contribute to lower emissions is by investing in clean energy companies that eliminate or reduce emissions by providing cleaner alternatives to traditional energy sources.

As the costs of solutions fall and they represent sound financial opportunities, we also hope to see continued optimism towards certain longer-duration and innovative areas of clean energy where we do not yet have exposure, such as hydrogen. As the roll-out of renewables appears to be dramatically increasing so too may the demand for infrastructure and tailwinds for companies that support the efficient distribution of power, including grid services and energy storage firms.

203 **gigawatts (GW)**
of renewable energy capacity installed

13% increase from 2022

The companies in our clean energy theme continue to exhibit a high degree of consistency in how they report relevant metrics, which makes aggregation easier. While metrics as GW of renewable energy capacity installed can be split, for solar, wind and hydroelectric power there is still a high degree of uniformity in reporting aggregate renewable capacity across our holdings within the theme. Where our portfolio companies do report on the impact metrics, the majority have increased over the past year.[25] The core utilities holdings in our clean energy theme have consistently increased their installed energy capacity over the past three years.

Resource Efficiency

While this is inevitably a broad theme, its main objective – reducing the amount of resources used per unit of output – is critical to the global response to climate change. Within this theme, we focus on positive environmental impact in three areas: transportation and logistics (notably enabling wider adoption of electric vehicles); smart cities (including improved building efficiency); and manufacturing (through the automation and electrification of traditional production processes).

In measuring a company's effect on greenhouse gas emissions, in addition to Scopes 1, 2 and 3, a more recent, voluntary metric has been gaining prominence – that of avoided emissions, sometimes referred to as Scope 4.[26] This measure covers emission reductions that "occur outside a product's life cycle or value chain but as a result of the use of that product," according to the World Resources Institute, which established the GHG Protocol. While there is as yet no standardization in how companies calculate avoided emissions, we believe it is an important KPI to capture where disclosures do exist.

1.2 **billion metric tons**
of CO_2e avoided

22% increase from 2022

Several developments led to a marked increase in our portfolio's CO_2e avoided metric in 2023. In our previous impact report, we highlighted how one core holding, a Swiss company providing electrification, grid and industrial automation solutions, had paused impact reporting due to necessary changes to its methodology as part of its efforts to align its broader targets with the Science Based Targets Initiative (SBTi). This year we are pleased to note the successful conclusion of its work and a long-term SBTi approved target, alongside a significant contribution to our aggregate CO_2e avoided KPI. Second, a Japanese manufacturer of high-efficiency motors and battery energy storage systems has in the past regularly stated its goal to provide more data on avoided emissions. While it had cumulative targets in place for a long time, 2023 was the first time the company reported specific product figures. Finally, we saw a notable jump in CO_2e avoided at a Taiwanese EV energy infrastructure company as it changed its reporting and now considers the entire useful life of its products sold over a certain period as part of our aggregate metric (in line with how many of its peers report this information).

Approaches to impact reporting differ across the industry. For example, one of the companies in the portfolio stopped providing a CO_2e avoided metric across its business and now only shares CO_2e avoided for projects that are financed by green bond proceeds where such reporting requirements are in place.

25 Goldman Sachs Asset Management, as of December 2023.
26 https://professional.ft.com/en-gb/blog/measuring-scope-4-emissions-what-boards-need-to-know/.

Sustainable Consumption

Human consumption has an outsized impact on the climate – a problem that is poised to get worse due to growing populations and economies. The interconnectedness of issues within the climate crisis is particularly notable in relation to consumption, and balancing demand against the world's limited resources, such as water and arable land, is a key challenge in the sustainable transition.

We seek to address these problems by allocating to immediately investable innovations in areas such as food and agriculture, as well as areas that we know are critical, but which we continue to monitor ahead of initiating an investment position in. Corporate actions were a notable theme for the portfolio in 2023, with a number of transaction announcements during the year impacting businesses in our sustainable consumption theme.

For example, a leading Dutch health, nutrition and biosciences company acquired the world's largest privately-owned fragrance and taste company. Specialty ingredients are experiencing strong growth thanks to their ability to reduce financial and environmental costs, while fragrance innovation is contributing to sectors such as plant-based alternative foods. In addition, the industrial production and application of cultures and enzymes can increase agricultural yields, extend the shelf life of food and reduce how much land, water and pesticides we need. While the acquired company's reporting is not currently captured in the portfolio's headline impact KPIs due to data aggregation challenges, we are pleased to note that consolidated company continues to provide impact reporting metrics. The portfolio's lower waste reduced metric for 2023 is due to one holding, a Danish bioscience company, which was subject to corporate action that was completed in January 2024. The company was in the process of adjusting its impact calculation methodology, which resulted in lower reported figures.

225,738
metric tons of waste reduced

67% decrease from 2022

20.5% **reduction in CO_2 emissions** per kg of dairy produced due to enzymes reducing methane production from livestock

Circular Economy

A circular economy can begin to decouple economic growth from resource consumption, helping to reduce greenhouse gas emissions and protect biodiversity. The need to better manage limited resources and prevent further loss of biodiversity has led to the rise of new markets, including sustainable packaging and renewable natural gas. This theme also include activities such as single-use substitution, recycling and waste management.

Annual plastic production will more than double by 2040,[27] making it paramount to reduce, manage and recycle waste. As such, we are pleased to note a continued increase in tons of material recycled at the aggregate portfolio level in 2023. The improvement is driven by increases within the bioenergy space, creating sustainable food, feed and fuel solutions from organic by-products. The data is from the two North American waste management companies in the portfolio.

Focusing on waste management, we are pleased to observe our holdings' continued ability to execute effectively in what was a difficult economic backdrop, as well as implementing additional growth capex to support greater impact and increase their production of waste-based energy. In particular, renewable natural gas (biogas captured or produced from the decomposition of organic matter)[28] has become a new source of growth for waste management businesses. Demand has been forecast to grow by 10 times by 2040, driven by gas utilities and commercial / industrial firms,[29] and supply from waste landfills and treatment plants is catching up.

45.0 **million metric tons** of material recycled

2% increase from 2022

27 Source: Systemiq, Nordic Council of Ministers, Towards Ending Plastic Pollution by 2040, as of September 2023..
28 Source: US Environmental Protection Agency, as of August 2024
29 Source: Boston Consulting Group, Is Renewable Natural Gas Poised for Future Growth or Doomed to Decline? as of June 2023.

Water Sustainability

Urbanization, industrial growth and rising temperatures have driven a six-fold increase in water demand over the last 125 years, while supply remains essentially flat.[30] This sharp growth in consumption is prompting investment in a range of solutions, with strong growth in investments across the water ecosystem, including treatment applications and desalination.[31] The companies in our portfolio are responding to the increased demand for water through water management and treatment, distribution and desalination.

The improvement in the water saved KPI reflects strong execution across our holdings, aided by the uniformity of an impact metric that is widely reported and can be aggregated across the industry. We note the increase in corporate actions across the environmental space and uptick in detailed impact reporting. This was evident in a spin-off during the year of a US water treatment business, as a result of which we now own the pure-play environmental impact element as opposed to the additional healthcare diagnostics and services the company provided prior to the transaction.

4.6 **million megaliters**
of water saved

12% increase from 2022

In addition to water saved, our holdings also report some other important KPIs. For example, one of our US water treatment holdings also reported assisting 60 billion hands to be cleaned;,[32] while a second provided 800 million people with access to clean water and sanitation and prevented 1.9 billion m³ of polluted water from flooding communities or entering local waterways.[33]

30 Source: Our World in Data, as of December 2023.
31 Source: Ibid.
32 Source: Company Reported Information (Growth and Impact Report), as of December 2023.
33 Source: Company Reported Information (Sustainability Report), as of December 2023.

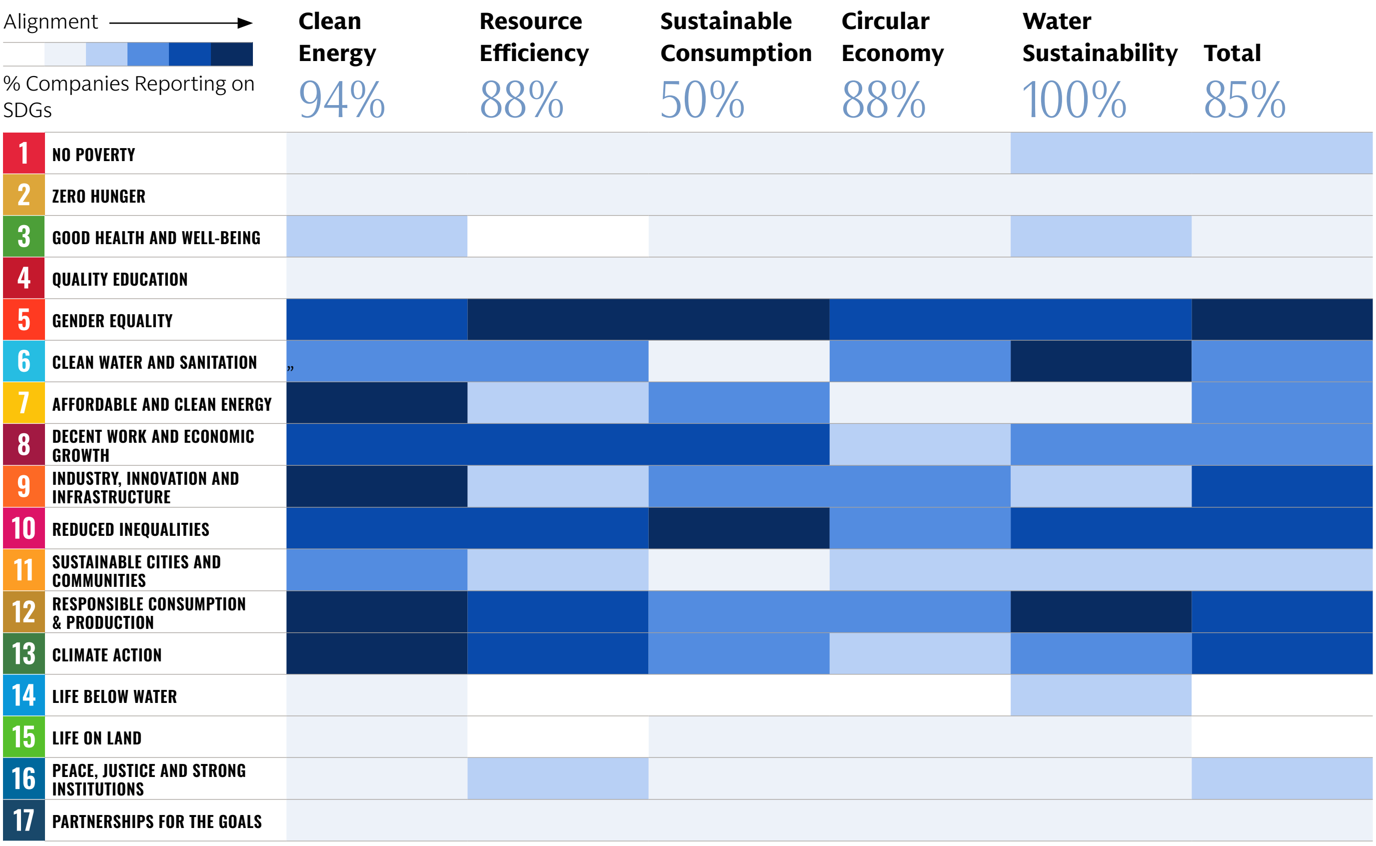
Alignment with the UN Sustainable Development Goals

The below graphic maps the Fund's holdings to the United Nations Sustainable Development Goals (UN SDGs) using MSCI's SDG Alignment methodology.

Whilst MSCI's data coverage has consistently trended upwards since we commenced impact reporting for the Fund in 2020, it has fallen to 85% (down from 94%) this year. This has been driven by a steep reduction in coverage of companies within our Sustainable Consumption theme via MSCI's methodology. A number of these holdings have market-capitalizations below <$1bn, and as such, only 4 out of the 8 that were held at any one point during 2023 have data available.

Highlights include the marked increase in the Fund's alignment to SDG 9 (Industry, Innovation and Infrastructure), notably within our Clean Energy theme. Furthermore, a focus on "Misalignment" (denoted by white colouring within the matrix below) continues to help guide our engagement and assessment of companies, as operational considerations must be weighed alongside a company's solution and ultimate net impact. We are pleased to see an overall reduction in companies designated as "Misaligned" in comparison to last year's report. In summary, of the 85% of companies in the Portfolio captured by MSCI's methodology, we can observe greatest alignment (50% of companies and above - as illustrated by the color shading in below graphic) with SDG 5 (Gender Equality), SDG 9 (Industry, Innovation & Infrastructure), SDG 10 (Reduced Inequalities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

UN SDG Mapping: Goldman Sachs Global Environmental Impact Equity Portfolio



Source: MSCI. As of Oct-2024. Corresponding shading for each theme is determined by the number of underlying companies that are positively aligned with the referenced Environmental Impact Equity Portfolio Key Theme and UN Sustainable Development Goal (SDG) via MSCI UN SDG Alignment Methodology. Alignment is defined as Strongly Misaligned, Misaligned, Neutral, Aligned, Strongly Aligned. The scale is divided into 25% alignment intervals (by name), with lighter shades indicating fewer companies have exposure to the referenced SDG, and darker indicating more companies with exposure to the referenced SDG. Methodology Example: 94% of holdings within the Clean Energy Theme (of the 85% with MSCI UN SDG Alignment data on file) are either Aligned or Strongly Aligned with SDG 13 (Climate Action). In instances where a Portfolio company is aligned with multiple SDGs, all aligned SDGs have been included. The Total column represents the sum of the companies across all 5 key themes, held within the entire Portfolio at any one point in 2023, and their aggregate exposure to the corresponding SDG. % companies reporting on SDGs represents the % of portfolio companies (by name) with MSCI UN SDG Alignment data on file.

CASE STUDY:

Given intermittency considerations for renewable power, battery storage solutions are expected to play a key role in the climate transition. **Sebastian Gruhn**, a research analyst on the impact equity investing team, profiles one holding and how the Team has approached such investments, given the challenging backdrop witnessed for the broader battery / electric vehicle space over the course of the last year.

What role do batteries play in the modern economy?

SG: Lithium-ion batteries play a critical role in the global energy transition, from powering EVs to providing energy storage for renewable technologies. Batteries also foster electrification by enabling decentralized solutions and helping to stabilize energy grids.

What is the positive impact of batteries on the environment and the society?

SG: Through their use in EVs, batteries enable emissions to be reduced in the transport industry, which accounts for around a quarter of greenhouse gas emissions and whose energy needs are still satisfied primarily through fossil fuels. [34]

More stable energy grids and local power solutions could help up to 400 million people in emerging and developing economies gain access to electricity by 2030.[35]

What are the challenges that we face on the energy transition path as it relates to batteries?

SG: To meet the targets set out by COP28, batteries will need to play a part in achieving a sixfold increase in global energy storage by 2030.[36] However, the mining and refining of minerals such as cobalt, nickel and lithium, which are used in batteries, poses environmental challenges. The supply chains of these minerals have a significant carbon footprint and high energy intensity, underscoring the need for efficient technologies to recycle batteries when they have been used.

Could you provide an example of a sustainable business that aims to alleviate these challenges?

SG: One of the companies we invest in is a leading manufacturer and supplier of batteries for EVs and energy storage. The company looks to drive EV adoption around the world by providing cutting-edge, low-cost batteries. For example, one of its battery packs has 10-15% greater energy density than a standard battery, which means less minerals and materials are required to produce a battery with the same range. It has a 50% share of the global market and diversified regional exposure, which means the company is well placed to drive the adoption of EVs on a global scale.

How do the company's operational practices help mitigate stress on the environment?

SG: The company has worked with customers to build a closed loop of battery recycling and resource regeneration, recycling around 4,500 tons of manganese, nickel and cobalt compounds from used lithium batteries every year. One of the company's battery plants became the first in the world to reach carbon-neutral status, with 80% of the energy it uses coming from renewable sources, including hydro. ■

34 United Nations, Fact Sheet Climate Change, prepared for the Sustainable Transport Conference, October 2021.
35 IEA (2024), Batteries and Secure Energy Transitions, IEA, Paris https://www.iea.org/reports/batteries-and-secure-energy-transitions, Licence: CC BY 4.0.
36 IEA (2024), Batteries and Secure Energy Transitions, IEA, Paris https://www.iea.org/reports/batteries-and-secure-energy-transitions, Licence: CC BY 4.0.

Goldman Sachs Global Climate and Environment Equity

The Goldman Sachs Global **Climate and Environment Equity** Fund contributes to advancing the low-carbon transition by investing in companies that are developing solutions across five environmental themes: clean energy, resource efficiency, sustainable consumption, circular economy and water sustainability.[37]

In early 2024, the sustainable investment objective of the Goldman Sachs Global Climate and Environment Equity Fund was expanded to include a more detailed description of the thematic alignment process that we apply to the potential investee companies. In addition, sustainability indicators and binding elements under the Sustainable Finance Disclosure Regulation (SFDR) were updated to better reflect the impact investing nature of the strategy and its objective to invest in companies that provide solutions that drive environmental sustainability. As part of these updates, environmental impact themes and sub-themes have been aligned across the Fundamental Equity Impact suite. Below we present the aggregate impact made by companies the Goldman Sachs Global Climate and Environment Equity Fund invests in.

37 Full information about the fund can be found in the literature available on the Goldman Sachs Asset Management website. There is no guarantee that objectives will be met. Your capital is at risk and you may lose some or all of the capital you invest. Further information in relation to the sustainability-related aspects of the Fund can be found at https://am.gs.com/en-no/advisors/funds/detail/PV104874/LU0555018661/goldman-sachs-global-climate-environment-equity.

Please note that as of March 1, 2024, the Prospectus of the fund reflected the following five impact themes: clean energy, resource efficiency, sustainable consumption, circular economy, water sustainability. Please note that while for both environmental funds (GS Global Environmental Impact Equity and GS Global Climate & Environment Equity) we report on the same indicators (renewable capacity installed, tons of CO2 avoided, waste reduced, and water saved or treated), the impact themes of the two funds currently differ. As of March 1, 2024, the new Prospectus for GS Global Climate & Environment Equity changed to reflect thematic alignment with the more diversified GS Global Environmental Impact Equity Portfolio.

Clean Energy

The GW of renewable energy capacity installed metric reflects our holdings' total installed base capacity.

We are pleased this measure was up by 14% year-on-year across the three companies reporting within the theme. Trends in mobility, construction and manufacturing are leading to further electrification, fuelling investments in renewable energy and grid infrastructure, which is evident in the growth of renewable power capacity.

255 **gigawatts (GW)** of renewable energy capacity installed

9% increase from 2022

Resource Efficiency

The Fund's increase in CO_2e avoided is driven primarily by additional production capacity installed at one holding that reports CO_2e avoided over the lifetime of its wind turbines.

Two other contributions to the KPI came from companies within our smart cities sub-theme: one providing building materials and solutions to help reduce energy consumption and the other providing leading energy management products.

1.0 **billion metric tons** of CO_2e avoided

31% increase from 2022

Sustainable Consumption

Sustainable consumption is a new key theme for the Fund.

Across our sub-themes, waste reduced is the most reported metric, given the diversity of sectors in which companies operate within sustainable consumption. It is also important to note the focus of our holdings and their reporting on impact KPIs that are not included in our aggregate reporting but are still contributing meaningfully to environmental progress. Food & Agriculture is a key sub-theme within sustainable consumption, and it is pleasing to note strong figures for several KPIs that span both environmental and social impact (such as people reached with nutritious food).

170,000 **metric tons** of waste reduced

2 **million meals** using fresh food produced per day

12,100 **billion liters** of food packaging

20.5% **reduction** in CO_2 emissions per kg of dairy produced due to the use of enzymes reducing methane production by livestock

25% **reduction** in CO_2 emissions per meal compared with meals made using supermarket ingredients

Circular Economy

This theme involves granular information, capturing metrics reported by holdings providing very different products and services and adopting different business models.

We believe it is informative for our clients to see the diversity of reporting approaches in this area. For the first time we are reporting on a core waste recycled KPI, following our investment in a waste management company.

40.4 **million metric** tons of material recycled

941 **million liters** of fuel saved

3.6 **billion sheets** of paper saved

15.2 **million tons** of waste recycled

Water Sustainability

Water sustainability represents one of the largest thematic allocations within the Fund, with holdings spanning water utilities and water management and treatment firms. Companies in the theme report a wide range of impact KPIs, including the length of water pipelines monitored and number of water tests enabled.

We expect to see our water saved metric rise at the aggregate portfolio level over time due to our positive engagements with companies on the importance of reporting aggregate impact metrics in line with the peer universe. In 2023, the strong improvement in the metric of megaliters of water saved is due to a US water utility now reporting an expanded total water treated KPI as opposed to purely municipal water treated.

5.9 **million megaliters** of water saved

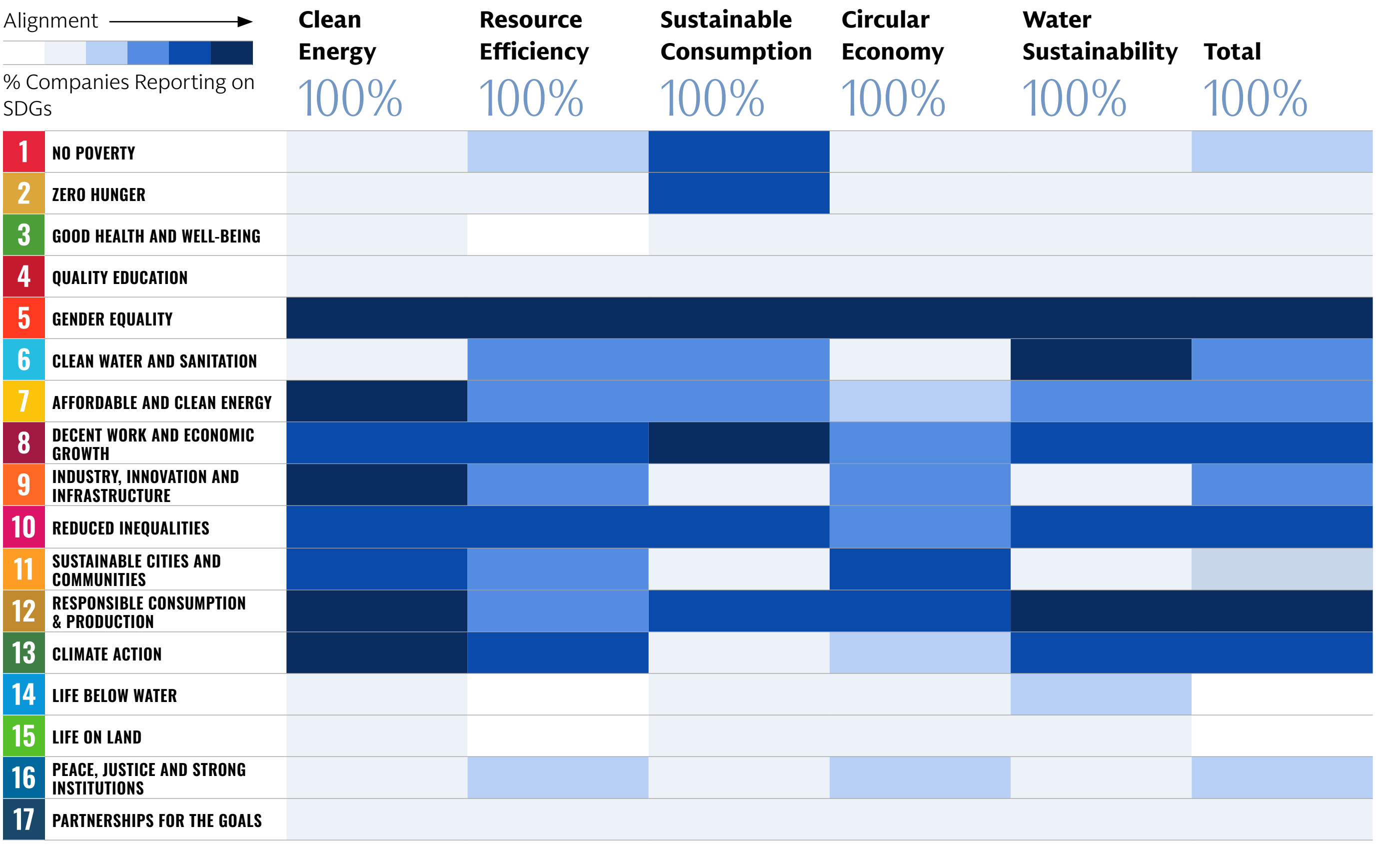
46% increase from 2022

Alignment with the UN Sustainable Development Goals

One hundred percent of companies in the Fund are captured by MSCI's UN SDG Alignment methodology, we can observe greatest alignment (50% of companies and above - as illustrated by the color shading in below graphic) with SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth), SDG 10 (Reduced Inequalities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

In comparison to last year, it is pleasing to note the increasing strength of company alignment across all five key themes to SDG 5 (Gender Equality).

UN SDG Mapping: Goldman Sachs Global Climate & Environment Equity



Source: MSCI. As of Oct-2024. Corresponding shading for each theme is determined by the number of underlying companies that are positively aligned with the referenced Environmental Impact Equity Portfolio Key Theme and UN Sustainable Development Goal (SDG) via MSCI UN SDG Alignment Methodology. Alignment is defined as Strongly Misaligned, Misaligned, Neutral, Aligned, Strongly Aligned. The scale is divided into 25% alignment intervals (by name), with lighter shades indicating fewer companies have exposure to the referenced SDG, and darker indicating more companies with exposure to the referenced SDG. Methodology Example: 100% of holdings within the Clean Energy Theme (of the 100% with MSCI UN SDG Alignment data on file) are either Aligned or Strongly Aligned with SDG 13 (Climate Action). In instances where a Portfolio company is aligned with multiple SDGs, all aligned SDGs have been included. The Total column represents the sum of the companies across all 5 key themes, held within the Portfolio at year-end 2023, and their aggregate exposure to the corresponding SDG. % companies reporting on SDGs represents the % of portfolio companies (by name) with MSCI UN SDG Alignment data on file.

CASE STUDY:

As a case study within our water sustainability theme, Impact & Sustainable Equity Portfolio Manager **Ivo Luiten** profiles a US water metering and technology business, owned within Goldman Sachs Global Climate & Environment.

Why is water such a prominent theme in an environmentally focused portfolio?

IL: Water is essential in the production and delivery of nearly all goods and services. Demand for water is already exceeding population growth by 1.7 times and is expected to grow by 30% by 2050, far exceeding supply, which is naturally limited and rapidly depleting.[38]

What are the implications of this?

IL: 31% of global GDP is threatened by water scarcity[39] and almost two-thirds of the world's people experience severe water scarcity for at least a month every year. Climate change, pollution, extreme weather events and deteriorating infrastructure are making this crisis worse.

What is one of the biggest problems in water management?

IL: One of the biggest issues is that we are losing water that is already in the system. Around the world, 344bn liters of drinking water are lost every day due to leakages and faulty infrastructure. Improving outdated or inaccurate water metering technology that helps detect leaks early is essential for sustainable water management.

What is the solution to this problem?

IL: Monitoring and early detection of leaks can prevent and limit water loss and increase the life of critical infrastructure.

One of the companies in our portfolio is a global provider of industry-leading water solutions. Its product portfolio is focused on measurement technology and advanced metering infrastructure (AMI). It provides customers with data and analytics to optimize their operations and contribute to the sustainable use and protection of water.

What is the company's business model?

IL: 95% of the company's revenues are derived from products that enable water utilities, municipalities and commercial and industrial customers around the world to manage water more sustainably. For example, the company's data and software solutions helped one of its water authority clients reduce water demand during peak hours by 1.1 million gallons.

The company is highly innovative. For example, its ultrasonic meters enable accurate water measurement and help utilities identify leaks and other unaccounted water losses. This is critical to conserving water and ensuring that is it affordable for all users.

How does the company manage its own operations with respect to this valuable resource?

IL: To drive sustainability within its own operations, in 2023 the company reduced its water usage by 27% and has reduced its greenhouse gas emissions by 44% relative to 2020 levels. ■

38 World Water Assessment Program (United Nations), as of 2021 World Bank 'Water in Agriculture' as of 2021.
39 Bank of America Global Research, 2023.

Social Impact

Reducing social inequality and fostering more inclusive and cohesive societies present investment opportunities that offer the prospect of attractive financial returns, in addition to advancing social progress.

Inequalities persist around the world, and underserved populations still find it difficult to access critical services. Meanwhile, the world's wealthiest 10% of people own three-quarters of global household wealth and earn over half of incomes.[40] In addition, there are significant gender disparities in wealth and income.

Social issues are gaining in prominence. Investors are beginning to recognize the potential of social investments to diversify their environmentally focused portfolios in terms of the sectors, themes and UN SDGs that they are exposed to.

Companies are responding to the increased interest in social issues by developing solutions that democratize access, drive better outcomes, eliminate inefficiencies and reduce costs.

Furthermore, operational ESG assessments have traditionally tended to focus on human rights and safety. These are now expanding to encompass modern slavery and supply chains. The expanded focus on social themes is also supporting product-led innovation and investment in communities and improving lifestyles.

40 World Inequality Report 2021 (World Inequality Lab), as of December 2021.

Goldman Sachs Global Social Impact Equity

The Goldman Sachs Global **Social Impact Equity** Fund aims to promote inclusive growth by investing in companies contributing to a better quality of life and enabling people to participate in economic development. To achieve this objective, the Fund focuses on themes such as thriving communities, economic empowerment, good health and well-being, and safe society.[41]

41 Full information about the fund can be found in the literature available on the Goldman Sachs Asset Management website. There is no guarantee that objectives will be met. Your capital is at risk and you may lose some or all of the capital you invest. Further information in relation to the sustainability-related aspects of the Fund can be found at https://am.gs.com/en-dk/advisors/funds/detail/PV104897/LU0555015568/goldman-sachs-global-social-impact-equity.

Thriving Communities

This theme contributes to the fund's sustainable investment objectives through allocations to areas such as affordable housing, digital inclusion, access to clean water and sanitation, and access to clean energy. Within these areas, we invest in companies including information technology providers and developers of water-treatment and purification solutions.

Digital Inclusion

Improved telecommunications in emerging markets can increase access to mobile coverage, which in turn boosts digital inclusion. Expanding digitalization is critical for underserved communities, especially in developing countries with low mobile phone penetration. It is particularly important for financial inclusion as digital transfers enable people and small businesses to make transactions without the need for a bank account. In 2023, the Fund's exposure to mobile-phone-based payment services increased due to our investment in another telecommunications provider in Africa providing this service.

144 **million** people reached with telecommunication services coverage

2% increase from 2022

63.6 **million** people using mobile-phone-based payment services in Africa

11% increase from 2022

Access to Clean Water and Sanitation

This indicator captures the number of people with access to safe, treated drinking water thanks to investments to upgrade outdated infrastructure. It also captures affordability, as measured by how much the average water bill costs as a proportion of median household income.

3.2 **million** people reached with water services

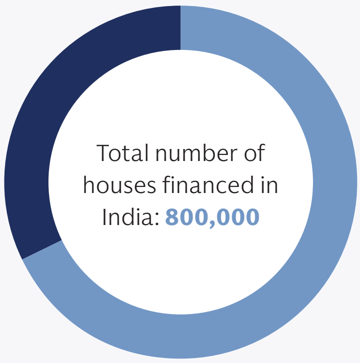
3% increase from 2022

Average monthly water bill equivalent to

0.75% of median household income

Affordable Housing

Expanding access to home mortgages for low- and middle-income borrowers is essential in helping more people progress to home ownership. This year we report aggregated data for both lower- and middle-income borrowers because following a merger between a loan provider and a bank in India (we had been initially invested in the former), the new company has changed how it reports these figures. However, additional metrics related to financial inclusion are reported by this new company (please refer to the Economic Empowerment section).



64% were for people in lower- and middle-income groups

20% decrease from 2022

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Economic Empowerment

Economic empowerment is central to the Fund's goal of enabling people to participate in economic development. It encompasses topics such as access to education, equal job opportunities and financial inclusion. Within this theme we invest in companies such as providers of online and hybrid education, human resources companies, providers of services for micro-entrepreneurs, and financial services and payments companies targeting the underbanked and unbanked.

Financial Inclusion

In 2023 we saw small businesses in the US pivot to digital sales channels, with over half of transactions taking place online.[42] The companies we invest in help entrepreneurs and small- and medium-sized enterprises to prosper by facilitating their businesses' online activities. They also provide banking services, including small loans to companies that typically have limited access to traditional banks. Others provide tools for project management and handling bills and inventory, or a web domain from which companies can build an online presence.

Financial inclusion is fostered by building healthy credit scores, which is facilitated by credit bureaus. Finally, getting access to health insurance is a form of saving, especially for families with a sole earner within the household.[43]

45 million loans granted to entrepreneurs and SMEs

22,500 rural Indian villages provided with banking services to fund traditional agriculture

8.9 million customers in the US improved their credit score using free consumer products

35 million entrepreneurs and SMEs provided with digital solutions

150% increase from 2022

18 million people reached with health insurance products in Asia

6% increase from 2022

Equal Job Opportunities

This indicator demonstrates how the companies we invest in are helping people from different backgrounds and with different levels of ability to participate in the global workforce by using online technology and platforms. Using technology, it is possible to simplify hiring and thus reduce the time it takes to gain employment while matching people's abilities and aspirations with the right job. Online e-commerce platforms can enable entire households to earn a living by trading goods; this is particularly valuable in countries with high levels of unemployment and low GDP per capita.

30 million jobs searchable online worldwide per day on average

574,000 small- and medium-sized enterprises in Latin America helped to trade online, of which over 70% are family businesses

42 Forbes: https://www.forbes.com/sites/tonybradley/2024/05/08/small-business-growth-in-the-digital-age/#:~:text=The%20pivot%20to%20digital%20sales,over%20the%20past%20six%20months.

43 Company reported information. As of August 20, 2024.

Education For All

The education sector plays an important role in preparing the generations of tomorrow to contribute to society's development. In this sector, we look for companies that enable students around the world to access high-quality education regardless of their background or status. The use of technology in the education sector can play an important role in this respect.

It is estimated that around 90% of the global population will need new skills by 2030, and this could cost up to $15 trillion in lost GDP.[44] Historical trends have shown that new technologies can create more jobs than they replace. For example, around 60% of today's workforce operates in occupations that did not exist before 1940.[45] These shifting dynamics in the social space present greater investment opportunities and tie into the changing consumption landscape, with around 80% of members of Generation Z emphasizing the importance of trust in the sustainability credentials of brands they purchase from.[46]

298,400
virtual school enrolments

3 **million** students provided with virtual study and exam preparation materials

44 Source: World Economic Forum: Jobs Will Be Very Different In 10 Years. Here' s How To Prepare, January 2020.
45 Source: The Quarterly Journal of Economics: "New Frontiers: The Origins and Content of New Work, 1940-2018." March 2024.
46 Source: ForMomentum, "Social Impact Trends 2024: A Data-Driven Look," June 2024.

Good Health and Well-Being

This theme contributes to improving people's quality of life by focusing on areas such as nutritious food, an active lifestyle, and accessible and innovative healthcare. Within these areas, the fund invests in companies such as medical technology developers, healthcare and insurance providers, and operators of fitness centers.

Accessible & Innovative Healthcare

The companies we invest in operate in various segments of the healthcare industry, including pharmaceuticals, diagnostic tools and services, hospitals and other medical services companies.

We group the social impact indicators we measure in three highly relevant areas within healthcare:

1) Prevention and early detection of disease, as this leads to the best patient outcomes. It also minimizes costs given that costs typically increase sharply as a disease progresses.

- **72%** customers of a US-based healthcare insurance company received preventative care
- **1 million** diagnostic tests performed per hour around the world
- **2.3 million** patients equipped with a continuous glucose monitor, which improves health outcomes and reduced costs (by $424 per month on average), **35% increase** from 2022.

If disease has manifested and care is required:

2) Treatment and care should be as non-invasive and affordable as possible. Access to care is also critical – and this includes access to mental health services, which has worsened since the pandemic.

- **2.4 million** people reached with $3 per vial insulin, **33% increase** from 2022.
- **14.2 million** minimally invasive robotic procedures performed, **18% increase** from 2022.
- **45 million** patients provided with access to mental health services through a US-based insurance company
- **250 million** people reached with diagnostics and treatment in the areas of women's health and respiratory health, **20% decrease** from 2022 (due to fewer respiratory tests post covid).

159 **million** people reached in 2023 across various segments of the healthcare industry.[47]

3) Medical innovation is key to address gaps in care with scientific or technological breakthroughs.

- **65%** improvement in detecting breast cancer cases by 3D mammography tests[48], **0% change** from 2022.
- **43%** less force on tissue exerted during robotic surgery[49] thanks to a holding's newly launched robotic platform, which reduces unnecessary trauma.

47 These are not necessarily unique individuals. Unfortunately, there is no way to assess how much overlap there is amongst the people reached by different portfolio companies.
48 Company Reported Information leveraging internal methodology / measurement.
49 Company Reported Information leveraging internal methodology / measurement.

Nutritious Food

In a world in which over 3 billion people suffer from malnutrition[50] and many are obese, it is important that people have access to food that has **high nutritional content**.[51] The companies we invest in are involved in the production of essential components of healthy diets and increasing the nutritional content of food, while improving gut health.

2 million meals containing sustainably sourced salmon produced per day

0% change from 2022

227 million people provided with essential vitamins

677 million people reached with products and approaches that increase access to vital micronutrients, such as staple food fortification and micronutrient supplements and powders

5% increase from 2022

Active Lifestyle

The physical and mental benefits of sufficient daily exercise are well documented.[52] However, given today's sedentary lifestyle, 30% of adults and 80% of adolescents do not achieve the recommended levels of physical activity.[53] The companies we invest in help more people become active by offering access to fitness facilities at an affordable price across various locations.

18.7 million people accessing affordable fitness facilities

0% change from 2022

50 Stevens GA, Beal T, Mbuya MNN, Luo H, Neufeld LM. Micronutrient deficiencies among preschool-aged children and women of reproductive age worldwide: a pooled analysis of individual-level data from population-representative surveys. The Lancet Global health. 2022;10(11):e1590-e1599.
51 Definition: https://www.collinsdictionary.com/dictionary/english/nutritious-food.
52 https://www.who.int/news-room/fact-sheets/detail/physical-activity.
53 https://www.who.int/news-room/fact-sheets/detail/physical-activity.

Safe Society

Building a safe society improves the quality of life of individuals and communities. This theme covers areas such as data privacy and security, physical safety, climate change resilience and accountable and transparent institutions. We invest in companies such as cloud security providers, safety equipment manufacturers and environmental consulting firms.

Human Safety

We invest in companies that provide technologies to **improve people's safety** on the road, on the job and in the built environment.

300,000 people protected by gas sensors every day

20% increase from 2022

40 **million** workers protected annually through safety gear and equipment

Data Privacy and Security

This theme involves the protection of fundamental privacy rights of people around the world. It involves companies safeguarding the private data of clients and employees. Our new indicator this year is the result of the activities of one of the firms we invest in.

41 **million** users protected from cybersecurity threats

Accountable and Transparent Institutions

These indicators show the impact of services provided to governments or communities to increase digitalization, reduce human errors in data handling and improve social inclusion. The data in this category are diverse because the services provided encompass a variety of activities performed by government institutions. The companies we invest in also contribute to expanding access to education and research. Access to scientific research enhances reliable knowledge, which in turn speeds up the adoption of best practices and standards around the world, improving the equitable distribution of new discoveries and know-how.

13 **countries** using child support welfare software, providing permanent homes to over 7,400 vulnerable children.[54]

6,738 **women** empowered to access state maternity resources in Mississippi

Climate Change Resilience

There is an increasing need to be prepared for the physical risks resulting from climate change. For example, physical infrastructure needs to be adapted to deal with rising sea levels, while government budgets need to be directed towards improving the resilience of vital infrastructure.

125 low- and middle-income countries provided with scientific information for researchers

0% change from 2022

630,000 relevant peer-reviewed articles published

5% increase from 2022

$63 **billion** value of disaster recovery funds managed in the US

54 Company Reported Information leveraging internal methodology / measurement.

Alignment with the UN Sustainable Development Goals

100% of companies in the Fund are captured by MSCI's methodology. We can observe greatest alignment (50% of companies and above - as illustrated by the color shading in below graphic) with SDG 5 (Gender Equality), and SDG 8 (Decent Work & Economic Growth).

In the context of social impact investing, it is important to note that MSCI's sustainable impact metrics are more granular in categories related to environmental impact. That said, there has been noteworthy year-on-year progress; the Fund is now fully covered by MSCI's SDG Alignment methodology (up from 97%), and we can see a steep increase in mapping to SDG 8 (Decent Work & Economic Growth).

UN SDG Mapping: Goldman Sachs Global Social Impact Equity

Source: MSCI. As of Oct-2024. Corresponding shading for each theme is determined by the number of underlying companies that are positively aligned with the referenced Social Impact Equity Fund Key Theme and UN Sustainable Development Goal (SDG) via MSCI UN SDG Alignment Methodology. Alignment is defined as Strongly Misaligned, Misaligned, Neutral, Aligned, Strongly Aligned. The scale is divided into 25% alignment intervals (by name), with lighter shades indicating fewer companies have exposure to the referenced SDG, and darker indicating more companies with exposure to the referenced SDG. Methodology Example: 100% of holdings within the Economic Empowerment Theme (of the 100% with MSCI UN SDG Alignment data on file) are either Aligned or Strongly Aligned with SDG 13 (Climate Action). In instances where a Portfolio company is aligned with multiple SDGs, all aligned SDGs have been included. The Total column represents the sum of the companies across all 4 key themes, held within the Portfolio pre-merger during 2023, and their aggregate exposure to the corresponding SDG. % companies reporting on SDGs represents the % of portfolio companies (by name) with MSCI UN SDG Alignment data on file.

CASE STUDY

In April 2024, **Vera Swart** was elevated to co-Portfolio Manager of the GS Global Social Impact Equity Fund. Specializing in healthcare research, she profiles one of the companies we invest in - specifically dedicated to women's health. It is involved in both diagnostics and the treatment of women's health conditions such as breast and cervical cancer.

Can you outline some of the issues surrounding women's health?

VS: Women are severely underrepresented in clinical studies: they account for only a third of clinical trial participants.[55] However, with respect to many health issues, women often present different symptoms to men and need different treatments. For example, when women suffer a heart attack, they might experience very different symptoms from the text-book chest pain. Women are more than twice as likely to die after a heart attack than men.[56] Similarly, the rate of adverse reactions to approved medicines is more than 50% higher for women than for men.[57] Meanwhile, just 4% of biopharma pipeline assets and 5% of medtech approvals are directed at addressing specific women's health conditions. McKinsey estimates that women spend 25% more time in poor health than men over their lifetime.[58]

How is the company we invest in contributing to greater awareness of the issues surrounding women's health?

VS: The company publishes a Global Women's Health index that measures women's health from five perspectives: Preventive Care, Emotional Health, Opinions of Health and Safety, Basic Needs and Individual Health. By measuring data over an extended timeframe, the company is in a position to clearly identify gaps in care specific to women and monitor the direction of travel and the effectiveness of measures taken in response. In this way, its datasets can serve as highly effective policy tools to advocate for more attention on women's health needs.

How is the company contributing to women's health with its products and services?

VS: Another issue is that women are underdiagnosed. For example, a Danish study showed women receive a cancer diagnosis 2.5 years later than men.[59]

The company we invest in has developed highly innovative imaging systems that can detect breast cancer with higher accuracy, in a less painful manner and at an earlier stage. For example, its 3D mammography scans detect 65% more invasive breast cancers than 2D scans. The same is true for cervical cancer. As a result, women can be treated more quickly and much more effectively.

How does the company treat women's health?

VS: Another example is in endometriosis, which we believe has historically been a neglected women's health concern for a long time: it's estimated that under half of US women living with the condition have been diagnosed. Endometriosis can lead to abnormal and painful bleeding and in some cases abnormal tissue has to be removed in a hysterectomy, which means they can no longer have children. The company has developed a minimally invasive procedure that enables endometriosis to be treated without major surgery. ■

55 Hologic Women's Health Index, as of September 2021.
56 Source: European Society of Cardiology's Congress report, Heart Failure 2023, as of May 2023.
57 https://www.mckinsey.com/mhi/our-insights/closing-the-womens-health-gap-a-1-trillion-dollar-opportunity-to-improve-lives-and-economies.
58 McKinsey Health Institute and World Economic Forum, Closing the Women's Health Gap, As of January 2024.
59 Westergaard, D., Moseley, P., Sørup, F.K.H. et al. Population-wide analysis of differences in disease progression patterns in men and women. Nat Commun 10, 666 (February 2019). https://doi.org/10.1038/s41467-019-08475-9.

SPOTLIGHT

Investing in Education

Impact Equity Portfolio Manager **Marina Iodice** spotlights why it is important and what we are looking for.

The Goldman Sachs Global Social Impact Equity Fund has a sub-theme called Education for All: can you explain how this fits in with the broader Economic Empowerment theme and its investment objectives?

MI: Prioritizing and expanding investment in education is a key driver of social progress and individual empowerment, as several academic articles have shown.[60] The Social Impact Fund aims to invest in companies that seek to reduce social inequalities. Investing in education is one of the best ways of fostering economic inclusion by providing the foundation for successful employment.

The Education for All sub-theme invests in education providers that seek to address Sustainable Development Goal 4, which calls for universal quality primary and secondary schooling and literacy and numeracy for all youth.

What types of challenges does Education for All aim to address?

MI: First, we need to address the quality of education. This means ensuring that education enhances human capital, which in turn results in improved economic opportunities for the beneficiaries of the education. Higher-quality education also involves careful consideration of the needs of today's students: while the overall pupil population is set to decline in many developed economies due to low birth rates, the number of pupils with special educational needs has increased in many countries, such as England, where it has increased by +80% since 2016. Often these changes are not reflected in current spending, which is based on historical data.

Meanwhile, government and private spending on education varies by country, and it is important that public and private schools provide comparable-quality education to benefit students from different locations and socioeconomic backgrounds.

Another important consideration is that better educational outcomes are highly dependent on human resources in the sector. The availability and quality of teachers is one of the biggest drivers of education quality. In the UK, for example, only 69% of teachers who qualified five years ago are still teaching, with 15% of that cohort leaving in their first year.[61] In the US, only 55% of schools are fully staffed with teachers for all classes.[62] A good work-life balance for teachers and their ability to tailor education to their students' needs is also important in ensure teaching is effective.

What solution providers does the Fund invest in, and why?

MI: We invest in companies that we believe provide high-quality content and take advantage of innovations in this field. Through the rise of AI-related tools and applications, and after Covid enforced digitization in schools around the globe, today's learning content needs to adapt to high digitization requirements without leaving children behind. As governments deliberate on textbooks' content, the way this content is structured and delivered is key to achieving good learning results. This is where content providers can deliver value.

60 https://portal.sds.ox.ac.uk/articles/online_resource/We_Need_More_Investment_in_Education_-_Not_Just_Spending_on_More_of_the_Same_/24545482?file=43112185.
61 https://epi.org.uk/publications-and-research/education-the-fundamentals-eleven-facts-about-the-education-system-in-england/.
62 Stride investor presentation, 2024.

We also look for companies that support learning diversity – those that develop new education delivery models, such as customized digital content. This gives those students who face different mental, physical and social hurdles to attending classes in person an opportunity to keep pace with their peers.

Enhancing analytics in Learning Management Systems (LMS) is also very important. Technology is increasingly indispensable in an education sector making the best use of scarce resources, maximizing efficiency in classrooms and helping teachers prepare classes for students with different learning requirements. LMS' are the invisible infrastructure that keeps the school system efficient and enables teachers to tailor the content of their classes to everyone's needs.

Last but not least, we look for investment opportunities in further career skills training and career preparation for students.

What trends have we seen in 2023 and what do we expect going forward in this sector?

MI: Rapid developments in technology that we saw in 2023 and into 2024 will result in new business models and new investment opportunities. It is already clear that technology is key for digital content providers to compete and prosper. The problem of scarcity of human resources when it comes to personalized teaching will be at least partially alleviated by innovative tech solutions.

Furthermore, we see that at-home studying with full online connectivity is here to stay after Covid, and that is also thanks to recent technological advances.

Artificial intelligence is changing the way students learn, but it is also changing the way content is delivered and how teachers conduct their classes, and already providing clear advantages compared with the past. The jury is still out on whether this will result in improved education for new generations, but it is clear that it will change the school system forever. ■

Goldman Sachs Global Equity Impact Opportunities

The Goldman Sachs Global **Equity Impact Opportunities** Fund invests in companies that contribute to improving quality of life, protecting the environment and promoting inclusive growth. The Fund focuses on a diverse range of themes, including decent living standards, fit body and mind, affordable healthcare, financial inclusion, water management, food sufficiency, the energy transition, circular economy, enhanced productivity, resilient infrastructure, better knowledge and safe society.[63]

63 Please note that as of March 1, 2024, the prospectus of the fund reflects the following nine impact themes: thriving communities, economic empowerment, good health & well-being, safe society, clean energy, resource efficiency, sustainable consumption, circular economy and water sustainability. Full information about the fund can be found in the literature available on the Goldman Sachs Asset Management website. There is no guarantee that objectives will be met. Your capital is at risk and you may lose some or all of the capital you invest. Further information in relation to the sustainability-related aspects of the Fund can be found at https://am.gs.com/en-no/advisors/funds/detail/PV104698/LU0250161907/goldman-sachs-global-equity-impact-opportunities.

Climate & Environment

Clean Energy

The number fell compared with last year because we exited two holdings in the renewable energy space that contributed towards this metric. However, this figure represents a **32% increase** since 2022 for the remaining holding.

25 **gigawatts (GW)** of renewable energy capacity installed

Resource Efficiency

CO_2e savings increased by 4% from 2022 levels despite fewer companies in the portfolio reporting. Our holdings in this theme contribute to reducing the CO2 emissions of data centers and the built environment through waste recycling, methane capture and providing renewable energy.

312 **million** metric tonnes of CO_2e emissions avoided

Sustainable Consumption

Indicators show stable to positive progress in this theme.

2 **million** meals containing fresh food produced per day

20.5% reduction in CO_2e per kilogram of dairy produced thanks to livestock feeds that improve animal health

Circular Economy

All indicators improved slightly from the previous year, and for the first time we are reporting on waste recycled following our investment in a waste management company.

941 **million** liters of fuel saved

3.6 **billion** sheets of paper saved

15.2 **million** tons of waste recycled

Water Sustainability

This represents a significant increase from 2022, not only because more companies are beginning to report this indicator, but also because we changed the way we track the impact of one of our water management holdings to take into account the company's total contribution towards the theme.

2.7 **million** megaliters of water saved

Social Impact

Please refer to the Goldman Sachs Global Social Impact Equity section for more detailed information on the progress of these indicators over-time. given overlapping ownership.

Thriving Communities

- **144 million** people provided with telecommunication services coverage
- **32.1 million** people using mobile-phone-based payment services in Africa
- **800,000 households** in India provided with finance, of which **64%** are people in lower- and middle-income groups
- **3.2 million** people provided with water services

Good Health and Wellbeing

- **2.3 million** patients equipped with a continuous glucose monitor
- **250,000** people around the world provided with diagnostic solutions to prevent diseases
- **18.7 million** people accessing affordable fitness facilities
- **677 million** people provided with foods containing essential micronutrients

Economic Empowerment

- **35 million** entrepreneurs and SMEs provided with digital solutions
- **18 million** people provided with health insurance products in Asia
- **22,500** rural Indian villages provided with banking services to fund traditional agriculture
- **30 million** jobs searchable online around the world per day on average
- **574,000** small- and medium-sized enterprises in Latin America enabled to trade online, of which over 70% are family businesses
- **3 million** students provided with virtual study and examination preparation materials

Safe Society

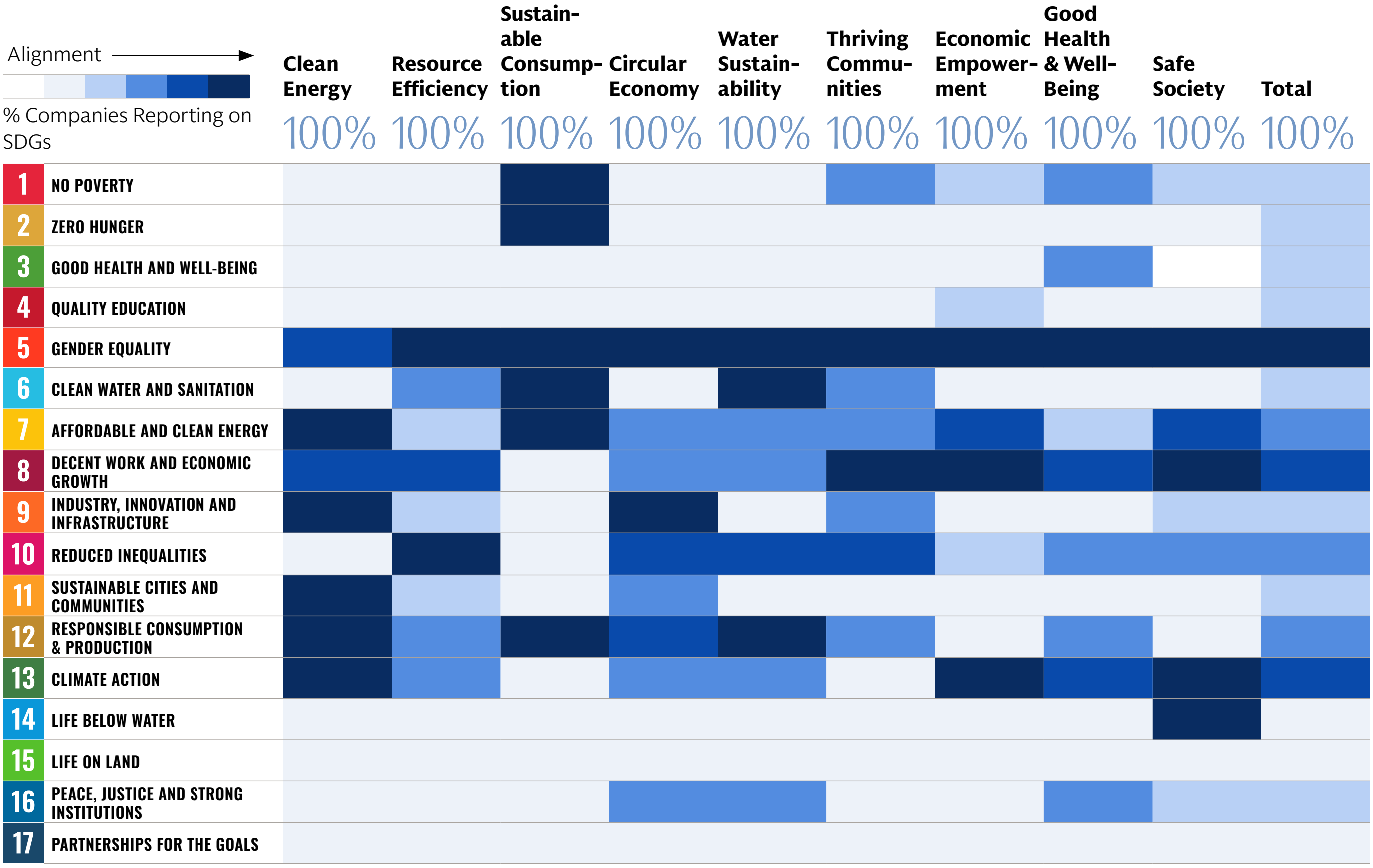
- **300,000** people protected by gas sensor products annually
- **40 million** workers protected through safety equipment
- **125** low- and middle-income countries provided with scientific information for researchers
- **630,000** relevant peer-reviewed articles published

Alignment with the UN Sustainable Development Goals

One hundred percent of companies in the Fund are captured by MSCI's UN SDG Alignment methodology (up from 97%). We can observe greatest alignment (50% of companies and above - as illustrated by the color shading in below graphic) with SDG 5 (Gender Equality), SDG 8 (Decent Work & Economic Growth), and SDG 13 (Climate Action).

In addition to the Fund now being fully covered by MSCI's SDG Alignment methodology, more companies across themes now map to SDG 5(Gender Equality), alongside the Portfolio mapping for the first time to SDG 8 (Decent Work & Economic Growth).

UN SDG Mapping: Goldman Sachs Global Equity Impact Opportunities



Source: MSCI. As of Oct-2024. Corresponding shading for each theme is determined by the number of underlying companies that are positively aligned with the referenced Global Equity Impact Opportunities Key Theme and UN Sustainable Development Goal (SDG) via MSCI UN SDG Alignment Methodology. Alignment is defined as Strongly Misaligned, Misaligned, Neutral, Aligned, Strongly Aligned. The scale is divided into 25% alignment intervals (by name), with lighter shades indicating fewer companies have exposure to the referenced SDG, and darker indicating more companies with exposure to the referenced SDG. Methodology Example: 100% of holdings within the Clean Energy Theme (of the 100% with MSCI UN SDG Alignment data on file) are either Aligned or Strongly Aligned with SDG 13 (Climate Action). In instances where a Portfolio company is aligned with multiple SDGs, all aligned SDGs have been included. The Total column represents the sum of the companies across all 9 key themes, held within the Portfolio at year-end 2023, and their aggregate exposure to the corresponding SDG. % companies reporting on SDGs represents the % of portfolio companies (by name) with MSCI UN SDG Alignment data on file.

CASE STUDY

Access to credit and financial services can facilitate entrepreneurship and job creation. **Marcus Pugh-Smith**, Impact Equity Client Portfolio Manager, highlights the challenges on a global scale, and how a company operating in this space can also reduce inequality to support development.

The problem:

- Limited access to credit or formal financial services represents a significant barrier to economic growth for businesses and individuals in emerging markets (EM). The annual financing gap for micro-, small- and medium-sized enterprises in EM totals almost $6 trillion, and 1.7 billion adults do not have access to basic transaction accounts.[64]
- According to the World Economic Forum, maintaining open financial access could drive $3.7 trillion in growth for developing countries by 2025.[65]
- Improved financial inclusion in emerging markets can help marginalized groups invest in healthcare, education, entrepreneurship and other income-generating activities.

Contribution of our investee company to the solution:

- The company provides banking and financial services in India. Indian banks are legally required to lend at least 40% of their adjusted net banking credit to priority sectors including agriculture, micro and small enterprises, housing and social infrastructure. As one of the country's market leaders in mortgage financing, the company provides wider homeownership opportunities and is one of the key players in the government's "Housing for All" program.
- The company provided 71% of its loan volume to customers earning under $24,000 per year, of which 23% was to those earning under $8,000 per year. About half of its individual mortgage loan disbursements were to first-time buyers, while 67% of loan value went to women as the company is involved in partnerships focusing on increasing female homeownership.
- As of March 2023, the company had disbursed a total of almost $4 billion of individual housing loans to home buyers in certified green building projects across the country. ■

64 International Finance Corporation, 2022.
65 https://www.weforum.org/agenda/2023/01/finance-inclusive-growth-wef23/.

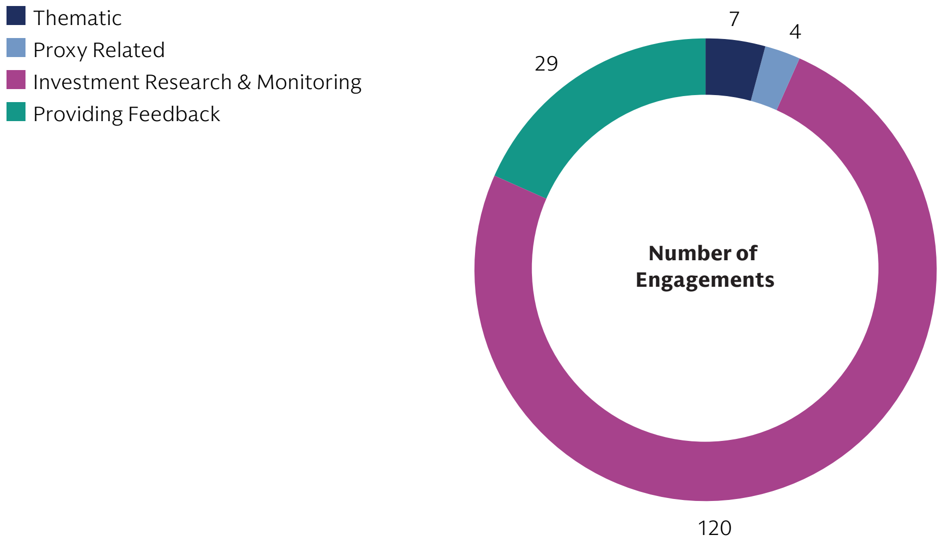
Stewardship

The Global Stewardship Team engages in three core activities: proxy voting, industry leadership across the stewardship space, and engaging with the management teams of a subset of the companies we invest in on behalf of our clients. Our engagements with companies generally fall into one of the following categories set out in Our Approach to Stewardship:

- Thematic engagements from our stewardship framework.
- Proxy-related discussions to inform our proxy-voting decisions.
- Providing feedback, generally in response to companies' questions about reporting or other matters.
- Investment research and monitoring, primarily to seek information for our investment decisions.

In 2023, we conducted 160 engagements across these categories with companies we held across our range of impact equity strategies.

Breakdown of 2023 Engagements with Impact Equity Holdings (Total: 160)



Source: Goldman Sachs Asset Management, for illustrative purposes only.

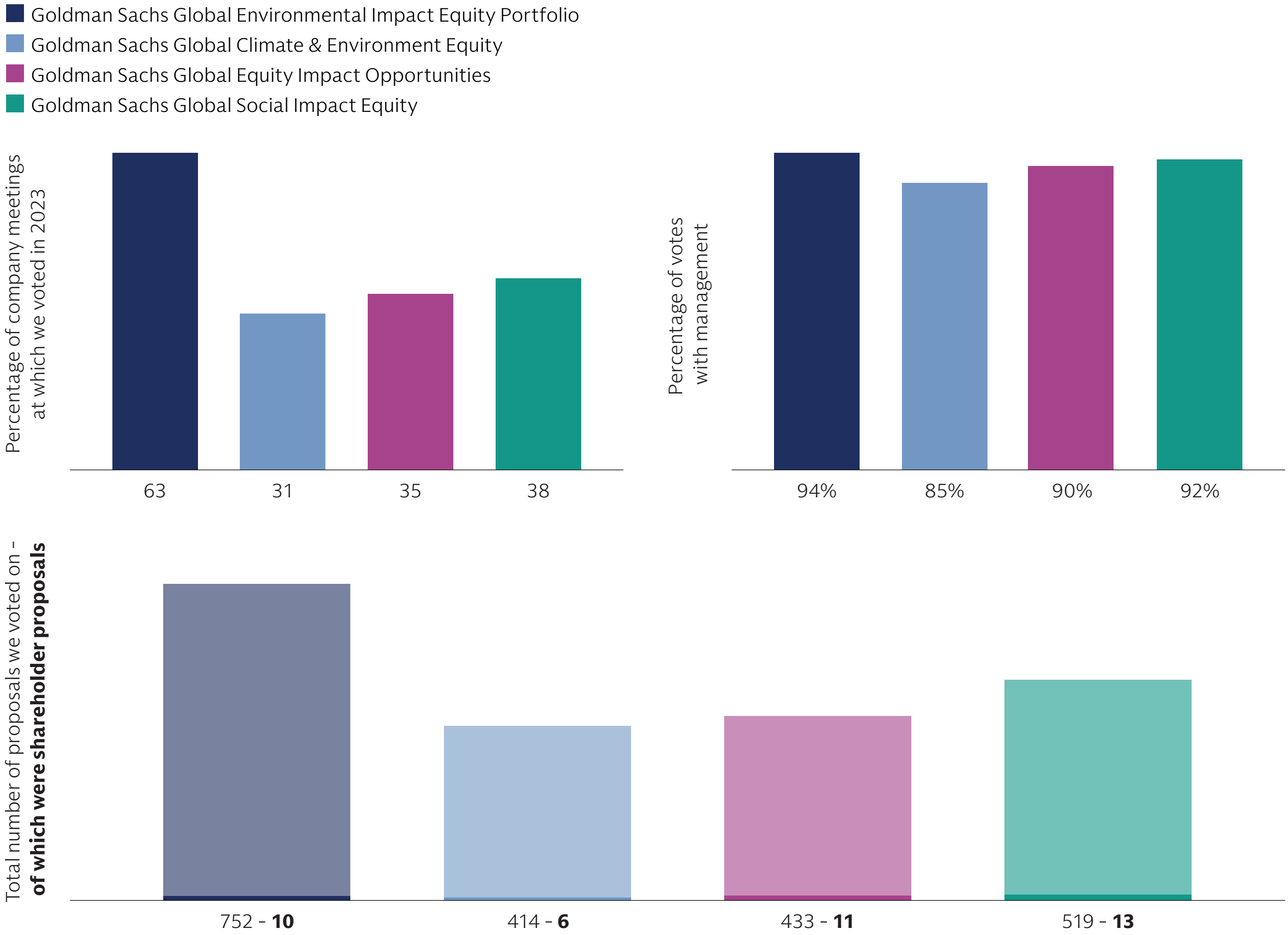
Engagement is generally a part of our Fundamental Equity investment team's research process. These interactions may involve in-depth discussions and offer insights into a company's operations, financial performance and the quality of its management team. We conduct on-site visits when appropriate and supplement our face-to-face management meetings with conference calls. We also may meet with companies' customers, suppliers and competitors to cross-check the statements provided by their management teams. Our meetings with companies enable our investment professionals to evaluate a company's commitment to its shareholders and consider how it compares with their industry and regional peers. We may discuss ESG topics in these meetings as part of our research process, and we also may conduct meetings that are dedicated to ESG. Such meetings provide opportunities to encourage positive corporate change.

Proxy-related engagement is primarily conducted by our Global Stewardship Team, often alongside our Fundamental Equity investment teams. These engagements give 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 and shareholder proposals.

Exercising our clients' shareholder rights through proxy voting is an important element of the portfolio management service we provide to our advisory clients who have authorized us to deal with these matters on their behalf. As a fiduciary, our guiding principle when proxy voting is 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.

Below we set out the 2023 proxy-voting highlights for our impact equity funds, starting with the Goldman Sachs Global Environmental Impact Equity Portfolio. Our three other impact equity funds – Goldman Sachs Global Climate & Environment Equity, Goldman Sachs Global Equity Impact Opportunities and Goldman Sachs Global Social Impact Equity – were previously managed by Dutch asset manager NN Investment Partners, which Goldman Sachs acquired in 2022. These funds were rebranded to Goldman Sachs Asset Management names in March 2023.

Proxy voting highlights 2023



Source: Goldman Sachs Asset Management.

The following case studies demonstrate how our engagements work in practice.

CASE STUDY

Country: **United States** **Sector:** **Utilities**

Category: **Thematic** **Themes:** **Climate - Execute Strategy**

- In November 2023, members of our Global Stewardship Team and Fundamental Equity investment team engaged with the Investor Relations and Corporate Secretary of a US utilities company, to discuss the execution of its climate strategy. We had identified the company as a candidate for engagement under our Climate – Execute Strategy engagement initiative, in which we seek to engage with companies on their implementation of a robust and quantifiable climate transition strategy.
- We have engaged with the company every year since 2020. In our first meeting in 2020 we encouraged the company to expand its disclosure of material emissions data as it was not disclosing Scope 2 emissions. In its following sustainability report, it expanded its disclosures to include Scope 2 and partial Scope 3 emissions data.
- We engaged again in October 2021 to discuss the company's emissions reduction targets. We discussed its timeline to wind down its remaining exposure to coal and encouraged it to set long-term targets beyond its 2025 goals. The following year, the company published its Zero Carbon Blueprint, which contained a target to reach "real zero" Scope 1 and 2 emissions by 2045, with interim goals relating to renewable generation capacity.
- During our November 2023 engagement, we focused on how the company's capital allocation strategy will support its real zero goals. We encouraged additional disclosure about capex, particularly with respect to how its near-term capital spending is in line with its targets.
- We intend to continue engaging with the company on its material disclosures and the progress of its climate transition strategy.

CASE STUDY

Country: **Japan** **Sector:** **Industrials**

Category: **Providing Feedback** **Themes:** **Workforce Diversity, Executive Compensation**

- In December 2023, members of our Global Stewardship Team and Fundamental Equity investment team engaged with representatives from the Investor Relations and Sustainability teams of a Japanese industrials company, to discuss its social impact goals and initiatives. We have met with the company four times since 2020 to encourage it to adopt best practices and monitor its progress in areas such as workplace diversity and corporate governance.
- The company has shown progress in its workplace diversity metrics and has set a target that 50% of its employees should be female by 2030. The company has also committed to increase the proportion of women in executive roles.
- During our most recent engagement, we discussed the company's social impact goals, focusing on its targets to cut the time it takes for people to find a new job by half and to help 30 million underprivileged jobseekers across its countries of operation to find new jobs. We advised that the logic and method behind the calculation of these metrics need to be clear and objective.
- The company also introduced new ESG metrics in its long-term incentive compensation plans for its CEO, chairman and business unit leaders to increase alignment with the company's long-term development. However, we found the disclosure of the metrics unclear and encouraged the company to improve the transparency of its executive compensation.
- We will continue engaging with the company to monitor its progress and provide feedback on important sustainability topics.

CASE STUDY

Country: France **Sector:** Industrials

Category: Proxy Related **Themes:** Climate Strategy

- In April and May 2023, members of our Global Stewardship Team and Fundamental Equity investment team engaged with members of the Board of Directors of a French industrials company, to discuss sustainability topics ahead of its annual general meeting (AGM).
- The company had published a climate strategy and report and proposed a management resolution at its AGM asking shareholders to “issue a favourable opinion on this climate strategy”.
- We discussed the company’s climate strategy and noted that it had set Science Based Targets to achieve net zero emissions by 2050, with interim targets for 2030. While we noted that the company had disclosed some information on the steps it was taking to reach its climate goals, we encouraged it to develop this reporting further. In particular we encouraged it to improve disclosure and clarity about its capital expenditure plans.
- The company asked our views on appropriate ESG metrics to include in its compensation plan. We encouraged it to clearly align any new ESG metrics with its climate strategy and to use quantitative performance indicators where possible.
- We also discussed the company’s workforce, encouraging it to continue reporting on the results of its staff engagement survey and on any relevant key performance indicators in place that monitor its progress in improving diversity and inclusion.
- We ultimately voted in favour of the company’s climate strategy plan and will continue engaging with the company on sustainability topics.

Market Outlook

Looking Ahead

We asked Impact Equity Portfolio Manager **Saurabh Jain** to share his thoughts on how the impact equity market is likely to develop, and where investors can look for opportunities.

Over the year we have "underwritten" the green transition theme in our environmental impact portfolios for the coming years based on several considerations. The cost of renewable power generation has fallen dramatically, making it the most competitive source of new energy capacity and it now makes clean tech a potentially attractive investment opportunity. Renewable power is now the most cost-effective way for heavy emitters to decarbonize, and they increasingly adopt proven green solutions. At the same time, more and more innovative new technologies are emerging. We expect capital flows to be directed towards areas with the highest risk-adjusted return potential. Investments in energy transition solutions have accelerated significantly in recent years. In 2023, such investments hit $1.8 trillion, up 17% on the previous year, which was a new record,[66] and would need to increase by more than 170% if the world is to be on track for net zero in the coming years.[67]

What's more, national security concerns may accelerate the roll-out of clean energy solutions. How to provide affordable, reliable and sustainable energy is a top priority for policymakers and corporate management teams alike. Given the recent increase in geopolitical tensions, governments are keen to invest in economic independence, which includes faster adoption of renewable energy and domestic manufacturing of critical climate solutions.

Electrification is one of the main trends in the energy transition and key to decarbonization. Replacing technologies or processes that use fossil-based energy sources, such as internal combustion engines and gas boilers, with electricity-powered alternatives, such as electric vehicles or heat pumps, leads to efficiency gains and reduces overall energy requirements.

The proportion of total energy production that electricity accounts for is projected to increase from around 20% in 2022 to 50% by 2050.[68] The growth in global demand for electricity is accelerating significantly, with new developments in mobility, construction and manufacturing leading to what is referred to as the "Electrification of Everything".[69]

The increase in electricity demand in developed markets is primarily due to the ongoing electrification of the residential and transport sectors, the adoption of heat pumps and, more recently, an extraordinary expansion of data centers, in large part driven by AI. In fact, AI is driving a massive uptick in power demand, which will lead to significant opportunities for environmental solutions providers, notably in renewable power generation and energy-efficient electrical infrastructure. Investment opportunities are emerging along the data center value chain, including in power generation and distribution, electrical products and auxiliary areas such as heat management and indoor climate solutions.

When applied responsibly, AI has the potential to accelerate our progress towards socially focused SDGs. There is a huge range of applications for AI: McKinsey has a database of 600 possible use cases of generative AI[70] – more than three times more than in 2018, when it first starting tracking these use cases. Over 30% of these possible uses are aligned with SDG 3 (Good Health), SDG 4 (Quality Education) and SDG 2 (Zero Hunger).

66 BloombergNEF, Energy Transition Investment Trends 2024, as of January 2024.
67 Ibid.
68 IEA.
69 https://www.nytimes.com/interactive/2023/04/14/climate/electric-car-heater-everything.html.
70 McKinsey: AI for social good: Improving lives and protecting the planet, May 10, 2024.

For instance, AI has the potential to help increase agricultural yields and reduce the use of pesticides. It could also play a significant role in accelerating the pace of drug discovery and development. We are particularly excited about opportunities resulting from new technologies in managing diabetes and AI-assisted robotic surgery, both of which have strong growth potential and major positive impacts. Meanwhile, AI can contribute to education and economic empowerment through upskilling, self-directed learning and matching workers' skills to organizations' needs.

Of course, responsible investors must be mindful of the risks that rapid adoption of AI could involve. Job displacement and economic inequality are very real threats – there are already projections of large-scale unemployment in certain sectors and the prospect of increased economic disparity as high-skilled jobs are preserved. The investor community will need to weigh risk and opportunities as they arise and find ways in which negative consequences may be mitigated and countered.

There are also privacy and security concerns, including increased surveillance and the potential abuse of personal data. Data privacy and security is a consideration in our Social Impact fund's Safe Society theme.

We see strong growth potential for cybersecurity firms that specialize in cloud security to protect companies' digital network infrastructure from cyberattacks and that make the cloud a safe place to do business. One of the companies we invest in provides network security solutions to enterprises, service providers and government entities including nine of the 10 largest hospitals in the US.

Despite our excitement about the opportunities that new technology is opening up, we recognize the need to be balanced in our approach and discerning in our assessment of how companies harness the benefits of AI while mitigating the risks. These concerns need to be discussed with the companies we invest in, to help understand how corporate management teams are addressing them and to advocate for strong oversight, regular audits and the adoption of best ethical practices.

Overall, we believe that the growth of impact strategies in general is an irreversible trend. Having exceeded $1trn of AUM in 2022, investor allocations to impact strategies have been increasing, especially from asset owners such as pension funds and insurance companies. There has been a surge of impact investments in listed equity, with listed equity impact AUM up from $5.5bn in 2017 to $10.6bn by 2022, representing an average annual growth rate of 14%.[71] The proportion of AUM in impact strategies investing in mature, publicly traded companies reached 27% at the end of 2022. Investments in such firms grew by an average of 53% over the five years to the end of 2022.

According to the GIIN, **"Investors are increasingly recognizing the important role that larger public companies can play in the impact investing ecosystem, with tremendous potential to reach impact at scale."** In 2023, the organisation published guidance on pursing impact in listed equities, with a focus on the measurement, management and reporting of pre-determined key performance indicators (KPIs).

For their part, companies also realize the importance of setting meaningful targets and being transparent about their progress towards them. Over the next five years, as the focus shifts toward outcomes, the adoption of standardized data, measurement and reporting will increase substantially.

While 67% of investors compare their actual impacts with their own impact targets, only 15% compare their impact results with those of their peers. [72] What's more, 76% of investors consider the inability to compare their impact with those of their peers to be a significant or moderate challenge in the industry. We hope for greater transparency, aggregation and consistency in impact data publication. It will allow researchers in the impact field to use that data to develop analytic tools, helping to attract further capital into the asset class.

71 2023 Impact Investing Allocations, Activity & Performance.
72 Source: 2023 GIINSIGHT - Emerging Trends in Impact Investing.

RISK & REWARD PROFILE

This risk profile is based on historical data and may not be a reliable indication of the future risk profile of the Portfolio. The risk category shown is not guaranteed and may change over time. The lowest category does not mean risk free. It is possible that a portfolio stated to have a lower risk profile may in fact fall in value more than a portfolio with a higher risk profile. The Portfolio is in category 6 as it mostly invests in shares and similar instruments which typically experience higher levels of price fluctuations than fixed income securities. The capital is not guaranteed.

Other Material Risks:

Market risk – the value of assets in the Portfolio is typically dictated by a number of factors, including the confidence levels of the market in which they are traded.

Operational risk – material losses to the Portfolio may arise as a result of human error, system and/or process failures, inadequate procedures or controls.

Liquidity risk – the Portfolio may not always find another party willing to purchase an asset that the Portfolio wants to sell which could impact the Portfolio's ability to meet redemption requests on demand.

Exchange rate risk – changes in exchange rates may reduce or increase the returns an investor might expect to receive independent of the performance of such assets. Hedging of this risk may not be fully effective and may increase other risks (e.g. derivative risk).

Custodian risk – insolvency, breaches of duty of care or misconduct of a custodian or sub-custodian responsible for the safekeeping of the Portfolio's assets can result in loss to the Portfolio.

Derivatives risk – derivative instruments are highly sensitive to changes in the value of the underlying asset that they are based on. Certain derivatives may result in losses greater than the amount originally invested.

Counterparty risk – a party that the Portfolio transacts with may fail to meet its obligations which could cause losses.

Emerging markets risk – emerging markets are likely to bear higher risk due to lower liquidity and possible lack of adequate financial, legal, social, political and economic structures, protection and stability as well as uncertain tax positions.

Stock Connect – Stock Connect is a new trading programme and the relevant regulations are untested and subject to change. Investments through the Shanghai-Hong Kong Stock Connect are subject to additional risks, including amongst others, quota limitations, restrictions on selling imposed by frontend monitoring, ownership of securities held on Stock Connect applicable to certain rules, participation in corporate actions and shareholders' meetings, non-protection by any investor compensation scheme, differences in trading day, operational risk, recalling of eligible stocks and trading restrictions, trading costs (including tax), local market rules, foreign shareholding restrictions and disclosure obligations, clearing, settlement and custody risk, currency risk and default risk.

Sustainability risk – an environmental, social or governance event or condition that could cause the value of the portfolio, to go down. Examples of sustainability risks include physical environmental risks, climate change transition risks, supply chain disruptions, improper labor practices, lack of board diversity and corruption.

Concentration risk – this is a concentrated asset strategy that is likely to exhibit a significantly greater fluctuations in asset values than a broad investment in a wide range of shares of companies.

Risks associated with investments in China - the Portfolio's operations and financial results could be adversely affected by adjustments in the PRC's state plans, political, economic and social conditions, changes in the policies of the PRC government and laws and regulations, in particular where investments are made through any of the investment regime introduced by the PRC government.

For more detailed information on the risks associated with an investment in the Portfolio, please refer to the section in the Prospectus entitled "Risk Considerations" and discuss with your professional advisers.

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Capital is at risk.

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Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

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Environmental, Social, and Governance (ESG) strategies may take risks or eliminate exposures found in other strategies or broad market benchmarks that may cause performance to diverge from the performance of these other strategies or market benchmarks. ESG strategies will be subject to the risks associated with their underlying investments' asset classes.

Further, the demand within certain markets or sectors that an ESG strategy targets may not develop as forecasted or may develop more slowly than anticipated.

Please note the following matters relevant to investors in certain jurisdictions.

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