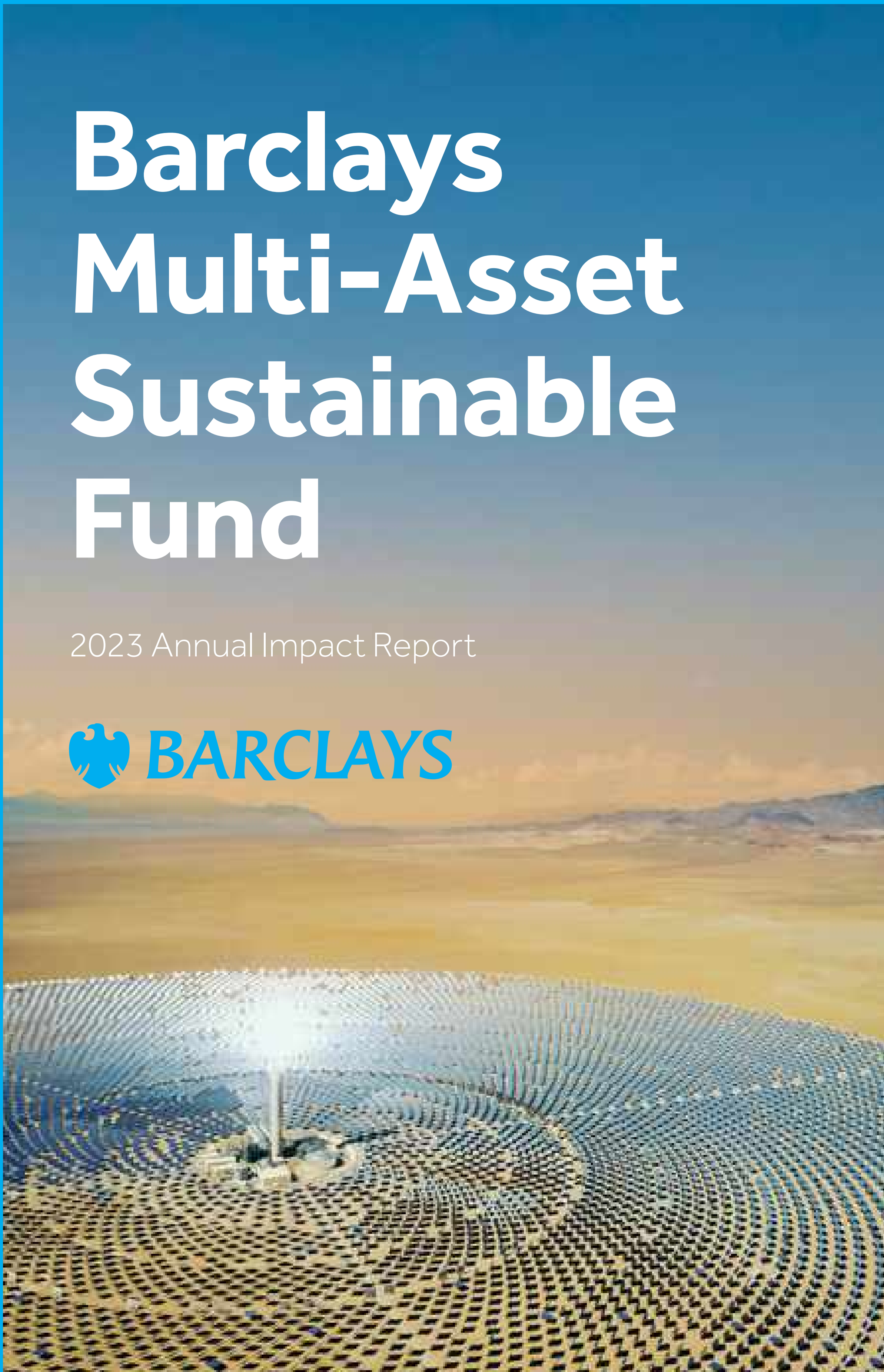
Barclays Multi-Asset Sustainable Fund

2023 Annual Impact Report

BARCLAYS



Explanation of this report

This document predominantly covers the period 31 December 2021 to 31 December 2022. Some aspects of this document include later periods to reflect changes to the fund in early January 2023. All aspects related to that period in early January 2023 are noted accordingly.

As of 20 February 2023, this fund's name was changed to the "Barclays Multi-Asset Sustainable Fund", having previously been named the "Barclays Multi-Impact Growth Fund".

As this information is backward looking, it should not be relied upon as any prediction of future outcomes.

Past performance is not a future indication and, as with all investments, initial capital is not guaranteed and its value may go down as well as up.

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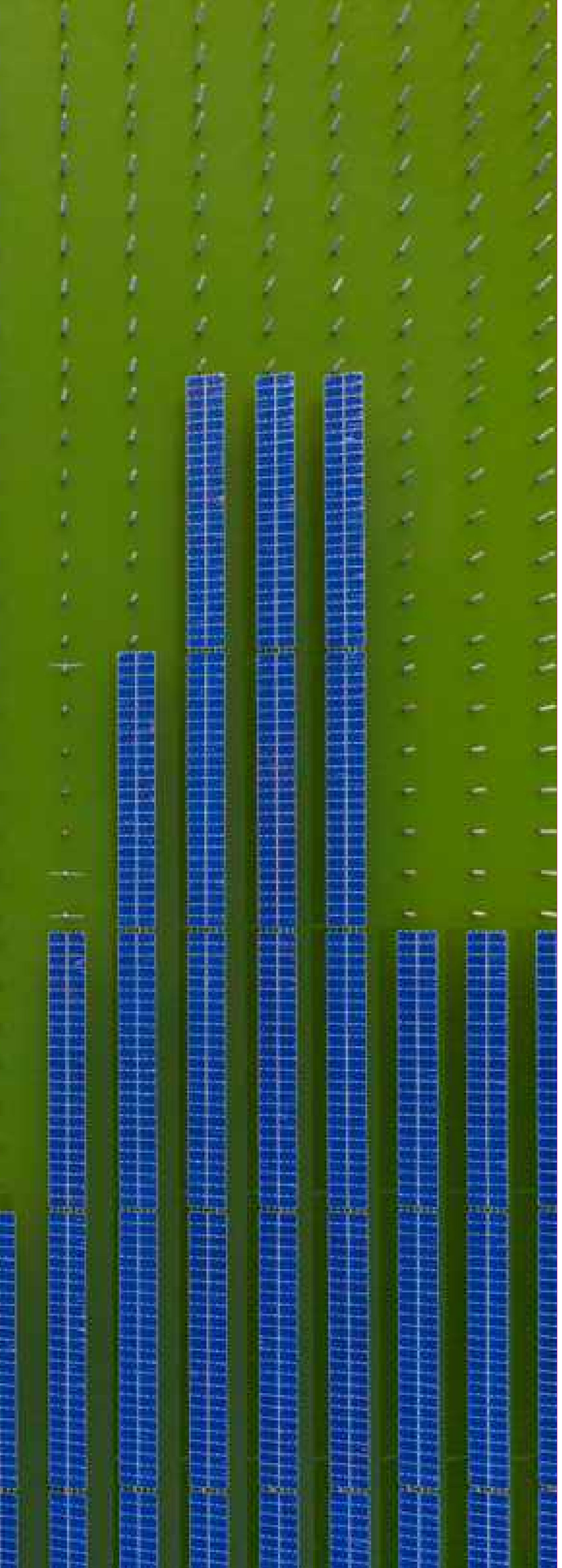


The Barclays Multi-Asset Sustainable Fund (MASF) offers investors of any capital size a simple, sophisticated and single-access way of gaining exposure to leading impact and sustainable funds and investments.

The MASF invests primarily in specialist third-party equity and fixed income funds which have been researched and chosen by Barclays' experienced in house Manager and Fund Selection Team.

These underlying funds have been selected as what we believe are top tier funds based on both their potential for strong financial returns and their consideration of impact around key social and environmental issues.

The result is a rigorously selected investment solution that incorporates sustainability and impact considerations and that is managed according to Barclays' best investment thinking and capabilities. It's an investment solution that we believe will help shape a better world for both the current and future.

View from the top

Whilst we saw a number of challenges for the global financial markets in 2022, we continued to see our investors put their capital to work towards key social and environmental issues.

The Barclays Multi-Asset Sustainable Fund supports the delivery of these issues, alongside strong long-term financial returns. In collaboration with our fund management community, we are proud to bring you this report which details the achievements of the fund in 2022, and highlights the impact made across asset classes, industry sectors, and geographies.

We are grateful to our investors who have selected the fund, as it continues to support them to grow their assets and make a positive contribution to society.

William Hobbs

Chief Investment Officer, Barclays Wealth Management and Investments

Our Multi-Asset Sustainable Fund

To say that 2022 has been a turbulent year is an understatement. High inflation, supply chain problems and the Russia-Ukraine war has brought the energy trilemma into sharp focus. As the world grapples with the challenges of ensuring energy security, affordability, and sustainability, countries around the globe are facing difficult decisions. The COP27 summit in Sharm El-Sheikh spotlighted these challenges and the agreement on a "loss and damage" fund for developing nations may help to ease the path to meeting the goals set in Paris in 2015, but there is more to do.

As the focus shifts from governments to companies in driving sustainability efforts, asset managers have an important role to play. They can engage with and hold companies accountable for their actions in addressing the energy crisis. This report aims to showcase the commitment of this fund to delivering financial returns while directing resources to deliver environmental and social impact.

At the end of the year, we took the decision to change the name of this fund, previously known as the Barclays Multi-Impact Growth Fund, to the Barclays Multi-Asset Sustainable Fund (MASF). This was in light of the UK regulator's consultation paper on its upcoming regulation, the Sustainability Disclosure Requirements (SDR). Within this consultation paper, the Financial Conduct Authority (FCA) stated that for a fund to be an 'impact fund', its objective must be to achieve a pre-defined, positive, and measurable real-world impact. As a fund-of-fund, whilst we can and do measure its impacts and they are positive, we are not certain that we can define these in advance. As such, we felt in prudent to change the name and update the prospectus in late December 2022, with these changes being effective from February 2023.

The MASF's invested capital continues to be directed towards companies that we believe are consciously working to have a positive impact on the world through a variety of means. These companies often look beyond traditional ESG themes, for example, investing in clean energy solutions across the Americas (see the AllianceBernstein AB Sustainable US Thematic Portfolio Fund). It is important to showcase the positive impact these companies are having on the world as it plays a central role in their own investment cases.

This year's report focuses on themes of clean energy, sustainable transport and improved health and wellbeing. The ongoing global energy crisis and increased public demand for solutions to environmental and social dilemmas have made these topics a priority.

As we look ahead to 2023, companies that can adapt to the transformations in the global economy will be the winners. The economic case for clean energy has never been stronger, and efforts to accelerate climate action require investments in both reducing emissions and in adaptation solutions. The MASF will continue to play a role in this energy transition, providing clients the opportunity to achieve strong long-term financial returns while pursuing the ambition of a cleaner, more environmentally friendly future.

Ian Aylward

Head of Manager Selection and Responsible Investing

Views from the Fund Managers

2022 was a challenging period for investors. From an economic perspective, inflation remained stubbornly high in most developed markets throughout the year. The inflationary pressures were exacerbated when Russia shocked the world by invading Ukraine. The response from the west was to impose financial sanctions upon Russia. The impact of the conflict on energy and agriculture commodities was significant and put additional pressure on inflation expectations and risk sentiment throughout the year.

The economic environment forced developed market central banks to adopt a hawkish stance in an attempt to bring inflation back towards their targets. The US Federal Reserve began raising interest rates in March and delivered 4.25% of hikes throughout the year. As the year progressed the market became increasingly concerned over the ability of central banks to engineer a soft landing and so recessionary concerns increased.

The impact of high inflation, tighter monetary policy, slowing economic growth and rising geopolitical tensions led to an unusual market dynamic where traditional safe-haven assets delivered a material drawdown at the same time as growth orientated assets. Unsurprisingly, this dynamic proved very challenging for multi-asset investors including the MASF as there were very few ways to protect capital during the year.

The majority of the performance of the fund was driven by our strategic asset allocation (SAA). The focus of our SAA on developed market equities and emerging market equities which make up the majority of the asset allocation and are supplemented by high quality government and corporate fixed income investments. Whilst doing this, the fund aims to invest in companies that deliver a financial return in addition to contributing to social, environmental or sustainability goals. Typically, this means the fund favours companies that are in a growth phase whilst avoiding large capitalised traditional firms in sectors like banking and resource sectors such as energy and mining. The combination of the market dynamic combined with the inherent style bias of a positive impact orientated fund explained the majority of the drawdown during the year.

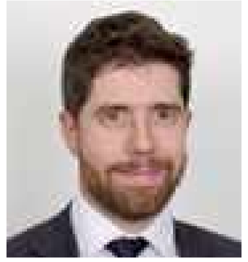
In addition, though, we do take an active approach to our asset allocation in order to help capture short term opportunities through tactical asset allocation (TAA) decisions. TAA opportunities were more numerous than in the previous year. We began the period with a small currency position in the US Dollar relative to Sterling to mitigate against the risk of a policy error in the UK.

We became more active as the year progressed. During the middle of the year, we allocated to the Japanese Yen against the Dollar whilst closing our long position in the US Dollar. We became more conservative in our outlook for emerging markets and moved underweight emerging market equities versus developed market equities. We also decided to increase our interest rate exposure during the summer by taking a long position in the US through the Nuveen US Core Impact Bond Fund. Towards the end of the year, we became active in managing our developed market equity exposure and moved overweight for a short period as we felt sentiment had become excessively weak. We ended the year underweight emerging market equities with an overweight to US interest rate risk and overweight the Japanese Yen against the Dollar.

Throughout the year we also made some changes to our equity manager line up. During the middle of the year, we rotated out of some of our passive socially responsible investments and also exited our position in the Allianz Global Sustainability Fund in order to increase our exposure to the Janus Henderson Global Sustainable Fund as well as the RobecoSAM Sustainable Healthy Living Equity Fund and the Impax Environmental Markets Fund. We believed that this change allowed us to deliver a similar financial outcome but with a greater sustainable impact.

Since we launched the fund over 5 years ago, the opportunity set has increased as new third-party strategies have been developed. This trend has given us the opportunity to allocate to a new fund within emerging market equities. We added the Aikya Global Emerging Markets Fund to our strategy towards the end of the year which we funded through positions in the Robeco QI Emerging Conservative Equities Fund and the Fisher Institutional Emerging Markets Equity fund. We consider Aikya as a disciplined, research-based firm, that invests in high quality companies that it identified as making a positive contribution to Environmental, Social, and Governance areas within the countries in which they operate. The core of Aikya's process is to first find businesses aligned with one of the UN Sustainable Development Goals and then assess their financial soundness.

Finally, we would not be able to deliver a fund like this without the strong contribution from our underlying managers who continued to deliver both in terms of financial performance and more importantly, positive impact. This annual report is a great illustration of the work our managers achieved over the course of the year.



Christopher Bamford & Stephen Peters

Managers of the Barclays Multi-Asset Sustainable Fund

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Thank you

One of the great aspects of the impact investing industry is the spirit of openness and collaboration.

We are once again deeply grateful to our third-party fund providers, whose teams were willing to answer our extensive survey, engage with our numerous queries and endorse their sections of this report. We sincerely hope that your respective pages are an accurate reflection of the effective impact your funds are achieving.

Finally, we must acknowledge the considerable efforts of Oliver Knox and Shakeel Aslam for working on the sixth edition of this report.

Fund overview

The Barclays Multi-Asset Sustainable Fund (MASF) is an innovative product that seeks to achieve long-term financial returns alongside a societal and environmental impact. It aims to tackle social and environmental challenges globally by selecting impact and sustainable fund managers that invest in companies and organisations which, through their practices, products or services make a positive contribution to our world.

Barclays Multi-Asset Sustainable Fund Portfolio

One fund switch occurred in early January 2023 reaching completion on 19 January 2023. To fully encompass and reflect this change, and to further support later aspects of this report, please find below the Barclays Multi-Asset Sustainable Fund (MASF) portfolio composition as of 19 January 2023.

Portfolio as of 19 January 2023

Name	ISIN	Asset Class	% of Fund	2022 Performance	# of Holdings	Impact Style
Aikya Global Emerging Markets Fund	IE00BMCM3082	Developed Market Equities	6.07%	0.86%	33	ESG Integrated
AllianceBernstein AB Sustainable US Thematic Portfolio Fund	LU0128316170	Developed Market Equities	11.89%	-23.43%	47	Sustainable
AXA World Funds Green Bonds Fund	LU1280196426	Developed Government Bonds	9.04%	-19.22%	285	Catalytic
Columbia Threadneedle CT UK Social Bond Fund	GB00BF233C45	Investment Grade Bonds	3.94%	-10.91%	202	Catalytic
Impax Asian Environmental Markets Fund	IE00BYQ91839	Emerging Market Equities	5.16%	-14.81%	44	Catalytic
Impax Environmental Markets Fund	IE00BYQNSD98	Developed Market Equities	7.53%	-14.04%	58	Catalytic
Janus Henderson Global Sustainable Equity Fund	GB00B71DPP64	Developed Market Equities	15.10%	-15.29%	54	Sustainable
Jupiter Ecology Fund	GB00B4KLC262	Developed Market Equities	4.48%	-12.26%	53	Catalytic
Mirova Euro Green & Sustainable Corporate Bond Fund	LU0552643685	Investment Grade Bonds	2.95%	-15.88%	193	Sustainable
Muzinich Sustainable Credit Fund	IE00B4PL7R16	Investment Grade Bonds	2.83%	-10.06%	191	ESG Integrated
Nuveen US Core Impact Bond Fund	IE00BZ0GCS44	Investment Grade Bonds	18.50%	-13.94%	245	Catalytic
RobecoSAM Sustainable Healthy Living Equity Fund	LU2146189746	Developed Market Equities	5.84%	-14.97%	43	Catalytic
Vontobel mtx Sustainable Emerging Markets Leaders Fund	LU1717118191	Emerging Market Equities	2.59%	-16.55%	52	ESG Integrated
Vontobel Fund – TwentyFour Sustainable Short Term Bond Fund	LU2081485596	Short Duration Bonds	2.21%	-4.22%	115	ESG Integrated
Net cash (GBP, EUR, USD, JPY)	-		-		1.87%	-

Source: Barclays, 19 January 2023

MASF Performance over the reporting period

The MASF faced a challenging year in 2022, in line with an extremely testing period for equity and fixed income markets alike given a number of significant macroeconomic and geopolitical challenges.

Whilst the end of 2022 ended on a more positive theme, spurred on by the hope that the global economic downturn may be shorter than expected, the year overall proved to be weaker than historically.

With the MASF having little exposure to some of the best performing sectors in 2022 due to many of these sectors having weak impact or sustainable investing credentials, the MASF ended the year lower than its peer group. This is because most of the funds in the peer group, which are not impact funds, do not exclude such investments.

The high-quality fixed income space faced one of its worst periods on record, with all our fixed income funds experiencing a negative return, along with their asset classes. All our equity funds held during 2022 also saw a negative performance for the year, with funds such as the Janus Henderson Global Sustainable Equity Fund and Jupiter Ecology Fund being strongly exposed to poorly performing sectors in 2022.

However, we remain confident in the long-term outlook for our chosen selection of funds in the MASF and we believe we are positioned well to bounce back in 2023.

Annualised statistics since inception as of 31 December 2022

Barclays Multi-Asset Sustainable Fund R Acc GBP	Peer Group: IA Mixed Investment 40–85% Shares	
3.8%	3.1%	Return
0.4	0.3	Sharpe Ratio
9.0	10.1	Standard Deviation
-17.3%	-21.4%	Max Drawdown

Source: Barclays, 31 December 2022

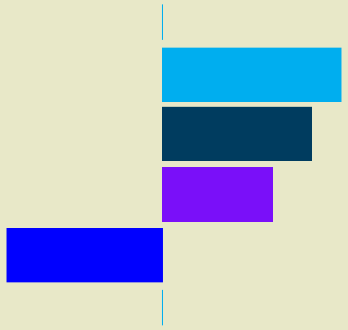
Fund return per year

01/01/2019 – 31/12/2019 15.95%

01/01/2020 – 31/12/2020 13.31%

01/01/2021 – 31/12/2021 9.81%

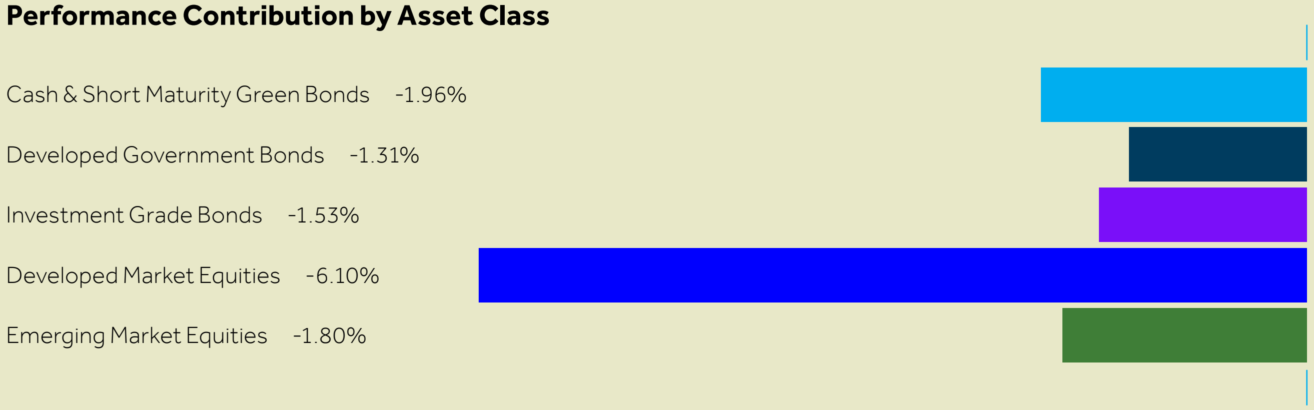
01/01/2022 – 31/12/2022 -13.86%



The period for this report is 1 January 2022 to 31 December 2022, therefore the performance will reflect this timeframe. More up-to-date performance is available via fact sheets. Past performance is not an indicator of future performance. This fund does not have a performance benchmark.

MASF Performance over the reporting period

Performance Contribution by Asset Class



Equities
Global equity markets started 2022 in a generally positive frame of mind. However, that changed with the war in Ukraine. This had a wide range of effects on markets and consumer confidence. Uncertainty over energy security, particularly in Europe, saw significant price rises in oil and gas. Companies that are heavy users of energy had to find other sources of natural resources they would normally buy from Russia or Ukraine. Supply shortages of energy and logistical issues globally contributed to sharp and steep rises in inflation and increasing concerns that the world was going to enter an economic recession. Many expensively valued shares and sectors including technology fell as investors took their profits and rotated into defensive or more cheaply valued parts of the stock market.

A lot of equity funds that adopt some form of ESG or sustainable investing approach suffered from poor performance relative to their benchmarks. The best performing shares over the years were often the ones – such as those in the oil, gas, tobacco or defence industries – that had the weakest ESG or sustainable investing credentials. However, stock markets ended the year on a more upbeat tone on hopes that the economic slowdown would not be as deep or last as long as feared.

Fixed Income
Fixed income contributed a negative return during the period. The impact of high inflation, tighter monetary policy, slowing economic growth, and rising geopolitical tensions proved to be one of the worst periods on record for high quality fixed income.

Government bonds delivered a very significant drawdown during the period but still managed to outperform corporate bonds which were impacted by both rising underlying government bond yields and investors demanding greater compensation for corporate credit risk.

Whilst all of our underlying strategies delivered negative total returns Colombia Threadneedle UK Social Bond and Muzinich Sustainable Credit Fund both outperformed their reference indices. However, this was offset by the underperformance of the Mirova Euro Green and Sustainable Corporate Bond Fund.

Despite the challenging period for fixed income, corporate fundamentals appear reasonably robust for now as many companies locked in lower borrowing costs for an extended period of time by issuing bonds with longer maturities prior to the dislocation in markets. There may be a lot of uncertainty surrounding the near-term outlook, however the starting point is much improved with high quality yields at levels not seen since the financial crisis whilst the period of negative yielding bonds seems to be behind us for now.

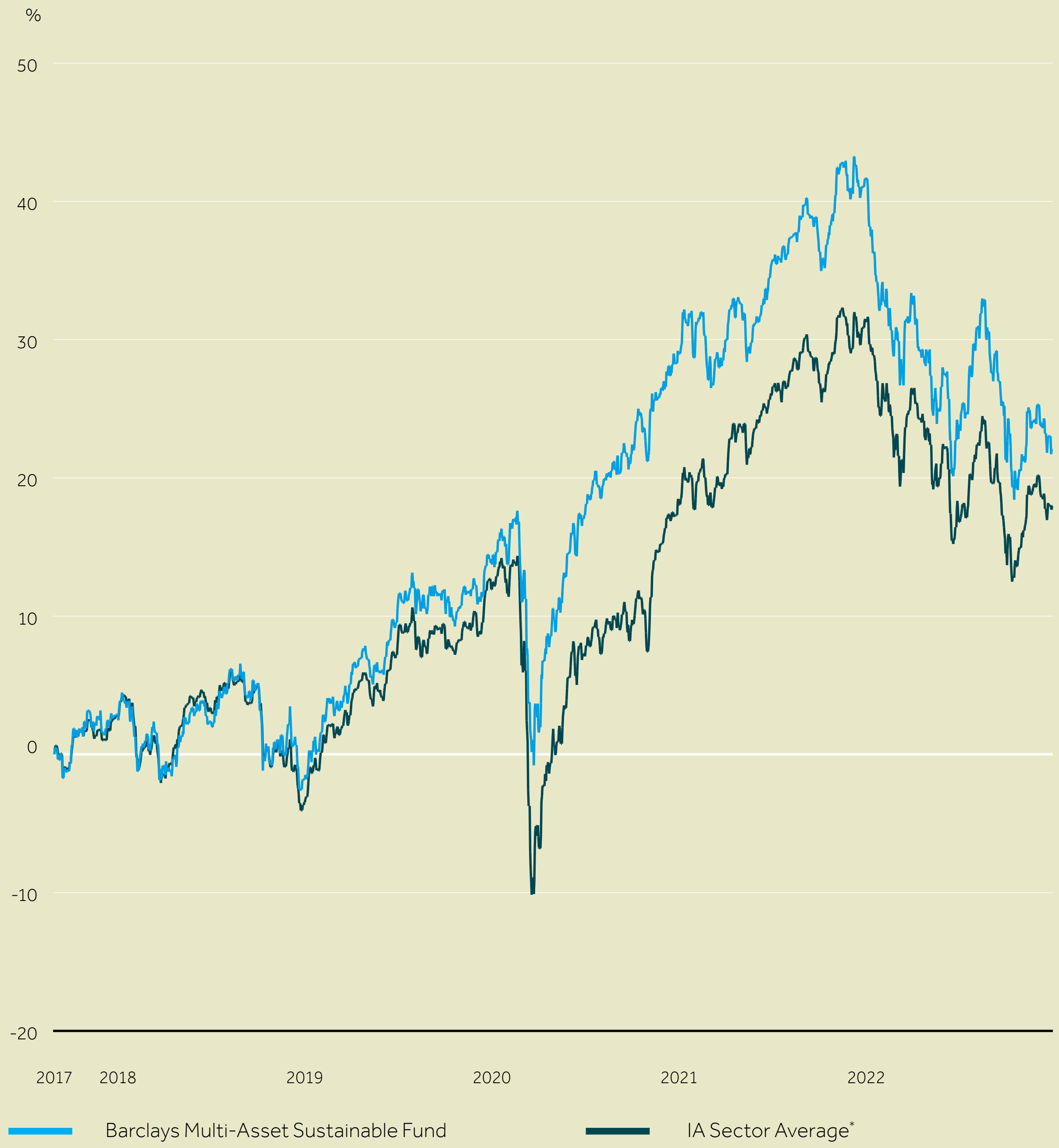
The period for this report is 1 January 2022 to 31 December 2022, therefore the performance will reflect this timeframe. More up-to-date performance is available via fact sheets. Past performance is not an indicator of future performance.
Source: Barclays, 31 December 2022

Trailing returns as of 31 December 2022

MASF		Peer Group: IA Mixed Investment 40-85% Shares
-2.40	1 month (Dec 2022)	-1.40
0.60	3 months (Oct–Dec 2022)	3.00
-13.90	1 Year (Jan– Dec 2022)	-10.20
22.00	Since inception (Aug 2017–Dec 2022)	18.00

The period for the report is 1 January 2022 to 31 December 2022, therefore the performance will reflect this timeframe. More up to date performance is available via fact sheets. Past performance is not an indicator of future performance.
Source: Barclays, 31 December 2022

Cumulative returns as of 31 December 2022



*Category: GBP Investment Association (IA) Mixed Investment 40-85% Shares.

To enable comparison between funds, the Investment Association, a trade body representing UK investment managers has established categories to group funds according to their actual investment style, not merely their stated investment objectives. The MASF is assigned to the "IA MIXED INVESTMENT 40-85% SHARES sector" which includes funds with a mandate to invest in a range of asset types (including equities, bonds, property, commodities, cash and liquid alternatives) for a GBP-based investor. The equity or equity equivalent risk component will usually be between 40% to 85% in the normal running of the fund.

Source: Morningstar, 31 December 2022

Past performance is not an indicator of future performance.

Barclays assessment of impact approaches by Fund

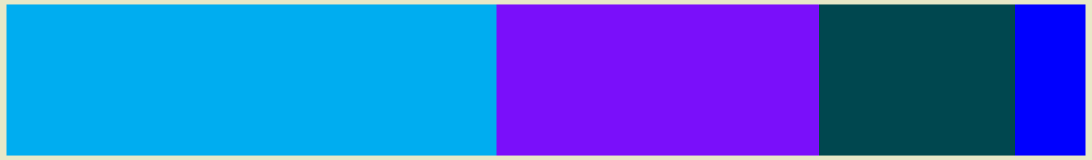
Breakdown by impact approach, separating cash

MASF portfolio allocation of Barclays assessment of impact approaches (2023)

Catalytic	54.49%	ESG Integrated	13.70%
Sustainable	29.94%	Cash	1.87%

Source: Barclays, 19 January 2023

MASF portfolio allocation of Barclays assessment of impact approaches (2021)



Catalytic	45.40%	Sustainable	18.20%
ESG Integrated	29.90%	Cash	6.50%

Historical information provided for illustrative purposes only. Source: Barclays, 31 December 2021

Fund overview

Impact approach diversification

While every investment has an impact on the world, the way different fund managers take this into account varies considerably. We've established a systematic method of understanding the impact approach that our fund managers apply when selecting investments.

It can be difficult to identify how our fund managers consider the potential impact of the investments they make based on terminology, names or marketing materials. The terminology in the ESG field can be confusing for many and this becomes more difficult when various actors use the same terms with different meanings. When reading names of funds, it is frequently unclear what, if any, impact approach they follow, even less so when reviewing marketing materials.

Therefore, we decided to establish classifications on how investors consider impact when making their investment decisions. When we conduct our analysis, this categorisation helps us to compare managers applying the same approach and avoid unfairly comparing those who don't. We also hope it clarifies the outcomes investors can expect from their investments using each impact approach.

Funds are broadly categorised into three approaches – ESG integrated, sustainable, and catalytic.

ESG Integrated
Fund managers here seek to enhance financial value by incorporating environmental, social and governance (ESG) factors that could affect stakeholders. The primary focus is on the impact created by how the organisation operates rather than the products or services it provides. Fund managers assess these operational practices by gathering and using ESG data and scores. The aim is to generally select the best and/or avoid the worst companies based on how they manage key risks associated with their industry. Although it is reliant on good quality, non-financial data, this approach can be used across nearly every asset class and industry.

Sustainable
Fund managers here seek to produce financial value by pursuing sustainability themes that benefit stakeholders. The starting point for these managers is broader – looking at wider trends and themes in the world for investment opportunities. These could be social trends, such as ageing populations or healthy living, or they could be environmental, such as climate change or water efficiency. Fund managers are looking for the organisations that are profiting from these trends, and whose products and services are driving them. They tend to focus on certain industries and sectors that relate to the theme(s) that they are considering. Importantly, we would still expect managers to consider the operating practices of the companies by incorporating ESG considerations.

Catalytic
Fund managers here seek to generate financial value by addressing a societal challenge that delivers specific outcome(s). For these managers, their investing starts with a desire to address pressing societal problems by investing in organisations providing commercial solutions to them. They usually start with a particular issue (e.g. sustainable transport) and seek to identify the organisations with the products and services (e.g. solar panel manufacturers or wind turbine operators) that directly address these issues as well as generate financial returns. Given the focus on the products and services, funds often have thresholds about the minimum revenue a company must generate to qualify for consideration. Again, we would expect managers to also assess the operating practices of these companies by incorporating ESG considerations.

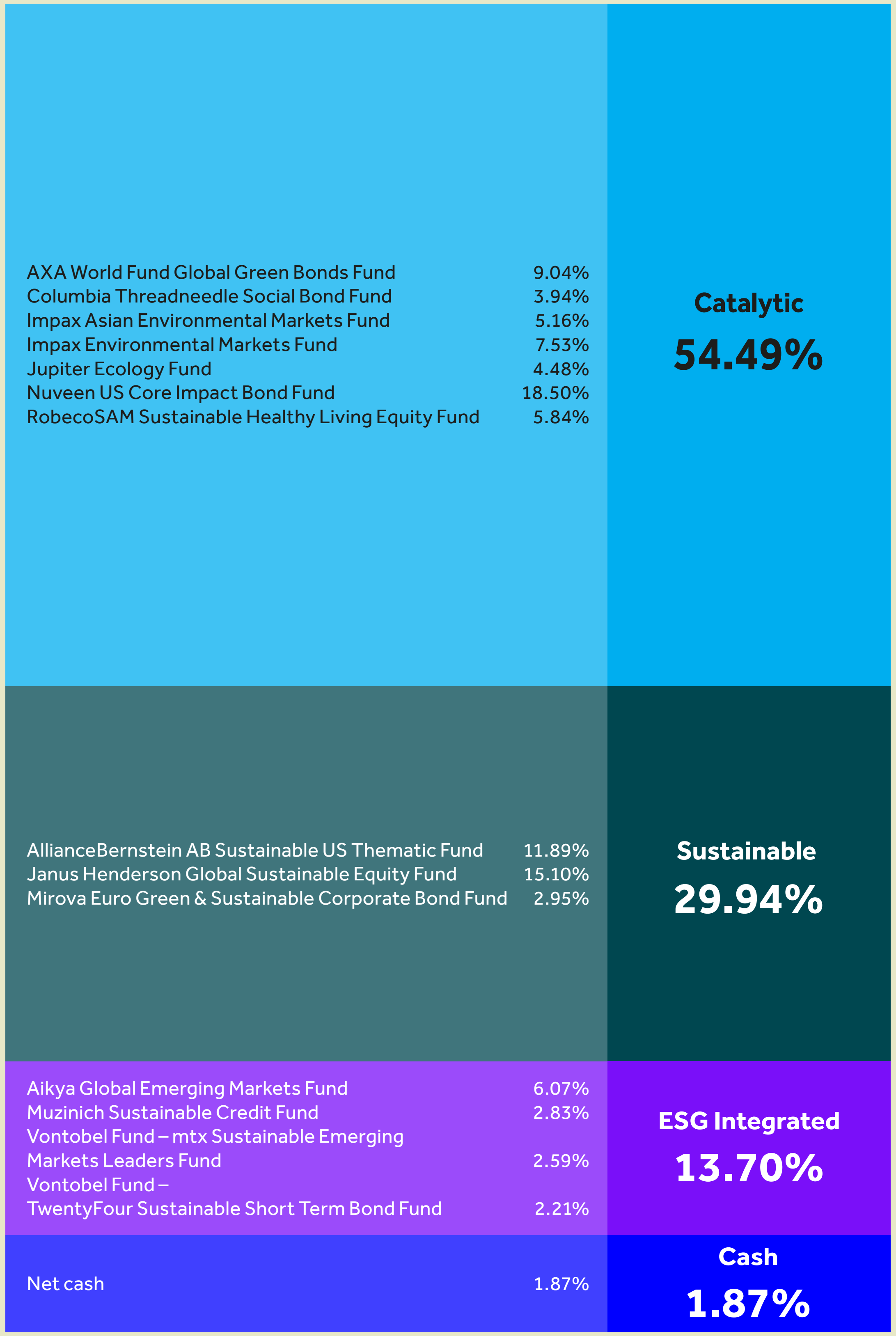
Notes on impact approaches
This assessment does not reflect whether funds use any ethical criteria to automatically avoid investments based on certain moral or religious values, or global norms. These ethical criteria can be used in conjunction with impact approaches and some managers also screen certain companies and / or industries.

Finally, with each of these approaches, there is no judgement about which impact approach is better or best. Approaches lend themselves more or less effectively depending on the fund's investment objectives and scope – e.g. asset classes, target company sizes, or industries.

All of the approaches differ from traditional fund managers who have no real consideration of the environmental, social, or governance factors, or impact of investments, and only focus on the financial aspects and outcomes of the companies.

Impact funds that we consider to be top tier intentionally and effectively use impact as a factor to select investments and still seek to financially outperform funds that do not consider impact. What's important is to understand the implications of each approach to the value it seeks to add to the investment process and to the wider world.

Barclays assessment of impact approaches by Fund



Source: Barclays, 19 January 2023

Changes to the Multi-Asset Sustainable Fund

Retained Funds

Full Fund Name	ISIN	Currency	Asset Class
AXA World Fund Green Bond	LU1280196426	Euro	Developed Government Bonds
Threadneedle CT UK Social Bond Fund	GB00BF233C45	Pound Stirling	Investment Grade Bonds
Impax Asian Environmental Markets Fund	IE00BYQ91839	Pound Stirling	Emerging Market Equity
Impax Environmental Markets IRL Fund	IE00BYQNSD98	Pound Stirling	Developed Market Equity
Janus Henderson Global Sustainable Equity Fund	GB00B71DPP64	Pound Stirling	Developed Market Equity
Jupiter Ecology Fund	GB00B4KLC262	Pound Stirling	Developed Market Equity
Mirova Euro Green and Sustainable Corporate Bond Fund	LU0552643685	Euro	Investment Grade Bonds
Muzinich Sustainable Credit Fund	IE00B4PL7R16	Pound Stirling	Investment Grade Bonds
Nuveen U.S. Core Impact Bond	IE00BZ0GCS44	US Dollar	Investment Grade Bonds
RobecoSAM Sustainable Health Living Equities Fund	LU2146189746	Euro	Developed Market Equities
Vontobel MTX Sustainable Emerging Markets Fund	LU1717118191	Pound Stirling	Emerging Market Equity
Vontobel Fund – TwentyFour Sustainable Short Term Bond Fund	LU2081485596	Pound Stirling	Short Duration Bonds

Fund Exits

Full Fund Name	ISIN	Currency	Asset Class	Exit Quarter
Allianz Global Sustainability Fund	LU1405890390	Euro	Developed Market Equity	Q2 2022
Brown Advisory US Sustainable Growth Fund	IE00BF1T6S03	US Dollar	Developed Market Equity	Q1 2023
Fisher Emerging Markets Equity ESG Fund	IE00B571B412	Pound Stirling	Emerging Market Equity	Q4 2022
iShares MSCI USA SRI UCITS ETF	IE00BYVJRR92	US Dollar	Developed Market Equity	Q1 2023
iShares MSCI World SRI UCITS ETF	IE00BDZZTM54	US Dollar	Developed Market Equity	Q2 2022
Robeco QI Emerging Conservative Equities Fund	LU0875838053	Pound Stirling	Emerging Market Equity	Q4 2022

Fund Additions

Full Fund Name	ISIN	Currency	Asset Class	Addition Quarter
Aikya Global Emerging Markets Fund	IE00BMCM3082	Pound Stirling	Emerging Market Equity	Q4 2022
AllianceBernstein AB Sustainable US Thematic Portfolio	LU0128316170	US Dollar	Developed Market Equity	Q1 2023

Source: Barclays, 19 January 2023

Commentary on fund changes

There have been a number of changes to the Barclays Multi-Asset Sustainable Fund (MASF) over the past year, including the funds we are invested with. The MASF has been running for over five years, and in that time, the Sustainable and ESG investing landscape has evolved a huge amount. There are many more funds now available to investors than there were only a few years ago. The way in which many go about their aims and objectives, and the way in which those objectives are measured has and continues to develop.

During 2022, we continued to review all the fund holdings on an ongoing basis. We found that some funds had not seen their approaches to the impact, engagement or responsible investing keep pace with the wider market. Furthermore, amongst those more recently launched funds, we found several that we believed were an improvement on several incumbent funds.

With that in mind, we removed a number of funds. We did not think these funds were bad investments. Rather, we felt other funds, either already in the MASF or new, potential replacements met our needs and requirements more precisely.

We further took a view that impact, in its purest form, was difficult to achieve through investing in passively managed equity funds. As a result, we have replaced all of our passively managed funds and reallocated the money into actively managed strategies over time. No passively managed fund remains.

In some cases, funds were reallocated to existing holdings. In other cases, we added new funds that passed our strict investment and operational due diligence requirements to the MASF.

Additionally, in late 2022 it was decided that the name of the fund would be changed to the Barclays Multi-Asset Sustainable Fund, having previously been named the Barclays Multi-Impact Growth Fund. For a detailed explanation as to why we felt this necessary, please see the Fund's 2022 overview from Barclays' Head of Responsible Investing, Ian Aylward, on page 5.

Commentary on Fund Additions

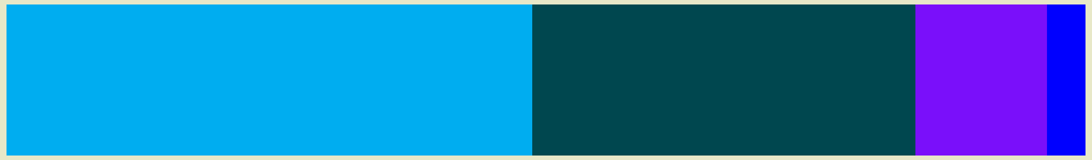
Aikya Global Emerging Markets Fund
The Aikya team have an investment process that is rooted in a philosophy that the best returns come from investing in companies that are doing 'good'. Aikya spend a lot of time understanding the culture of a company, its owners and senior management, and ensuring that the company's approach to business is aligned to one or more of the UN's Sustainable Development Goals. Aikya has a series of targets for the portfolio across a range of areas, looking for overall, measurable improvements in the portfolio scores for items including, but not limited to, carbon emissions, social stewardship and good governance practices.

AllianceBernstein AB Sustainable US Thematic Portfolio
The AllianceBernstein team has a pragmatic but thoughtful approach to trying to achieve meaningful impact in a portfolio of listed US equities. It tries to measure and manage companies' 'handprints' and 'footprints'. In essence, this alludes to the good that a fund does, and the impact it has on society and the environment in doing so. AllianceBernstein recognises that the main impact it can have on companies is through active engagement, and it therefore encourages companies to improve how they operate for the benefit of all stakeholders.

Change in Allocations

Geographical comparisons

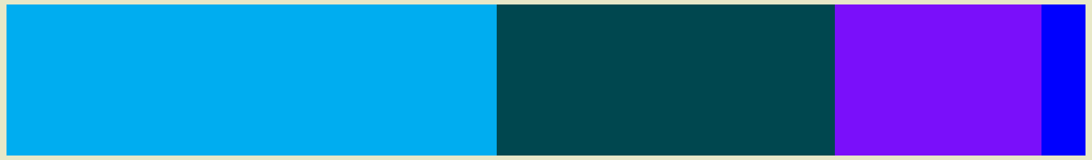
MASF Geographic Allocation (2023)



North America 48.11%
APAC 12.87%
Europe 35.52%
Others 3.50%

Source: Barclays, 19 January 2023

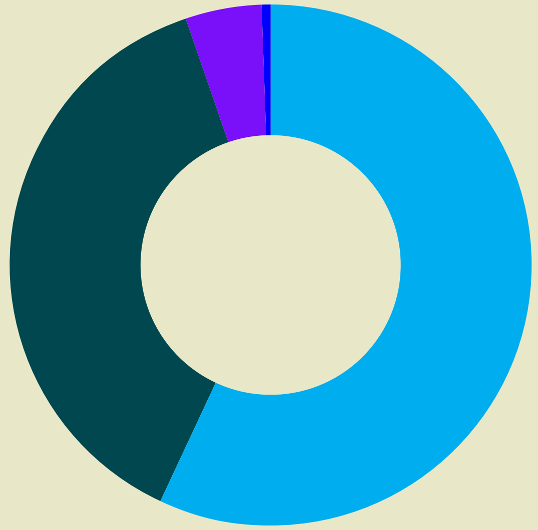
MASF Geographic Allocation (2021)



North America 45.59%
APAC 19.19%
Europe 31.23%
Others 4.00%

Historical information provided for illustrative purposes only. Source: Barclays, 31 December 2021

MASF Asset Allocation (2023)

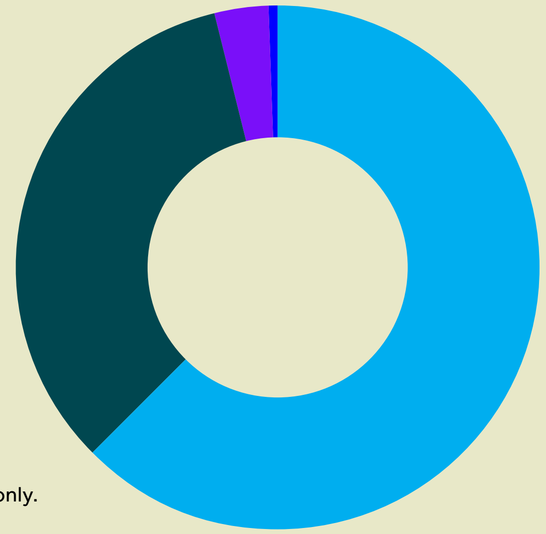


Equity 57.04%
Fixed Income 37.96%
Cash 4.50%
Derivatives 0.52%

Source: Barclays, 19 January 2023

Asset class comparisons

MASF Asset Allocation (2021)



Equity 62.57%
Fixed Income 33.79%
Cash 3.25%
Derivatives 0.38%

Historical information provided for illustrative purposes only.
Source: Barclays, 31 December 2021

Industry comparisons (GICS)*

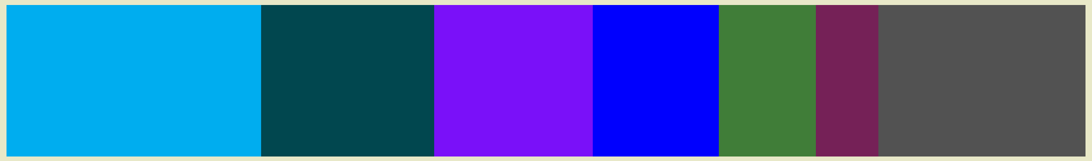
MASF Sector Allocation (2023)

Information Technology	22.5%	Consumer Discretionary	8.0%
Financials	19.3%	Utilities	7.6%
Industrials	15.6%	Others	15.4%
Health Care	11.5%		

Source: Barclays, 19 January 2023

NB: Due to labelling restrictions in the fixed income asset class, sector allocations are representative for equity holdings only.

MASF Sector Allocation (2021)



Information Technology	23.6%	Consumer Discretionary	9.0%
Financials	16.1%	Utilities	5.8%
Industrials	14.7%	Others	19.2%
Health Care	11.7%		

Historical information provided for illustrative purposes only. Source: Barclays, 31 December 2021

*GICS – Global Industry Classification Standard (MSCI)

Impact highlights from the Barclays Multi-Asset Sustainable Fund

Water management

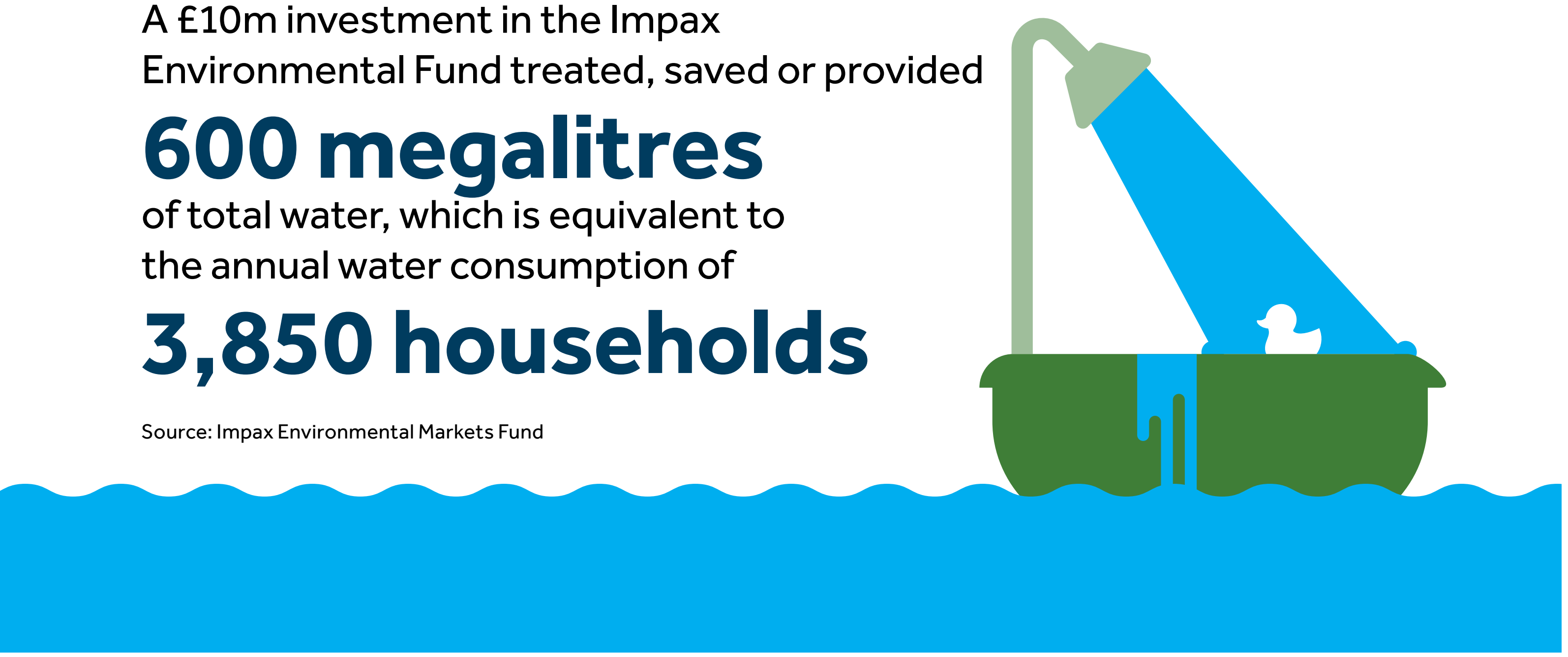
A £10m investment in the Impax Environmental Fund treated, saved or provided

600 megalitres

of total water, which is equivalent to the annual water consumption of

3,850 households

Source: Impax Environmental Markets Fund



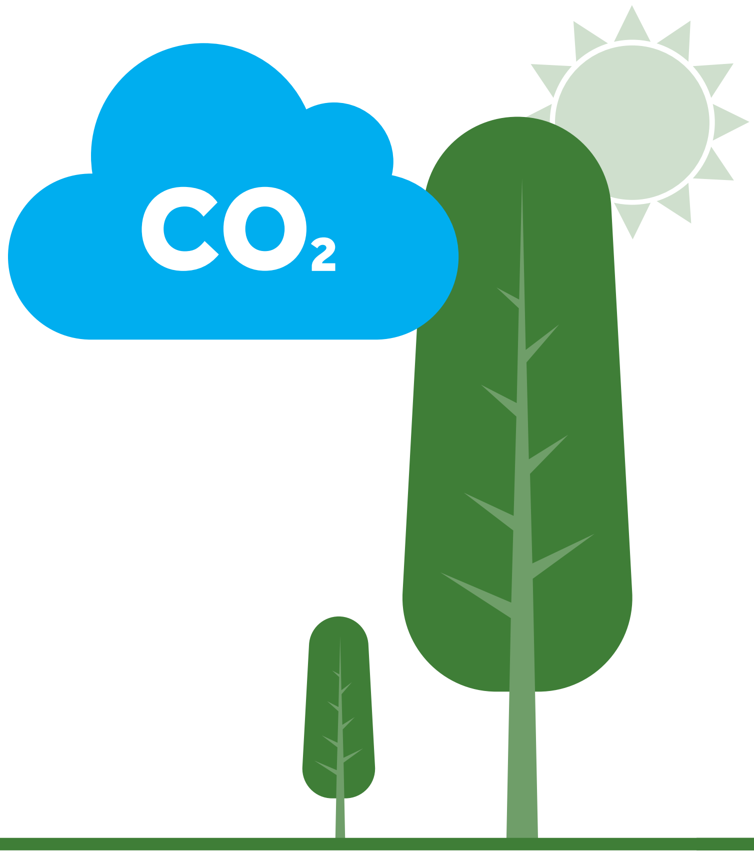
Land ecosystems

The Muzinich Sustainable Credit Fund saved the equivalent CO_2 absorbed by

25,978 acres

of US forests in one year.

Source: Muzinich Sustainable Credit Fund, December 2022
Carbon reduction data point derived using US Government Environmental Protection Agency's Greenhouse Gas Equivalency tool"



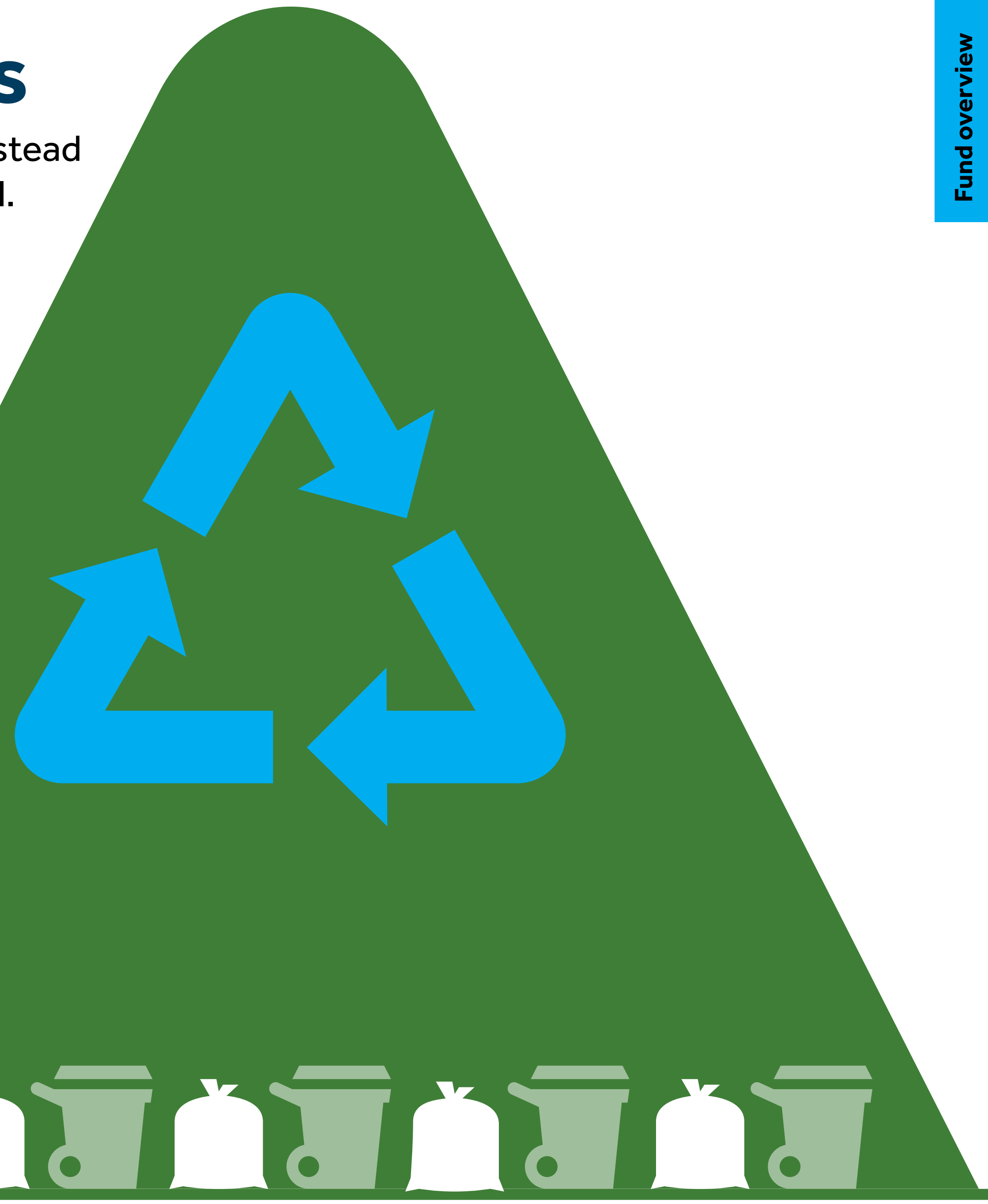
Waste mangement

For every £1m invested, the AllianceBernstein AB Sustainable US Thematic Portfolio Fund saved the equivalent CO_2 of

1,012 bin bags

being recycled instead of going to landfill.

Source: Barclays, December 2022
Carbon equivalency point derived using data from the AllianceBernstein AB Sustainable US Thematic Portfolio Fund, MSCI's ESG tool and the US Government Environmental Protection Agency's Greenhouse Gas Equivalency tool.



Impact highlights from the MASF (cont.)

How a company operates can have substantial societal and environmental impact, while also affecting that company's bottom line

Companies with leading organisational practices, such as strong governance controls, an effective environmental risk management culture or transparent labour practices, generally have a competitive edge over peers. These sustainable operating practices make them more operationally effective and less prone to scandals, and ultimately help their investors achieve better financial results.

Investors who want to identify these companies use ESG data. Several research providers collect and analyse this data to produce ESG ratings / scores that can give an indication of a company's overall sustainable operational practices.

How sustainable are holdings within the Barclays Multi-Asset Sustainable Fund (MASF)?

To understand if the portfolio companies held by the third-party fund managers have leading ESG practices, we used MSCI's ESG Ratings*.

Analysing the MASF's underlying company holdings at the end of December 2022, 69% of the portfolio had an ESG score of A or above. Using an asset weighted distribution of our MASF's ratings compared to the MSCI All Country World Index (ACWI) confirmed that underlying fund managers tend to choose companies with a greater sustainable impact.

Key terms to know

Environmental, social and governance (ESG):

Issues and areas that are considered material to how a company operates: Does the company pollute the environment? Does it treat its workers well? Is it at risk of bribery or corruption?

ESG rating/scores:

Summary metrics that indicate if a company has sustainable operational practices by categorising a company on a numeric or alphabetic scale according to how it manages its ESG risks and opportunities.

Different data providers have different scales and scoring methodologies.

MSCI ESG RESEARCH LLC

MSCI

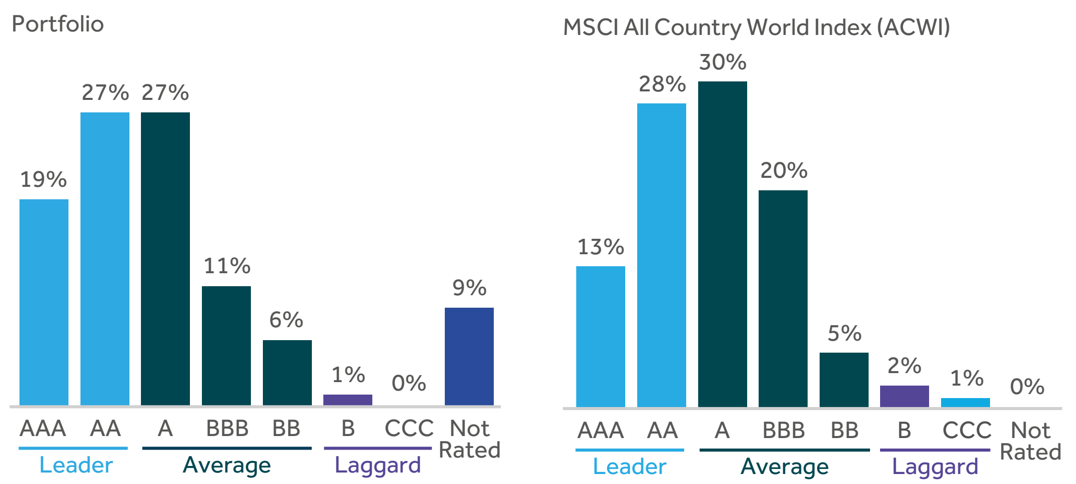
*MSCI ESG Research provides in-depth research, ratings and analysis of the environmental, social and governance related business practices of thousands of companies worldwide. Their research is designed to provide insights that can help institutional investors identify risks and opportunities that traditional investment research may overlook.

In general, the MSCI ESG ratings correspond to the following levels of ESG leadership:

- **AAA-rated companies**: Highest rating. These companies tend to have an integrated ESG strategy, with formal and proactive sustainability efforts. One such example in the MASF is Taiwan Semiconductor Manufacturing Co Ltd (TSMC) which has maintained an AAA rating from last year. The company's robust governance structures and leading performance on key social issues compares favourably with that of industry peers.
- **BBB-rated companies**: Average rating. These companies tend to have some good ESG management practices, but still have exposure to ESG risks. One such example within the MASF is Thermo Fisher Scientific Inc., who are admired for their robust performance on governance relative to peers, but lag industry leaders in employee management.
- **CCC-rated companies**: Lowest rating. These companies tend to have a poor ESG record. Often fund managers are in the process of engaging with these companies, to improve their practices. If successful, this has a positive effect. If not, the manager may choose to sell their holding/holdings in the company.

MSCI Asset-Weighted ESG Rating Distribution: MASF and MSCI ACWI

ESG Rating Distribution – Portfolio and MSCI ACWI



MSCI ESG Ratings Distribution represents the percentage of a portfolio's market value coming from holdings classified as ESG Ratings Leaders (AAA and AA), Average (A, BBB, and BB), and Laggards (B and CCC). Not Rated includes cash. The MASF portfolio is comprised of corporate and non-corporate equity and fixed income holdings as of 31 December 2022. This fund does not have a performance benchmark.

MASF Sustainable Impact Performance

The MASF performed well versus an equity index (MSCI All Country World Index) according to MSCI's 'Sustainable Impact' performance measure, per an MSCI ESG Research report on the MASF's ESG characteristics as of 31 December 2022.

MSCI determine Sustainable Impact performance through exposure to Sustainable Impact Solutions. These solutions, split by MSCI into environmental and social categories, reflect the extent to which company revenue is exposed to products and services that help solve the world's major social and environmental challenges.

MSCI's Social Impact and Environmental Impact exposures indicate the portfolio's weighted average of each company's percent of revenue generated by Social and Environmental goods and services. Additionally, Social and Environmental Impact revenue from companies with negative externalities is excluded. The following metrics represent the MASF's exposure to each MSCI determined theme which is calculated by the portfolio weighted average of each company's percent of revenue generated from goods and services.

The MASF's portfolio exposure to Overall Sustainable Impact as determined by MSCI totalled 10.6%, versus exposure of 6.4% for the MSCI ACWI, as of 31 December 2022. This was predominantly driven by the MASF having 2.7 times exposure to Environmental Impact compared with MSCI ACWI. The Social Impact exposure was below the MSCI ACWI rate and remains a point for improvement within the next year.

The reason for this Social Impact figure being below the MSCI ACWI figure was wholly due to a lack of exposure to Major Diseases Treatment. On this particular exposure, the MASF portfolio recorded an exposure of 0.8%, versus MSCI ACWI exposure of 2.3%. All other exposure metrics contributing to the Social Impact exposure were above or broadly equal against the MSCI ACWI. This included the MSCI categories of sanitation, nutrition, affordable real estate, education, SME finance, and connectivity.

The MASF maintained an extremely strong performance against the MSCI ACWI for environmental impact due to the MASF maintaining a comfortably greater exposure than the MSCI ACWI in each MSCI Environmental Impact exposure categories. This MSCI categories include exposure to alternative energy, energy efficiency, green building, sustainable water, pollution prevention, and sustainable agriculture. Highlights for the MASF's Environmental Impact exposure against the MSCI ACWI included alternative energy, scoring 2.9% exposure versus 0.5% exposure for the MSCI ACW, as well as sustainable water, scoring 1.3% exposure versus 0.1% exposure for the MSCI ACWI

Overall Sustainable Impact

10.6% MASF	**6.4% MSCI ACWI**

Environmental Impact

8.5% MASF	**3.2% MSCI ACWI**

Social Impact

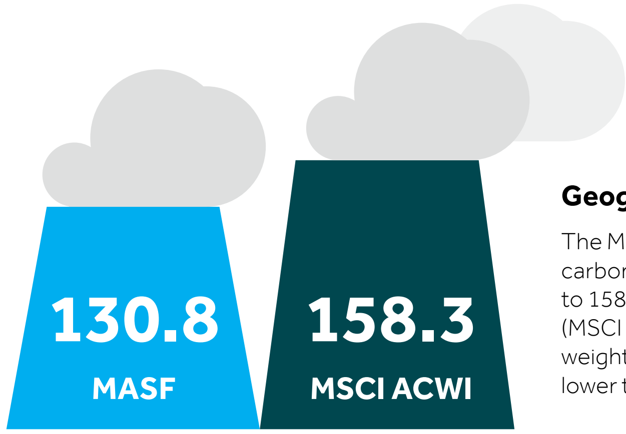
2.5% MASF	**3.3% MSCI ACWI**

Source: MSCI ESG Research. The MASF portfolio is comprised of equity and fixed income holdings, as of 31 December 2022. As of 31 December 2022, the MSCI ACWI is comprised of nearly 3000 stocks from 23 developed markets and 24 emerging markets. This fund does not have a performance benchmark

Sustainability focus areas

Environmental:
What is the MASF's carbon impact?

MSCI Weighted Avg. Carbon Footprint Intensity (tCO_2e/$m Sales)



Climate change represents one of our greatest global challenges. Carbon foot printing can be a first step to address the investment implications of climate change, helping investors to understand, measure and manage carbon risk and opportunities in their portfolios.

While there are various approaches to carbon foot printing, carbon intensity is a commonly used metric that determines the amount of emissions, in tons of CO_2, the companies in the portfolio produce for every million dollars of sales.

This is calculated by adding the organisation's emissions from direct operations and energy consumption (Scope 1 and 2), then dividing by its sales. That figure is then weighted, based on the percentage of each company in the overall portfolio. This makes it possible to compare companies of different sizes.

The final score indicates the portfolio's exposure to risks associated with climate change as holding companies with a higher carbon intensity are likely to face more exposure to carbon-related market and regulatory risks. It also allows for comparisons over time as a benchmark against multiple portfolios, regardless of portfolio size.

Geographic Diversification

The MASF is associated with a weighted average carbon footprint intensity of 130.8, compared to 158.3 for the MSCI All Country World Index (MSCI ACWI). This means the MASF has a weighted average carbon footprint which is 20.6% lower than this index.

That's equivalent to losing greenhouse gas emissions from :

- 67,020 miles driven by an average passenger vehicle
- 5.8 gasoline-powered passenger vehicles driven for one year

Losing CO_2 emissions from:

- 29,873 pounds of coal burned
- 3,284,351 smartphones being charged

Sequestering carbon from:

- 446 tree seedlings grown for 10 years
- 32 acres of US Forests in 1 year

Source: MSCI ESG Research.
Carbon emission data compiled using MSCI's ESG Climate Risk report tool. Carbon equivalency data derived using the US Government Environmental Protection Agency's Greenhouse Gas Equivalency tool. The MASF portfolio comprised of equity and fixed income holdings, as of 31 December 2022. As of 31 December 2022, the MSCI ACWI is comprised of nearly 3000 stocks from 23 developed markets and 24 emerging markets.

Social:
MASF exposure to controversial areas

The way in which companies treat their workforce and engage with the wider community play a significant role in their overall impact on society. Responsible investors seek to invest in companies that not only recognise these issues but actively engage in mitigating the negative impacts of their actions through stakeholder engagement.

The MASF performed extremely strongly versus the MSCI ACWI on reputational risk for portfolio holdings. The MSCI's reputational risk measure represents the percentage of a portfolio's market value coming from holdings involved in very severe controversial events. Whilst the MSCI ACWI recorded a 0.8% exposure to very severe controversies, the MASF recorded a 0.0% exposure. This builds on the MASF exposure from year end in 2021, when the MASF recorded portfolio exposure to very severe controversial events of 0.2%, versus 1.2% exposure for the MSCI ACWI.

Alongside this measure, the MASF also proved to be successful in 2022 when the MSCI's ESG Values Alignment Exposure is considered. This group of MSCI exposure measures provide transparency to help identify funds that align with ethical, religious, or political views. The metrics measure the percentage of portfolio's market value exposed to companies flagged for controversial business involvement, controversies, global norms violations, and religious compliance.

One of the key measures in the MSCI's ESG Values Alignment Exposure is the Global Compact Compliance Violation exposure measure. This is a percentage measure of a portfolio's exposure to companies in violation the UN Global Compact principles which cover labour standards, human rights, the environment, and anti-corruption. The MASF holdings again compared strongly with the MSCI All Country World Index on MSCI's ESG Values Alignment Exposure, with the MASF recording 0.0% exposure to Global Compact Compliance Violations versus 0.7% exposure for the MSCI ACWI.

On a more granular level, the MASF held 0.0% exposure to controversial weapons, versus 0.7% exposure for the MSCI ACWI. This particular measure is defined by MSCI as the percentage of a portfolio's market value exposed to companies with ties to landmines, cluster munitions, biological or chemical weapons, or depleted uranium.

The strong performance of the MASF versus the MSCI ACWI in these key areas further validates the impact, as determined by MSCI, the MASF makes through avoiding areas often seen as controversial and hindering global sustainable development. The MASF performance in this area also further validates the rigorous selection process each fund manager and their fund go through to be placed within the MASF.

Very Severe Controversy Exposure

0.0% MASF	**0.8% MSCI ACWI**

Global Compact Compliance Violation

0.0% MASF	**0.7% MSCI ACWI**

Source: MSCI ESG Research. The MASF portfolio is comprised of equity and fixed income holdings, as of 31 December 2022. As of 31 December 2022, the MSCI ACWI is comprised of nearly 3000 stocks from 23 developed markets and 24 emerging markets. This fund does not have a performance benchmark.

Governance:
What percentage of the MASF's holdings are exposed to companies lacking an independent board majority?

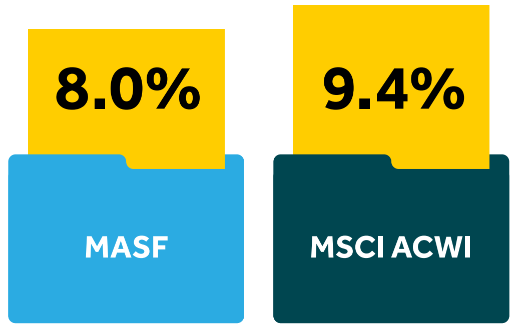
MSCI Lack of Independent Board exposure (%)

Having a significant number of independent directors on a company board is vital to sustaining a company's performance and enhancing its reputation. A board of directors with a variety of backgrounds, perspectives and experiences, working collaboratively should lead to better decision making and a more dynamic organisational environment.

MSCI highlight the percentage of a portfolio's market value exposed to companies lacking an independent board majority.

The MASF has 8% of its market value exposed to companies who lack board independence, compared to a higher 9.4% for the MSCI ACWI.

The expectation is that companies which have a high exposure to independent directors tend to perform better in the long term. This metric demonstrates that the underlying fund managers in the MASF are considering governance in their selection of investments and perform better than the MSCI ACWI for this specific metric.



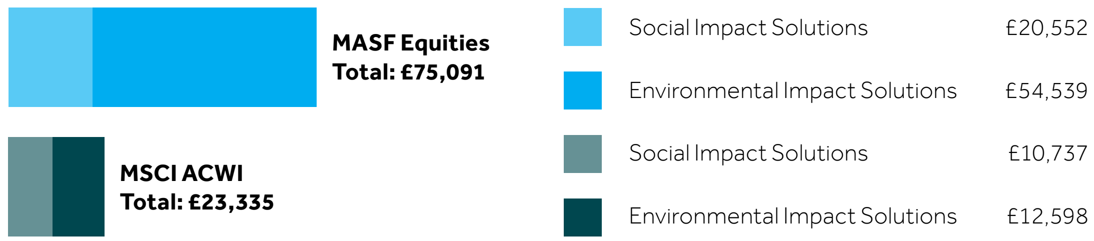
Source: MSCI ESG Research, as of 31 December 2022

MASF Equities:
Sustainable Impact Solutions Revenue

Revenue from Sustainable Impact Solutions is defined by MSCI ESG Research as company revenue which is derived from products and services which MSCI determine as solving the world's major social and environmental challenges. These include, but are not limited to, the Sustainable Impact Solutions highlighted in the Social and Environmental Impact Solutions sections on pages 34 and 35 of this report. According to MSCI ESG research, for every £1m invested in the equity component of the MASF as of 31 December 2022, an estimated £75,091 in annual revenue would be generated by companies from products and services providing Sustainable Impact Solutions.

This compares well versus estimated annual revenue of £23,335 from Sustainable Impact Solutions for the MSCI All Country World Index. MSCI identifies Sustainable Impact Solutions as products and services that help solve the world's major social and environmental challenges.

MASF Equities: Estimated annual revenue from Sustainable Impact Solutions from a £1m investment



Source: MSCI ESG Research. This section covers MASF portfolio equity holdings only, as of 31 December 2022. As of 31 December 2022, the MSCI ACWI is comprised of nearly 3000 stocks from 23 developed markets and 24 emerging markets. This fund does not have a performance benchmark.

MASF Equities:
Key themes and highlights from MSCI ESG Research on estimated annual revenue from Sustainable Impact Solutions

Social Impact Solutions

Knowledge and Nutrition

Nutrition:

£9,490

(vs MSCI ACWI £3,297) annual revenue from nutritious food generated from a £1m proportional investment into MASF equities.

Example: Bakkafrost (Faroe Islands)
In the 2021 financial year, Bakkafrost derived an estimated 95.72% of its revenues from the sale of basic food products. Bakkafrost is also the single largest private employer in the Faroe Islands, alongside being the largest fish farming company on the islands.

Education:

£1,251

(vs MSCI ACWI £95) annual revenue from education services generated from a £1m proportional investment into MASF equities.

Example: Pearson (UK)
In the 2021 financial year, Pearson derived an estimated 94.98% of revenues from educated services and related services. The company offers education courseware, assessment, and services delivery primarily to academic institutions.

Improved Wellbeing

Affordable Real Estate:

£1,390

(vs MSCI ACWI £496) annual revenue from affordable real estate generated from a £1m proportional investment into MASF equities.

Example: The Unite Group (UK)
In the 2021 financial year, The Unite Group derived 100% of revenues from affordable real estate. The company operates affordable student housing properties, providing residential accommodation to over 70,000 students.

Sanitation:

£3,379

(vs MSCI ACWI £1,434) annual revenue from sanitary products generated from a £1m proportional investment into MASF equities.

Environmental Impact Solutions

Clean energy

Alternative Energy:

£9,492

(vs MSCI ACWI £2,987) annual revenue from alternative energy technologies generated from a £1m proportional investment into MASF equities.

Example: Vestas Wind Systems (Denmark)
Vestas is a Danish manufacturer, seller, installer, and servicer of wind turbines. In the 2021 financial year, Vestas Wind Systems derived 100% of revenues from supplying alternative energy or providing products and services that support alternative energy.

Energy Efficiency:

£13,223

(vs MSCI ACWI £5,592) annual revenue from energy efficiency technologies generated from a £1m proportional investment into MASF equities.

Example: Rivian Automotive (US)
Rivian Automotive is an electric vehicle manufacturer and automotive technology company. In the 2021 financial year, Rivian Automotive derived an estimated 100% of its revenues from products or services that help reduce energy consumption, with three vehicles launched to date.

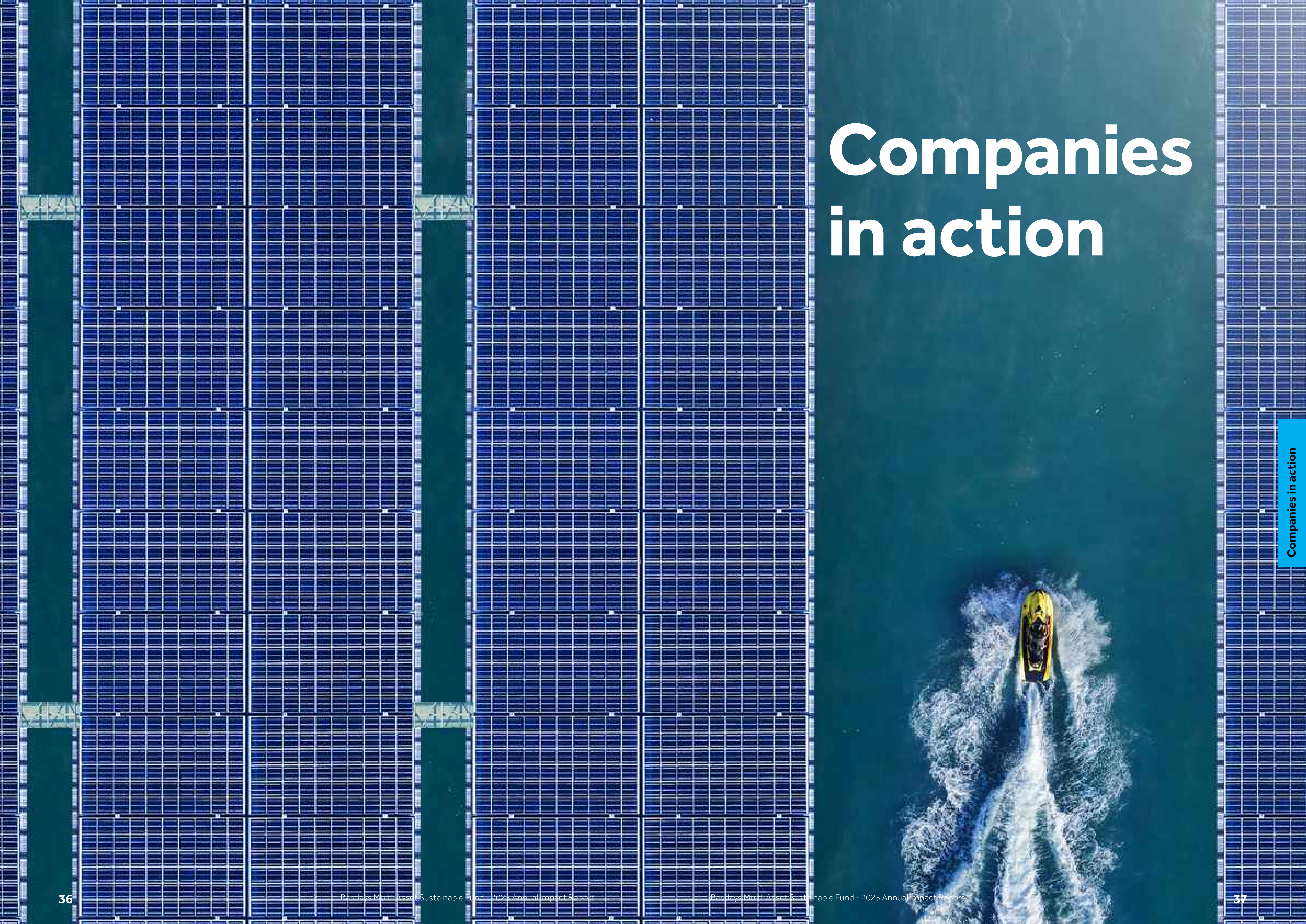
Water management

Sustainable Water:

£7,130

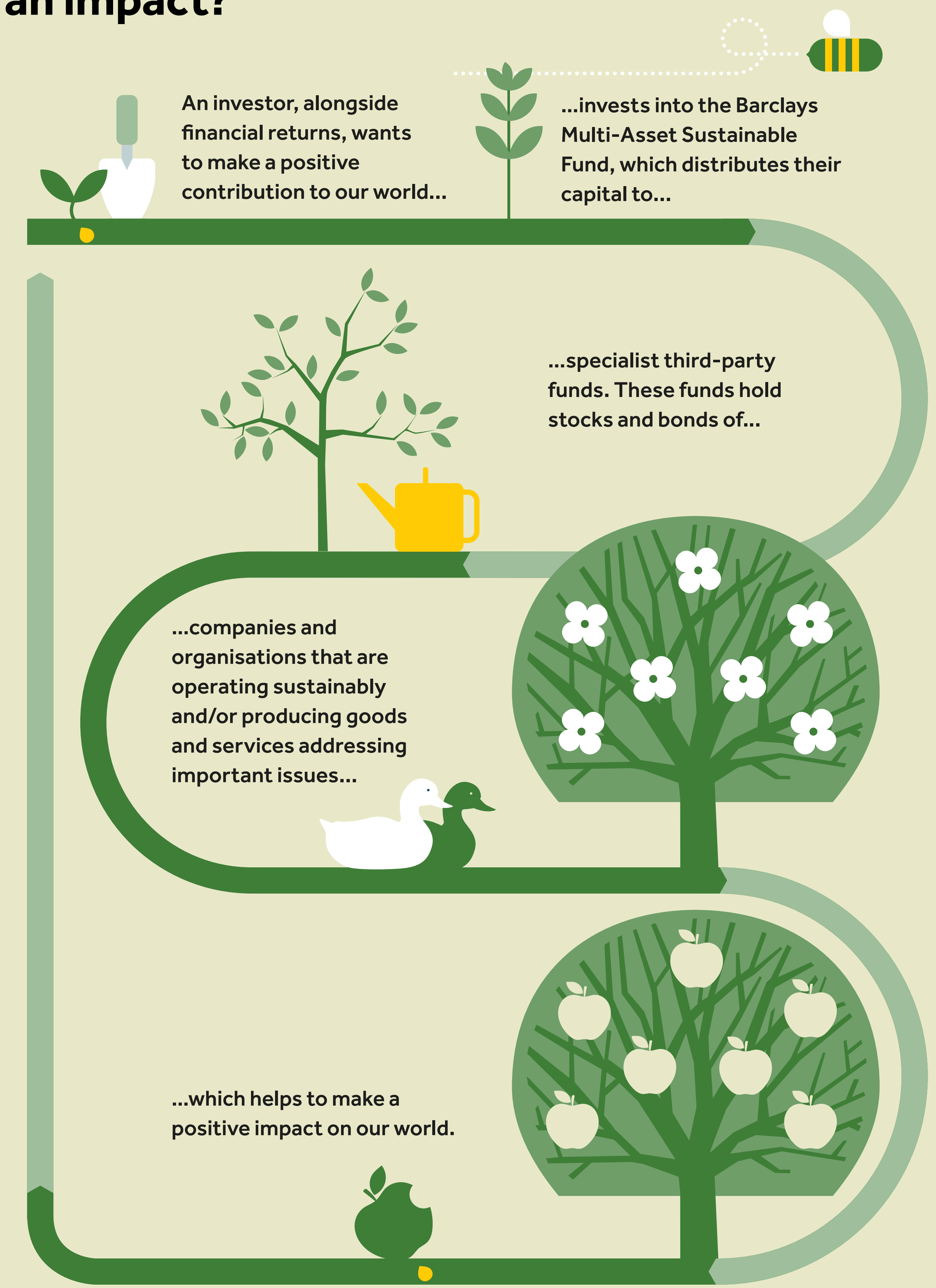
(vs MSCI ACWI £469) annual revenue from sustainable water technologies generated from a £1m proportional investment into MASF equities.

Source: MSCI ESG Research. This section covers MASF portfolio equity holdings only, as of 31 December 2022.
As of 31 December 2022, the MSCI ACWI is comprised of nearly 3000 stocks from 23 developed markets and 24 emerging markets.
These case studies represent MSCI's interpretation of certain ESG factors and do not represent an assessment of the companies' overall ESG credentials.



Companies in action

How does the fund make an impact?



Companies in action

In this section, we highlight some of the social and environmental challenges that we face today – and more importantly, companies in action trying to address these challenges.

All organisations have an impact on the world – through how they operate as well as through the products and services they provide. As part owners of the equity or debt of the companies within the MASF, your investment provides capital to finance their activities.

At a minimum, all the fund managers selected in the MASF seek to invest into companies which operate responsibly – for example, by avoiding pollution of the natural environment, providing safe working conditions or not paying bribes to win business. This investment approach considers the ESG factors that help to identify where a company can be at risk or have an advantage relative to its peers.

But beyond this inward-looking approach, many fund managers also pick companies that look outward for business opportunities to provide products and services that help to address our biggest global challenges.

Around the world, we face complex issues like climate change, limited natural resources, changes in demographics and technological disruption. However, it is also worth recognising that this year has been unlike any that has gone before it and therefore we take a closer look at how this has impacted our companies in action.

Looking across all the holdings in the MASF, we have identified six themes around significant global challenges which include clean energy, sustainable transport, health and wellbeing, water management, knowledge and innovation, and waste management.

Each theme is framed by a brief explanation of the challenge and how it links to the UN's (United Nations) 17 Sustainable Development Goals, and provides statistics to highlight the scale and breadth of the issue. A company from within the MASF is then showcased for how they have found a commercial opportunity that seeks to address this theme.

By understanding the themes, you can see how your investment in these companies has made an impact by investing into these companies. These case studies are examples of themes and companies held in the MASF during its third year, or where managers decided not to make an investment. These case studies reflect one aspect of each company's business and do not represent an assessment of the companies' overall ESG credentials.

While these organisations were part of the MASF as of 19 January 2023, holdings can change and they may not always be included within the MASF portfolio. Also, because the MASF does not target any specific impact allocation or outcome, nor guarantee any achievement of a social/environmental impact, these themes may change during other investment periods.

Mentioning specific companies and organisations is not a recommendation to invest in them. Instead, our aim is to help you to see how the listed companies you invest in through the MASF have an impact on these challenges.

Clean Energy – First Solar (US)

The challenge

Vladimir Putin's invasion of Ukraine highlighted just how reliant the world remains on non-renewable forms of energy. Since the invasion, western nations have looked to speed up renewable energy transition plans. However, significant progress is still required to move towards a global adoption of clean energy, with further mass mobilisation from private and public sectors required to achieve widespread clean energy adoption. The world still relies on non-renewable forms of energy, and will continue to do so for some time, causing further pollution through damaging greenhouse gas emissions. Additionally, significant wealth inequalities continue to prevent many from accessing sustainable forms of energy, leaving those most vulnerable behind in the transition.

How companies contribute solutions

Companies can accelerate the transition to clean energy by building clean energy into their supply chain infrastructures and engaging in energy efficient practices. Furthermore, companies can invest in clean energy research and development, financing the innovation of new technologies and further advancing the clean energy field forward to improve its efficiency and affordability.

How First Solar is responding to the challenge

First Solar is an American company which fits manufactured solar panels and provides utility-scale PV power plants. The company is uniquely well-placed to take advantage of key growth drivers, standing alone in the industry with differentiated semiconductors and a streamlined manufacturing process, which yield unparalleled quality and reliability. In 2021, they saw a 29% increase in production of solar modules, compared to 2020. First Solar modules have a carbon footprint 2.5 times lower, water footprint three times lower and an energy payback time two times faster than conventional crystalline silicon solar panels on a life cycle basis.

Being the only US-headquartered company among the world's 10 largest module producers, with a large manufacturing presence on US soil, the company is set to benefit in the wake of the US Inflation Reduction Act that over the next decade. This will place a valuable stream of tax-credits on solar energy productions, also favouring those with a sizeable US-based manufacturing footprint.

Impact:

Production of more reliable and better quality solar panels

Less reliant on non-renewable forms of energy

Reducing greenhouse gas emissions

Fast facts

- First Solar will have a global annual manufacturing capacity of over 20 gigawatts by 2025.[1]
- By 2028, First Solar aims to be 100% renewable energy powered.[2]
- To date, First Solar has spent over $1.5bn on research and development.[3]

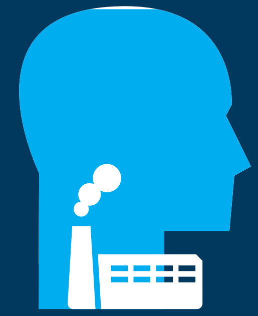
Sustainable Development Goals

#7 Ensure access to affordable, reliable, sustainable and modern energy for all

Fast facts about the clean energy challenge

Did you know?

According to the World Health Organisation (WHO), 99% of people in the world breathe air that exceeds air quality limits and threatens their health, predominantly being created by the burning of fossil fuels.[4]



The International Renewable Energy Agency estimates that by 2050 90% of global electricity can come from renewable energy sources.[5]

In 2020, 733 million people were without electricity. Unless current trends improve, this figure is expected to only fall to 679 million.

Sustainable Transport – Denso (Japan)

The challenge

Integral to achieving a sustainable world economy is developing and maintaining transport systems which have sustainable social and environmental impacts. Even during the pandemic period when transport levels were below their historical trend, transport in 2021 accounted for 37% of CO_2 emissions from sectors which consume primary energy and electricity produced by the electric power sector. The transport sector also had the highest reliance on fossil fuels of any sector during 2021.[6]

How companies contribute solutions

Companies are integral to continue the development of innovative, cost-effective solutions to ensure the transport sector materialises its sustainability potential. Companies are able to contribute to these solutions in a number of ways; from ensuring they maximise their own sustainable transport use throughout their supply chain operations, to developing systems which enhance the energy efficiency of public transport systems, to ensuring more cost-effective alternatives to fossil fuel transport.

How Denso is responding to the challenge

Denso is a Japanese manufacturer which develops electronic parts for automobiles and is a leader in advanced electronic control systems such as the idle-stop system, hybrid EV components, and thermal products. The investment case strengthens as rising emissions standards and efficient requirements drive growth in the transport sector.

As a solutions provider in the electrification of motor vehicles, the company is therefore an enabler in the transition to a cleaner and more sustainable transportation systems. One of its main product offerings is powertrain control systems, which manage environmental control and fuel efficiency systems. Denso's three-pronged approach will provide numerous environmental benefits: improving the efficiency of auto parts so vehicles consume less energy; developing an exhaust gas purification system that allows the exhaust air to be cleaner than the injected air; and working to reduce the environmental impact of the auto manufacturing process.

Impact:

Producing auto components

For cleaner and more efficient vehicles

Reducing greenhouse gas emissions

Fast facts

- Denso is the world's second largest parts and systems provider in terms of sales.[7]
- The firm has with 42,000 patents worldwide.[8]
- As part of Denso's core strategy, Denso has 5 explicit environmental commitments:
  Prevention of global warming;
  Prevention of air pollution; Reduction of substances negative environmental impact;
  Preservation of resources and conservation of water resources.[9]

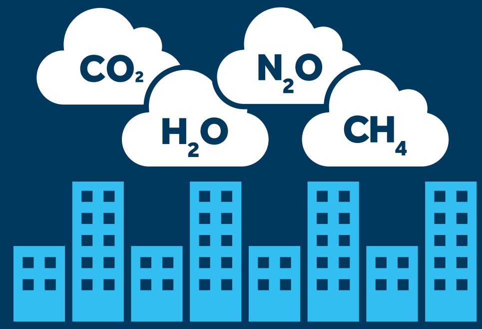
Sustainable Development Goals

#11 Make cities and human settlements inclusive, safe, resilient and sustainable

Fast facts about the sustainable transport challenge

Did you know?

Cities contribute more than 80% of global GDP and account for over 70% of greenhouse gas (GHG) emissions.[10]



As of 2022, only 52% of the world's urban population have convenient access to public transportation.[11]

According to current rates of urban population growth, about 70% of the world's population will live in cities by 2050.[12]

Companies in action

Health & Wellbeing – Hypera Pharma SA (Brazil)

The challenge

A core pillar to sustainable development is the healthy living and wellbeing for the global population. Much of this challenge involves increasing access to healthcare, particularly in developing nations, as well as improving healthcare standards universally. The COVID-19 pandemic highlighted the vulnerability of global healthcare system and halted significant progress on efforts aside from responding to the pandemic. A worrying example of this was for the first time in 10 years the global immunisation coverage rates had dropped. As a result of this slowing progress, the UN continues to call for urgent action to restore pre-pandemic momentum in global health and wellbeing development.

How companies contribute solutions

Businesses have a huge impact on health and wellbeing across the globe. The most evident way firms can contribute is through research, development and deployment of products and services which improve health outcomes. Additionally, they are also to contribute to solutions via ensuring the best possible health and wellbeing for their own employees and communities involved in their supply chain operations, whilst also leading on stakeholder initiatives related to healthy behaviour and access to healthcare. With the global healthcare services worth an estimated $12tn in 2022 , the opportunity for impact in this market is significant.

How Hyper Pharma is responding to the challenge

Hypera Pharma SA is a Brazilian pharmaceutical company, mostly focused on the manufacturing and selling of over-the-counter, generic and prescribed medicines. The company supports the accessibility of medicines in Brazil in several areas including pain management gastro, cardiovascular and respiratory issues, and vitamins. Hypera has approximately 9% market share in the Brazilian pharmaceutical market and is a leader in the retail market with approximately 20% market share in over-the-counter medicines. The vast majority of the company's product portfolio are branded products, with the company creating over 450 products during the past five years to the end of June 2022. Additionally, Hypera a further 350 products in the development and rollout pipeline. The company has been able to double capacity during the past year, allowing it to increase its portfolio of product offerings in several areas. These products have been made available in about 97% of Brazilian pharmacies and have therefore contributed significantly to increasing access to affordable medicines throughout the company.

Impact:

Increased production of over-the-counter generic and prescribed medicines

Greater accessibility to affordable medicines

Improved health and wellbeing

Fast facts

- Hyper Pharma is Brazil's largest pharmaceutical company in net sales.[14]
- In 2021, Hyper Pharma announced an investment in the largest platform for accessing and consulting medication information in Brazil (Consulta Remédios) to better understand consumer consumption habits with the aim of boosting sales and promoting quality health to the wider Brazilian population.[15]
- Hyper Pharma has the largest pharmaceutical operating complex in Latin America, employing more than 5,700 people out of its 9,000 strong workforce.[16]

Sustainable Development Goals

#3 Ensure healthy lives and promote well-being for all at all ages

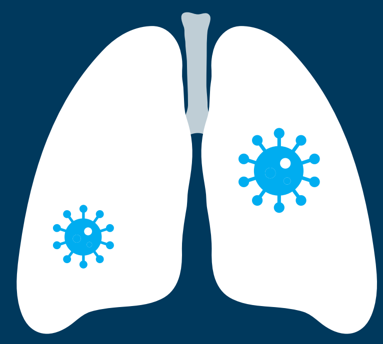
Fast facts about the health and wellbeing challenge

Did you know?

HIV infections globally decreased by 39% between 2010 and 2020, however, this is well below the 75% target set in 2016 by the UN General Assembly.[17]

The lives of over 115,500 health and care workers are believed to have been claimed by the COVID-19 pandemic.

The number of Tuberculosis deaths rose for the first time in 2020 since 2015.[18]



Water management – American Water Works (US)

The challenge

Ensuring that there is universal access to safe water is a colossal task, and the UN has stated that unless current progress levels quadruple, the UN's target of universal safe water by 2030 target will be missed. Water management is integral to the provision of safe water. This involves extracting a sustainable amount from natural water sources such as rivers and lakes, whilst ensuring water is of a sufficient quality through water quality monitoring systems. Additionally, appropriate water infrastructure needs to be available and well maintained in order to distribute water, reduce leakages during distribution and ensure water is not contaminated during the distribution journey.

How companies contribute solutions

Companies can contribute to solutions in water management by ensuring they develop and implement internal water strategies aimed at being socially equitable and environmentally sustainable, whilst also ensuring economic benefits to water basins where company operations take place. As part of these water strategies, companies can invest in improving their own water efficiency, improve wastewater treatment, and reuse water to reduce the impact of their water usage. Furthermore, companies can play an active part in developing new systems and technologies for monitoring water quality and usage, as well as improving access to water, especially in rural communities.

How American Water Works is responding to the challenge

American Water Works provides water and water-related services across North America. The US water system is highly fragmented with over 50,000 individual community water systems. Close to 10% of the US population is served by water systems so small that they lack economies of scale and financial, managerial, and technical ability – leading to water quality violations. The US Army Corps of Engineers estimates that due to inadequate investment in water infrastructure, 6 billion gallons of treated water are lost in the United States daily, caused by an estimated 240,000 water main breaks per year. The company is large and well-managed, with good execution and the ability to deploy capital for badly needed water infrastructure improvements. Annually, the company provides, saves, or treats approximately 3.5 billion gallons of water.

Impact:

Providing water and water-related services

Preventing waste, treating water and ensuring water quality

Enabling access to clean and safe water

Fast facts

- American Water Works provides regulated-like drinking water and wastewater services in 24 US states, reaching an estimated 14 million people.[19]
- 60% of American Water's board self-identified as Female or Racially Diverse.[20]
- American Water have reduced greenhouse gas emissions (Scope 1 and 2) by 37% from 2007 levels, just shy of their 40% target by 2025.

Sustainable Development Goals

#6 Ensure availability and sustainable management of water and sanitation for all

Fast facts about the water management challenge

Did you know?

For at least 3 billion people the quality of water they depend on is unknown due to a lack of appropriate monitoring.[21]

Over 733m people live in countries with high and critical levels of water stress.

In 2030 1.6 billion people will still lack safely managed drinking water if current rates of progress continue.

Knowledge and Innovation – ASML (Netherlands)

The challenge

The progression of knowledge and innovation are essential to meet challenges the global community currently faces and challenges it will face in the future. To meet these challenges with tangible solutions, particularly surrounding sustainability, environments that foster and encourage innovation are required now more than ever to nurture and facilitate ideas into reality. Spending on research and development continues to grow, with just over $2.475 trillion estimated to have been spent globally in 2022, triple the figure 20 years ago.[22] Maintaining significant spending on research and development will be needed from both from public and private sectors to continue solving ever-more complex global issues that humanity continues to confront.

How companies contribute solutions

The private sector plays a fundamental role in knowledge and innovation. Companies are integral to researching, developing, and distributing products and services that are at the forefront of human knowledge and innovation. Furthermore, firms are able to support the innovation environment by providing access to finance, fostering entrepreneurship, and pooling financial and research resources together.

How ASML is responding to the challenge

ASML is a global manufacturer of semiconductor microchip-making equipment and is headquartered in the Netherlands. Its mission is to invent advanced technology for high-tech lithography (transferring patterns or shapes to silicon wafers), metrology (measurement) and software solutions for the semiconductor industry.

This enables the advancement of 'Moore's law' towards even smaller, cheaper, more powerful and energy efficient semiconductors: this, in turn, results in increasingly powerful and capable electronics that enable the world to progress within a multitude of fields, including healthcare, technology, communications, energy, mobility, and entertainment. ASML is the global leader in 'extreme ultraviolet lithography', which is expected to propel the semiconductor industry to the next generation of chips.

Impact:

Spearhead developments in semiconductor microchip manufacturing equipment

Produce smaller, cheaper, more powerful, and more efficient semiconductors

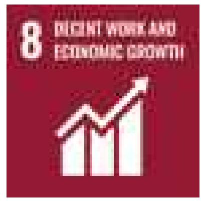
Provide the foundations for further innovations across other sectors

Fast facts

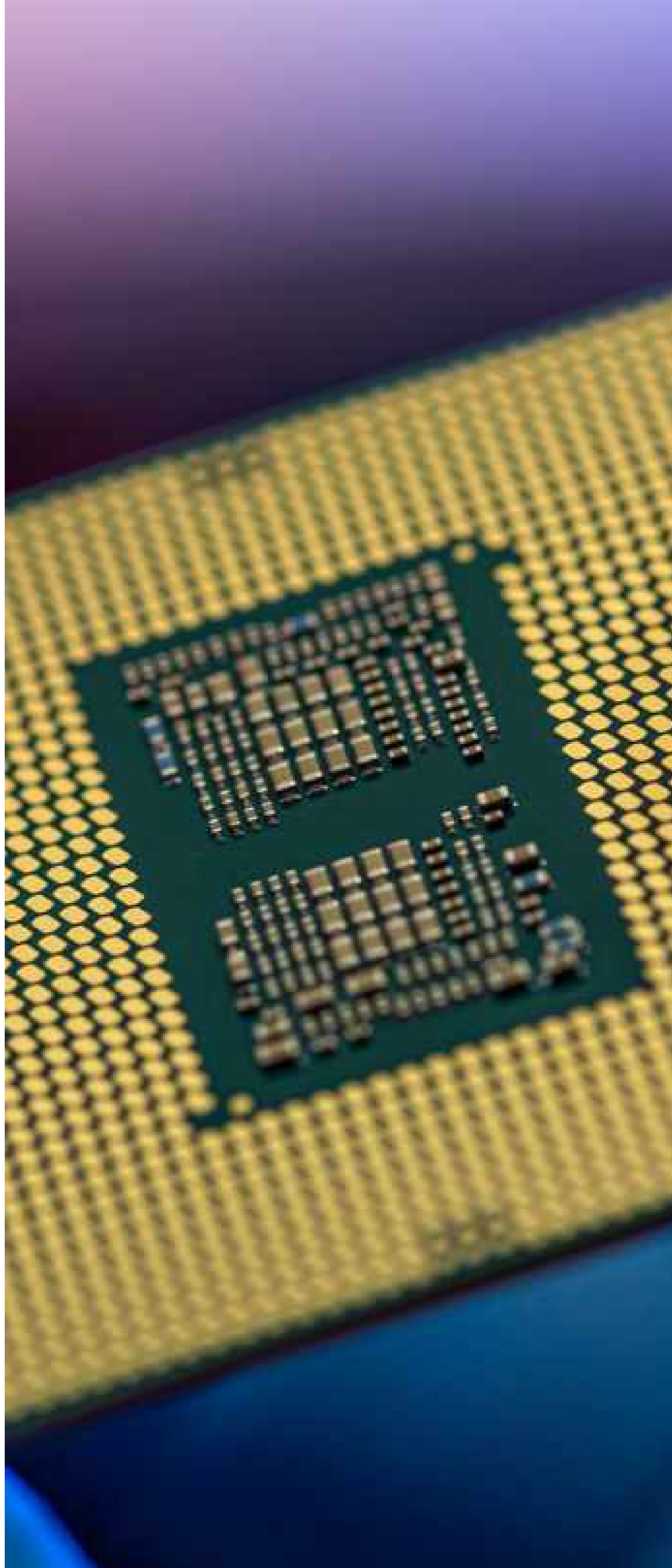
- In 2020, ASML reached its goal to use 100% renewable energy across its operations. ASML aims to achieve zero Scope 1 and Scope 2 emissions across its operations by 2025.[23]
- In 2021, ASML employed over 37,500 people from 144 different nationalities across its 60+ locations, spending over €2.5bn on research and development.[24]
- Receiving high operational ESG ratings from Sustainalytics (84) and MSCI (AAA), ASML is often included in sustainability-focussed market indices.[25]

Sustainable Development Goals

#9 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



#8 Promote sustained, inclusive, and sustainable economy growth, full and productive employment and decent work for all



Fast facts about the knowledge and innovation challenge

Did you know?

Higher-technology manufacturing industries are found to be far more resilient in crises overall when compared with low-technology industries.[26]

Whilst between 2015 and 2021 4G network coverage doubled to reach 88% of the world's population, 17% of lower developed countries and landlocked developing countries remain without coverage.[27]

According to the Global Innovation Index 2022, 7 out of the top 10 most innovative countries in the worlds are found in Europe (Switzerland (1), Sweden (3), UK (4), Netherlands (5), Germany (8), Finland (9), Denmark (10)).[28]

Waste Management – Unicharm (Japan)

The challenge

Unsustainable patterns of production and consumption have been the key contributor to climate change, biodiversity loss, and pollution, making it integral to the Earth's survival that humanity change its habits. Over 2 billion tonnes of municipal solid waste is produced annually, with this figure expected to increase by 70% to 3.4 billion tonnes in 2050. To avoid this alarming estimate becoming a reality, drastic change is required at each state of a product's lifecycle, from reducing waste during production, to reducing the waste from the end user.

How companies contribute solutions

Companies are central to changing the way humanity manages waste, starting with better understanding their own production and consumption, and subsequent impacts from their operations on local communities. This allows companies to adapt a more responsible, circular business model, enhancing the long-term sustainability of the company and contributing to a more sustainable society through better waste management.

How Unicharm is responding to the challenge

Japanese nappy manufacturer Unicharm has built a successful business in Emerging Markets like India and Indonesia, by providing affordable and functional localised products. These products have an important role to play when it comes to health and hygiene. However, nappies are extremely impactful from an environmental perspective, accounting for c. 5% of total landfill in Japan. They are not biodegradable and present one of the world's fastest growing waste problems. Within this context, Unicharm stands out globally for its proactive efforts to combat the environmental challenge. Over the last couple of decades, the company has reduced waste in the manufacturing process, procured more sustainable materials, and lowered energy costs. It is taking environmental stewardship to the next level, as the first nappy manufacturer globally to commercialise the recycling of nappies, which is expected to reduce GHGs by close to 90%. This technological breakthrough very clearly demonstrates the family owners at Unicharm are thinking about the long-term risks and opportunities for the business.

Impact:

Recycling nappies

Multiple years of investments in propriety recycling technology

Reduce nappies destined for landfill, and therefore GHGs

Fast facts

- Unicharm have a presence in roughly 80 countries around the world.[29]
- The Unicharm company, formerly named Taisei Kako Company, originally manufactured and sold wood wool cement board before turning its attention to manufacturing and selling sanitary pads in 1963.[30]
- Unicharm currently has five key business segments: wellness care, pet care, feminine care, baby and childcare, and kirei ('nice and clean') care.[31]

Sustainable Development Goals

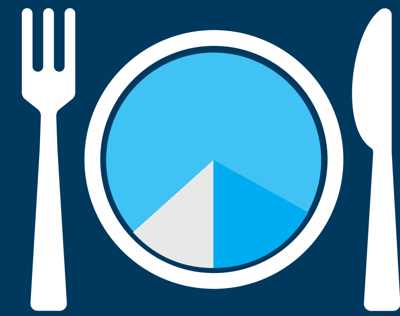
#12 Ensure sustainable consumption and production patterns

Fast facts about the waste management challenge

Did you know?

The East Asia and Pacific region generated the most amount of global waste, at 23%.[32]

13.3% of the world's food is lost in the phase after harvesting and before reaching retail markets, whilst 17% of total food is wasted at the consumer level.[33]



Only 22.8% of the world's electronic waste is collected and safely managed.[34]

Fund deep dive

About our Fund Deep Dive

This Fund Deep Dive section is designed to give an insight into funds the Barclays Multi-Asset Sustainable Fund (MASF) is currently engaged with.[1] This section will not only cover the respective performance and provide an insight into impact of each fund, but also detailing how the fund managers integrate and measure their impact.

The impact reporting ability of Equity Funds and Fixed Income Funds varies significantly. Equity funds can have a more active approach in implementing change through generally having more voting rights at company meetings and engaging directly with companies as company shareholders. We note that shareholder engagement, the process by which shareholders actively engage with a company on various issues, and voting on company resolutions at company meetings, have powerful impacts on companies to implement meaningful change. To reflect this enhanced influence, the Equity Fund sub-section within this Fund Deep Dive also includes a 'voting and engagement' segment, highlighting some of the direct impacts in 2022 our equity funds have had on the companies they are invested in.

Homogeneous reporting among all funds is difficult to achieve given the broad variety by which impact funds within the industry set performance and impact objectives, as well as measure and report on their performance and impact. Indeed, some fund managers are even limited in their ability to report through regional legislative restrictions. This Fund Deep Dive details provides as homogeneous a report as possible given these obstacles. Whilst detailed homogeneous sustainability and impact reporting remains an industry-wide challenge, we continue to work with our fund managers annually to standardise and maximise the impact and sustainability reporting of their funds' investments.

Due to changes made to the fund in early January, some data reflects the fund's position as of 19 January 2023, instead of the year-end reporting period 31 December 2022. All instances where data as of 19 January 2023 is used are highlighted accordingly within each fund's 'deep dive'. These fund profiles focus on the funds' ESG strategies and unless otherwise indicated, should not be interpreted as suggesting that the funds apply any particular exclusion policies.

Equity Funds

Fixed Income Funds

Aikya Global Emerging Markets Fund

Investment objective

Aikya Global Emerging Markets Fund combines two objectives in their strategy.

The first objective is to generate healthy long-term investment returns for their clients with strong downside protection.

Their second objective is to make a significant impact on the sustainable development problems facing emerging market countries by investing in responsibly run high-quality companies.

They believe that generating healthy long-term investment returns with strong downside protection is only possible if they invest in high-quality companies that are well-positioned to solve sustainable development problems.

Integration of impact into the investment process

At Aikya, ESG is first-and-foremost considered at a bottom-up stock level. If a company does not pass the fund strict quality tests that consider all aspects of ESG, then it will be unable to be admitted to Aikya Quality List, and therefore it will be ineligible as a Portfolio holding.

In this context, Aikya build detailed sustainability models that analyse various ESG metrics for a business, including: 1) Purpose, 2) Environmental Stewardship, 3) Social Stewardship, 4) Governance, and 5) Organisational Culture.

Analysing sustainability topics and engaging with companies on the most material issues is an integral part of Aikya's investment process. Therefore, every Aikya analyst is involved with stewardship and engagement activities.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 411m

Fund's inception date: October 2020

Number of holdings: 33

Weight in MASF: 6.07%*

Asset Class: Developed Market Equities

Fund geographical target: Global

Impact Style: ESG Integrated

Top 10 holdings

1.	Uni-President Enterprises Corp	5.62%
2.	Foshan Haitian Flavouring & Fo	5.08%
3.	AIA Group Ltd	5.03%
4.	LG Corp	4.27%
5.	Meituan	3.98%
6.	Vitasoy International Holdings	3.94%
7.	Unicharm Corp	3.88%
8.	NetEase Inc	3.81%
9.	AVI Ltd	3.61%
10.	Fomento Economico Mexicano SAB	3.46%

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Impact data and methods

Since ESG data is not yet standardised and often covered in 'greenwash', Aikya have developed their own industry-specific detailed sustainability models. These models combine various sustainability reporting standards such as GRI, SASB and UN SDG. They allow us to compare various companies within an industry and across entire industry value chains.

The fund has developed such detailed models for all Quality List companies. With the help of various data points, the fund uses the following models to assess companies: 1) Purpose, 2) Quality of Environmental Steward ship; 3) Quality of Social Stewardship; 4) Quality of governance; and 5) Organizational Culture.

Integration insights

Case Study – KingMed Diagnostics (China)

KingMed Diagnostics is leading diagnostics business in China. Its scale means that it is one of the lowest cost providers, meaning it has an important role to play in lowering healthcare costs in China. Governance is also strong, since the original founder remains heavily involved in the business.

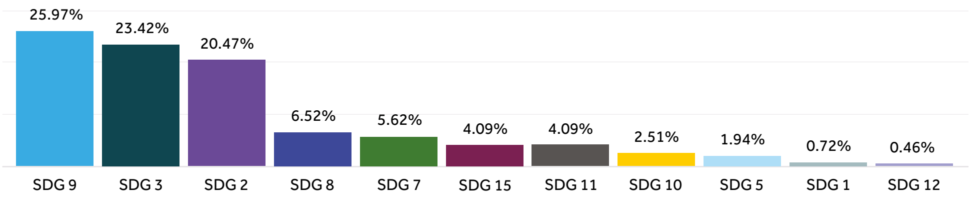
KingMed qualified for the Aikya Quality List towards the start of 2022, following months of due diligence conducted by the investment team. Aikya only invested in KingMed some months later when the valuation met Aikya's strict return hurdles.

The company was admitted to the Quality List because it passes Aikya's stewardship, franchise, and financial tests. From a stewardship perspective, it is a business with a strong sense of purpose since it is playing a leading role lowering healthcare costs in China. It is also a well governed businesses, with a strong organisational culture, which stems from the founder.

The Chinese government is determined to lower healthcare costs, which creates opportunities in sectors such as diagnostics, which are ripe for consolidation. KingMed operates one of the largest diagnostics networks in China and is focused on scale, which means its prices are low. It is well positioned to help consolidate the industry.

Impact stats

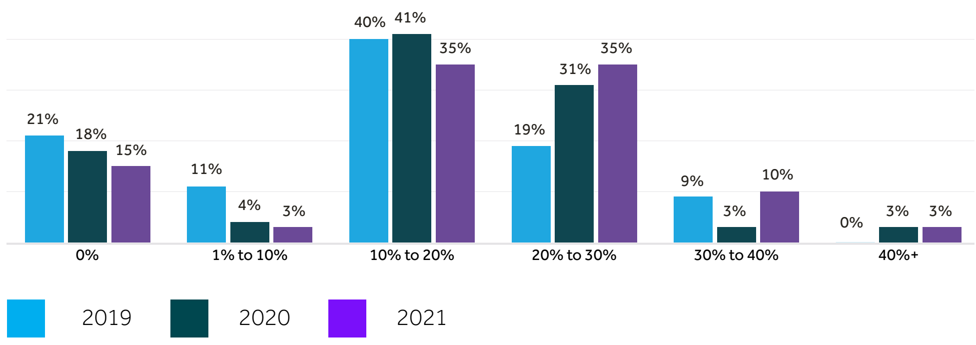
Sustainable Development Goal (SDG) Alignment Alignment by Aikya Global Emerging Markets Fund portfolio weighting



Source: Aikya Investment Management, 31 December 2022

Governance Insights

Aikya Global Emerging Markets Fund Portfolio: Female board members



Weighted average of holdings' female board members:

2019: 14.2%

2020: 14.8%

2021: 17.3%

Source: Aikya Investment Management, 31 December 2019, 31 December 2020, 31 December 2021. 2022 data was not available at the time of writing.

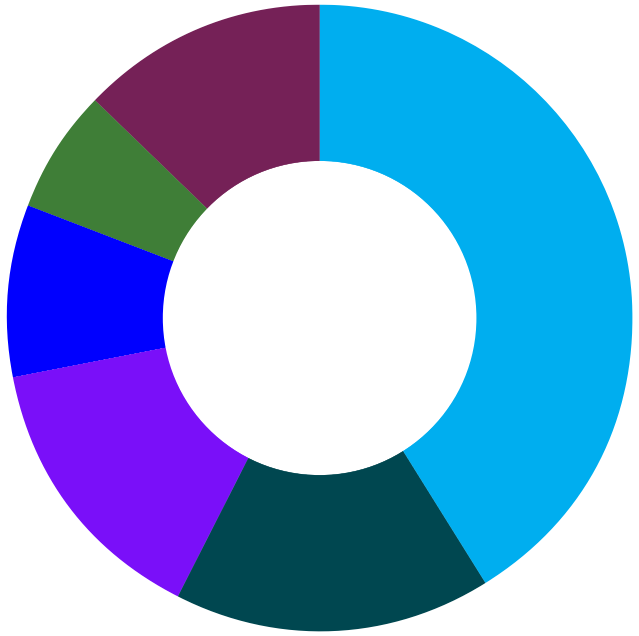
Voting and engagement insights

Top voting and engagement themes:

- Company leadership
- Corporate structure
- Reporting and disclosures practices

Aikya Global Emerging Markets Fund Engagement 2022

Board of Directors	178
Corporate Structure	70
Committees & Reporting	63
Remuneration	38
General Governance	28
Other	54

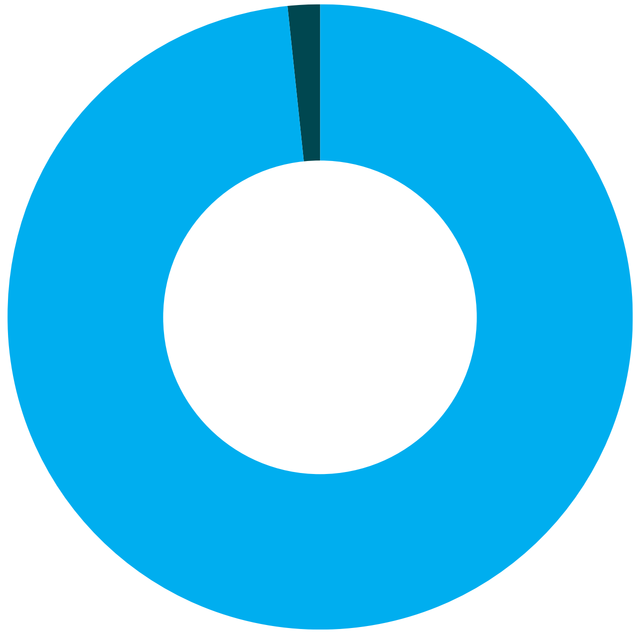


Source: Aikya Investment Management, 1 January 2022 – 31 December 2022

Source: Aikya Investment Management, 1 January 2022 – 31 December 2022

Aikya Global Emerging Markets Fund Engagement 2022: Voting Decisions

For Management	425
Abstain	6
Against Management	0



Source: Aikya Investment Management, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – NetEase (China)

Aikya were asked to vote for the re-election of NetEase's directors. Aikya decided to abstain in the belief that the individuals in question had been on the board for far too long, with tenures in excess of 15 years.

Following the decision to abstain, Aikya wrote a letter to company's founder and Chairman of the board outlining their strongly held views on board independence. Having communicated their opinion on the matter, Aikya anticipate they will likely vote against the re-election of these directors when the next election cycle arrives.

Aikya also abstained from the re-election of four NetEase directors on the basis that more sustainability experience would be hugely beneficial to the company. Aikya have subsequently been engaged in communications with NetEase on this matter, writing extensively to them with their thoughts and explanations.

Fund breakdown

(As of 31 December 2022)

Sector diversification

	Consumer Staples	38.67%
	Financials	20.73%
	Information Technology	10.62%
	Consumer Discretionary	9.51%
	Industrials	7.82%
	Communication Services	6.41%
	Healthcare	6.24%

Geographic diversification

	APAC	82.9%
	Latin America	10.4%
	EMEA	6.8%

These diversification graphs exclude cash.
Source: Aikya Investment Management, 31 December 2022

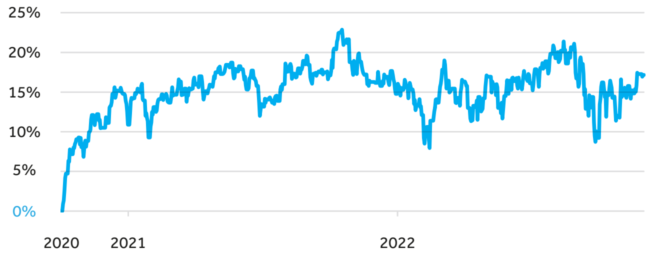
Fund Performance (as of 31 December 2022)

From a financial perspective, 2022 was a difficult year for Emerging Markets and equity markets more broadly. Within this context, Aikya demonstrated strong downside protection characteristics, outperforming its Emerging Markets benchmark (IA Global Emerging Markets) by 10.1%.

From an ESG and outcome perspective, the Aikya Global Emerging Market Fund continued to engage with their portfolio holdings on a range of environmental, social, and governance issues in order to improve their individual and combined performance. Whilst engagement on ESG topics is typically a multi-year process, several efforts yielded success. For instance, they witnessed the acceleration of adopted of renewable energy by some of their Indian holdings, improved reporting on nutrition from their food & beverage holdings, and enhanced ESG disclosure amongst their Chinese A-Share investments.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years*



*5-year performance period not available so performance since inception used instead.

Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Tata Consultancy Services (India)

Indian IT services provider Tata Consultancy Services (TCS) is a global leader within its industry. The company's success is in part a reflection of management's proven ability to manage the burden of scale and a work force that now exceeds 500,000 people. It requires exceptional long-term governance, a leading organizational culture, and an ability to understand the social consequences of being one of India's largest employers.

The company's insight to ensure the sustainability of its business model for decades to come was to design its corporate structure as a matrix of small specialised legal entities. These business units sub-divided further when they reached scale, which has provided both autonomy and career growth for ambitious employees. At the same time, TCS has consistently avoided the temptation to cut headcount to manage profitability during difficult times. This has earned the company a reputation for being the best employer in the industry and allowed the business to emerge stronger from every economic downturn.

As supporting evidence, TCS exhibits the lower employee attrition within its industry, and at the same time has generates sales growth and profit margins that are superior to peers.

Impact: Industry, innovation and infrastructure / health and wellbeing

Provide exceptional human resource and organisational culture

Reduced employee attrition

More sustainable working practices

Fund's key impact facts

The Aikya Global Emerging Market Fund performed admirably against its benchmark in terms of year-over-year carbon intensity*.

Aikya's Global Emerging Market Fund had a carbon intensity that was over 4.7x lower than the MSCI Emerging Markets Index in 2022, with Aikya's Global Emerging Market Fund lowering its carbon intensity by 7.94% versus 2021.

Source: Aikya Investment Management

Association memberships and participation in external ESG, sustainability and impact Initiatives

- B Corp Movement (Certified 'B Corporation')
- CCLA's "Find it, Fix it, Prevent it" Modern Slavery initiative
- CDP (formerly the Carbon Disclosure Project)
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Investor Agenda
- Task Force on Climate-Related Financial Disclosures (TCFD)
- UK Stewardship Code
- UN Principles of Responsible Investment (PRI)

*Greenhouse gas emissions to sales: Scope 1 & Scope 2

AllianceBernstein AB Sustainable US Thematic Portfolio Fund

Investment objective

The AB Sustainable US Thematic Portfolio Fund's (the "Fund's") objective is to increase the value of an investment over time through capital growth.

The Fund seeks to generate strong financial returns through investments in companies that contribute to positive social and environmental outcomes. It invests in fundamentally strong companies whose products and services are aligned with the United Nations Sustainable Development Goals (SDGs) and excludes companies whose products are misaligned with that agenda.

The Fund focuses on three key thematic areas - Health, Climate and Empowerment – whose revenues are derived from products that enable SDG outcomes in these areas.

Integration of impact into the investment process

ESG criteria are inherently woven into the investment process for this AllianceBernstein fund. From a top-down decision-making perspective, the products or services offered by companies considered for inclusion must align to one or more of the Sustainable Development Goals. In the bottom-up decision-making process, the Fund utilises a system to score six risk categories for every stock covered. In addition to environmental, social and governance (ESG), the categories include strategic, operational and financial. Stocks deemed to have a high ESG risk relative to their potential rate of return are normally deemed not suitable for portfolio inclusion.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: USD 1,043m

Fund's inception date: April 2001

Number of holdings: 47

Weight in MASF: 11.89%*

Asset Class: Developed Market Equities

Fund geographical target: US

Impact Style: Sustainable

Top 10 holdings

1.	Deere & Co.	3.12%
2.	Aflac, Inc.	3.09%
3.	Danaher Corp.	3.03%
4.	Visa, Inc. – Class A	3.01%
5.	Flex Ltd.	2.99%
6.	Microsoft Corp.	2.97%
7.	NextEra Energy, Inc.	2.84%
8.	Procter & Gamble Co. (The)	2.84%
9.	Waste Management, Inc.	2.82%
10.	Unilever PLC (Sponsored ADR)	2.80%

Impact data and methods

The AB Sustainable Thematic Equity Investment Team utilises a proprietary materiality map that serves as a guide to material ESG risk factors facing every GICS subindustry. Analysts leverage this information in their research. In evaluating a company, analysts generate a worksheet for each company under consideration that contains a thorough analysis of ESG factors they face. Analysts' ESG risks, and other material non-ESG risks, are quantified and directly influence the cost of equity (COE) used in the valuation process. Companies with higher levels of material ESG risks and/or poorer ESG risk-mitigation practices have a higher COE, which functions as the hurdle rate for inclusion.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – Procter & Gamble (US)

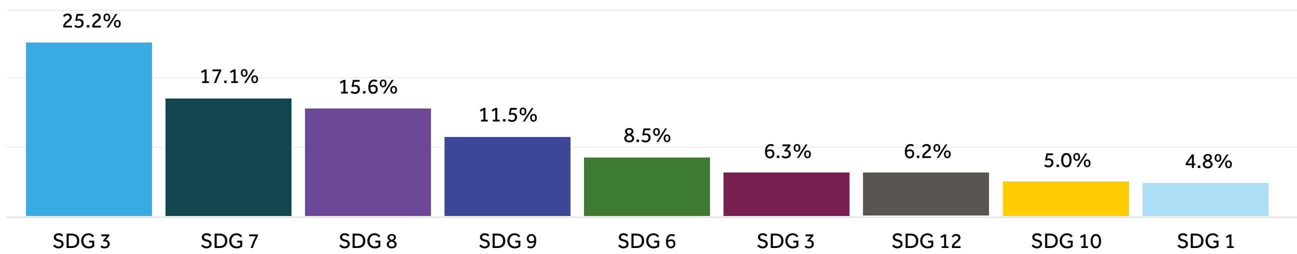
P&G is an industry-leading consumer packaged goods company aligned with SDG #12 (Responsible Consumption and Production). P&G's "Ambition 2030" program effectively mandates responsible consumption goals and metrics into each of its leadership brand's business strategies for the next decade.

They have committed to reducing emissions from operations by 50% by 2030 from a 2010 base-year, addressing the main source of emissions across its value chain by measures including: ensuring that 70% of all washing machine loads are washed in cold water, doubling the use of post-consumer resin in plastic packaging and ensuring zero deforestation in the palm oil supply chain.

The Investment Team believes that P&G's strong brand positioning creates a durable franchise that should withstand difficult macroeconomic conditions..

Impact stats

Sustainable Development Goal (SDG) Alignment

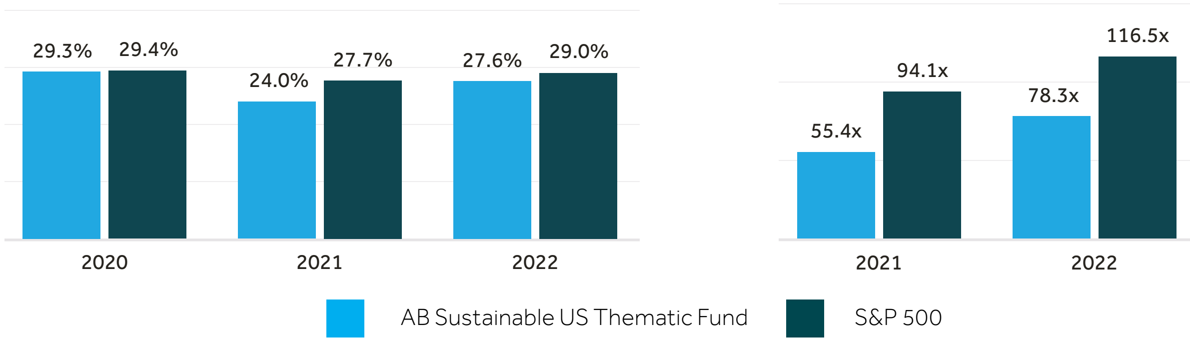


This graph excludes cash. Source: AllianceBernstein, 31 December 2022

Governance Insights

Percentage of Women on Boards and in Top Management

Ratio of Executive-Level Pay to Average Employee Pay



Source: AllianceBernstein, 31 December 2020, 31 December 2021, 31 December 2022

Deep dive

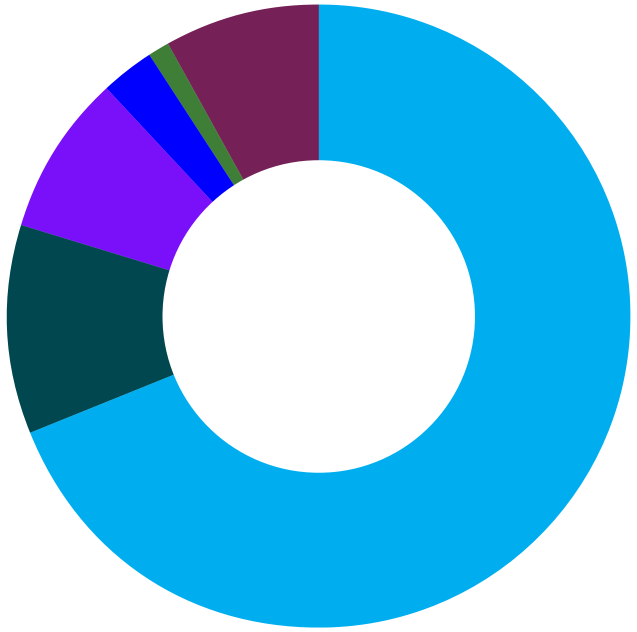
Voting and engagement insights

Top voting and engagement themes:

- Third-Party Racial Equity / Civil Rights Audit
- Ownership Threshold for Shareholders to Call a Special Meeting
- Reporting on Diversity, Equity, and Inclusion Efforts

AllianceBernstein AB Sustainable US Thematic Portfolio Fund
Engagement 2022: Voting Resolution Categories
by Number of Votes

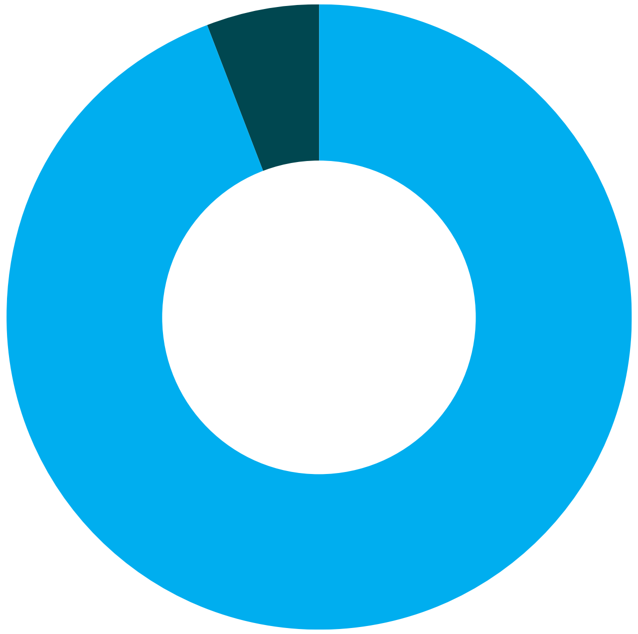
Board of Directors	390
Remuneration	61
Audit related	47
Capitalisation	15
Corporate governance	6
Other	45



Source: AllianceBernstein, 1 January 2022 – 31 December 2022

AllianceBernstein AB Sustainable US Thematic Portfolio Fund
Engagement 2022: Voting Decisions

For management	530
Against management	34



Source: AllianceBernstein, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – Apple (US)

During the year ended 31 December 2022, AllianceBernstein (AB) voted for a shareholder proposal asking Apple, Inc. to prepare a public report assessing the potential risks to the company associated with its use of concealment clauses in the context of harassment, discrimination, and other unlawful acts.

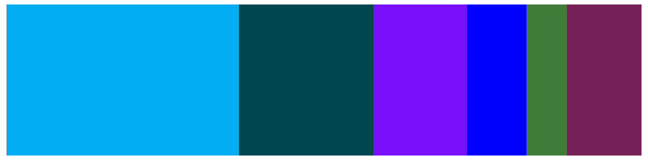
While AB appreciate the company has increased the availability of mandatory training on proper conduct and committed to remove Concealment Clauses from US separation agreements going forward to allow departing employees to discuss their experiences, AB are concerned that training alone has not prevented harassment cases at other companies. AB supported the proposal because they believe further reporting on Concealment Clauses will encourage Apple to e

ngage with shareholders to further explore best practices in this area. AB will continue to monitor updates Apple has after receiving 50% support from shareholders on the issue and engage on next steps the company plans to take.

Fund breakdown

(As of 31 December 2022)

Sector diversification



Information Technology	36.7%
Health Care	21.3%
Industrials	14.7%
Financials	9.4%
Consumer Discretionary	6.3%
Others	11.7%

Geographic diversification

United States	91.6%
Others	8.4%

These diversification graphs exclude cash.
Source: AllianceBernstein, 31 December 2022

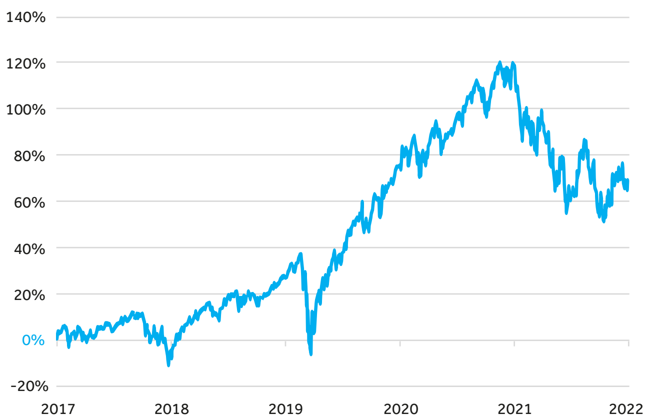
Fund Performance (as of 31 December 2022)

For the fourth quarter, the Fund's Class A shares increased in absolute terms and outperformed the S&P 500 benchmark, net of fees and in US-dollar terms. For the year, Fund shares posted negative absolute returns and underperformed their benchmark. Value stocks outperformed growth stocks. Quality fundamentals outperformed, continuing the reversal and taking back more of the ground lost in the first quarter's historically sharp low-quality value rally

AB's focus as thematic investors is finding private sector solutions to the world's biggest challenges. Broad shifts in the global economy take years to run their course, and global challenges such as climate mitigation, access to healthcare and infrastructure needs are not solved overnight. Importantly, companies providing solutions to these persistent and growing challenges should experience more resilient demand for their products and services than those that are reliant upon cyclical demand, in AB's view. AB expect this to translate into more resilient earnings, which may hold increasing appeal to investors if earnings growth becomes scarcer.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

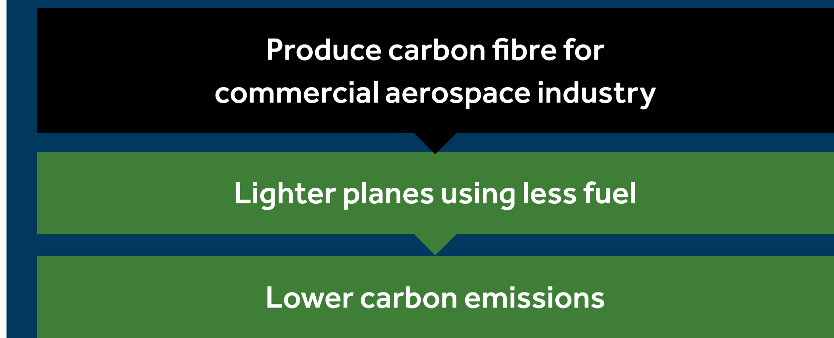
Past performance is not an indicator of future performance

Impact insights

Case Study – Hexcel (US)

Hexcel, an American industrial materials company, is a leading producer of carbon fibre reinforcements and resin systems. Carbon fibre has begun displacing steel and aluminium for aircraft due to it being significantly lighter, with Hexcel a leading supplier of carbon fibre for the commercial aerospace industry. Through this displacement, Hexcel is helping address the world's need to reduce CO_2 emissions. By replacing heavier materials, carbon fibre means lighter planes, in turn lowering fuel use when compared with steel and aluminium. CO_2 emissions are reduced by as much as 20-25% for new aircraft using higher carbon fibre content compared to those with lower carbon fibre content.

Impact: Lower aerospace industry carbon emissions



Fund's key impact facts

The AB Sustainable US Thematic Fund performed admirably against its benchmark in terms of year-over-year carbon intensity. The fund had a carbon intensity that was over 30% lower than the S&P500 benchmark at the end of 2022. This is equivalent to:

- CO_2 emissions from 2633 gallons of gasoline consumed
- 58,084 miles driven by an average gasoline-powered passenger vehicle
- 1,012 bags of waste recycled instead of landfill

Source: Barclays"

Association memberships and participation in external ESG, sustainability and impact Initiatives

- As You Sow
- Asia Investor Group on Climate Change (AIGCC)
- Asia Securities Industry & Financial Markets Association (ASIFMA)
- Asian Corporate Governance Association (ACGA)
- Australian Financial Services Council
- Boston College Center for Corporate Responsibility
- CCLA's "Find it, Fix it, Prevent it" Modern Slavery initiative
- CDP (formerly the Carbon Disclosure Project)
- Ceres
- The Child Safety Pledge
- Climate Action 100+
- Climate Bond Initiative (CBI)
- Council of Institutional Investors (CII)
- Emerging Markets Investors Alliance (EMIA)
- Eurosif Transparency Code
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Forum of Investors in Japan
- Global Impact Investor Network (GIIN)
- Hong Kong Investment Funds Association (HKIFA)
- Institutional Investors Group on Climate Change (IIGCC)
- International Corporate Governance Network (ICGN)
- Investor Stewardship Group (ISG) Stewardship Principles
- Investors Against Slavery and Trafficking Asia-Pacific
- The Investment Association
- Investment Company Institute (ICI)
- Investment Management Association of Singapore (IMAS)
- Japan Stewardship Code
- Japan Stewardship Initiative
- Japanese Principles for Financial Action for the 21st Century (Japan PRI)
- KnowTheChain Investor Statement: Investor Expectations on Addressing Forced Labour in Global Supply Chains
- Paris Aligned Investment Initiative (Ceres working group)
- PLSA Stewardship Disclosure Framework
- Securities & Futures Commission of Hong Kong (HKSFC)
- Stewardship Principles for Institutional Investors in Taiwan
- Sustainable Accounting Standards Board (SASB)
- Sustainable Trading Network
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Climate-Related Financial Disclosures (TCFD) in Japan
- UK Stewardship Code
- UN Principles of Responsible Investment (PRI)
- UN Principles of Responsible Investment and World Business Council for Sustainable Development CIO and CFO Taskforce

Impax Asian Environmental Markets Fund

Investment objective

The Fund seeks to achieve sustainable, above market returns over the longer term by investing regionally in Asia-Pacific companies that are developing innovative solutions to resource challenges in environmental markets. These markets address a number of long term macro-economic themes: growing populations, rising living standards, increasing urbanisation, rising consumption, and depletion of limited natural resources.

Investments are made in companies which have greater than 20% of their underlying revenue generated by sales of products and services in environmental markets.

Impax fully integrates proprietary ESG analysis in the investment process and is actively involved in stewardship activities with investee companies across ESG topics.

Integration of impact into the investment process

The Fund is designed to intentionally allocate clients' capital towards those companies Impax expect to flourish as the global economy transitions to a more sustainable model, and to reduce/eliminate exposure to potential losers from that transition. The investment team conducts ESG analysis on companies active in the growing Resource Efficiency and Environmental Markets. The goal is to ensure that a strong level of ESG quality is achieved.

Impax's investment process also results in quantifiable environmental benefits and measuring impact provides post-investment evidence of their investment intentionality. Impact is measured across four metrics: net CO_2 emissions avoided, water treated/saved or provided, materials recovered/waste treated, and coal displaced in Asian cities.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 279m

Fund's inception date: May 2010

Number of holdings: 44

Weight in MASF: 5.16%*

Asset Class: Emerging Market Equities

Fund geographical target: APAC

Impact Style: Catalytic

Top 10 holdings

1.	MTR Corp	4.01%
2.	Taiwan Semiconductor Manufac	3.91%
3.	Delta Electronics Inc	3.74%
4.	Glodon Co Ltd-A	3.58%
5.	Brambles Ltd	3.48%
6.	Airtac International Group	3.35%
7.	Xinyi Glass Holdings Ltd	3.01%
8.	Cleanaway Waste Management L	2.92%
9.	Denso Corp	2.89%
10.	Advantech Co Ltd	2.74%

Impact data and methods

Impax's principles for impact reporting are based on the belief that:

- Holistic reporting tells a more informative picture of a company's real-world impact
- Investing in carbon abatement solutions inevitably results in emissions today
- These are best understood in the context of future avoidance delivered rather than just reporting a simple carbon footprint
- Investors benefit from understanding portfolio level aggregated metrics in addition to individual company level metrics
- A comparison with a real-world benchmark is helpful in providing context and challenge
- Although carbon offsets can certainly play a part in abating emissions, they are not included in their methodology (and do not contribute to building new energy systems, transport networks and driving innovation in carbon avoidance in basic materials).

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

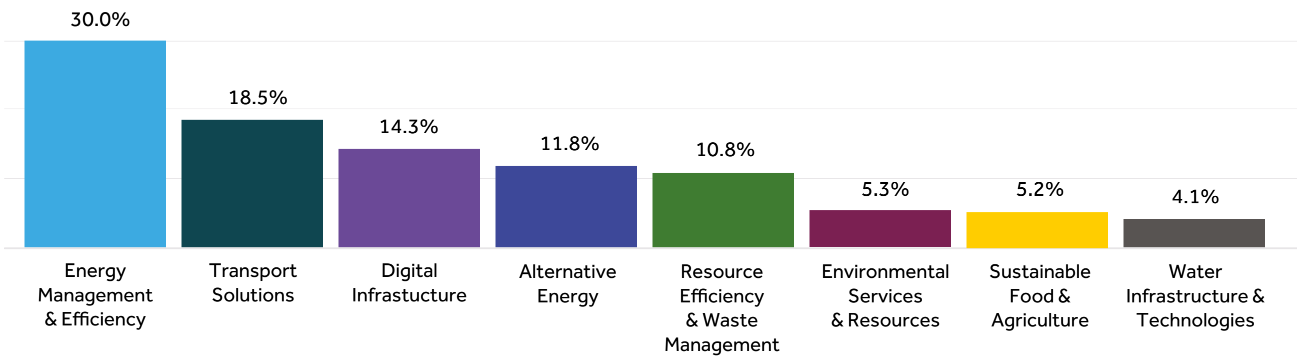
Case Study – ALS (Australia)

ALS is a global provider of testing, inspection, and certification (TIC) services for a range of end markets including the environmental, food, pharmaceutical, mining, oil & gas, and industrial sectors. ALS Ltd helps mitigate environmental impacts through its testing services, particularly water quality testing.

In terms of ESG scoring, ALS is one of the higher scorers in the portfolio. Good governance, including an independent board, short term incentives for management linked to ESG metrics, as well as environmental reporting are positives. The company aims to become carbon neutral in the next financial year, ahead of the company's 2030 target.

Impact stats

Holdings breakdown by Impax's Environmental Sectors



This graph excludes cash.
Source: Impax Asset Management, 31 December 2022

Governance Insights

Human capital management (including DE&I) is one of Impax's four strategic priority areas. Impax engages with proxies in way that encourage greater diversity, including:

- Voting against boards that include no racial diversity
- Voting in favour of strong diversity policies and programs and those that disclose the performance and success of those programs are, as Impax believes, less vulnerable to disruptions as a result of workplace strife, exceptional turnover, costly lawsuits and reputational damage.
- Impax also regularly engages with companies to press for greater diversity on their leadership teams and equal pay for their employees.

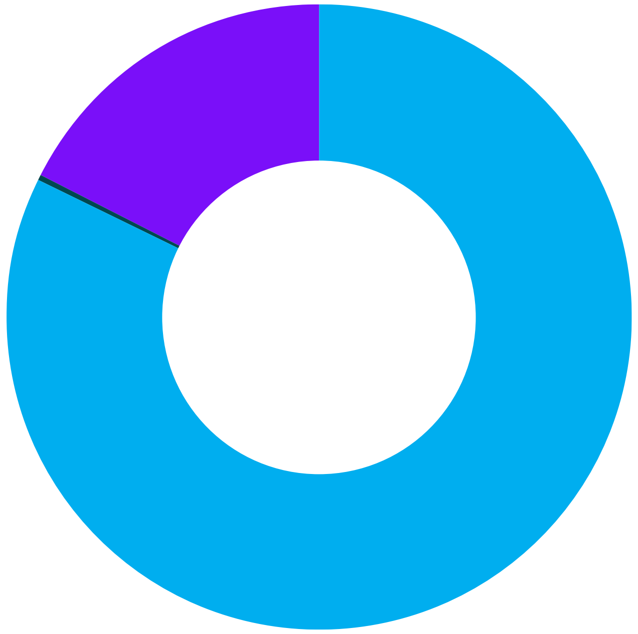
Voting and engagement insights

Top voting and engagement themes:

- Climate topics
- Corporate governance
- Human capital management
- Sustainable risk management

Impax Asian Environmental Market Fund Engagement 2022:
Voting Decisions on Management Resolutions

For	387
Abstained	2
Against	81



Source: Impax Asset Management, 1 January 2023 – 31 December 2022

Change in the Spotlight: Case Study – AirTAC (Taiwan)

Airtac International manufactures pneumatic components and offer after-sale support on all its products. Airtac is helping to address the increasing labour constraints and the need to drive better manufacturing efficiency in the transition to a more sustainable economy.

Impax has various engagement objectives for Airtac international, namely, improving sustainability processes, enhancing the firm's governance, and ensuring greater disclosures. Impax's engagement has aided multiple milestones for its various objectives. In 2019, Airtac undertook its first materiality assessment to define its most material issues.

In 2020, the company published its first Sustainability Report, aligned to GRI international reporting standards. And in 2021, Airtac continued to focus on developing a robust Environmental Management System (EMS), in addition to developing more transparent reporting on sustainability performance.

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

Information Technology	35%
Industrials	32%
Consumer Discretionary	15%
Utilities	8%
Others	10%

Geographic diversification

China	28%
Taiwan	22%
Japan	20%
India	12%
Australia	11%
South Korea	7%

These diversification graphs exclude cash.
Source: Impax Asset Management, 31 December 2022

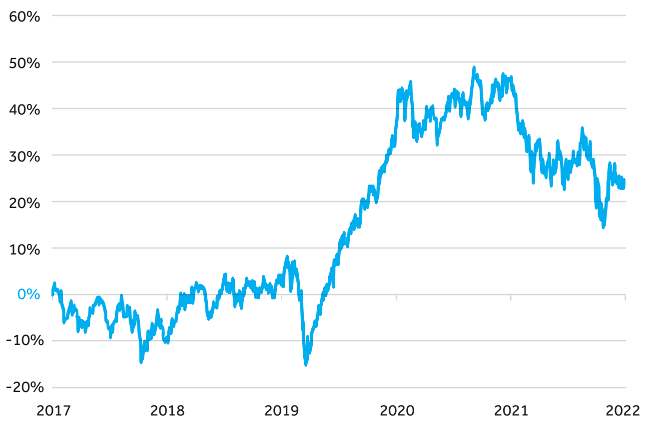
Fund Performance (as of 31 December 2022)

Asian markets experienced significant declines over the year though individual markets had a very different experience. India performed well as its domestic economy continued to recover, while Australia and Indonesia benefitted from higher commodity prices. The Japanese yen has been very volatile over the year. The resurgence of Covid-19 and the stringent enforcement of China's zero-Covid tolerance policies resulted in disruptions to domestic economic activity and severely impacted global supply chains.

The Fund fell as holdings were impacted by concerns over economic growth, though benefited from an underweight position to Digital Infrastructure, which was hit hard on worries about global demand, and an overweight to Sustainable Food & Agriculture, which was relatively defensive. The Fund has no exposure to Financials, which was the largest detractor. Having no exposure to Communication Services was beneficial, as internet related names experienced significant falls. Stock selection in Industrials was weak as many holdings faced temporary Covid-19 disruptions, while in Consumer Discretionary the lack of exposure to holdings benefitting from China domestic reopening negatively impacted the Fund.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – MTR Corporation (Hong Kong)

The fund is invested in MTR Corporation who are the sole railway operator in Hong Kong, the investment opportunity comes from the unique "rail plus property" model. In Hong Kong defensive railway operations are complemented by income from properties near the stations. MTR benefits from the government granting land development rights near their stations. This enables MTR to finance a modern and efficient rail system, provide accommodations for the public and increase land value.

Using public transport over combustion engine vehicles reduces carbon emissions and improves air quality. Additionally, the MTR system displaces passengers from using more carbon intensive buses, the second most popular transport mode in Hong Kong.

Emissions from the MTR railway system are half of that of buses on a per passenger kilometre basis. Emissions avoided by passengers using MTR systems instead of buses is approximately 798,564 tCO_2e per year.

Impact: Sustainable cities and communities

Provide railway services for Hong Kong

Reducing use of city buses

Improved air quality and reduced carbon emissions

Fund's key impact facts

In 2021*, the environmental impact of the Impax Asian Environmental Markets Fund supported:

- Avoided 63,500 tCO_2 being emitted, equivalent to 44,100 cars off the road
- Treated, saved, or provided 7,600 megalitres of water, equivalent to 58,690 household's water consumption
- Recovered and treated 39,610 tons of waste, equivalent to the annual waste of 137,580 households.

*At the time of writing, 2022 data was not available.

Source: Impax Asset Management

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Association memberships and participation in external ESG, sustainability and impact initiatives
- Asian Corporate Governance Association (ACGA)
- CDP (formerly the Carbon Disclosure Project)
- Ceres
- Climate Action 100+
- Climate Financial Risk Forum
- Council of Institutional Investors (CII)
- Energy Transitions Commissions
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Finance to Accelerate the Sustainable Transition-Infrastructure (FAST-Infra)
- Global Impact Investor Network (GIIN)
- Institutional Investors Group on Climate Change (IIGCC)
- Interfaith Center on Corporate Responsibility (ICCR)
- Investor Environmental Health Network
- Investor Network on Climate Risk (INCR)
- Investors for A Just Transition
- Natural Capital Investment Alliance
- Net Zero Asset Managers Initiative
- Northeast Investors Diversity Initiative
- ShareAction Investor Decarbonization Initiative
- Shareholder Rights Group
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- Thirty Percent Coalition
- UK Stewardship Code
- UK Sustainable Investment Forum (UKSIF)
- UN Principles of Responsible Investment (PRI)
- US Sustainable Investment Forum (USSIF)
- Women's Empowerment Principles

Impax Environmental Markets Fund

Investment objective

The Fund seeks to achieve sustainable, above market returns over the longer term by investing globally in companies that are developing innovative solutions to resource challenges in environmental markets. These markets address a number of long term macro-economic themes: growing populations, rising living standards, increasing urbanisation, rising consumption, and depletion of limited natural resources.

Investments are made in "pure-play" small and mid-cap companies which have >50% of their underlying revenue generated by sales of products or services in environmental markets.

Impax fully integrates proprietary ESG analysis in the investment process and is actively involved in stewardship activities with investee companies across ESG topics.

Integration of impact into the investment process

The Fund is designed to intentionally allocate clients' capital towards those companies they expect to flourish as the global economy transitions to a more sustainable model, and to reduce/eliminate exposure to potential losers from that transition. The investment team conducts ESG analysis on companies active in the growing Resource Efficiency and Environmental Markets. The goal is to ensure that a strong level of ESG quality is achieved.

Impax's investment process also results in quantifiable environmental benefits and measuring impact provides post-investment evidence of their investment intentionality. Impact is measured across four metrics: net CO_2 emissions avoided, water treated/saved or provided, materials recovered/waste treated, and renewable electricity generated.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 808m

Fund's inception date: Dec 2004

Number of holdings: 58

Weight in MASF: 7.53%*

Asset Class: Developed Market Equities

Fund geographical target: Global

Impact Style: Catalytic

Top 10 holdings

1.	Clean Harbors Inc	2.76%
2.	Ptc Inc	2.75%
3.	Eurofins Scientific	2.69%
4.	Koninklijke Dsm Nv	2.68%
5.	Bucher Industries Ag-Reg	2.67%
6.	Brambles Ltd	2.60%
7.	Stericycle Inc	2.58%
8.	Spirax-Sarco Engineering Plc	2.43%
9.	Pentair Plc	2.33%
10.	Graphic Packaging Holding Co	2.33%

Impact data and methods

Impax's principles for impact reporting are based on the belief that:

- Holistic reporting tells a more informative picture of a company's real-world impact
- Investing in carbon abatement solutions inevitably results in emissions today
- These are best understood in the context of future avoidance delivered rather than just reporting a simple carbon footprint
- Investors benefit from understanding portfolio level aggregated metrics in addition to individual company level metrics
- A comparison with a real-world benchmark is helpful in providing context and challenge
- Although carbon offsets can certainly play a part in abating emissions, they are not included in their methodology (and do not contribute to building new energy systems, transport networks and driving innovation in carbon avoidance in basic materials).

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

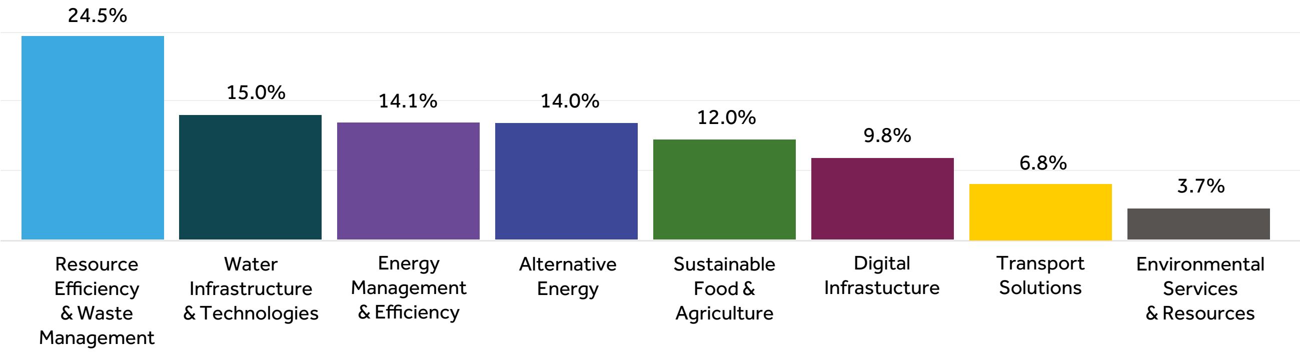
Case Study – Northland Power (Canada)

Northland Power is an integrated power producer and utility, involved in renewable electricity generation – in particular offshore wind as well as solar and biomass. This is important for the transition to cleaner energy sources and reducing carbon emissions.

The size of the position in the portfolio has increased over the year, as has the company's ESG score, assigned following Impax's proprietary ESG process. The change was mainly due to significant improvements in company's sustainability processes and disclosures, particularly in relation to material risks and climate change. The company reports GHG emissions and has improvement targets in place. This extends to some disclosure of physical climate risks and related scenario analysis.

Impact stats

Holdings breakdown by Impax's Environmental Sectors



This graph excludes cash.
Source: Impax Asset Management, 31 December 2022

Governance Insights

Impax takes diversity factors into account in their ESG analysis. Diversity indicators included in Impax's fundamental ESG research include:

- Gender, racial and ethnic diversity on the board of directors and executive management team
- Disclosure of workforce composition, new hires and attrition/turnover across gender, race and ethnicity
- Proactive goals/targets to increase gender and racial diversity, particularly at the senior leadership level, and whether such goals are linked to executive compensation
- Programs to develop a diverse talent pipeline, such as targeted recruiting, partnerships with professional/affinity networks and education sponsorships as well as internal efforts such as mentoring, sponsorship and leadership development programs geared towards underrepresented groups
- Commitments to pay equity, disclosure of pay equity data and efforts to close identified pay gaps by gender and race.

Deep dive

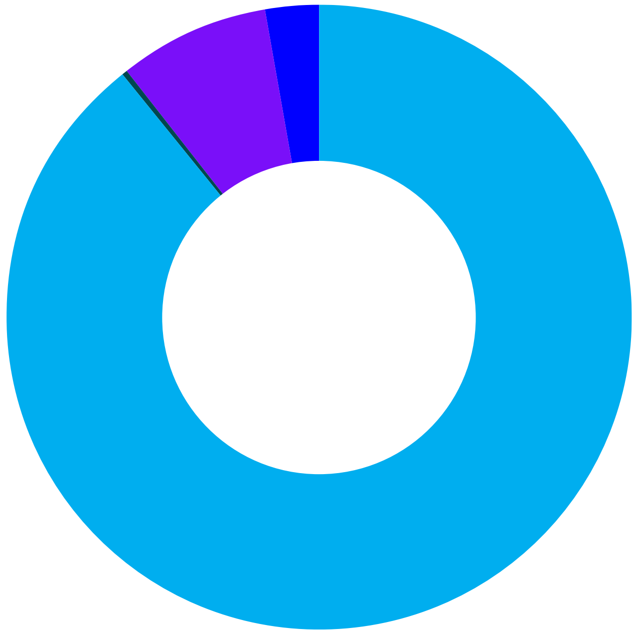
Voting and engagement insights

Top voting and engagement themes:

- Climate topics
- Corporate governance
- Human capital management
- Sustainable risk management.

Impax Environmental Market Fund Engagement 2022:
Voting Decisions on Management Resolutions

For	665
Abstained	2
Against	59
Witheld	19



Source: Impax Asset Management, 1 January 2023 – 31 December 2022

Change in the Spotlight: Case Study – Repligen (US)

Repligen is a bioprocessing company focused on the development, production, and commercialization of innovative products used in the process of manufacturing biologic drugs. The company's products reduce the resource intensity of the drug manufacturing process, yielding water savings of up to 90% and energy savings of up to 30%. Furthermore, drug manufacturers can use Repligen's products to achieve faster time-to-market.

Impax has been heavily engaging with Repligen on sustainability processes, governance, and enhanced disclosures. To date, is has contributed to multiple milestones in this space. Since the engagement, in 2021 Repligen published its first Sustainability Report which is GRI and SASB-aligned and includes a materiality analysis. The company also started reporting water, energy, and CO_2 data and has set an initial target for CO_2 emissions reduction, which will be enhanced in the later iterations of the report.

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

■	Industrials	42.38%
■	Information Technology	19.39%
■	Materials	13.72%
■	Utilities	12.69%
■	Health Care	5.36%
■	Others	6.46%

Geographic diversification

■	North America	50.62%
■	Europe (inc UK)	36.09%
■	Asia Pacific	11.82%
■	Latin America	1.49%

These diversification graphs exclude cash.
Source: Impax Asset Management, 31 December 2022

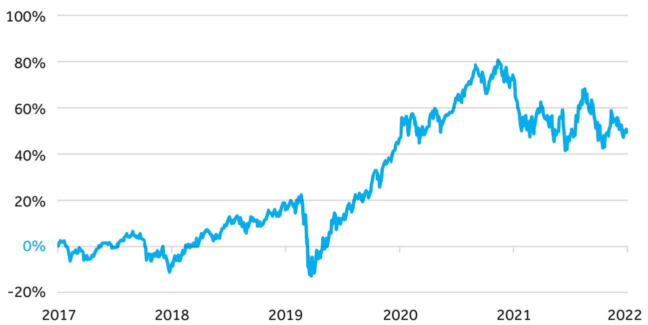
Fund Performance (as of 31 December 2022)

Returns for the Fund declined over the year, as concerns over inflation, rising interest rates and slowing economic growth negatively impacted performance. Given the Fund's bias to high quality growth exposure, the market rotation away from quality and growth into value also proved to be a headwind. Energy Management & Efficiency exposure was a leading detractor during the year. Additionally, rising interest rate pressure and the market rotation away from cyclical exposure due to recessionary concerns led to underperformance from holdings within Resource Efficiency & Waste Management as well as Water Infrastructure & Technologies.

Against this backdrop, Impax believes that companies with long term structural growth and innovative solutions continue to present attractive opportunities. Environmental and sustainable equities continue to see policy support and Impax believes that higher energy prices and a renewed focus on energy security are supportive of opportunities across a wide range of sustainable solutions. The investment team remains focused on finding companies with strong pricing protection and attractive valuations.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – SolarEdge (Israel)

SolarEdge Technologies is a solar energy company providing solar power optimization and photovoltaic monitoring solutions for power harvesting, conversion, and efficiency. SolarEdge is well-positioned in the fast-growing residential and commercial markets for its core business of solar power inverters and optimisers. It has made a series of acquisitions to expand into the 'connected home' theme, with cloud functionality for performance monitoring, software, battery storage and efficiency analytics.

SolarEdge's products and innovation can enhance productivity and help address climate change by making solar power more affordable and efficient, via its inverter, home storage and EV charging products. The company is also focused on sustainable sourcing of its raw materials and targeting near-zero electronic-waste to landfill.

SolarEdge's growth is contributing towards over 38,000 GWh of renewable energy produced by SolarEdge systems last year, and a net CO_2 avoidance of approximately 23 million tons.

Impact: Clean Energy

Produce solar energy generation equipment

Increase home production of clean energy

Greater proportion of people able to reduce use of non-renewable energy

Fund's key impact facts

A £10 million investment in the Fund (as of 31 December 2021*)

- Treated, saved or provided 600 megalitres of total water, which is equivalent to the annual water consumption of 3,850 households
- Generated 1,310 MWh of renewable electricity, equivalent to 360 households' annual electricity consumption
- Avoided -1,700 tCO_2 new CO_2 emissions, equivalent to 1,180 cars being taken off the road for one year
- Recovered and treated 280 tonnes of waste, equivalent to the annual waste of 300 households.

*At the time of writing, 2022 data was not available.

Source: Impax Asset Management

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Association memberships and participation in external ESG, sustainability and impact initiatives
- Asian Corporate Governance Association (ACGA)
- CDP (formerly the Carbon Disclosure Project)
- Ceres
- Climate Action 100+
- Climate Financial Risk Forum
- Council of Institutional Investors (CII)
- Energy Transitions Commissions
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Finance to Accelerate the Sustainable Transition-Infrastructure (FAST-Infra)
- Global Impact Investor Network (GIIN)
- Institutional Investors Group on Climate Change (IIGCC)
- Interfaith Center on Corporate Responsibility (ICCR)
- Investor Environmental Health Network
- Investor Network on Climate Risk (INCR)
- Investors for A Just Transition
- Natural Capital Investment Alliance
- Net Zero Asset Managers Initiative
- Northeast Investors Diversity Initiative
- ShareAction Investor Decarbonization Initiative
- Shareholder Rights Group
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- Thirty Percent Coalition
- UK Stewardship Code
- UK Sustainable Investment Forum (UKSIF)
- UN Principles of Responsible Investment (PRI)
- US Sustainable Investment Forum (USSIF)
- Women's Empowerment Principles

Janus Henderson Global Sustainable Equity Fund

Investment objective

The Fund aims to provide investors with long-term capital growth by investing in a global equity portfolio comprised of companies that provide solutions to environmental and social challenges.

To identify potential investments, fund managers look for opportunities strategically aligned with long term 'Positive Impact' themes derived from global megatrends.

The Fund avoids investing in companies that could negatively impact the development of a sustainable global economy. From this investment universe, the fund managers select equities on the basis of fundamental company analysis that incorporates ESG factors.

Integration of impact into the investment process

The fund managers believe that companies with sound governance, responsible environmental and social risk management practices have greater chances of creating sustainable shareholder value.

They proactively seek stocks with attractive fundamentals that are committed to contributing to at least one 'Positive Impact' theme and to avoiding harmful activities. The Fund considers the impact of a company's products as well as its operations.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 2.02bn

Fund's inception date: Aug 1991

Number of holdings: 54

Weight in MASF: 15.10%*

Asset Class: Developed Market Equities

Fund geographical target: Global

Impact Style: Sustainable

Top 10 holdings

1.	Microsoft	5.80%
2.	Westinghouse Air Brake Technologies	3.26%
3.	Aon	3.11%
4.	Humana	2.91%
5.	Intact Financial	2.83%
6.	Progressive	2.78%
7.	Microchip Technology	2.74%
8.	Autodesk	2.66%
9.	AIA Group	2.65%
10.	Texas Instruments	2.49%

Impact data and methods

Janus Henderson collects impact data through its investment research and company engagement. It relies on several data providers, including Bloomberg and MSCI. The firm restricts its reporting to high-quality data that can be applied to the whole portfolio.

Given the inherent challenges to reporting impact data for a multi-thematic fund, the firm is wary of placing too much emphasis on data as it can give an erroneous picture without appropriate context.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

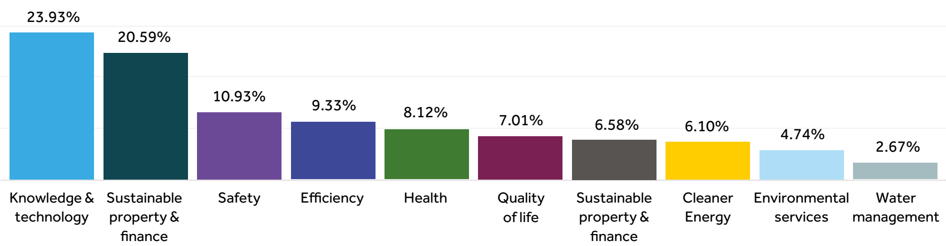
Case Study – T-Mobile (US)

T-Mobile is one of the major global communication services companies. As the clear leader in 5G investment in the US, T-Mobile stand to play a pivotal role in the upcoming era of ubiquitous connectivity through the IoT. Digital connectivity is a powerful tool for economic and social development. In developed economies, 5G networks will enable societies to capture productivity gains from smart cities, mobile working and autonomous driving.

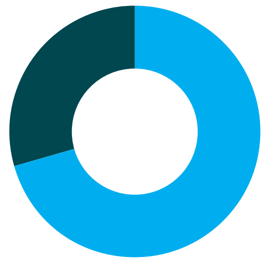
T-Mobile's 5G networks already cover nearly all of the US, around two years ahead of competitors, with additional investments planned to improve speed and reliability. Highly predictable, defensive business profile with underlying margin expansion and strong FCF generation post completion of Sprint integration. At time of acquisition, was trading at <9x '24 FCF/share, slightly less than even Verizon despite a much faster FCF/share growth profile of mid-teens and mid-single top line growth due to having a long runway for share gain due to its lead in 5G and price advantage. Based on positive impact through thematic exposure to Knowledge and Technology and growth potential and strong fundamentals, the team initiated a position in 2022.

Impact stats

Holdings Breakdown by Janus Henderson Investment Theme



Environmental and social thematic exposure

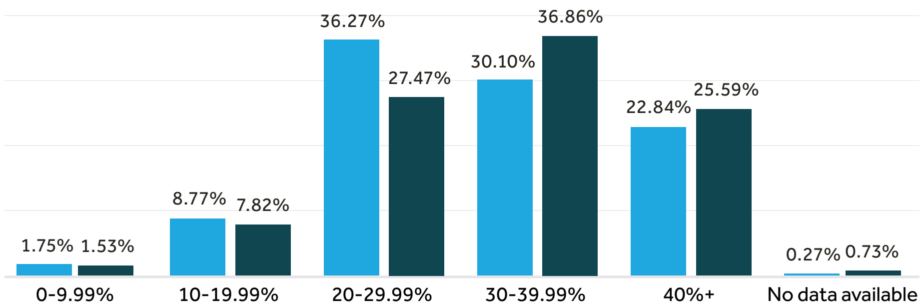


Social 69.89%

Environmental 29.13%

Governance Insights

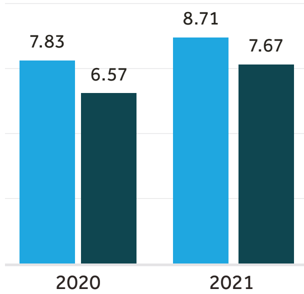
Proportion of female board members by portfolio weight



Janus Henderson Global Sustainable Equity

Inveso MSCI World UCITS ETF Acc

Breakdown by average CEO tenure (years)



Portfolio

MSCI World

Source: Janus Henderson, 31 December 2022

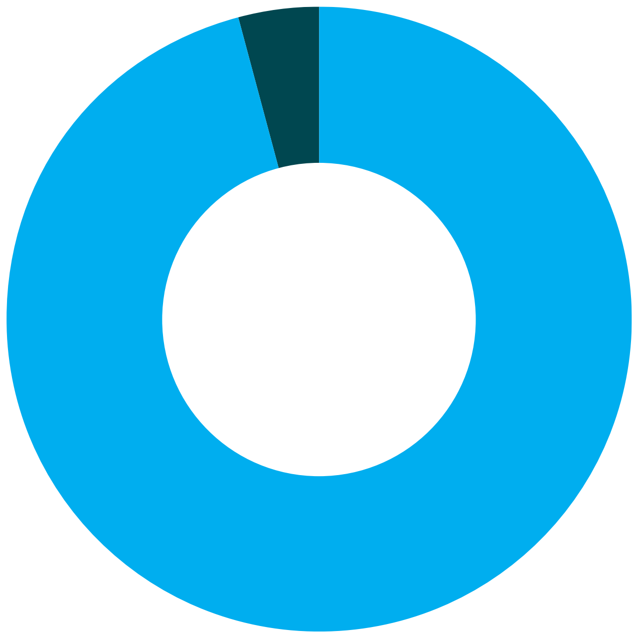
Deep dive

Voting and engagement insights

Top voting and engagement themes:

Janus Henderson do not currently track their top voting and engagement themes for their Global Sustainable Equity Fund. However, they are committed in 2023and beyond to tracking whether their votes against management are environmental, social, or governance related.

Janus Henderson Global Sustainable Equity Fund
Engagement 2022: Voting Decisions



Votes with management	649
Votes against management	27

Source: Janus Henderson, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – Adidas (Germany)

Adidas is one of the world's largest suppliers of shoes and clothing, serving customers in over 160 countries. Following a shareholder proposal addressed to a competitor, Janus Henderson (JH) engaged with adidas on a number of points relating to the sourcing of materials for its products.

JH asked about Adidas's approach to verifying cotton sourcing in light of concerns around the working conditions in the cotton supply chain. Adidas made clear that it does not source from certain high-risk areas and that it can trace the majority of products. However, management conceded that this process is dependent on suppliers to a certain extent, meaning the company is unwilling to provide a 100% guarantee. JH also enquired as to the sourcing of ocean plastic from Adidas's Parley collection.

Adidas management confirmed that not all plastic in the Parley collection is taken from the ocean as it often damaged and unable to be recycled into products. Instead, plastic is taken from beaches and coastal locations that are at risk of ending up in the ocean.

Fund breakdown

(As of 31 December 2022)

Sector diversification

	Information Technology	34.59%
	Industrials	17.98%
	Financials	15.75%
	Health Care	7.88%
	Consumer Discretionary	6.89%
	Utilities	6.26%
	Other	10.66%

Geographic diversification

	North America	68.62%
	Europe (inc UK)	17.42%
	APAC	13.96%

These diversification graphs exclude cash.
Source: Janus Henderson, 31 December 2022

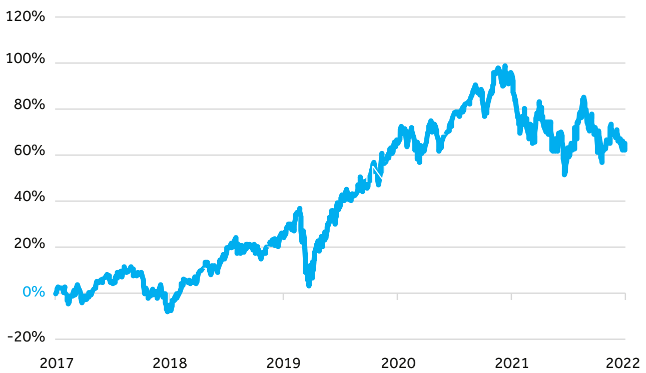
Fund Performance (as of 31 December 2022)

With value outperforming growth, it was a challenging backdrop to for Janus Henderson to keep up with market returns. Their sector positioning was a headwind to relative performance. Due to Janus Henderson's exclusionary criteria, they have zero exposure to the best-performing sector, energy, as well as no exposure to miners, banks and pharmaceutical companies.

Their overweight allocation to information technology was also detrimental to relative performance, given their exposure to higher growth names within software and semiconductors. This more than offset the positive contribution from other sectors. Through their exposure to insurance and renewable companies, their overweight to financials and utilities was beneficial. In addition, Janus Henderson's underweight positions in consumer discretionary and communication services, where they have no exposure to some of the large growth stocks that posted heavy losses, including Tesla, Amazon, Meta Platforms and Alphabet, was also beneficial.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – TE Connectivity (Switzerland)

TE Connectivity is one of the world's largest electronics connector companies. Its products are the building blocks for greater electrification and connectivity across transportation, industrial and communications end markets. It designs and manufactures around 500,000 different products that connect and protect the flow of power and data in vehicles, factories, buildings, power generation and communication networks. TE's technology is enabling customers to make products that are more reliable, safe and energy efficient, and which improve peoples' lives. With more than 85,000 employees, including over 8,000 engineers, TE Connectivity is working alongside customers in approximately 140 countries.

TE Connectivity has hundreds of thousands of individual products, but they all share some common attributes. Whether it is a high voltage connector, a resistor, a multi-coil resolver, a data connector, a force guided relay, or a pressure sensor, they are all acting as key components to enable the safe flow of electrical power and data. Effectively TE sells the 'nuts and bolts' for a more electrified and connected world and it is benefitting from secular trends associated with increased electrification, efficiency, safety, and connectivity across multiple industries.

In 2020, TE Connectivity achieved a 37% reduction in energy intensity, surpassing its goal by 2%. During 2021, renewable energy sourcing was implemented at approximately 35 sites globally and energy efficiency operating standards were developed and implemented across all sites. This led to a 30% reduction in overall absolute emissions compared to 2020. The company also began to hold quarterly continuous improvement meetings with segment leaders. These efforts resulted in a roughly 10% improvement of normalised energy performance for kilowatt hours reduction and a 30% reduction in absolute greenhouse gas (GHG) emissions in 2021 versus 2020. Building upon this success, the company set a new commitment to reduce absolute Scope 1 and 2 GHG emissions by more than 40% by 2030 (against a 2020 baseline). TE Connectivity has also begun working with key suppliers to reduce its Scope 3 emissions.

Impact: Sustainable cities and communities

Design and manufacture electrical components

Contribute in the move to global 'electrification'

Greater ability to rely on renewable energy sources

Fund's key impact facts

The Janus Henderson Global Sustainable Equity fund has a substantially less severe environmental impact than its benchmark, the MSCI World Index. Regarding total financed carbon emissions, Scope 1+2 emissions were 67.6% lower, Scope 3 Upstream emissions were 16.8% lower, and Scope 3 Downstream emissions were 87.2% lower.

Source: Janus Henderson Asset Management

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Association memberships and participation in external ESG, sustainability and impact initiatives
- Access to Medicine Index
- Asia Investor Group on Climate Change (AIGCC)
- Asian Corporate Governance Association (ACGA)
- Business Benchmark on Farm Animal Welfare
- CDP (formerly the Carbon Disclosure Project)
- Climate Action 100+
- Climate Transition Finance Working Group
- European Sustainable Investment Forum (EuroSIF)
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Global Impact Investor Network (GIIN)
- Institutional Investors Group on Climate Change (IIGCC)
- The Investor Forum
- Net Zero Carbon 10
- Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- Transition Pathway Initiative
- UK Stewardship Code
- UK Sustainable Investment Forum (UKSIF)
- UN Global Compact
- UN Principles of Responsible Investment (PRI)
- US Sustainable Investment Forum (USSIF)

Jupiter Ecology Fund

Investment objective

The Fund's formal investment objective is to provide capital growth with the prospect of income, over the long term (at least five years) by investing in companies whose core products and services address global sustainability challenges.

The fund invests in global listed equities that focus on making a positive impact towards environmental objectives, with a key focus on the foremost challenges of our time: climate change and natural capital restoration. Jupiter allocate capital to securities that they believe are making a material contribution to six solutions themes: clean energy; green mobility; green buildings and industry; sustainable agriculture and land ecosystems; sustainable oceans and freshwater systems; and circular economy. The manager has a particular focus on the 'what', which questions if a company's product fits across all themes. Another important consideration is the 'how' which focus on if the company's operations serve to further integrate ESG criteria.

Integration of impact into the investment process

The investment process begins with identifying global sustainable development challenges to understand the nature of the potential commercial solutions.

This creates the investable opportunity set of companies that provide sustainable impact. The process then combines 'positive' screening, which determines whether a company's core activity is aligned to sustainable solutions, and a 'negative' screen around industries with common ethical concerns.

Once this is established, this research process then identifies financially pertinent ESG-related risks and opportunities for consideration as part of the investment decision as well as engagement priorities relating to this.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 658m

Fund's inception date: Apr 1988

Number of holdings: 53

Weight in MASF: 4.48%*

Asset Class: Developed Market Equities

Fund geographical target: Global

Impact Style: Catalytic

Top 10 holdings

1.	Waste Connections, Inc.	3.38%
2.	Vestas Wind Systems A/S	3.28%
3.	Schneider Electric SE	3.17%
4.	Infineon Technologies AG	3.07%
5.	Republic Services, Inc.	2.98%
6.	LKQ Corporation	2.91%
7.	Prysmian S.p.A.	2.90%
8.	Linde plc	2.87%
9.	NORTHRN TRUST GL USD	2.79%
10.	Thermo Fisher Scientific Inc.	2.75%

Impact data and methods

Jupiter's impact data is collected by a combination of dialogue directly with the investee companies, as well as their public reporting.

Generally, Jupiter has medium confidence in the data quality given the complexity in comparing product and service impacts to an alternative that is not always straightforward to quantify. Rarely are datasets used from third parties and the investment team avoids benchmarking where datasets do not take into account impact data.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – Ansys (US)

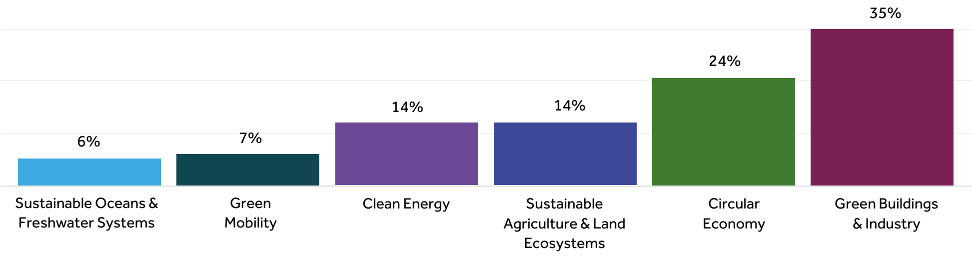
Jupiter initiated a new position in Ansys in 2022, a global leader in multi-physics engineering simulation software. Its products and solutions help customers reduce resource and material use (e.g. prototype and testing materials, labour, energy and water resources), save product development and validation costs, and shorten product-to-market time without compromising quality. Therefore, the company fits primarily into the funds Circular Economy theme.

Jupiter believe that increasing product complexity, higher requirement for resource efficiency (including carbon footprint reduction) and product quality will continue to drive simulation software adoption across Ansys' wide range of client industries.

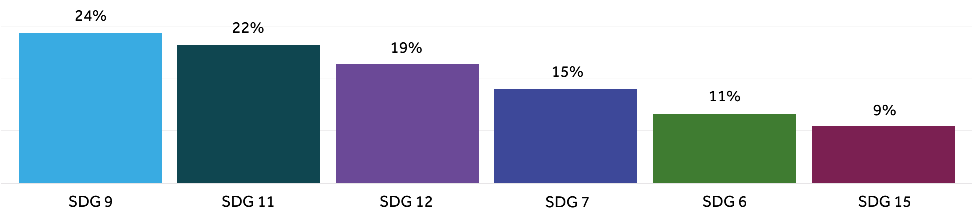
As a leader in this field, Jupiter views Ansys as best-positioned to deliver sustainable above GDP growth while maintaining its best-in-class profitability. This enables management to continue to invest in solutions that drive resource efficiency and a better environmental impact for its customers when compared to more traditional approaches.

Impact stats

Holdings breakdown by Jupiter environment impact theme

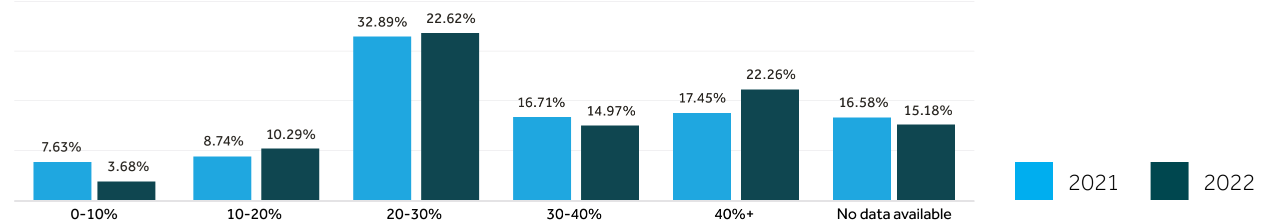


Holdings breakdown by Sustainable Development Goal alignment



Governance Insights

Proportion of female board members by portfolio weight



Source: Jupiter Asset Management, 31 December 2021, 31 December 2022

Deep dive

Voting and engagement insights

Top voting and engagement themes:

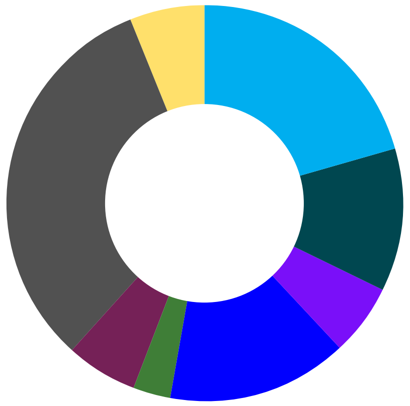
- Board composition and effectiveness
- Climate risk management
- Human Capital management.

Jupiter Ecology Fund Engagement 2022:
Engagements by ESG Theme

Governance	14
Social	6
Envionment	14

Jupiter Ecology Fund Engagement 2022:
Engagements by ESG Topic

E - Climate Risk Management	7
E - Environmental Impact Management	4
E - Operational Sustainability	2
S - Human Capital Management	5
S - Social Risks and Opportunities	1
G - Board Composition & Effectiveness	2



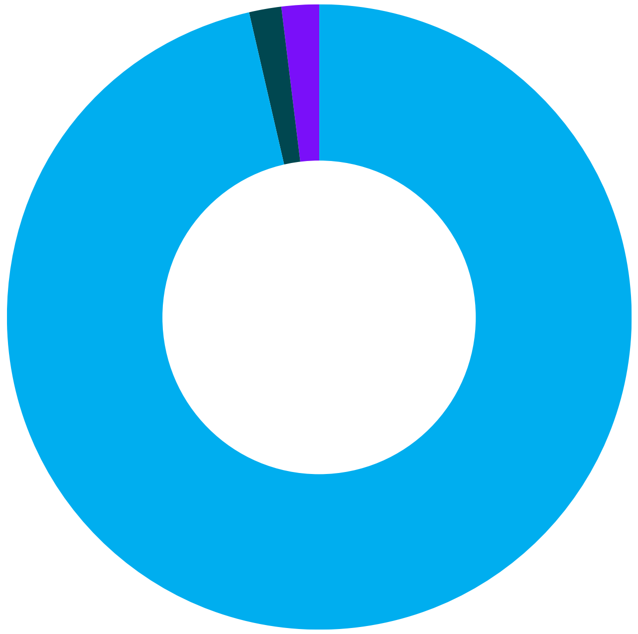
Jupiter Ecology Fund Engagement 2022:
Engagements by Region

Americas	11
EMEA	16
APAC	7

Source: Jupiter Asset Management, 1 January 2022 – 31 December 2022

Jupiter Ecology Fund Engagement 2022: Voting Decisions

Votes with management	755
Votes against management	13
Abstain / did not vote	14



Source: Jupiter Asset Management, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – Flat Glass (US)

Jupiter voted against the management of Flat Glass, a globally leading maker of glass for the solar power sector. This was on a matter where the Flat Glass Board sought approval for a proposed downward adjustment of the conversion price of the A-Share Convertible Bonds issued by the company, as well as authorization granted to the board to handle all matters in relation to the proposed downward adjustment of the conversion price of Flat Convertible Bonds.

A key contention was that the issuance of A-Share Convertible Bonds were completed as of May 2022 and are still at an early-stage relative to the total maturity of six years. In this context, Jupiter did not believe the Board had provided valid justifications for the proposed downward adjustment of the conversion price at the time and so voted against Flat Glass management.

Fund breakdown

(As of 31 December 2022)

Sector diversification

	Industrials	53.1%
	Information Technology	18.5%
	Materials	7.2%
	Utilities	6.3%
	Consumer Discretionary	6.1%
	Others	8.8%

Geographic diversification

	North America	49.90%
	EMEA	39.25%
	Asia Pacific	10.85%

These diversification graphs exclude cash.
Source: Jupiter Asset Management, 31 December 2022

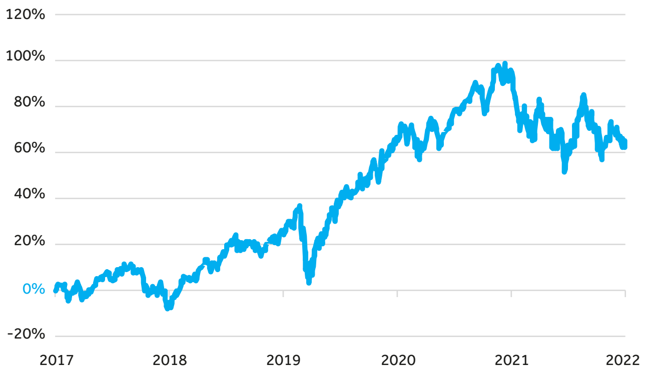
Fund Performance (as of 31 December 2022)

During the first half of the year, the best contributors were driven by waste and recycling service companies within Jupiter's Circular Economy theme, while detractors came from Green Mobility companies, constrained by supply chain challenges, and European industrials mainly within our Green Buildings & Industry theme.

Performance improved in the second half of the year, driven by both sector and style trends in the wider market, with growth-leaning and more cyclical sectors such as industrials generally outperforming, as well as stock-specific factors. The latter has included the beneficial impact, of a package of environmental programs called the Inflation Reduction Act (IRA) by Congress. The Act represents the largest-ever US government investment in addressing climate change, worth $370bn over 10 years for climate solutions. The Clean Energy theme has been particularly buoyant as a result. The fund has a 10-12% weighting in this theme and has seen the most outperformance where companies already have a North American manufacturing footprint, such as First Solar, and are therefore well positioned to take advantage of the significant production-side (as opposed to demand-side) tax credits.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – First Solar (US)

First Solar fits within Jupiter's Clean Energy theme, manufacturing solar panels, and providing utility-scale PV power plants. The company is uniquely well-placed to take advantage of key growth drivers, standing alone in the industry with differentiated semiconductor and streamlined manufacturing process, which yield unparalleled quality and reliability. In 2021, they saw a 29% increase in production of solar modules, compared to 2020. Modules have a carbon footprint 2.5 times lower, water footprint three times lower and an energy payback time two times faster than conventional crystalline silicon solar panels on a life cycle basis.

Being the only US-headquartered company among the world's 10 largest module producers, with a large manufacturing presence on US soil, the company is set to benefit in the wake of the US Inflation Reduction Act that over the next decade places a valuable stream of tax-credits on solar energy productions but also favouring those with a sizeable US-based manufacturing footprint.

Impact: Affordable and clean energy

Energy saving technologies to tackle climate change

Facilitating growing net-zero ambitions from companies

Emboldening companies to take more urgent and ambitious steps towards climate neutrality

Association memberships and participation in external ESG, sustainability and impact Initiatives

- CDP (formerly the Carbon Disclosure Project)
- Climate Action 100+
- The Diversity Project
- Eurosif Transparency Code
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Forest Carbon
- Good Work Coalition
- Healthy Markets Coalition
- Institutional Investors Group on Climate Change (IIGCC)
- ICMA Green Bond Principles
- The Investor Forum
- Japan Stewardship Code
- LGPS Transparency Code
- Net Zero Asset Managers Initiative
- RE 100
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Thirty Percent Coalition
- UK Stewardship Code
- UK Sustainable Investment Forum (UKSIF)
- UN Global Compact
- UN Principles of Responsible Investment (PRI)

Fund's key impact facts

Emissions intensity ($tCO_2eq/yr/M€$) vs benchmark:

Scope 3 emissions savings

- Ecology Fund: -58,
  FTSE Benchmark: -7

Scope 1&2 emissions savings

- Ecology Fund: -6,
  FTSE Benchmark: -3

Scope 3 induced emissions

- Ecology Fund: 160,
  FTSE Benchmark: 130

Scope 1&2 induced emissions

- Ecology Fund: 46,
  FTSE Benchmark: 23

The contribution of the portfolio holdings to mitigating climate change is reflected in its emissions savings of 58 $tCO_2/y/M€$ (enterprise value), which compares favourably to the Morningstar Developed Markets Target (used as a proxy of global private sector emissions) of 9 $tCO_2/y/M€$. This is largely driven by the portfolio's holdings within its clean energy theme, although the green industry and buildings theme also made a meaningful contribution. The Jupiter Ecology Fund's bias towards industrial companies, and its more modest exposure to technology versus the FTSE World index, results in a higher level of induced emissions.

Source: Jupiter Asset Management

RobecoSAM Sustainable Healthy Living Equities Fund

Investment objective

The fund seeks to achieve long-term capital growth through investments in selected companies that anticipate and respond to sustainability challenges related to health by offering feasible solutions supporting healthy nutrition, physical activity, good hygiene and efficient healthcare.

The fund's investment philosophy is based on the core belief that sustainable companies will outperform their peers in the long-term. The fund analyses material ESG information and integrates it into the definition of the thematic investment universe and the fundamental investment approach. It follows a structured and disciplined investment process to generate long-term outperformance by investing in undervalued companies in relation to their expected long-term profitability.

Integration of impact into the investment process

Robeco is one of the market leaders in terms of integrating financial and sustainability insights into a structured investment process. A key focus of their SI research and their ESG integration in the investment process is the focus on financially material sustainability criteria. This integration of sustainability criteria into the financial valuation of companies is the cornerstone of the fund's research and investment philosophy.

Sustainability and ESG criteria are integrated into the definition of the thematic investment universe for the Sustainable Healthy Living theme. In addition, the sustainability profile of an analysed company – including environmental, social and governance factors – influences its attractiveness in the fundamental valuation.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: EUR 431 million

Fund inception date: March 2007

Number of holdings: 43

Target geography: Global

Weight in MASF: 5.84%*

Asset class: Developed Market Equities

Fund geographical target: Global

Impact type: Catalytic

Top 10 holdings

1.	Boston Scientific Corp	4.26%
2.	Bakkafrost P/F	3.98%
3.	UnitedHealth Group Inc	3.69%
4.	Deckers Outdoor Corp	3.55%
5.	Alcon Inc	3.50%
6.	Thermo Fisher Scientific Inc	3.45%
7.	Lonza Group AG	3.44%
8.	Siemens Healthineers AG	3.30%
9.	BellRing Brands Inc	3.20%
10.	Novo Nordisk A/S	3.05%

Impact data and methods

Their sustainable thematic fund range targets companies offering products & services that provide solutions to specific sustainability challenges with a positive environmental and social impact. The outcome of thematic investing is a portfolio that pursues superior financial returns coupled with investing in companies that contribute to the Sustainable Development Goals (SDGs). Therefore, they're using the Robeco SDG Framework, which ranks companies from a -3 to a +3 score thus quantifying their contribution to UN SDGs. SDG analysis for each company indicates to which SDG the company has an impact and the level of contribution (low/medium/high). Investments in negative SDG scores are not authorized across their sustainable theme funds range.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

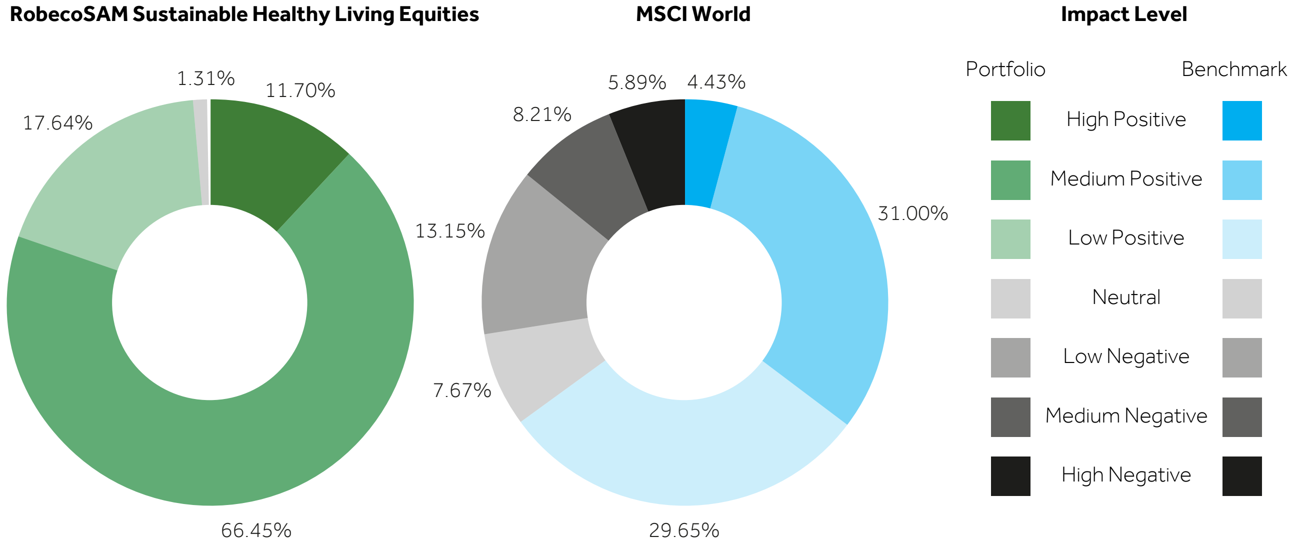
Case Study – Thermo Fisher Scientific (US)

ThermoFisher is the global leader in Life Science Tools & Diagnostics. Since 2006, when it merged with Fisher Scientific, the company has made some 100 acquisitions totalling over USD 100 billion, consolidating a highly fragmented industry, and becoming the number 1 player in the space. ThermoFisher is a leading player that offers a full range of laboratory instruments, products, diagnostic test kits, and other life science equipment. Its TAM is over USD 200 billion and growing mid-single digit, addressing needs in pharma & biotech, diagnostic & healthcare, and industrial end-markets as well as working with academic researchers and governments.

With its commitment to making the world healthier, cleaner and safer the company is a vital part of the supply chain for biopharmaceutical research and manufacturing as well as environmental laboratories. Thanks to recent acquisitions, ThermoFisher has a fully vertically integrated Biopharma offering and can deliver end-to-end support for drug development to Pharma & Biotech customers. During the pandemic, ThermoFisher played a leading role in PCR-based Covid-19 testing and supported mRNA vaccine development & commercial production.

Impact stats

Goal scores (based on Robeco's SDG Framework*) versus benchmark index



*The Framework utilises a three-step approach to assess a company's impact alignment with the relevant Sustainable Development Goals, provides a methodology for assigning companies with an SDG score. The score ranges from positive to negative impact alignment, with levels from high, medium, or low impact alignment. This results in a 7-step scale from -3 to +3. If the data set does not cover the full portfolio, the figures shown above each impact level sum to the coverage level to reflect the data coverage of the portfolio, with minimal deviations to reflect founding.

Source: Robeco, 31 December 2022

Deep dive

Voting and engagement insights

Top voting and engagement themes:

- Good governance
- Biodiversity
- Sustainable Development Goal Engagement.

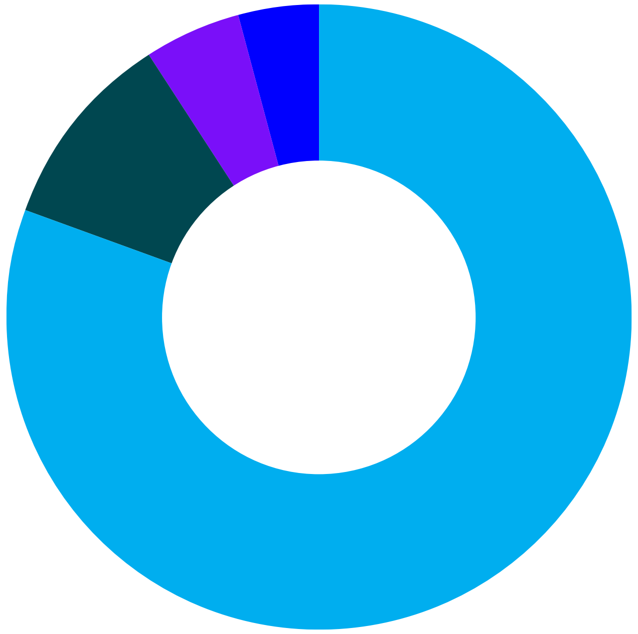
RobecoSAM Sustainable Healthy Living Equities Fund
Engagement 2022: Engagements by ESG Theme

Environmental	3
Social	2
Governance	3
Sustainable Development Goal	1

Source: Robeco, 1 January 2022 – 31 December 2022

RobecoSAM Sustainable Healthy Living Equities Fund
Engagement 2022: Voting Decisions

Votes with management	526
Votes against management	67
No action taken	31
N/A or 'Mixed'	27



Source: Robeco, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – Nike (US)

During Nike's 2022 Annual General Meeting (AGM), Robeco saw two agenda items of particular importance.

The first was the Say on Pay proposal, which once again drew significant opposition from shareholders. It faced dissent from 35% of the votes cast, up from 28% in 2021. Robeco voted Against the proposal for the third year in a row as Nike's remuneration policy and practices continue to lag our expectations. In line with Robeco's voting policy, they assessed the company's compensation program based on their proprietary remuneration framework which looks at factors such as pay structure, pay magnitude and transparency. Robeco concluded that their opposition is warranted given, inter alia, the discretionary adjustments to the FY2021 short-term incentive plan, the large base salary increases, and the low ratio of long-term incentives delivered to the CEO in the form of Performance Share Units.

The second notable resolution on the agenda was a shareholder proposal opposed by management. This resolution requested that Nike adopt a policy to pause the sourcing of cotton and other raw materials from China until the U.S. government Business Advisory is lifted or rescinded. We abstained from voting on the resolution. While we consider that Nike should address the risks related to its China sourcing, pausing all raw material sourcing from China is not the sole means to achieve this.

Fund breakdown

(As of 31 December 2022)

Sector diversification

Health Care	45.70%
Consumer Staples	26.28%
Consumer Discretionary	13.60%
Materials	10.48%
Others	3.95%

Geographic diversification

US	43.43%
Europe (ex-UK)	44.08%
UK	9.72%
Japan	2.77%

These diversification graphs exclude cash.
Source: Robeco, 31 December 2022.

Fund Performance (as of 31 December 2022)

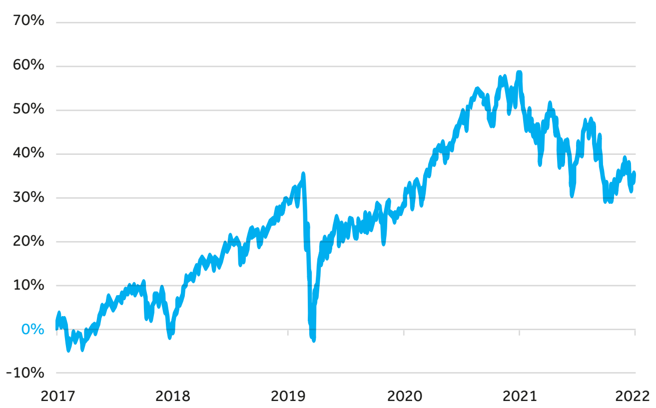
2022 was expected to be another good year for stock markets as the economy re-opened and pandemic restrictions eased. However, Robeco's expectations did not quite materialize, as 2022 developed into a challenging and extremely volatile year for global stocks, creating a difficult environment for Healthy Living investments. The fund ended the year with a performance of -14.2%, underperforming broader global markets.

Underperformance can be largely explained by the absence of Energy sector stocks (which strongly outperformed in 2022) from the fund's thematic universe sector as well as the fund's substantial exposure to the Consumer Discretionary sector. In addition, global markets experienced a remarkable rotation from growth to value stocks, a class of stocks which had previously suffered from years of underperformance.

Given the fund's preference for growth investments, the rotation to value negatively impacted the strategy.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – Siemens Healthineers (Germany)

Siemens Healthineers operates in three segments of the healthcare spectrum. It is the leader in Medical Imaging with number one positions in the most sophisticated technologies such as magnetic resonance imaging (MRI), computer tomography (CT) and positron emission tomography (PET). It has a very solid Advanced Therapies business, where imaging is combined with intervention.

Siemens Healthineers contributes positively to SDG 3 (Good health and well-being) through 100% of its sales. The company is aligned with the circular economy initiative including ambitious targets (e.g., carbon neutrality by 2030) which are integrated into its business strategy. In addition, it prolongs the useful life of its devices through various service packages and offers certified refurbished instruments.

Fund's key impact facts

A EUR 10 million investment in the RobecoSAM Sustainable Healthy Living Fund is associated with*:

- Reaching 8,400 people with a healthy diet for a year
- Reaching 11,200 patients with medical products and services
- Providing 2,760 people with products to meeting their hygiene needs for a year
- Providing 1,850 people with apparel to live an active lifestyle

*Based on the impact of 32 companies in the RobecoSAM Sustainable Healthy Living Fund, representing 77.1% of the portfolio as of 31 December 2021. Data available for 2022 was not available at time of writing.

Source: Robeco

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Access to Medicine Index
- Advance Gender Equality in Business
- Asian Corporate Governance Association (ACGA)
- Brazilian Corporate Governance Association (AMEC)
- Business Benchmark on Farm Animal Welfare
- Cambridge Institute for Sustainable Leadership
- CDP (formerly the Carbon Disclosure Project)
- City to Sea Partnership
- Climate Action 100+
- DNB Sustainable Finance Initiative
- Dutch Association of Investors for Sustainable Development (VBDO)
- Dutch National Climate Agreement
- Dutch Fund and Asset Management Association (DUFAS)
- EDGE Certification Foundation
- Erasmus Platform for Sustainable Value Creation
- Eumedion
- European Fund Asset Management Association (EFAMA)
- Farm Animal Investment Risk and Return (FAIRR) Initiative
- Finance for Biodiversity Pledge Foundation
- Global Impact Investor Network (GIIN)
- Global Steering Group on Impact Investing
- GreenBuzz Zurich
- Global Real Estate Sustainability Benchmark (GRESB)
- Impact Management Project
- Institutional Investors Group on Climate Change (IIGCC)
- Interfaith Center on Corporate Responsibility (ICCR)
- International Corporate Governance Network (ICGN)
- Investor Alliance for Human Rights (IAHR)
- Investor Mining and Tailings Safety Initiative
- Investor Policy Dialogue on Deforestation (IPDD)
- Klimastiftung Schweiz (Swiss Climate Foundation)
- Net Zero Asset Managers Initiative
- Partnership Biodiversity Accounting Financials (BPAF)
- Plastic Solutions Investor Alliance
- Platform Carbon Accounting Financials (PCAF)
- Platform Living Wage Financials (PLWF)
- Powering Past Coal Alliance (PPCA)
- Roundtable on Sustainable Palm Oil (RSPO)
- Sustainable Finance Geneva (SFG)
- Swiss Sustainable Finance (SSF)
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- Thirty Percent Coalition
- Transition Pathway Initiative
- UK Stewardship Code
- UN Global Compact
- UN Principles of Responsible Investment (PRI)
- PRI Human Rights Stewardship Initiative
- PRI's Inevitable Policy Response
- UN Treaty on Plastics (Financials)
- World Benchmarking Alliance (WBA)
- ZSL-SPOTT Palm Oil benchmark

Vontobel Fund – mtx Sustainable Emerging Markets Leaders Fund

Investment objective

The Vontobel Sustainable Emerging Markets Fund aims to generate long-term capital growth and seeks to promote environmental or social characteristics by employing a number of safeguards and evaluating all investments against sustainability criteria with hard thresholds required to be met for inclusion. The fund managers adopt a bottom-up stock picking approach, believing that the selection of the right companies is key to driving performance over the long term. They use a rigorous and disciplined investment framework that seeks to identify what they believe are high quality businesses trading at attractive valuations. In Vontobel's view, high quality businesses are ones that offer consistently high returns on invested capital (ROIC), enjoy a strong industry position in which they can protect and grow these high levels of returns, and effectively manage and minimize their ESG risks. Importantly, their holdings must also offer attractive upside potential in terms of valuation.

Integration of impact into the investment process

ESG malpractice leads to lower profitability (Return On Invested Capital, ROIC) and underperformance and as a result Vontobel aims to eliminate these companies from their portfolio.
The ESG analysis is fully integrated into their company evaluation and enables their analysts to reach decisions based on a holistic understanding of each company. The Fund uses ESG Integration to avoid 'at risk' companies and thereby support enhanced portfolio performance. To maximise efficiency and expertise, the ESG analysis is conducted by financial analysts in collaboration with Vontobel's team of ESG specialists within the team.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: USD 4.1bn

Fund's inception date: July 2011

Number of holdings: 52

Weight in MASF: 2.59%*

Asset Class: Emerging Market Equity

Fund geographical target: Global

Impact Style: ESG Integrated

Top 10 holdings

1.	Taiwan Semic-ADR	6.48%
2.	TSMC	1.66%
3.	HDFC Bank LTD	5.03%
4.	Tencent	4.58%
5.	Alibaba Group Ho	4.25%
6.	DBS Group Hldgs	3.63%
7.	BB Seguridade PA	3.59%
8.	Samsung Electron	2.14%
9.	Samsun-GDR REG S	1.26%
10.	Haier Smart H-H	3.12%

Impact data and methods

The portfolio is made up of companies that have passed the fund's rigorous MSF framework. This scoring informs the decision-making process, adding consistency and discipline to a highly subjective area. Depending on the sector, there are over 20 separate indicators with each scored on a scale from 1 to 5 (5 = best) and an overall minimum score for the aggregated assessment is required. .

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – Kia (South Korea)

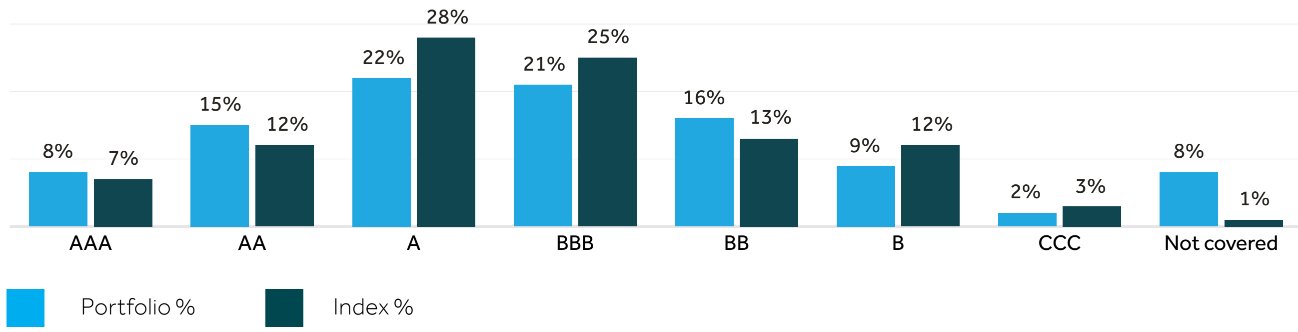
UPL is a global crop protection and seed company with product sales to the agricultural industry. They produce various Kia manufactures, sells, and exports passenger cars, mini-buses, trucks and commercial vehicles. While Vontobel don't make investment decisions based on ESG criteria alone, they invested in Kia Corporation during Q2 2022 with the company showing positive momentum on some key ESG criteria.

The company has an ambitious target to evolve its product mix from being mostly internal combustion engine or ICE (combustion engines represent approx. 90% of current units sold) into a more balanced 60/40 mix of ICE/EV (electric vehicles) within the next 4 years.

Kia achieves a mid-single digit margin in EVs while other players just break even or make losses. This is due to the common platforms Kia has in the EV segment with its partner, Hyundai. Given Vontobel's process is focused on return on invested capital, this ability to produce EV's profitably is key to Vontobel's investment rationale.

Impact stats

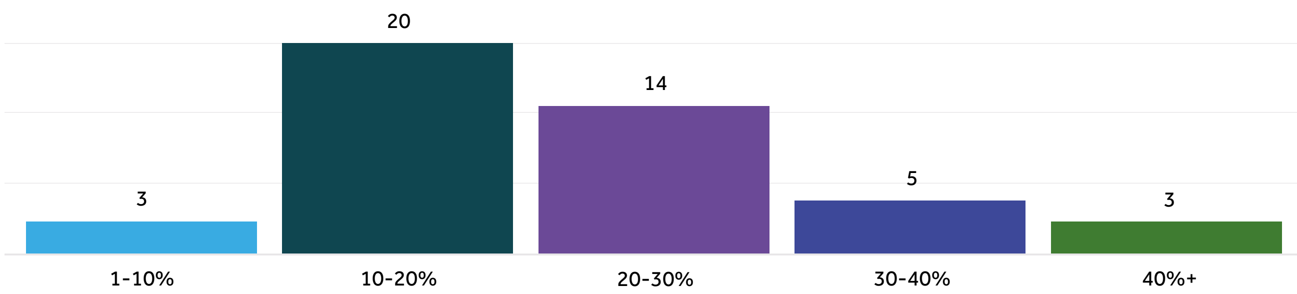
MSCI ESG rating distribution versus MSCI Emerging Markets Index



Source: Vontobel Asset Management, 31 December 2022

Governance Insights

Proportion of female board members by number of portfolio companies



Source: Vontobel Asset Management, 31 December 2022.
Data available for 45/52 companies held in the Vontobel mtx Sustainable Emerging Markets Fund as of this date.

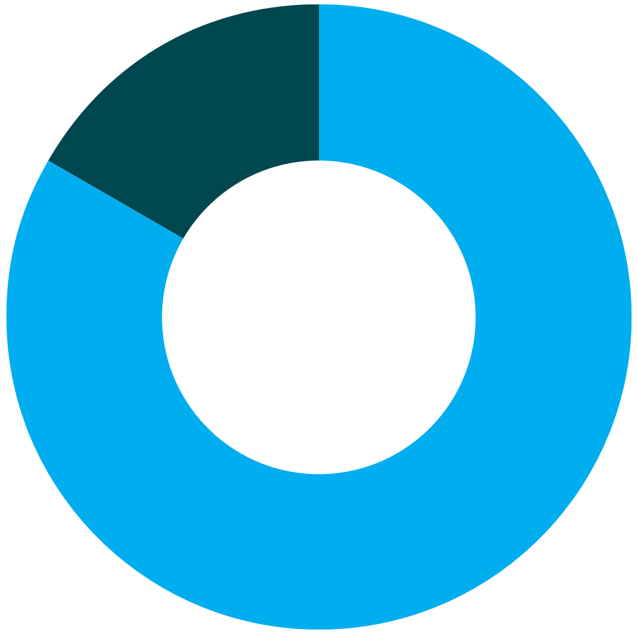
Voting and engagement insights

Top voting and engagement themes:

- Company leadership
- Disclosure practices
- Corporate governance, particularly with Chinese holdings.

Vontobel Sustainable Emerging Markets Fund
Engagement 2022: Voting Decisions

Votes with management	731
Votes against management	146



Source: Vontobel Asset Management, 1 January 2022 – 31 December 2022

Source: Robeco, 1 January 2022 – 31 December 2022

Change in the Spotlight: Case Study – Alibaba (China)

Vontobel expressed concerns to Alibaba over PWC having been the company auditor since 1999. Alibaba management have explained this by pointing out that Alibaba is a complicated company with different business lines, and so therefore argue it is better to have an auditor who knows them well. Instead, they rotate the audit partner rather than audit firm and they are now in their third cycle of audit engagement partners (in line with some US practices).

Despite Alibaba's arguments, Vontobel have remained committed with their vote against Alibaba management on this matter at the AGM and will continue to engage with the company on the issue.

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

Financials	29.11%
IT	22.92%
Consumer Discretionary	15.53%
Communication Services	9.60%
Materials	6.25%
Energy	2.24%
Other	14.35%

Geographic diversification

China	45.48%
Taiwan	17.49%
India	9.04%
Brazil	6.32%
South Korea	6.17%
Others	15.50%

These diversification graphs exclude cash.
Source: Vontobel Asset Management, 31 December 2022

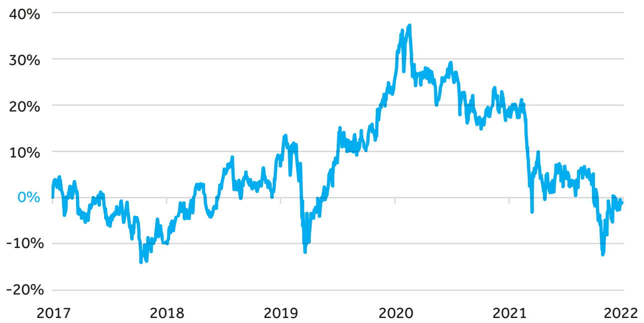
Fund Performance (as of 31 December 2022)

The Sustainable Emerging Markets Leaders (SEML) fund returned -25.2% for the year, representing an underperformance of -5% for the year. With the fund running a slight overweight position to Russia prior to the invasion of Ukraine in late February, almost 40% of the fund's underperformance for the year can be explained by the fund's Russian exposure i.e. -1.9%. From a sector perspective, the fund's stock selection in Information Technology, along with their overweight position in a sector that ended the year as the worst performer (-33.4%), combined to cost the fund -3.6% in relative performance. The US depositary receipt for Taiwan Semiconductor Manufacturing Company (TSMC), which fell -37% over the year, was the largest detractor to performance. Semiconductor stocks had a torrid year given the impending slowdown in the global economy and the market looking through to 2023 in anticipation of significant falls in earnings as customers pause their orders. Vontobel argue, however, that there are several reasons to believe this cycle could bottom in 2023, with markets traditionally discounting troughs months in advance.

The fund's strongest positive contribution came from the fund's financials which had a stellar year returning +12.1% compared to the benchmark return of -8.1%.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – TSMC (Taiwan)

TSMC is a global leader in the semiconductor manufacturing space and is uniquely positioned as the largest dedicated contract semiconductor manufacturer in the world. The company's management of ESG issues is strong and adds to the overall attractiveness of the investment case. Given the nature of the company's activities, it is vital that environmental factors are carefully managed. Vontobel view TSMC as a leader in the management of environmental issues, with the company showing a strong focus on climate change and commitment to net zero emissions by 2050. In addition, the company also has clear policies covering all related environmental risks including water usage and pollutants. Another key social risk for TSMC lies within its supply chain management and the company has therefore responded by strategically focusing on the issue. With this approach, TSMC is being proactive and going beyond its legal and compliance requirements.

Impact: Responsible consumption and production

Enhance semiconductor production process through greater consideration of ESG risks

Reducing negative environmental and social impacts

More responsible semiconductor production

Fund's key impact facts

The Weighted Average Carbon Intensity for the Vontobel Sustainable Emerging Markets fund's portfolio holdings was significantly below its benchmark (MSCI Emerging Market Index).

- Scope 1+2 emissions were 55% below the benchmark's figure
- Scope 3 upstream emissions were 10.8% below the benchmark figure
- Scope 3 downstream emissions were 70.6% below the benchmark figure.

Source: Vontobel Asset Management

Association memberships and participation in external ESG, sustainability and impact Initiatives

- The Austrian Ecolabel
- CDP (formerly the Carbon Disclosure Project)
- Energy Agency (EnAW)
- Global Impact Investor Network (GIIN)
- Italian Sustainable Investment Forum (ItaSIF)
- International Committee of the Red Cross (ICRC) Corporate Support Group
- Japan Stewardship Code
- Obu (Swiss Association for Sustainable Business)
- Spanish Sustainable Investment Forum (SpainSIF)
- Swiss Climate Foundation
- UK Stewardship Code
- UN Global Compact
- UN Principles of Responsible Investment (PRI)

AXA World Funds Global Green Bonds Fund

Investment objective

The Fund invests mainly in green bonds, which can offer the same returns as a comparable conventional bond plus the added benefit of enabling projects with environmental benefits in a transparent manner. The green bond market offers a tangible and transparent route to investing in the low-carbon economy.

AXA Investment Managers believes that investing in sustainable assets can create long-term value and attractive returns, both financially and environmentally. At the end of November 2022, the Fund's green bond allocation stood at 95%.

The Fund benefits from a deep green bond selection process and responsible investment and credit analysis.

Integration of impact into the investment process

AXA Investment Managers considers ESG criteria in its portfolio construction process, investing only in green bonds belonging to the eligible universe provided by the Responsible Investing Team and applying a proprietary analysis framework made of four ESG pillars: issuer quality, project types, management of proceeds and environmental impact.

Portfolio managers must balance these fundamentals with relative value to identify issuers and securities which represent the best credit risk and the most attractive relative value for the portfolio.

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Fund overview

Fund details as of 31 December 2022

Fund's AUM: EUR 1.47bn

Fund's inception date: November 2015

Number of holdings: 285

Weight in MASF: 9.04%*

Asset Class: Developed Government Bonds

Fund geographical target: Global

Impact Style: Catalytic

Top 10 holdings

1.	DBR 0 08/15/50	2.356%
2.	FRTR 1 3/4 06/25/39	2.017%
3.	DBR 0 08/15/31	1.984%
4.	EIB 3.3 02/03/28	0.830%
5.	FRTR 0.1 07/25/38	0.826%
6.	FERROV 0 3/8 03/25/28	0.819%
7.	EDPPL 1.7 07/20/2080	0.734%
8.	KFW 0 7/8 09/15/26	0.678%
9.	BTPS 1 1/2 04/30/45	0.656%
10.	EU 2 3/4 02/04/33	0.656%

Impact data and methods

AXA Investment Manager's ESG Green Bonds analysts within their RI team use a proprietary framework with a tilt towards impact and materiality to identify eligible green bonds. AXA's portfolio managers then benefit from access to a wide range of ESG Scores and KPIs in their front office tools as well as the internal and external research provided by the RI team. With additional support from their fundamental credit analyst team providing qualitative insight on ESG quality of the issuer, its momentum and how it compares with peers, they assess the materiality of ESG risks to financial stability of the issuer.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – EDP (Portugal)

The fund is positive on Energias de Portugal, S.A. (EDP) green bond programme. It represents a way to achieve the issuer's ambitious environmental objectives, which have been approved by the Science Based Target initiatives. Besides that, the green bond framework is in line with market best practices.

EDP is making great efforts to decarbonize its business model. The issuer has established both short- and long-term sustainability targets (2020 and 2030). Among others it includes:

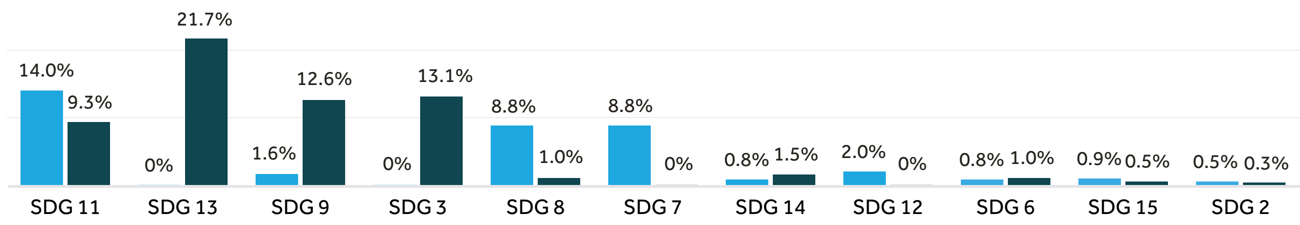
- Achieving carbon neutrality and 100% RE generation by 2030
- Being coal free by 2025

Impact stats

Portfolio allocation by AXA environmental impact themes

- Smart Energy Solutions 46.7%
- Low Carbon Transport 21.9%
- Green Buildings 19.9%
- Sustainable Ecosystem 11.5%

Alignment to the Sustainable Development Goals



Direct Contribution Indirect Contribution

This graph excludes cash.
Source: AXA Investment Managers, 31 December 2022

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

	Corporate Bonds	67.1%
	Quasi & Foreign Government Bonds	20.5%
	Sovereign	12%
	Other	0.4%

Geographic diversification

	Europe (ink UK)	68.1%
	North America	11.4%
	APAC	8.9%
	Supranational	7.1%
	Latin America	4.4%

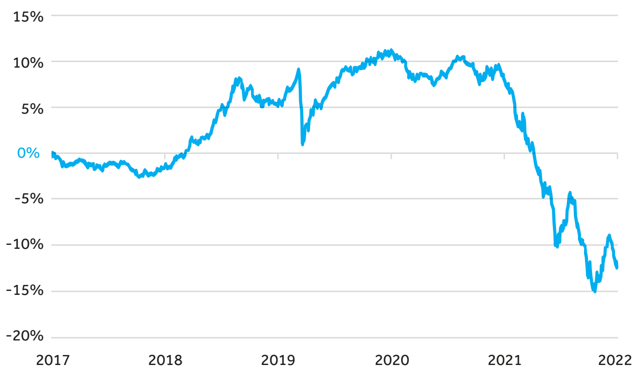
These diversification graphs exclude cash.
Source: AXA Investment Managers, 31 December 2022

Fund Performance (as of 31 December 2022)

Over 2022, the fund recorded -18.80% active performance in the context of volatile market conditions. The annualized gross performance since launch is -1.01%. Regarding the environmental impact, the fund allowed reduction of 89% of carbon emission compared to conventional issuance, removing 148 cars from the road per 1Mln invested. As of 31 December 2022, four highlighted environmental themes are “Smart Energy Solutions” (46,7% of the fund), Low Carbon Transport (21,9%), Green Buildings (19,9%) and Sustainable Ecosystem (11,1%). The fund has a significant environmental and social impact with a positive contribution to SDG11 and SDG13, SDG3 and SDG8.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – European Investment Bank (Europe)

The fund is positive on the European Investment Banks (EIB) Climate Awareness Bonds (CAB) program. EIB is a sound issuer, pioneer and structuring actor of the green bond market, proposing best practices and relevant standards. Proceeds dedicated to renewable energy and energy efficiency are clearly identified, separated in a dedicated account and exemplary tracked. Impact reporting is clear, in continuous improvement and provide projects impacts data at an aggregated basis.

Renewable energy projects include wind, hydropower, wave, tidal, solar and geothermal production. Energy efficiency projects such as district heating, cogeneration, building insulation, energy loss reduction in transmission and distribution.

The proceeds are clearly identified, separated in a dedicated account and exemplary tracked with daily monitoring of disbursements and allocations.

Impact reporting is clear, in continuous improvement and project impact data is provided on an aggregated basis.

Impact: More affordable and clean energy

Provide financing for clean energy

Increase capacity of renewable energy production

Reduce dependency on forms of non-renewable energy

Fund’s key impact facts

This year has been phenomenal for green bonds: the market doubled in size and hit $2tn milestone. The fund has also grown to more than €1.47bn during 2022 with around €140m Net New Money. This shows the strong interest for this asset class and rising awareness of investor regarding climate and environmental issues, reflecting the rise of the Green Bonds Market.

At AXA IM, the climate issues are at the centre of AXA RI philosophy, and they developed a set of principles which guide their decision-making and frame the selection of tools and key performance indicators to achieve portfolio alignment. AXA WF ACT Green Bonds invests only in “Green Leaders” and helps investors to achieve measurable impacts in these key issues.

Source: AXA Investment Managers

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Access to Medicine Index
- Access to Nutrition Initiative
- Asset Management and Investors Council (AMIC) – Sustainable Finance Working Group
- Association Française de Gestion (AFG) - Responsible Investment and Corporate Governance Committees
- CDP (formerly the Carbon Disclosure Project)
- Ceres
- Climate Action 100+
- Climate Bond Initiative (CBI)
- Dutch Association of Investors for Sustainable Development (VBDO)
- Eumedion
- European Association for Investors in Non-Listed Real Estate Vehicles (INREV)
- European Commission Business @ Biodiversity (EC B@B)
- European Fund and Asset Management Association (EFAMA) Stewardship and ESG Standing Committee
- European Public Real Estate Association (EPRA) Sustainability Council
- European Sustainable Investment Forum (EuroSIF)
- Finance for Biodiversity Pledge Foundation
- French Sustainable Investment Forum (FIR)
- Global Impact Investor Network (GIIN)
- Green Building Council Italie
- Italian Sustainable Investment Forum (ItaSIF)
- Impact Management Project
- Institutional Investors Group on Climate Change (IIGCC)
- International Capital Markets Association (ICMA) Sustainable Finance Committee
- ICMA Green Bond Principles
- ICMA Social Bond Principles
- International Corporate Governance Network (ICGN)
- Investors for A Just Transition
- The Investment Association Sustainable and Responsible Investment Committee
- Net Zero Asset Managers Initiative
- Observatoire de l’Immobilier Durable (OID)
- One Planet Initiative
- Operating Principles for Impact Management
- Responsible Investment Association Australasia
- Sustainable Accounting Standards Board (SASB)
- Sustainable Trading Network
- The Council of Ethics of the Swedish National Pension Fund: Collaborative Initiative Tech Giants and Human Rights Investor Expectations
- Task Force on Scaling Voluntary Carbon Markets
- Thirty Percent French Club Investor Group
- Thirty Percent UK Club Investor Group
- UK Stewardship Code
- UN Principles of Responsible Investment (PRI)
- World Economic Forum (WEF) Net Zero Carbon Cities

Columbia Threadneedle CT UK Social Bond Fund

Investment objective

The Fund's objective is to support socially beneficial activities, while providing investors with a financial return.

The Fund invests primarily in UK bonds issued by companies, government agencies, voluntary organisations and/or charities that engage in eight socially beneficial defined categories.

Big Issue Invest, one of the UK's best-known charities, serves as a social advisor to the Fund and worked with Columbia Threadneedle to define these categories and to develop a social assessment methodology.

All investments are reviewed against this assessment during the investment process and post investment at least quarterly by a social investment advisory committee.

Integration of impact into the investment process

Together, Big Issue Invest and Columbia Threadneedle developed a unique Social Assessment methodology for the Fund.

In line with the methodology, the fund managers positively screen all bonds with a focus on the degree to which they deliver positive social outcomes across eight categories. These include Housing and Property, Transport and Communication Infrastructure, Utilities and the Environment, Financial Inclusion, Health and Social Care, Education Learning and Skills, Community Services and Employment and Training.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 382m

Fund's inception date: December 2013

Number of holdings: 202

Weight in MASF: 3.94%*

Asset Class: Developed Market Equities

Fund geographical target: UK

Impact Style: Catalytic

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Top 10 holdings

1.	United Kingdom of Great Britain AN 0.875 31-Jul-2033 Reg-S	4.77%
2.	Natwest Group Plc 0.78 26-Feb-2030 Reg-S (Senior Non-Preferred)	2.73%
3.	LCR Finance Plc GovtGuar 4.5 07-Dec-2028 Reg-S	2.61%
4.	PRS Finance Plc GovtGuar 1.75 24-Nov-2026 Reg-S (Secured)	2.16%
5.	Yorkshire Building Society 1.5 15-Sep-2029 Reg-S (Senior Non-Preferred)	1.88%
6.	Motability Operations Group Plc 3.75 16-Jul-2026 Reg-S (Senior)	1.80%
7.	Barclays Plc 1.7 03-Nov-2026 Reg-S (Senior Non-Preferred)	1.77%
8.	Thames Water Utilities Finance Plc 1.875 24-Jan-2024 Reg-S (1st Lien)	1.74%
9.	Anglian Water Services Fin Plc 1.625 10-Aug-2025 Reg-S (1st Lien)	1.72%
10.	Dwr Cymru Financing UK Plc 1.625 31-Mar-2026 Reg-S (Sub)	1.69%

Impact data and methods

The Big Issue Group, working with Columbia Threadneedle's RI analysts, has developed a social assessment methodology by which Columbia Threadneedle positively screen all bonds with a focus on the degree to which they deliver positive social outcomes across eight focus social outcome fields. Overall, the process generates a discrete social score which can be used to compare bonds addressing different social needs and monitor the degree of the portfolio's social intensity over time. All fixed income team members have access to MSCI ESG Research issuer and sovereign ratings, ISS-ESG sustainability research, and Columbia Theadneedle's own proprietary ratings, and consider these where applicable.

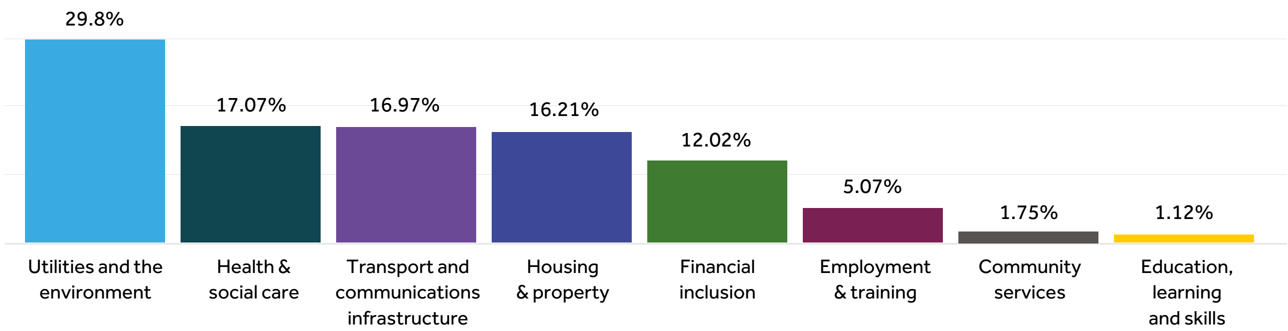
Integration insights

Case Study – Yorkshire Building Society (UK)

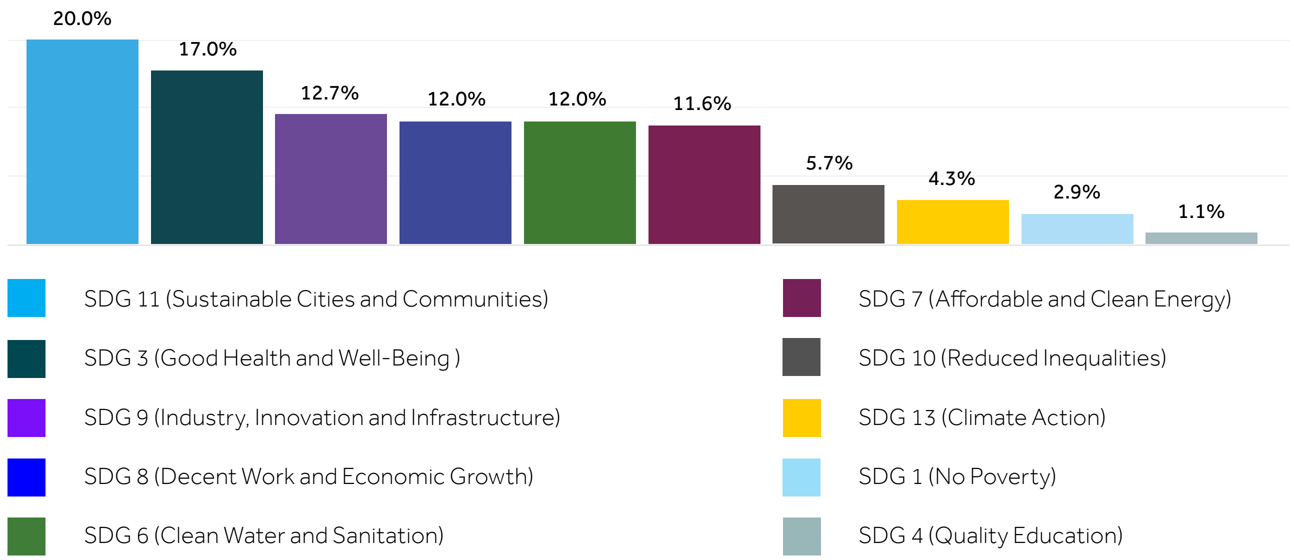
Yorkshire Building Society is the third largest Building Society in the UK that provides loans and mortgages with more than 3 million members and employing 3,000 full and part time employees. The company's core purpose is to provide Real Help with Real Life, prioritising lending to customers who are currently poorly served by the market, to help them overcome the financial barriers they face. £250 million social bond was used to fund mortgage lending to borrowers that at the time of the lending are part of an underserved population. The proceeds were also used to lend to registered providers of social housing, to help people with specific health needs, as well as those without the income to pay rent at full-market rates or buy a home of their own. The bond was rated C – Contribute to Solutions, to reflect its focus on financial inclusion for underserved borrowers.

Impact stats

Holdings breakdown by Columbia Threadneedle social assessment impact themes



Holdings Sustainable Development Goal (SDG) alignment

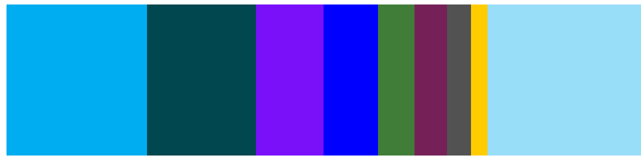


Source: Columbia Threadneedle Investments, 31 December 2022

Fund breakdown

(As of 31 December 2022)

Sector diversification



Utilities	22.14%
Banks	17.21%
Supranational	10.58%
Insurance	8.55%
Financial Services	5.82%
Sovereign	5.14%
Real Estate	3.73%
Consumer Services	2.58%
Other	24.25%

Geographic diversification

United Kingdom	80.83%
Europe (Ex-UK)	5.52%
Other	13.66%

These diversification graphs exclude cash.
Source: Columbia Threadneedle Investments, 31 December 2022

Fund Performance (as of 31 December 2022)

The year in review was a very poor period for most financial markets, and investment-grade (IG) corporate bonds were no exception. The fund returned -10.5% and outperformed if benchmark (ICE BofA GBP Non-Gilts 1-10yrs) by 55bps.

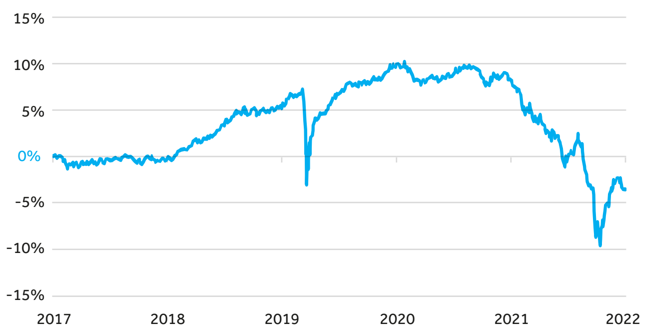
Outperformance was largely driven by credit selection, mainly due to not owning Russian names that were still in the benchmark at the beginning of the year. Other names of positive contribution include Wellcome Trust, Motability and Nationwide.

The fund invests in bonds that provide positive social income to those most deprived across the UK and aims to consistently improve the overall level of impact over time. Towards the later part of the year, the fund was invested with the second highest allocation to 'High' impact rated bonds since it launched in January 2014. Around 48% of the fund is invested in High impact rated bonds, 38% in Medium and around 15% in Low. Columbia Threadneedle's social partner, Big Issue, set the fund a target to be invested with a third in each category.

Past performance is not an indicator of future performance

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Impact insights

Case Study – Asian Development Bank (Asia)

The Asian Development Bank (ADB) is a regional development bank that supports public and private sector projects in developing member countries that create economic and development impact. Since launching its first theme bond in water in 2010, ADB has expanded its theme bond offerings to include education, health and gender. The bond is a £500 million 7-year gender theme social bond. It has been rated as High and C – Contribute to Solutions. Funds are ring-fenced for programmes, projects, investments and loans in gender equality and women's empowerment, with the aim to mainstream gender equality through specific targets, improve women's economic participation, health and social protections, increase women's climate resilience and support prevention of and response to gender-based violence.

Impact: Improve gender equality

Provide ring-fenced funding for Asian gender equality initiatives

Improve women's livelihoods, health, and wellbeing

Aid the gender equality movement in Asia

Fund's key impact facts

Columbia Threadneedle split their social impact fund via three key purposes, with fund allocations split into:

- Contributing to solutions: 52.8%
- Benefitting stakeholders: 26.38%
- Avoiding harms: 13.65%.

Additionally, 44.19% of the fund's assets are judged to have a high social intensity.

Source: Colombia Threadneedle Investments

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Climate Action 100+
- Global Impact Investor Network (GIIN)
- ICMA Green Bond Principles
- ICMA Social Bond Principles
- Nature Action 100
- Net Zero Asset Managers Initiative
- UK Government Advisory Group on Social Impact Investing
- UK Stewardship Code
- UN Global Compact
- UN Principles of Responsible Investment (PRI)

Mirova Euro Green & Sustainable Corporate Bond Fund

Investment objective

The Fund invests primarily in investment grade corporate issuers that meet Mirova's Responsible Investment requirements. Mirova believes that companies which integrate sustainable development into their strategies will be best positioned to navigate the impacts of the environmental, demographic, technological and governance transitions.

The fund manager selects investment opportunities by paying attention not only to the credit profile and valuation of each issue, but also to whether issues are 'black swans' (e.g. an inappropriate business model, litigation risks) or supporting the aforementioned transitions. Over half of the Fund is invested in green bonds.

Integration of impact into the investment process

The search for a balance between positive environmental, social and financial impact is a key driver at Mirova, and this is reflected in its investments at different stages of the investment process. All issuers in the investment universe undergo ESG (environmental, social and governance) analysis. Moreover, to avoid any risk of "weak issuance", Mirova's Sustainability Research team performs a green bond issue ESG analysis according to its own definition of green bonds.

Additionally, Mirova prioritises sustainability bonds as they represent a strong tool for an ESG approach. The portfolio managers will engage and possibly sell instruments for poor ESG factors.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: EUR 386m

Fund's inception date: July 2011

Number of holdings: 193

Weight in MASF: 2.95%*

Asset Class: Developed Market Equities

Fund geographical target: Global

Impact style: Sustainable

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Top 10 holdings

1.	Banco Bilbao VIZ 4.375% 14-10-29	2.09%
2.	Sparebank 1 SR TR 15-07-27	1.58%
3.	Verizon Comm Inc 0.750% 22-03-32	1.55%
4.	Hypo Noe Gruppe 1.375% 14-04-25	1.48%
5.	Mirova EU.H.Y.Green and SUST.BD.Z-NPF€	1.35%
6.	Mizuho Financial 3.490% 05-09-27	1.27%
7.	Digital Euro Fin 2.500% 16-01-26	1.23%
8.	Southern Power 1.850% 20-06-26	1.22%
9.	Procter & Gamble 0.350% 05-05-30	1.16%
10.	Banq Fed Crd Mut 1.000% 23-05-25	1.10%

Impact data and methods

Mirova use a sustainability assessment mostly based on a qualitative approach, providing an opinion on how each asset in their portfolio is meeting the Sustainable Development Goals. The firms Responsible Investment policy is regularly updated taking into account any advancement in research or new material issues.

Mirova's proprietary internal research methodology is used to rate issues on a proprietary sustainability scale that further defines the investment universe of the strategy and rank the positions within the portfolio. In an increasingly complex and demanding environment, they have recently enhanced this methodology with 3 main objectives:

- fine-tune the tracking and measurement of the impact of Mirova's investments
- reinforce controversy risk management
- ensure Mirova are compliant with the European definition of sustainable investment

As a natural evolution over the years since inception, stemming from demand by investors and regulatory agencies, Mirova's Sustainable Research Team is confident that the enhancements made will assist with identifying new opportunities to address market drivers and mitigate risks, while generating a greater impact. The fundamental principles are, and will remain, unchanged.

Integration insights

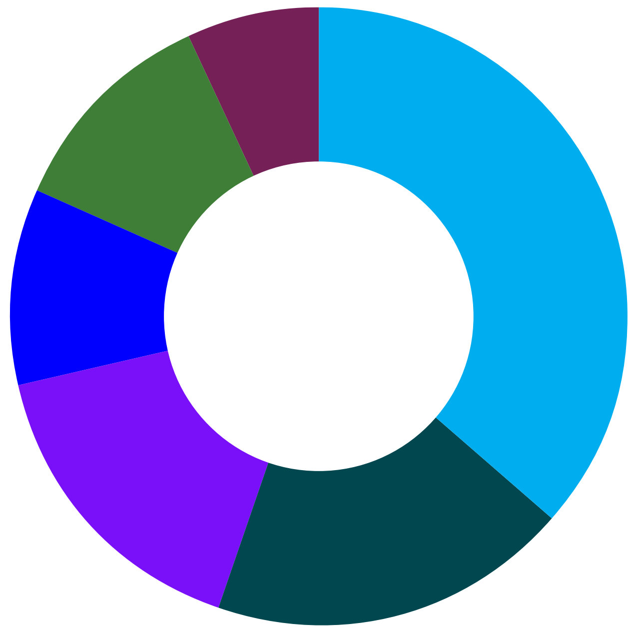
Case Study – RCI Banque (France)

RCI Banque is a 100% subsidiary of Renault; it finances sales and services for the Renault group and Nissan brands in Europe. It issued a green bond in 2022 in order to finance loans and lease contracts for vehicles with zero tailpipe emissions, as well as loans and lease contracts for a selected pool of electric vehicle (EV) charging infrastructure (EV charging stations for individuals and for EV fleets). This bond was in line with Renault's sustainability ambitions, 90% of its European sales to be BEV by 2030, and RCI's. Mirova considered investing in such a bond was fully in line with their policy to contribute to the expansion of the fleet of zero emission vehicles that are affordable for most classes.

Impact stats

Holdings allocation by Mirova Impact Pillers

- Climate Stability (SDG9, SDG13) 36.5%
- Healthy Eco-Systems (SDG14, SDG15) 18.9%
- Resource Security (SDG12) 16.2%
- Basic Needs (SDG1, SDG2, SDG3, SDG6, SDG7, SDG10) 10.1%
- Well being (SDG3, SDG4, SDG5, SDG10, SDG11, SDG16) 11.5%
- Decent Work (SDG8, SDG9, SDG10) 6.8%

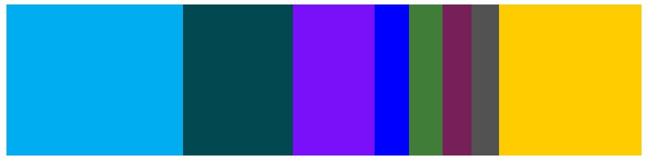


Source: Mirova, 31 December 2022

Fund breakdown

(As of 31 December 2022)

Sector diversification



Banking	27.8%
Utilities	17.3%
Consumer (cyclical and non-cyclical)	12.8%
Telecommunications	5.5%
Insurance	5.2%
Basic Industry	4.6%
Supranational	4.3%
Others	22.5%

Geographic diversification

Europe (inc UK)	78.2%
North America	12.3%
Other	4.8%

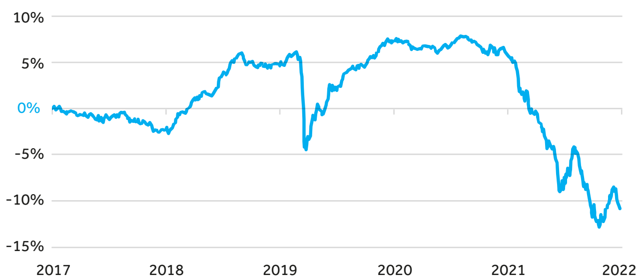
These diversification graphs exclude cash.
Source: Mirova, 31 December 2022

Fund Performance (as of 31 December 2022)

After three years of gross outperformance versus its index, Mirova Global Green and Sustainable Corporate Bond Fund had a hard year in 2022, largely due to a more offensive profile than the average index in what remains a historical turmoil: after the initial widening in the third quarter, credit was back to attractive levels, except for some German issuers which were relying heavily on cheap energy costs to run their businesses. This was way too early as mounting rates combined with fears of a recession in most Western countries led to a sharp widening in spreads up until mid-October. The fund has also increased its exposure to green, social and sustainable bonds over the year, from less than 44% to more than 54% over the period. The fund is now classified as an Article 9 fund under the EU's SFDR.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – ERG (Europe)

Historically focused on downstream oil, ERG has undergone a major business model transformation towards a company focused on clean energy: ERG's facilities comprised roughly 3,425 MW of installed capacity, split between wind (2,198 MW), solar (220 MW) and hydro power (527 MW) plus one Combined Cycle Gas Turbine (CCGT) of 480 MW in Sicily. The group sold two hydroelectric plants to Enel in January 2022, and one month later, reached a separate agreement for the sale of its CCGT. Following the transactions, ERG will be a pure player of wind (90.1%) and solar (9.1%) energy. The company reported in 2021 a carbon intensity for its electricity production of 121 gCO$_2$/kWh, or circa 137 gCO$_2$/kWh on a lifecycle basis, based on Mirova's own calculations. Following the disposal of its assets, the carbon intensity will fall to 0 gCO$_2$/kWh in terms of direct emissions and towards 16 gCO$_2$/kWh on a lifecycle basis, as estimated by Mirova. ERG's investments in 2021 were already largely geared towards wind (83%) and solar (12%), and the combined share will increase towards approximately 100%.

ERG has already well-advanced on its path towards a 100%-renewable production mix, and has continued to focus on reaching that goal as soon as possible, supporting the transition to a circular and low carbon economy.

Impact: Affordable and clean energy

Increase European clean energy generation capacity

Reduce use of non-renewable energy in Europe

Support transition to low carbon economy

Fund's key impact facts

Across the Funds' portfolio of 166 holdings:

- 55.7% of the Fund is invested in Green and Social Bonds
- 79.7% of the Fund is invested in issuers rated Committed or Positive
- It is aligned with a +1.5°C climate change scenario.

Source: Mirova

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Act4nature International
- AFG (French Association of Financial Management)
- Alliance for the Preservation of Tropical Forests
- B Corp Movement (Certified 'B Corporation')
- CDP (formerly the Carbon Disclosure Project)
- Ceres
- Climate Bond Initiative (CBI)
- Coalition for Private Investment in Conservation
- European Venture Philanthropy Association
- European Public Real Estate Association (EPRA)
- European Sustainable Investment Forum (EuroSIF)
- FAIR (ex Finansol)
- Finance for Biodiversity Pledge Foundation
- Paris Europlace - France for Tomorrow
- Global Impact Investor Network (GIIN)
- Hong Kong Green Finance Association (HKGFA)
- Italian Sustainable Investment Forum (ItaSIF)
- International Association for Emissions Trading (IETA)
- ICMA Green Bond Principles
- ICMA Social Bond Principles
- International Carbon Reduction and Offset Alliance (ICROA)
- International Platform for Insetting
- Nature Action 100
- Net Zero Asset Managers Initiative
- Solidarité Renouvelable (Solidarity Renewable Group)
- Spainish Sustainable Investment Forum (SpainSIF)
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- UK Stewardship Code
- UN Principles of Responsible Investment (PRI)
- UN Treaty on Plastics (Financials)

Muzinich Sustainable Credit Fund

Investment objective

The Fund seeks to protect capital and generate attractive returns by investing in European and North American corporate bonds which meet high environmental, social and governance (ESG) standards and aims to capture higher yields from investment grade and select high yield bonds, without a commensurate increase in risk, through intensive company-specific research and meaningful portfolio diversification and risk limits. The ESG component has evolved, with a more recent focus on reducing climate risk exposure and increasing transparency on the ESG profile of the Fund.

Integration of impact into the investment process

The portfolio managers incorporate ESG assessment into their credit selection process to gain an understanding of the risk and return opportunities of corporate debt investments. Muzinich's investment team first evaluates the financial attractiveness of potential investments, then filters for opportunities that meet its demanding ESG requirements. Controversial investments, including those in harmful sectors like tobacco, thermal coal, controversial and nuclear weapons etc are screened out. Finally, using Sustainalytics ESG scores, Muzinich hones in on investments with above-sector-median ESG scores.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: USD 164m

Fund's inception date: February 2011

Number of holdings: 191

Weight in MASF: 2.83%*

Asset Class: Developed Market Equities

Fund geographical target: Europe and US

Impact Style: ESG Integrated

Top 10 holdings

1.	Banco Bilbao VIZ 4.375% 14-10-29	2.09%
2.	Sparebank 1 SR TR 15-07-27	1.58%
3.	Verizon Comm Inc 0.750% 22-03-32	1.55%
4.	Hypo Noe Gruppe 1.375% 14-04-25	1.48%
5.	Mirova EU.H.Y.Green and Sust.BD.Z-NPF€	1.35%
6.	Mizuho Financial 3.490% 05-09-27	1.27%
7.	Digital Euro Fin 2.500% 16-01-26	1.23%
8.	Southern Power 1.850% 20-06-26	1.22%
9.	Procter & Gamble 0.350% 05-05-30	1.16%
10.	Banq Fed Crd Mut 1.000% 23-05-25	1.10%

Impact data and methods

Muzinich's internal ESG research is supplemented by information from ESG data specialists Sustainalytics and ISS ESG. This includes (i) alignment with international norms/ standards such as the UN Global Compact principles; (ii) issuer involvement in excluded sectors such as tobacco; (iii) issuer ESG management scores/ rankings; and (iv) carbon intensity of both individual issuers and the portfolio as a whole.

This data is integrated into the research process to target issuers which lead their industry in terms of ESG risk management, and to ensure the portfolio has a weighted average carbon intensity (WACI) at least 10% lower than its benchmark.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – Ardagh (Luxembourg)

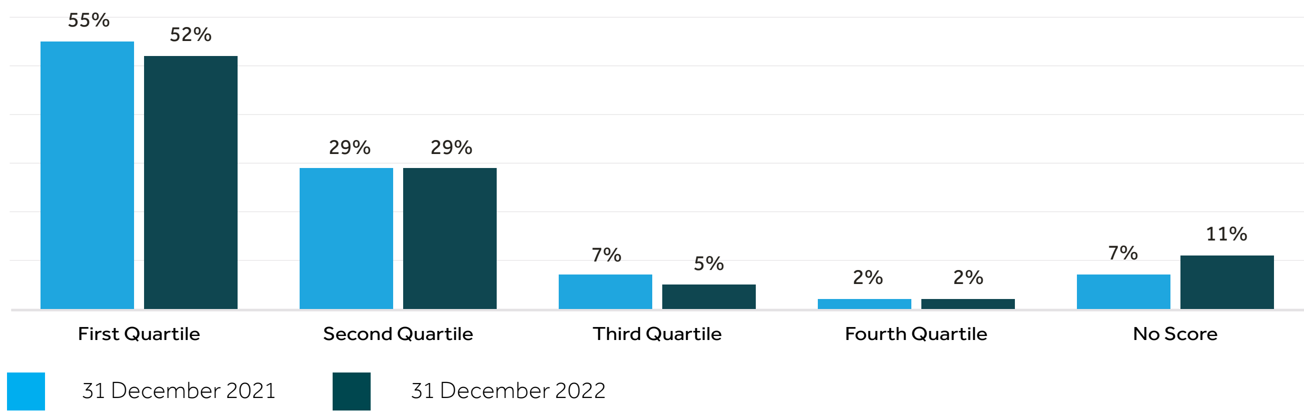
Ardagh operates 57 metal and glass packaging production facilities in 12 countries and employs over 16,000 people. Packaging has two key environmental impacts, 1) manufacture can be energy intensive and produces carbon emissions and 2) physical waste, which is more a function of the recycling infrastructure in place in the region where the packaging is being used. Ardagh is proactively trying to increase recycling rates by using as much recycled glass as possible, particularly in the US where only ~35% of glass is recycled compared to 75% in Europe.

The company has also recently committed to sustainability initiatives such as: (i) greater usage of renewable energy for production, including the installation of solar and wind projects in multiple production facilities (ii) promoting the use of recycled content (iii) pursuing energy-efficiency projects across our plant network (iv) sourcing sustainable inputs from Muzinich's supplier base and (v) minimizing VOC and NOx emissions.

Ardagh Metal Packaging also has now issued green bonds and is required to get an independent ESG audit once per year. While the company currently meets their ESG and financial requirements for investment, they expect to engage further on initiatives relating to promoting better packaging recycling rates.

Impact stats

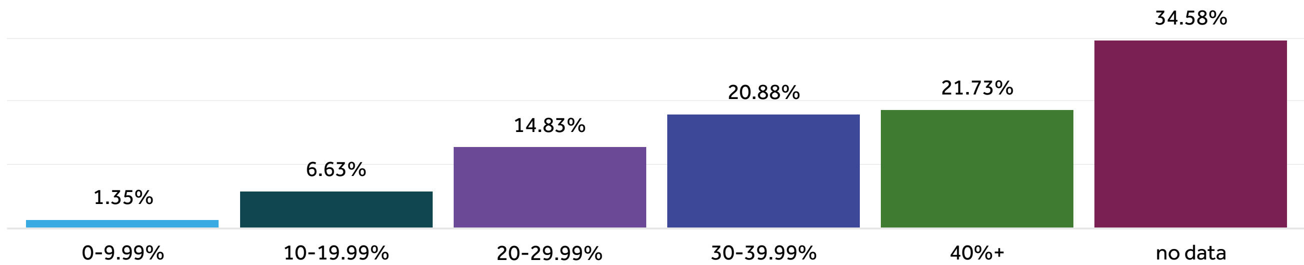
Holdings breakdown by ESG Risk Percentile*



*ESG Risk Percentile as determined by Sustainalytics Risk Ratings. Source: Muzinich, 31 December 2022.

Governance Insights

Proportion of female board members by number of portfolio weight



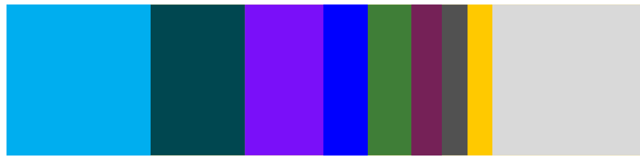
Source: Muzinich, 31 December 2022

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification



	Banking	22.64%
	Diversified Financial Services	14.85%
	Homebuilders / Real estate	12.37%
	Telecommunications	6.99%
	Utilities	6.85%
	Automotive & Airparts	4.77%
	Technology	4.08%
	Retail	3.89%
	Others	23.55%

Geographic diversification

	EMEA	56.58%
	North America	30.34%
	APAC	12.09%
	Latin America	0.98%

These diversification graphs exclude cash.
Source: Mirova, 31 December 2022

Fund Performance (as of 31 December 2022)

The Fund produced a negative return, although it outperformed its indicative reference index, the Bloomberg Barclays Global Aggregate Corporate Index. The Fund's more conservative positioning and use of credit and interest rates hedges during periods of heightened volatility helped preserve capital during what has been a difficult year for credit markets.

While the Russia/Ukraine conflict was an ongoing theme, it had a notable impact on portfolio holdings during the first quarter. Muzinich saw large intraday swings in March that made trading difficult. Given the increasing concerns around the situation in Russia and the likelihood of sanctions on Russian names, Muzinich exited their Russian holdings in early March.

In April, the Fund began moving out of EUR and GBP denominated bonds into USD denominated holdings which Muzinich believed were better protected from further rate rises, had lower exposure to the knock-on effects of the Russia/Ukraine conflict, yet, on a currency hedged basis, had the same yield. This strategy culminated in June, resulting in a 10% increase in USD bonds.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years

Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – Vena Energy (Singapore)

Vena Energy, headquartered in Singapore, is a leading renewable energy utility in the Asia-Pacific region, with a portfolio of >20 Gigawatts of solar, onshore and offshore wind, hybrid energy and battery storage projects. The company reports that in H1 2022 the energy it produced reduced carbon emissions by as much as 1.4 million tonnes and saved more than 1.4 billion litres of water.

In 2020 Muzinich contacted their ESG data provider to engage Vena and ensure the company could provide adequate ESG disclosures. As a result, this contributed to now Vena sitting in the third percentile of the Renewable Power Production sector in terms of its management of ESG risks. While Vena's renewable energy assets are key to helping the Asia-Pacific region meet its carbon reduction goals, Vena also shows strong commitments to supporting local communities through employment, education, healthcare and humanitarian initiatives.

Vena Energy is currently one of Muzinich's top 10 largest exposures by issuer credit strategy.

Impact: Environmental footprint and energy efficiency

Produce energy in Asia-Pacific region via renewable sources

Contribute to reducing regional use of non-renewable energy sources

Reduce carbon emissions, helping Asia-pacific region meet carbon reduction targets

Fund's key impact facts

The fund's Weighted Average Carbon Intensity (WACI) was 177.72 tonnes of CO_2 per EUR 1m invested which was 32% lower (i.e. more carbon efficient) than an equivalent amount invested in the Fund's benchmark (the Bloomberg Barclays Global Aggregate Corporate Total Return Index Hedged).

Source: Muzinich

Association memberships and participation in external ESG, sustainability and impact Initiatives

- Climate Action 100+
- Investment Company Institute ESG Task Force
- LGPS Transparency Code
- Net Zero Asset Managers Initiative
- Task Force on Climate-Related Financial Disclosures (TCFD)
- Task Force on Scaling Voluntary Carbon Markets
- UK Women in Finance Charter
- UN Principles of Responsible Investment (PRI) .

Nuveen US Core Impact Bond Fund

Investment objective

The Fund seeks a favourable long-term total return through income and capital appreciation while giving special consideration to certain ESG and impact criteria. Benchmarked to the Bloomberg US Aggregate Bond Index, the Fund is an actively managed, core fixed income offering designed to provide broad fixed income exposure.

The Fund focuses primarily on undervalued, investment-grade securities and seeks to add value through duration/yield-curve positioning, sector allocation and security selection. This includes Nuveen's proprietary criteria for defining ESG leadership and internal framework for identifying compelling impact investment opportunities that have direct and measurable social and environmental outcomes.

Integration of impact into the investment process

Nuveen believe the integration of ESG and impact criteria in their investment process can help drive performance, mitigate risk and identify compelling opportunities. The fund invests in a) bonds whose proceeds have direct, positive social and environmental impact, and b) bonds issued by leaders within their respective sectors on ESG factors relative to their peers.

The Fund uses a proprietary impact framework to identify bonds with positive impact in four themes: affordable housing, community and economic development, renewable energy and climate change, and natural resources. Each theme includes a set of concrete impact objectives aligned with the UN Sustainable Development Goals.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: USD 108m

Fund's inception date: October 2015

Number of holdings: 245

Weight in MASF: 18.50%*

Asset Class: Investment grade bonds

Fund geographical target:
US (USD oriented, but invests across global issuers)

Impact Style: Catalytic

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Top 10 holdings

1.	U.S. Treasury Note 4.125%, 11/15/32	8.64%
2.	U.S. Treasury Bond 3.000%, 08/15/52	6.02%
3.	FNMA 4.500%, 09/01/52	4.09%
4.	FNMA 4.000%, 10/01/52	2.76%
5.	FNMA 4.500%, 07/01/52	2.57%
6.	Freddie Mac Pool 3.500%, 05/01/52	2.42%
7.	FNMA 5.000%, 10/01/52	1.85%
8.	FNMA 4.000%, 05/01/52	1.82%
9.	U.S. Treasury Note 3.875%, 12/31/27	1.79%
10.	U.S. Treasury Bond 4.000%, 11/15/42	1.76%

Impact data and methods

Nuveen sources impact data annually directly from publicly available issuer disclosures. Their goal is to narrow the scope of the impact data to those activities financed directly or indirectly by the Fund's investments.

Given the difficulty of attributing impact in proportion to the size of the Fund's share of each bond issuance, the data reflects total impact generated rather than the Fund's share alone. The metrics represent relevant available data.

Integration insights

Case Study – Unilever (UK)

The Nuveen US Core Impact Bond fund invests in Unilever, with the Nuveen team believing Unilever arguably represents the gold standard among consumer products companies. Unilever have been consistently focusing on the "triple bottom line" since 2009, well before ESG was a mainsteam focus. From a social and environmental perspective, a few highlights which have motivated Nuveen to hold Unilever bonds include:

- In 2020, Unilever set its goal to achieve net-zero emissions across their value chain by 2039
- Unilever is a leader in pursuit of deforestation-free supply chain for palm oil, paper and board, tea, soy, and cocoa. The CDP has recognised Unilever with inclusion on its "A List" for Forests every year from 2018-2022
- Currently, 53% of all Unilever packaging is recyclable, reusable, or compostable, per the EMF Global Commitment definition of 'recyclable'.

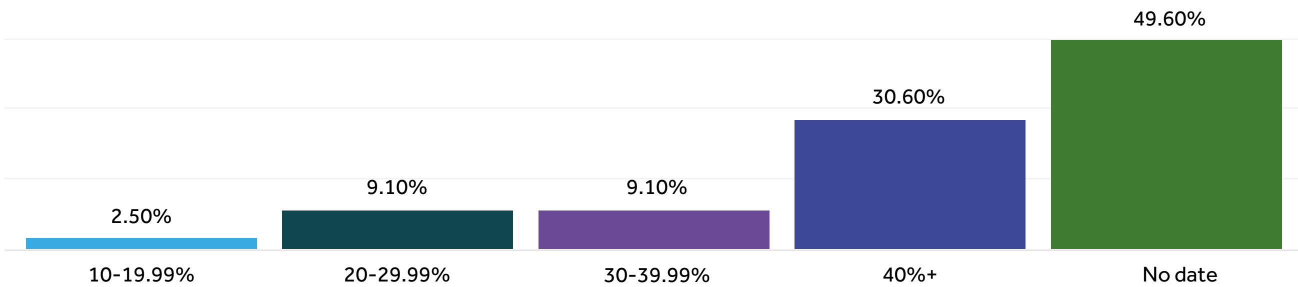
Impact stats

Holdings breakdown by impact investment

Affordable Housing	3.9%
Community and economic development	6.5%
Renewable energy &climate change	12.0%
Natural Resources	8.8%
ESG Leaders (chosen by Nuveen based on multiple dimensions, including: How issuer manager material ESG risk relative to peers, internal ESG ratings, relative value, and portfolio construction considerations).	68.8%

Governance Insights

Board gender diversity (2022)*



*Board gender diversity in this context is defined as the ratio of non-male board members to male board members.
Source: Nuveen, 31 December 2022.

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

■	Government	38.3%
■	Mortgage Securities	31.9%
■	Financial	12.4%
■	Utilities	4.7%
■	Other	12.7%

Geographic diversification

■	North America	82.15%
■	Europe (inc UK)	8.12%
■	Supranational	5.26%
■	Others	4.74%

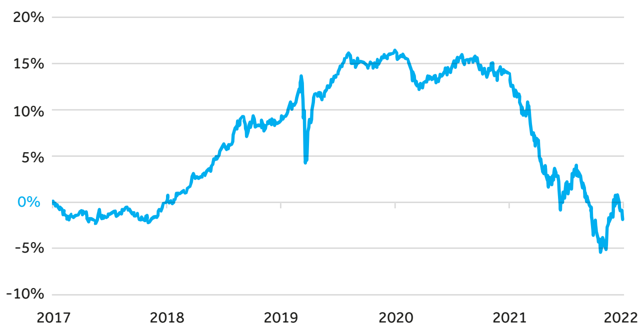
These diversification graphs exclude cash.
Source: Nuveen, 31 December 2022

Fund Performance (as of 31 December 2022)

The Bloomberg Barclays U.S. Aggregate Index returned The Nuveen U.S. Core Impact Bond Fund slightly underperformed on a net of fee basis the Bloomberg U.S. Aggregate Index, which returned -13.01% in 2022; results varied by share class. Sector allocation was the largest detractor from relative performance, driven mainly by an overweight corporate allocation. The portfolio's underweight MBS exposure was a positive contributor for much of the year, as the sector struggled with a lot of recent vintage low coupon bonds in the face of rapidly rising rates and duration extension. Security selection was a modest detractor, mostly due to year-end pricing discrepancies in Treasuries and MBS. The largest positive contributor was duration and yield curve. The Fund's slight underweight-to-neutral duration bias was helpful, as was the team's decision to underweight 2-year key rate duration (KRD) and overweight 10-year KRD. This positioning intended to lean into the most liquid instruments and part of the curve, and to take advantage of the anticipated curve inversion.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years



Source: Morningstar Direct, 31 December 2022

Past performance is not an indicator of future performance

Impact insights

Case Study – SK Hynix (South Korea)

In 2021, the Nuveen US Core Impact Fund invested in a green bond issued by SK Hynix, a South Korean-based semiconductor manufacturer. Proceeds were issued under SK Hynix's Green Bond Financing Framework and will be used to support the company's 2022 Environmental and Clean Operation (ECO) Vision. The vision seeks to significantly reduce the environmental impact of its business and manufacturing operations. Specifically, bond proceeds can be used to support activities in the following categories:

- **Sustainable water and wastewater, including water recycling**
- **Energy efficiency, including improved use of cooling towers and heat exchangers**
- **Pollution prevention and control; including nitrogen oxide reduction**
- **Biodiversity conservation, including wetland construction and maintenance**

Impact: reduction of environmental impact

Provide funding for SK Hynix's sustainability related activity

Enhance energy efficiency, reduce water waste and pollution, and enhance biodiversity conservation

Reduce environmental impact surrounding SK Hynix's operations

Association memberships and participation in external ESG, sustainability and impact initiatives

- Cambridge Institute for Sustainable Leadership
- Ceres
- Fannie Mae Green Rental Housing Task Force
- Global Impact Investor Network (GIIN)
- Impact Management Project
- ICMA Green Bond Principles
- Operating Principles for Impact Management
- Orange Bond Initiative
- Standard & Poor Global Ratings
- Sustainable Accounting Standards Board (SASB)
- UN Principles of Responsible Investment (PRI)

Fund's key impact facts

In 2021*, the Nuveen US Core Impact Bond Fund had the following impact through its investments:

- Affordable housing
- Provided or guaranteed 3.2 million mortgages, equivalent to the number of housing units in Denmark
- Renewable energy and climate change
- Avoided CO_2-equivalent emissions of 15.2m metric tons, equivalent to the emissions from 4 coal-fired power stations in the course of 1 year
- Saved 138.4 million kilowatt-hours worth of energy, equivalent to the annual electricity consumption of 19,083 homes
- Created 15,870 megawatts of new renewable energy capacity, equivalent to 5,290 large wind turbines
- Natural resources
- Conserved 188,000 acres of land, equivalent to an area greater than the size of London (UK)
- Saved 179.3 billion gallons of water, equivalent to the volume of 271,541 Olympic-sized swimming pools.

*Most recent data available for the Fund's key impacts are from 2021. 2022 data not available at time of writing.

Source: Nuveen

Vontobel Fund – TwentyFour Sustainable Short Term Bond Fund

Investment objective

The investment objective of the Fund is to achieve a positive absolute return in any market environment over a period of 3 years while keeping a modest level of volatility. In practice, this means that the portfolio managers are targeting a return of SONIA + 250bps (per annum after fees), over the medium term.

The Fund mainly purchases securities of companies around the world that contribute to sustainable economic activity and will be screened in accordance with TwentyFour's view of appropriate sustainability principles.

Integration of impact into the investment process

The Outcome Driven portfolio management team will seek to avoid investments in companies with material production in tobacco, alcohol, gambling, adult entertainment, controversial weapons and carbon intensive industries, and companies involved in animal testing for cosmetic purposes. This list is not exhaustive and may change from time to time to reflect new developments and research in the field of sustainable investment.

Fund overview

Fund details as of 31 December 2022

Fund's AUM: GBP 758m

Fund's inception date: January 2020

Number of holdings: 115

Weight in MASF: 2.21%*

Asset Class: Short Duration Bonds

Fund geographical target: Global

Impact Style: ESG Integrated

Top 10 holdings

1.	B 02/09/23	9.49%
2.	T 2.5 05/31/24	6.27%
3.	PICORP 6.5 07/03/24	1.82%
4.	SCTWID 5.5 06/16/23	1.68%
5.	SIEGR 0.875 06/05/23 EMTN	1.67%
6.	HIGHB 7.017 03/20/23	1.58%
7.	LGEN 5.375 10/27/45 EMTN	1.54%
8.	LVFRSC 6.5 05/22/43	1.53%
9.	NWG 3.622 08/14/30	1.53%
10.	RLMI 6.125 11/30/43	1.51%

Impact data and methods

Not applicable to this fund.

*As of 19th January 2023. This is to reflect the recent changes made to the MASF in early January.

Integration insights

Case Study – Pension Insurance Company (UK)

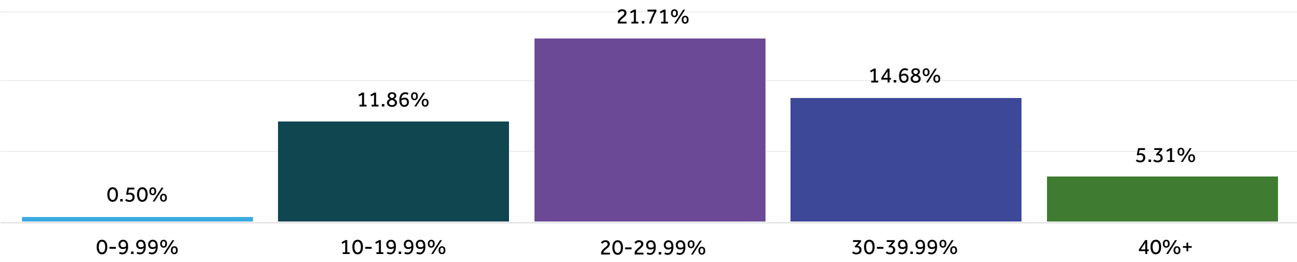
Pension Insurance Corporation is a stable, UK life insurance company (set to benefit from the LDI (liability-driven instrument) fallout and one which Vontobel have been long term investors of. This bond fits the fund's current financials and insurance allocation, as well as their short duration defensive positioning based on macro views.

Impact stats

Not applicable to this fund.

Governance Insights

Proportion of female executives by portfolio weight*



*No data available for 44.25% of Vontobel TwentyFour Short Duration Bond Fund holdings.
Source: TwentyFour Asset Management, 31 December 2022.

Deep dive

Fund breakdown

(As of 31 December 2022)

Sector diversification

	Financials	44.8%
	Investment Grade Corporates	17.3%
	Government	17.0%
	Asset Backed Securities	7.4%
	Other	13.5%

Geographic diversification

	United Kingdom	50.64%
	Europe (Ex-UK)	18.35%
	North America	28.33%
	Others	2.67%

These diversification graphs exclude cash.
Source: TwentyFour Asset Management, 31 December 2022

Fund Performance (as of 31 December 2022)

2022 was one of the most challenging years for fixed income in history. Throughout the year interest rates aggressively repriced to reflect magnitude of central bank hikes needed to tame inflation, and credit spreads widened to reflect the recessionary headwinds facing businesses over the next 24months. Against this backdrop the fund's full year performance was -4.21%, a disappointing outcome despite the managers reducing the duration of the fund substantially to 1.4yr – this action did not immunise the portfolio from the aggressive rates move at the front end of the curve. The fund's higher beta sectors were the worst performers, particularly corporate hybrids which lost -8.87%.

Positive returns came from the Government bond allocation, which was up +0.24%, contributing +4bp. This was despite further large yield rises in US Treasuries, because the bulk of the allocation was kept in very short-dated US Treasury Bills, all of which produced positive returns. The fund continues to have an ESG score 65% higher than the reference index and the carbon intensity of the fund also remains substantially lower than the index.

Share class performance (as of 31 December 2022)

This chart shows the performance of the invested share class over 5 years*

*5-year performance period not available so performance since inception used instead.
Source: Morningstar Direct, 31 December 2022.

Past performance is not an indicator of future performance

Impact insights

Not applicable to this fund.

Fund's key impact facts

Not applicable to this fund.

Association memberships and participation in external ESG, sustainability and impact initiatives

- Investment 20/20
- UK Stewardship Code
- UN Principles of Responsible Investment (PRI)
- 10000 Black Interns.

Appendices

Glossary of terms

This glossary of terms seeks to help clarify the language that frequently appears in the industry. With the concept of 'impact investing' emerging just over a decade ago, a whole new set of terminology has arisen which can make it confusing for investors. Many of the definitions and concepts are still in debate and under development as the industry matures. Our aim here is to set out a few key terms and how we use them.

Impact Investing

At Barclays, we see it as making a positive contribution to the World by investing in companies that we believe make a societal impact and generate financial returns, so that we can protect and grow our client's assets. Impact investing should be seen as a practice across how we invest, rather than a label on an investment product.

ESG

ESG stands for Environmental, Social and Governance. These are the factors that are commonly looked at in Impact Investing.

Types of Impact

From an investor's perspective, there are generally two types of impact that are of interest:

1. Impact generated in how an organisation operates, and
2. Impact generated via the goods and services they provide.

These are two distinct aspects, which may be important individually or together.

To understand how a company operates, the industry has started to gather information about a company's ESG processes and activities. Data about the risks a company faces in these areas and how well they manage them provides insight into how well a company is being run. The impact the goods and services make is important to consider in terms of whether these provide solutions to societal problems or contribute to them.

Organisations who can provide commercially viable solutions to our pressing challenges have potential for growth and positive impact, whereas negative impact from goods or services may face imposed costs or backlash from consumers or government regulations.

Approaches to Impact

There's no single way to integrate impact into how we invest, however we have identified and categorised three common approaches:

- **ESG integrated**
  This approach seeks to enhance financial value by primarily using ESG criteria as part of the investment process. This could be to exclude companies who have problems on an E, S, or G issue important in their industry.
  It could also be to select companies who are best in their peer group at managing ESG risks.
- **Sustainable**
  This approach seeks to produce financial value by pursuing sustainability aims that benefit stakeholders. For instance, an investor may invest in a company whose products and services address pressing sustainability challenges.
- **Catalytic**
  This approach seeks to generate financial value by addressing a societal challenge that delivers specific outcome(s). For instance, an investor may support a specific cause that they believe in by investing in companies addressing that challenge. The provision of additional capital becomes catalytic in pulling mainstream finance to further the impact and improve effectiveness of this intervention.

ESG Ratings/Scores

Some investors and data providers take information about E, S and G factors and create numeric or alphabetical scores on how well an organisation is managing these factors. Often, individual ratings are merged into a single, company-wide score so they can be compared with the scores of peers and other organisations.

Social/Green Bond

Bonds issued by companies or organisations where the use of the money raised is earmarked for social or environmental projects.

UN Sustainable Development Goals (SDGs)

17 global goals were agreed by the United Nations member states in 2015. These called for action by 2030 on specific challenges, including poverty and climate change. The SDGs often serve as a simple framework to categorise company activities and investments.

Equity Stocks/Shares

Companies offer (or issue) stocks to raise money in exchange for a stake in the company's assets and profits. When you buy stocks, you effectively become a part owner of the company. The bigger the investment you make, the bigger your stake will be in the company. To get a return on this investment, you would need another investor to purchase your shares at a higher price or the company to pay out profits in what's known as a dividend.

Fixed-Income (Bonds)

Organisations, including companies and governments, issue bonds to raise money in the form of a loan. The bond indicates the money that is borrowed and must be repaid, with terms about the size of the loan, interest rate and maturity or renewal date. When you buy a bond, you're becoming a creditor to the organisation that's borrowed money. To get a return on this investment, you can either get income from any fixed interest payments, known as coupons, or you could sell the bond to another investor at a higher price than you purchased it.

Listed (Public) Stock & bonds

While stocks and bonds can be bought or sold privately, generally they are listed on an exchange, like the London Stock Exchange (LSE) or the New York Stock Exchange (NYSE), where they can be publicly traded and prices can be seen.

Securities

Formally, securities are any kind of financial instrument that can be traded. We generally use the term to refer to the stocks and/or bonds that are within the third-party Funds.

Asset Classes

Assets classes refers to a category of securities that exhibits similar, specific characteristics.
At the broadest level, investors tend to allocate to three mains asset classes of equities, bonds and cash.

At Barclays we divide these into more specific groupings – 1) cash & short maturity green bonds, 2) developed government bonds, 3) investment grade bonds, 4) high yield and emerging market bonds, 5) developed market equities and 6) emerging market equities.

The MASF invests in equity, fixed income and cash equivalent investments.

Asset Allocation

Asset allocation is the process of deciding the percentage of each asset class in the total fund. The aim is to use the different characteristics of each asset class so that, when combined, they can be complementary to optimise the expected risk and reward of the overall portfolio.

Funds

When you invest in a fund, your money is pooled together with that of other investors. A fund or investment manager then buys, holds and sells investments on your behalf. Funds typically focus on one single asset class, usually either stocks or bonds, but can also have multiple asset classes. The MASF is made up of a selection of specialist funds from other investment managers. As none are run by Barclays, we call them third-party funds.

Fund-of-Funds

Instead of investing directly into stocks or bonds (or other securities), a fund can also be made up of other funds, which then make these decisions – these are called fund-of-funds. The MASF is a fund-of-funds where the role of Barclays is to create an overall portfolio by identifying and blending together the best managers from different asset classes.

Fund references

Barclays Multi-Asset Sustainable Fund constituents as of 19 January 2023

Full fund name	ISIN	Share class name	Fund inception	Currency
Aikya Global Emerging Markets Fund	IE00BMCM3082	AIKYA GLOABL EM-I GBP	October 2020	GBP
AllianceBernstein AB Sustainable US Thematic Portfolio Fund	LU0128316170	AB SICAV-SUS US THEM PT-IUSD	April 2001	USD
AXA World Funds Green Bonds Fund	LU1280196426	AXA WF-ACT GRN BD BD-IA	November 2015	EUR
Columbia Threadneedle CT UK Social Bond Fund	GB00BF233C45	CT UK SOCIAL BOND-IA-GBP	December 2013	GBP
Impax Asian Environmental Markets Fund	IE00BYQ91839	IMPAX ASIAN ENV MKT IRE-XGBP	May 2010	GBP
Impax Environmental Markets Fund	IE00BYQNSD98	IMPAX ENVIR MKTS IRL-X GBP	December 2004	GBP
Janus Henderson Global Sustainable Equity Fund	GB00B71DPP64	JAN HND GS EQ FD-I ACC	August 1991	GBP
Jupiter Ecology Fund	GB00B4KLC262	JUPITER ECOLOGY-I ACC	April 1988	GBP
Mirova Euro Green & Sustainable Corporate Bond Fund	LU0552643685	EUR G&S CORP BND -I/A EUR	July 2011	EUR
Muzinich Sustainable Credit Fund	IE00B4PL7R16	MUZI SUST CREDIT-HG GBP IN S	February 2011	GBP
Nuveen US Core Impact Bond Fund	IE00BZ0GCS44	NUVEEN US CORE IMP BND-IUA	October 2015	USD
RobecoSAM Sustainable Healthy Living Equity Fund	LU2146189746	RS SUS HEALTHY LIVING EQ-F E	March 2007	EUR
Vontobel Fund – mtx Sustainable Emerging Markets Leaders Fund	LU1717118191	VF-MTX SUST EM MK LDR-AN	July 2011	GBP
Vontobel Fund – TwentyFour Sustainable Short Term Bond Fund	LU2081485596	VONTOBEL-24 SUS S/T B-AQGGBP	January 2020	GBP

Reference sources

Companies in Action

Clean Energy

1. First Solar will have a global annual manufacturing capacity of over 20 gigawatts by 2025 – First Solar: Corporate Factsheet, 2022: https://www.firstsolar.com/-/media/First-Solar/Documents/Corporate-Collaterals/FS_Corporate_Factsheet.ashx

2. By 2028, First Solar aims to be 100% renewable energy powered – First Solar: Corporate Factsheet, 2022: https://www.firstsolar.com/-/media/First-Solar/Documents/Corporate-Collaterals/FS_Corporate_Factsheet.ashx

3. To date, First Solar has spent over $1.5bn on research and development – First Solar: Corporate Factsheet, 2022: https://www.firstsolar.com/-/media/First-Solar/Documents/Corporate-Collaterals/FS_Corporate_Factsheet.ashx

4. According to the World Health Organisation (WHO), 99% of people in the world breathe air that exceeds air quality limits and threatens their health, predominantly being created by the burning of fossil fuels - United Nations: Climate Action, 2022: https://www.un.org/en/climatechange/raising-ambition/renewable-energy

5. The International Renewable Energy Agency estimates that by 2050 90% of global electricity can come from renewable energy sources - United Nations: Climate Action, 2022: https://www.un.org/en/climatechange/raising-ambition/renewable-energy

Sustainable Transport

6. Transport in 2021 accounted for 37% of CO_2 emissions from sectors which consume primary energy and electricity produced by the electric power sector. The transport sector also had the highest reliance on fossil fuels of any sector during 2021 - International Energy Agency (IEA): Transport, 2022: https://www.iea.org/topics/transport

7. Denso is the world's second largest parts and systems provider in terms of sales - Denso, 2022: https://www.denso.com/global/en/about-us/at-a-glance/

8. Denso has with 42,000 patents worldwide - Denso, 2022: https://www.denso.com/global/en/about-us/at-a-glance/

9. Denso has 5 explicit environmental commitments: Prevention of global warming; Prevention of air pollution; Reduction of substances negative environmental impact; Preservation of resources and conservation of water resources – Denso, 2022: https://www.denso.com/global/en/about-us/at-a-glance/

10. Cities contribute more than 80% of global GDP and account for over 70% of greenhouse gas (GHG) emissions - United Nations: Sustainable Development Goals, 2022: https://unstats.un.org/sdgs/report/2022/goal-11/

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Health and wellbeing

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14. Hyper Pharma is Brazil's largest pharmaceutical company in net sales - Hypera Pharma corporate profile, 2022: https://ri.hypera.com.br/en/hypera-pharma/corporate-profile/

15. In 2021, Hyper Pharma announced an investment in the largest platform for accessing and consulting medication information in Brazil (Consulta Remédios) to better understand consumer consumption habits with the aim of boosting sales and promoting quality health to the wider Brazilian population - Hypera Pharma corporate profile, 2022: https://ri.hypera.com.br/en/hypera-pharma/corporate-profile/

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17. HIV infections globally decreased by 39% between 2010 and 2020, however, this is well below than the 75% target set in 2016 by the UN General Assembly - United Nations: Sustainable Development Goals, 2022: https://www.un.org/sustainabledevelopment/health/

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Water Management

19. American Water Works provides regulated-like drinking water and wastewater services in 24 US states, reaching an estimated 14 million people - American Water corporate overview, 2022: https://ir.amwater.com/ir-home/default.aspx

20. 60% of American Water's board self-identified as Female or Racially Diverse - American Water sustainability, 2022: https://ir.amwater.com/sustainability/esg/esg-home/default.aspx

21. For at least 3 billion people the quality of water they depend on is unknown due to a lack of appropriate monitoring - United Nations Sustainable Development Goals, 2022: https://unstats.un.org/sdgs/report/2022/goal-06/

Knowledge and Innovation

22. Spending on research and development continues to grow, with just over $2.475 trillion estimated to have been spent globally in 2022, triple the figure 20 years ago - Statista: Global Spending on research and development from 1996 to 2022, 2022: https://www.statista.com/statistics/1105959/total-research-and-development-spending-worldwide-ppp-usd/

23. In 2020, ASML reached its goal to use 100% renewable energy across its operations. ASML aims to achieve zero Scope 1 and Scope 2 emissions across its operations by 2025 - Janus Henderson, January 2023

24. In 2021, ASML employed over 37,500 people from 144 different nationalities across its 60+ locations, spending over €2.5bn on research and development - ASML, 2022: https://www.asml.com/en/company/about-asml/asml-at-a-glance

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26. Higher-technology manufacturing industries are found to be far more resilient in crises overall when compared with low-technology industries - United Nations: Sustainable Development Goals Report, 2022: https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf

27. Whilst between 2015 and 2021 4G network coverage doubled to reach 88% of the world's population, 17% of lower developed countries and landlocked developing countries remain without coverage- United Nations: Sustainable Development Goals Report, 2022: https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf

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Waste Management

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31. Unicharm currently has five key business segments: wellness care, pet care, feminine care, baby and childcare, and kirei ('nice and clean') care - Unicharm, 2022: https://www.unicharm.co.jp/en

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- made a number of key judgements, estimations and assumptions, and the processes and issues involved are complex. This is for example the case in relation to carbon equivalency and the use of third party data.
- used ESG and climate data, models and methodologies that we consider to be appropriate and suitable for these purposes as at the date on which they were deployed. However, these data, models and methodologies are subject to future risks and uncertainties and may change over time. They are not of the same standard as those available in the context of other financial information, nor subject to the same or equivalent disclosure standards, historical reference points, benchmarks or globally accepted accounting principles. There is an inability to rely on historical data as a strong indicator of future trajectories, in the case of climate change and its evolution. Outputs of models, processed data and methodologies will also be affected by underlying data quality which can be hard to assess or challenges in accessing data on a timely basis.
- continued (and will continue) to review and develop our approach to data, models and methodologies in line with market principles and standards as this subject area matures. The data, models and methodologies used and the judgements estimates or assumptions made are rapidly evolving and this may directly or indirectly affect the metrics, data points and targets contained in the climate and sustainability content within this report. Further development of accounting and/or reporting standards could impact (potentially materially) the performance metrics, data points and targets contained in this report. In future reports we may present some or all of the information for this reporting period using updated or more granular data or improved models, methodologies, market practices or standards or recalibrated performance against targets on the basis of updated data. Such re-presented, updated or recalibrated information may result in different outcomes than those included in this report. It is important for readers and users of this report to be aware that direct like-for-like comparisons of each piece of information disclosed may not always be possible from one reporting period to another.

What is important to our investors and stakeholders evolves over time and we aim to anticipate and respond to these changes. Disclosure expectations in relation to climate change and sustainability matters are particularly fast moving and differ in some ways from more traditional areas of reporting in the level of detail and forward-looking nature of the information involved and the consideration of impacts on the environment and other persons. We have adapted our approach in relation to disclosure of such matters. Our disclosures take into account the wider context relevant to these topics, including evolving stakeholder views, and longer time-frames for assessing potential risks and impacts having regard to international long-term climate and nature-based policy goals. Our climate and sustainability-related disclosures are subject to more uncertainty than disclosures relating to other subjects given market challenges in relation to data reliability, consistency and timeliness, and in relation to the use of estimates and assumptions and the application and development of methodologies. These factors mean disclosures may be amended, updated, and recalculated in future as market practice and data quality and availability develops.