

June 2023



M&G Sustainable Multi Asset Growth Fund
2022 Environmental,
Social and Governance
(ESG) and Impact Report

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Sustainability in brief:

M&G Sustainable Multi Asset Growth Fund

Sustainable investment	Climate focus	Positive impact
Fund weighted average MSCI ESG rating:	Carbon intensity ² of the fund: (based on corporate holdings only)	Proportion of the fund held in positive impact assets:
7.5 (equivalent to AA)	90.7 tonnes CO₂ per US\$ million sales³	44.5%⁴

Source: M&G Investments. As at 31 December 2022.

The metrics listed in the table above provide an overview of some of the high level sustainability credentials of the fund. From a sustainability perspective, all our holdings can be classified as either 'Sustainable Investment' or 'Positive Impact' holdings. As shown above, our fund has an MSCI ESG score of 7.5, equivalent to AA MSCI ESG rating. The carbon intensity of the fund is another metric we monitor closely. It is calculated as the sum of the product of each portfolio holding's weight and that company's individual carbon intensity, where carbon intensity equals the company's carbon emissions divided by its total sales in US dollar terms. With a carbon intensity of 90.7 tonnes CO₂/US\$ million sales, our fund compares very favourably to the MSCI World ACWI index, representing the global equity market, which has a carbon intensity of 160.9 tonnes CO₂/US\$ million sales. Finally, the fund holds 44.5% (vs 39.3% a year ago) of its value in positive impact assets, holdings which have clear net positive social or environmental externalities as we continue to take advantage of the growing opportunity set across asset classes in the positive impact space.

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²Carbon intensity calculation methodology (MSCI): Weighted average carbon intensity is measured in terms of tonnes of CO₂ per US\$ million of sales. It is calculated as the sum of the product of each portfolio holding's weight and that company's individual carbon intensity, where carbon intensity equals the company's carbon emissions divided by its total sales in US\$ terms.

³The fund does not target a particular level of carbon intensity. For context, the carbon intensity measure for the MSCI ACWI index (which consists entirely of equities, unlike the fund which is a multi-asset strategy which includes other asset classes such as bonds, cash and alternative assets), had a carbon intensity measure of 160.9 tonnes CO₂/US\$ million sales, as at 31 December 2022.

Within the positive impact exposure, the fund invests across six different positive impact areas, three environmental and three social. Each of these impact areas incorporates at least one of the 17 United Nations Sustainable Development Goals (SDGs). While we support the UN SDGs, we are not associated with the UN and our funds are not endorsed by them. We measure specific impacts that our investee holdings seek to deliver within each area.

In the last year, the companies and institutions whose investments we hold have made contributions to each of the impact areas:

Our 'Climate Action' holdings...



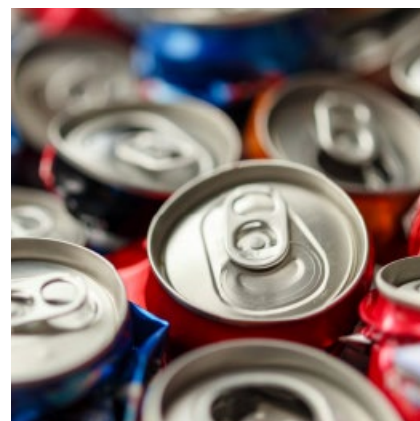
generated **69,000 GWh** of renewable energy, and avoided more than **55 tonnes** of CO₂ emissions and saved **50 GWh** of energy and **337 megalitres** of water

Our 'Environmental Solutions' holdings...



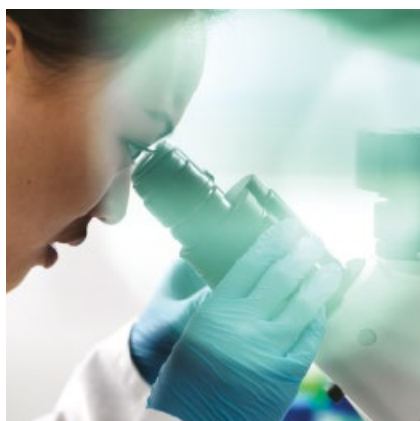
directly avoided more than **365 million tonnes** of CO₂ and saved, tested, treated or provided more than **1 million megalitres** of water.

Our 'Circular Economy' holdings...



avoided more than **200 million tonnes** of CO₂ emissions, saved **12 GWh** of energy, saved **58 million trees**, **4,480 million litres** of water, and handled **100 million tonnes** of waste material

Our 'Better Health, Saving Lives' holdings...



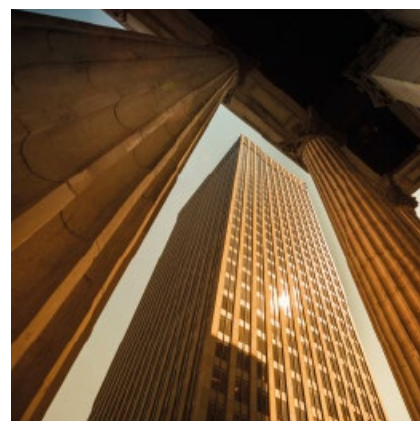
treated or served more than **52 million** people, and processed **36 million** blood donations, sequenced **280 petabases** of DNA, installed base in **265,000** labs, provided **40,000** implants, and provided requisition for **218 million** tests

Our 'Better Work and Education' holdings...



provided educational services for **2.7 million** students and workers' compensation insurance to **8,400** policyholders

Our 'Social Inclusion' holdings...



provided financial, insurance, and family support services to over **56 million** people in underserved or lower income markets, provided **11,131 beds** for homeless people, and the social inclusion supranational bonds held in the fund contributed **US\$4.5 billion** in developing countries

Figures are based on the key performance indicators (KPIs) against which we measure individual company impacts. These have been aggregated within each impact area, where companies within the area share similar KPIs. These figures are largely based on the latest information available from company literature and hence are backward looking.

Fund manager's perspective



Maria Municchi
Fund Manager

After the sustainability 'hype' of 2021, 2022 brought several headwinds for sustainable investors. Within what was an already very complex macroeconomic and financial market environment, sustainable investors have had to come to terms with extremely high and volatile energy and commodity prices and a rising interest rate environment. These three elements exacerbated negative performance for sustainable investors.

During a year where most asset classes lost significant amount of value and multi asset investors had nowhere to hide, higher energy and commodity prices drove positive returns in areas such as the oil and gas and mining sectors, where sustainable investors have usually held limited exposure. Moreover, the unprecedented level of interest rate increases of 2022 hurt equities on higher valuations the most, particularly quality and growth stocks – two areas sustainable investors are often biased towards.

Our exposure to quality stocks comes as a result of the high ESG and climate standards of our holdings, together with the willingness to ensure the robustness of the business models we invest in as part of our positive impact exposure. Growth stocks are critical for the delivery of innovative products and services which can provide solutions for a sustainable economy going forward. As interest rates moved higher and expectations adjusted to the new environment of 2022, these assets with higher valuation multiples suffered the most as the discount rate increased. However, we believe that in many cases their prospects remain unaltered.

Investors are having to cope with a similar set of issues in terms of the balance between inflation and growth in 2023, but today the starting point is very different.

Higher interest rates are being reflected in the fixed income market where investors are now better compensated across the risk spectrum.

Equity valuations have also normalised and in my view look today more attractive and in some cases more resilient to further inflationary or growth shocks. Despite continued macro and market volatility, prospective long-term returns for sustainable multi asset investors have greatly improved.

A renewed focus on energy independence, continued advancements in technology, supportive regulation and legislation and shifting demographics are some of the long-term global trends that continue to underpin the case for sustainable investing.

With energy security at the centre of many countries' agenda, we think that renewable energy infrastructure companies, such as long-term holding Greencoat Renewables should be well placed to benefit from renewable energy capacity expansion in the coming years.

With the ever-expanding deployment of solar technology, companies such as SolarEdge Technologies, focused on enhancing efficiencies and usability of photovoltaic systems are in a good position to deliver enhanced technological solutions as well as positive returns.

As legislation continues to support the shift towards electric vehicles, companies like Volvo Cars are financing their transition by issuing green bonds aimed solely at supporting the company's efforts to become a fully electric car manufacturer by 2030, ahead of many of its competitors.

Changing demographic trends are reshaping our world, not least the shift to a more diverse and inclusive society. As highlighted by the latest UK budget, challenges exist to increase female workforce participation. Childcare provider Bright Horizons supports working families in the US and Europe to meet their childcare needs, facilitating gender equality and its impact on economic growth.

We believe our strategies are well positioned to navigate the current volatile environment by combining strategic and tactical allocation while delivering on our sustainability outcomes and contributing to a more sustainable economy.

A stylized, handwritten signature in dark blue ink, appearing to read 'M. Municchi'.

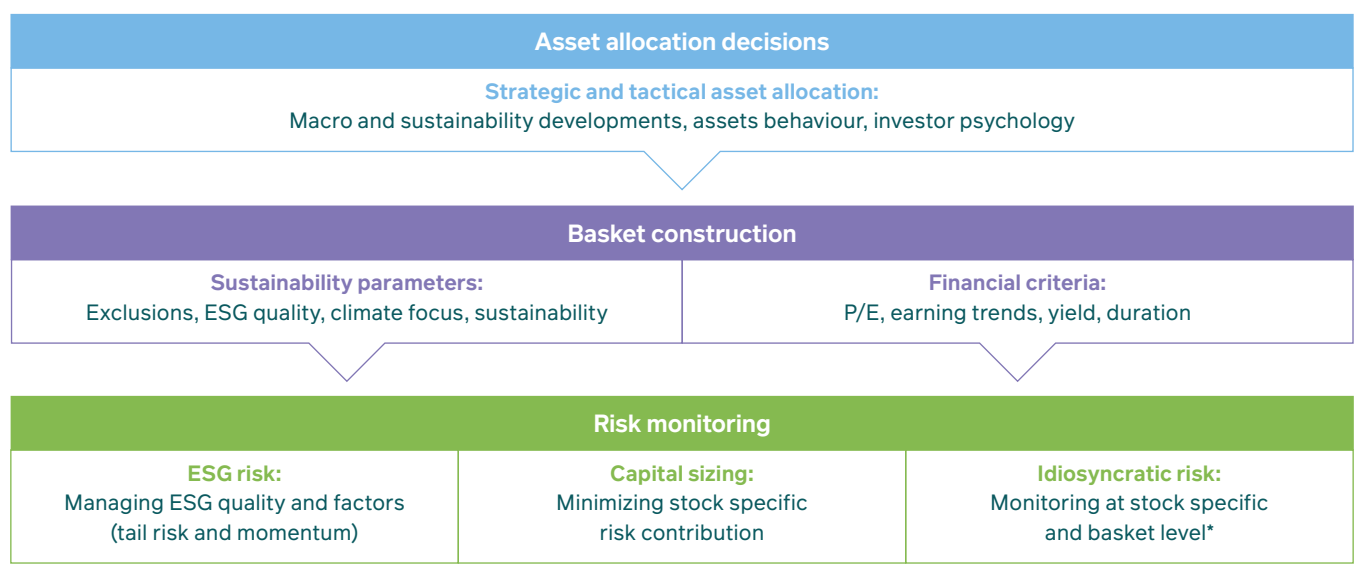
Our approach to sustainable multi-asset investing

Asset allocation

In employing a sustainable-investment approach that looks to generate long-term returns, we intend for the asset allocation decisions to be the key drivers of those returns. Once an asset allocation has been determined the fund’s desired exposure is achieved by applying sustainable-investment criteria to selecting our investments, including our positive impact holdings. Details of the criteria are laid out in a dedicated document, the ESG Criteria and Sustainability Criteria, which is available on our website.

This will entail investing in securities, including equities (company shares) and bonds among others, that fulfil the requirements of a rigorous sustainability approach. Typically, between 20% and 50% is dedicated to investing in positive impact assets. Positive impact assets are those considered to have a positive societal or environmental impact, addressing the world’s major challenges, as identified by the 17 United Nations Sustainable Development Goals (SDGs). Examples may be companies that are dedicated to developing pollutant extraction technologies, or that focus on building low cost/social housing or hospitals in underprovided areas.

Asset allocation: an overview



Source: M&G Investments, illustrative, as at December 2022.

Sustainable investing: Corporates

Our sustainable-investment approach to corporates includes exclusions as well as an assessment of various sustainability indicators.

First, we exclude companies assessed to be in breach of the United Nations Global Compact Principles on human rights, labour, the environment and anti-corruption.

We further exclude companies that are producers of, or provide services in, controversial products and we scrutinise CO₂ intensive industries such as oil and gas and utilities. More details regarding the exclusion criteria applied to the fund's investment universe may be found in the appendix of this report.

After these exclusions are applied, we then scrutinise potential investments in the portfolio by analysing their ESG characteristics, carbon emissions, and climate target disclosures. For our positive impact investments, we carry out a proprietary impact assessment based on analysing the investment, intention and impact of the investment. More on our III Framework in the positive impact section of the report.

Finally, as active investors, voting and engagement are an important component of our sustainable-investment approach. This is especially important for the adoption of best practice across governance and sustainability issues (eg remuneration and climate disclosure).

Sustainable-investing approach: Corporates

Exclusions	Sustainable investment	Active ownership
<p>Our Good Governance and Do No Significant Harm approach</p> <ul style="list-style-type: none">Companies in breach on UNGC principlesThermal coal and fossil fuelWeapons	<p>Our sustainable-investment approach</p> <p>Sustainability indicators:</p> <ol style="list-style-type: none">ESG quality and climate focus (carbon intensity, disclosure, targets)Positive impact investments, M&G III framework (investments, intention, impact)	<p>Active voting policy on:</p> <ul style="list-style-type: none">remunerationboard structure and diversitysustainability and climate change

M&G Investments, December 2022.

In the following sections, we will take a closer look at the ESG quality, climate focus and active ownership pillars of our sustainable-investing approach.

ESG quality

The assessment of our corporate holding's ESG quality is based on a combination of third-party quantitative assessments with an internal qualitative assessment. The table below provides an overview of all our corporate holdings' (excluding Supranationals) MSCI ESG score.

Weighted average MSCI ESG score	
Equity holdings	7.9
Corporate bond holdings	7.9

Source: MSCI, as at 31 December 2022

We aim to maintain a high MSCI ESG rating for individual holdings and at fund level. As shown below, the majority of our corporate holdings are rated A-AAA. It is worth noting that those holdings that are rated below BB or not rated are mainly positive impact holdings, for which we carry out a detailed qualitative and quantitative impact assessment as part of our III assessment.

MSCI ESG rating breakdown for all corporate holdings (reweighted to 100%, including Listed Infrastructure & excluding Supranationals)



Climate focus

Disclosure





The fund's weighted average carbon emissions intensity (based on the corporate holdings only as at 31 December 2022) was 90.7tCO₂/US\$ million sales. To provide some context to that figure, the equivalent measure for the broad global equity market index, MSCI ACWI Index was 160.9tCO₂/US\$ million sales, according to MSCI ESG Research.

The data for the fund reflects the limited holdings in the oil and gas utilities sectors and not having any thermal coal holdings. The fund also has investments in renewable energy infrastructure and solution providers.

This is based on 'Scope 1' and 'Scope 2' emissions, which are those emissions within the direct control of a company. 'Scope 1' includes emissions from fuel combustion within owned furnaces or boilers and company vehicles, while 'Scope 2' includes emissions from purchased electricity, heating, cooling and steam. 'Scope 3', or indirect emissions, currently remain difficult for companies to quantify with sufficient accuracy, so we do not include them in this year's report.

81% percent of the fund's corporate holdings disclose Scope 1 and 2 emissions to the CDP. For holdings without disclosure, we use estimated data from third-party providers.

What is Scope 1, 2 and 3?

Scope 1 (direct)	All direct emissions from activities of an organisation or activities under its control 
Scope 2 (direct)	Emissions created during the production of electricity, steam, heating and cooling used by an organisation 
Scope 3 (indirect)	All other indirect emissions from activities of the organisation from sources they do not own or control Upstream Emissions generated from purchased goods and services, business travel and employee commuting  Downstream Emissions generated from consumption of goods and services sold, end-of-life treatment of products 

Source of emissions

As the bar chart below shows, the industrial sector is responsible for around 40% of the fund's emissions, despite the fund only having an allocation of 10% to this sector. This is due to the high absolute carbon intensity associated with the industrials sector, which is shown in the table to the right. Many companies in this sector sit within the Environmental Solutions and Circular Economy impact areas.

While these companies rely on manufacturing processes that use substantial amounts of energy, they have been selected for the fund because the net impact they generate is positive. The amount of emissions saved or avoided through the use of their products and services outweighs the emissions emitted during production.

Republic Services, a waste management company, is an example. The company reports a carbon footprint of more than 13.5 million tonnes of CO₂; however, its operations directly helped avoid 114m tonnes of landfill waste through recycling in 2021.

The utilities sector is the next largest contributor (see bar chart). However, much of the exposure to this sector is achieved through holdings of green bonds, where the funds are dedicated to projects reducing the carbon intensity of the issuer company, and to supporting the climate transition.

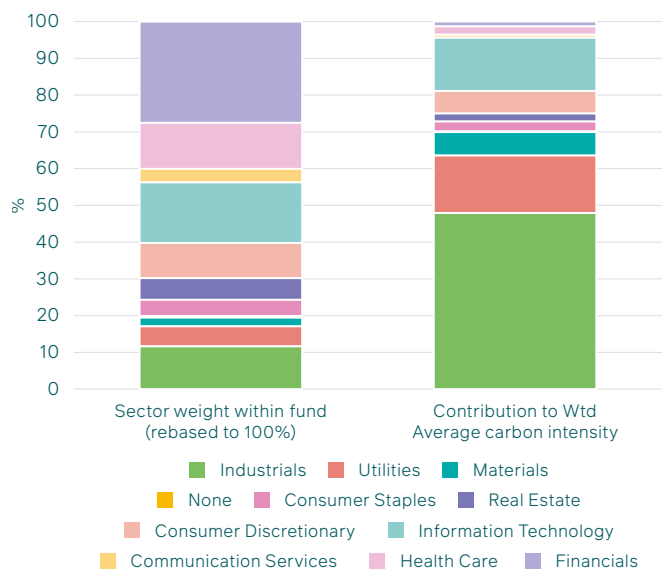
We have also divested from LG Corp in the beginning of 2023 following a downgrade in its MSCI ESG score due to governance-related issues. The company had the highest weighted average carbon intensity in the fund.

Weighted average carbon intensity (WACI) by sector

Sector	WACI of fund holdings (tCO ₂ /US\$ million)
Industrials	373.7
Utilities	261.9
None	250.2
Materials	79.7
Information Technology	58.2
Consumer Staples	56.6
Consumer Discretionary	33.1
Real Estate	20.3
Communication Services	16.4
Health Care	13.8
Financials	4.4
Overall fund WACI	90.7

Source: M&G Investments, MSCI ESG Research, as at 31 December 2022.

Sector contributions to fund WACI



Climate targets

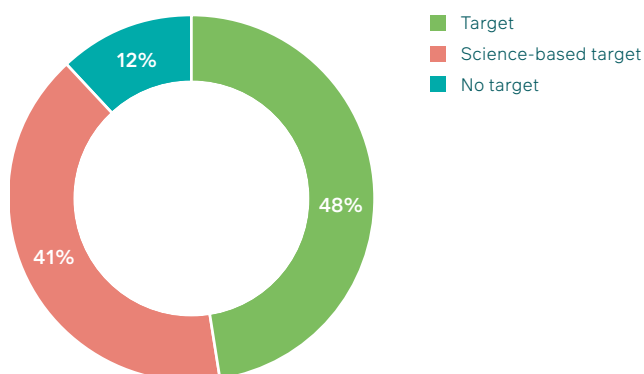
As part of the climate focus of the fund, we aim to assess our holdings not only relative to their current carbon emissions and emission intensity but also on the basis of their climate transparency, governance and ambition as represented by clear reduction targets.

For the fund's impact holdings, we go a step further. While the impact holdings' main focus is the impactful nature of a company's product or services, we do scrutinise the operations of all these holdings as part of our assessments. In all cases, we look for meaningful carbon-reduction programmes and targets, and particularly encourage companies with energy intensive manufacturing processes to develop and enforce science-based targets. We note that the fund's largest emitter, Republic Services, published its targets in August 2020, aiming to reduce absolute Scope 1 and Scope 2 emissions by 35% by 2030, from a 2017 baseline.

It is encouraging to see that **41%** of the fund's corporate holdings have SBTi aligned targets, up from **38%** a year ago. Currently, only **12%** of our corporate holdings (excluding listed infrastructure holdings) lack a carbon emission target (vs 10% last year).

The ISS methodology for that analysis is shown in the appendix of this report

Climate target assessment (rebased to 100%)



Source: M&G, as at 31 December 2022.

Active ownership and engagement

M&G Investments' Stewardship and Sustainability team

M&G Investments' Stewardship and Sustainability team supports our investment teams on a range of issues that can affect our investments over the long term, acting as a dedicated central ESG resource for the whole of M&G Investments, working collaboratively with investors across our wholesale and institutional business. Having a central function to cover these areas ensures oversight and accountability for stewardship within the organisation.

The team coordinates M&G Investments' stewardship activities, engaging with companies on a number of issues from corporate governance to environmental sustainability, alongside the investment teams. Closely linked to this engagement work, the team undertakes M&G Investments' voting responsibilities at shareholder meetings, which we see as one of our central responsibilities as long-term shareholders. The team votes in line with M&G Investments' Voting Policy, which is evolving to reflect our increased engagement focus on both climate and diversity.

The team is responsible for coordinating M&G Investments' participation in various external initiatives and investor collaborations, including the UK's Investment Association, the Investor Forum, the Institutional Investors Group on Climate Change and the Asian Corporate Governance Association, among others. The team also maintains M&G Investments' relationships with responsible investment-orientated organisations, including the UN-backed Principles for Responsible Investment (UNPRI).

Active ownership is an essential element of our investment approach. By engaging with management during and between meetings, and voting at the annual general meetings, we can use our voice and votes to encourage our companies to act in the best interests of stakeholders and towards the UN SDGs. By participating in and encouraging open conversation with companies, we can share our thoughts and ideas regarding key issues to encourage transformation towards a more sustainable economy. We are also able to gain clearer insight into the processes and measures companies are putting into place to improve their ESG profile.



Voting stats

The fund has been an active participant during the course of 2022. The table below provides a summary of our voting activity.

We have cast votes in favour of shareholder resolutions for gender pay gap disclosure and employee representation on company boards. We have also voted against management or abstained on such things as remuneration and choice of auditors.

99

Number of votable meetings

How did we vote?

1,387

Number of items voted on

121 (8.7%)

Votes against management

96 (6.9%)

Votes against a proposal

Where did we vote?

30

Meetings in the USA

30

Meetings in Europe

9

Meetings in the UK

30

Meetings in the rest of the world

Strategic engagement

Across our portfolio holdings we identify opportunities for strategic engagement on sustainability-related matters. Subjects for engagement may be wide and varied and include areas such as sourcing of raw materials, effects of operations on biodiversity, reductions in carbon footprint, to improvements in working conditions both within a company and throughout its supply chain.

An example of an engagement carried out in 2022 was with Ball Corporation, the world's leading aluminium packaging specialist. The objective of the engagement was to encourage the firm's decarbonisation plans and push for increased ambition around Scope 3 emissions. We met with the company's chief sustainability officer in May 2022 to discuss these matters. The company announced that it will be publishing a recycling roadmap in September 2022, aimed at ensuring a 1.5°C pathway for its Scope 3 emissions.

Sustainable investing: Sovereigns

We believe that sovereign entities play a crucial role in moving towards a more sustainable economy. Sovereigns typically issue bonds to supplement their tax and other revenues and use that to fund their spending across the breadth of their economies.

In making our investment choices, we apply a number of exclusion and sustainability criteria. In particular, we aim to monitor a country's progress towards sustainability across different metrics, including climate change performance index from a climate standpoint and social progress index from a social one. Additionally, increased sovereign issuance of use of proceeds bonds, where funds are dedicated to specific green and social projects enable us better visibility in terms of sustainability outcome.

Sustainability exclusions and criteria

- EU/UN sanctions
- World governance indicators
- ESG quality
- Climate change performance index rating
- Social progress index score
- Use of proceeds bonds

The sustainable-investing approach we apply means the fund excludes holding bonds issued by governments that score poorly on our quantitative and/or qualitative overlay criteria. Examples of excluded government bonds include those issued by China and Russia. However, it may be possible to achieve exposure to certain emerging markets by investing in bonds issued by supranational agencies, priced in the desired emerging market currency, for example in Brazilian reals or Indonesian rupiah. There has also been a growing trend in new issuance of green and sustainable bonds from both developed and emerging markets. In 2020, we invested in a social bond issued by the government of Chile. More recently, we invested in Colombia's first ever green bond in October 2021.

MSCI ESG rating breakdown (rebased to 100%) : Sovereigns and supranationals



Positive impact approach and measurements

The UN Sustainable Development Goals

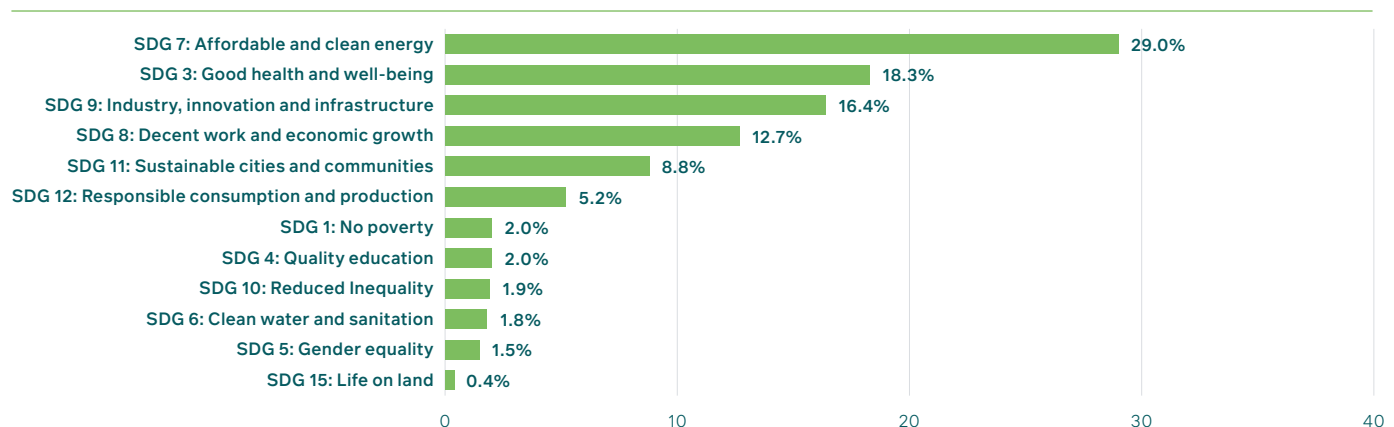
The fund embraces the UN Sustainable Development Goals (SDG) framework. The United Nations Sustainable Development Goals (SDGs) are a collection of 17 interconnected goals, which collectively form a blueprint for peace and prosperity for people and the planet, now and into the future. The goals cover areas such as ending poverty and improving health, reducing inequality, tackling climate change and preserving our oceans and forests.

We believe the SDGs provide a solid, accepted framework for determining material impact areas, and help frame the measurement of how those positive impacts are being achieved. We assign all of our investments a primary SDG that we believe they are addressing, and determine specific, SDG-aligned key performance indicators (KPIs), against which we measure the materiality of the impacts they are achieving.

While we support the UN SDGs, we are not associated with the UN and our funds are not endorsed by the organisation.

The United Nations Sustainable Development Goals (UN SDGs) are used as a framework for measuring our investments' positive impacts. Every holding is assigned a primary SDG, which we believe it directly contributes towards through its products and services, and potentially a number of secondary SDGs. Here, we consider the fund's overall exposure to the SDGs, and look at the primary SDGs for each of the investments we hold.

Fund SDG breakdown (Positive impact holdings only, rebased to 100%)



Source: M&G Investments, December 2022.

Our positive impact approach

Within our positive impact exposure, the fund makes long-term investments in holdings that aim to generate a positive social and/or environmental impact alongside a financial return. The fund aims to make positive impacts across six key social and environmental impact areas, each mapped to the UN's Sustainable Development Goals.

Positive impact holdings by Impact area
(rebased to 100%): 44.5% of the fund



Source: M&G, 31 December 2022

The III framework

The III framework (encompassing Investment, Intention and Impact) is a practical means of scoring candidate holdings. The framework has been elaborated by us and robustly and consistently applies set criteria and standards for rating the impact and investment case of these companies.

Equities

The fund leverages the work and expertise of our Positive Impact team to identify opportunities in the public equities space. The team undertakes III analysis to create a watch-list of high-quality, sustainable, impactful companies. A security requires above-average results in order to be included in the watch-list, as well as consensus agreement of a company's merits from the entire team. Our Positive Impact team represents a wide range of expertise, and includes fund managers, impact analysts and specialists in various fields.

Infrastructure

In addition to investing in equities and fixed income, the fund also invests in listed infrastructure names. These typically operate renewable energy assets and contribute directly to SDG 7: Affordable and clean energy. They are structured as listed investment vehicles and have specialist management teams that are responsible for the growth and operation of the asset base. From an investment perspective, the assets are typically underpinned by long-term contracts and benefit from strong inflation linked cashflow generation as a result.

Green bonds and supranationals

The availability of positive impact investments is growing across asset classes, and within our sustainable multi-asset investment strategy we aim to capitalise on as many of those opportunities as possible. The role that supranational development banks play is an important one, both within global development and within our portfolio. Supranational bonds enable us to widen our exposure to different types of positive impact investments, as well as providing diversification for the portfolio in terms of duration, maturity and currency exposure. These bonds allow us to finance smaller projects in more challenging geographies without taking on the associated credit risk. We have given some examples of the types of projects financed by these bonds in the case studies in the following pages, which we view as highly impactful and SDG-aligned.

Similarly, green bonds issued by governments and corporations have the potential to offer us attractive financial characteristics, whilst helping us to meet our sustainability/positive impact criteria. Measured by issuance volume, green bonds are by far the most popular ESG financing solution in public debt markets. These instruments channel investors' capital towards environmentally friendly projects and other impactful activities.

The following pages list all of our investments by impact category, explain the KPIs we have chosen to measure them against, and how those KPIs have been achieved (or not). Many of these measurements rely on company reporting, and hence are backward looking.

There are some companies currently within the portfolio whose impact it has proven very challenging to quantify. Where hard metrics have proven elusive, we have provided case studies to highlight what we believe to be the impactful nature of these companies.

How do we select KPIs?













For every company in the fund, we assign at least one key performance indicator (KPI). KPIs allow us to measure a company's impact, and track how this progress from one year to the next.






When selecting KPIs, we first determine the primary United Nations Sustainable Development Goal (SDG) which we believe the company is addressing. We can then select a metric which best assesses the materiality of the company's contribution towards that SDG.



Climate action









Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
AES Brazil	Brazil based renewable energy provider with large hydropower footprint	# Renewable energy generated	11308 GWh		100%
Apple (Green Bond) February 2023	A green bond issued to fund environmental impact and sustainability projects	i. # CO ₂ emissions saved ii. GWh of renewable energy generated iii. GWh of energy saved iv. Megalitres of water saved, tested, treated or provided	i. 0.4m tonnes ii. 400 GWh iii. 49.7 GWh iv. 337 megalitres		100%
Boralex (Equity)	Renewable energy provider	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.4m tonnes ii. 6,300 GWh		100%
Electricité de France (Green Bond)	A green bond issued to finance new EDF Renewables wind and solar projects. Proceeds also used to renovate and modernise French hydropower assets	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 1.8m tonnes ii. 3,300 GWh		100%
Energias de Portugal (Green Bond)	A green bond issued to finance new wind and solar energy projects	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 1.8m tonnes ii. 2,377 GWh		100%
European Investment Bank (Green Bond)	Green bond issued to finance various climate change mitigation projects in Europe in various sectors including transportation, construction and renewable energy	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.3m tonnes ii. 668 GWh		100%
Greencoat Renewables	Owner and operator of renewable infrastructure energy assets	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.6m tonnes ii. 2,487 GWh		100%
Greencoat UK Wind	Investment company investing in UK wind farms	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 1.6m tonnes ii. 4,362 GWh		100%
ING (Green Bond)	Green bond issued to finance green projects	# CO ₂ emissions saved	0.4m tonnes		100%
KBC (Green Bond)	Green bond issued to finance green projects	# CO ₂ emissions saved	0.1m tonnes		100%
KFW (Green Bond)	Green bond issued to facilitate projects focused on renewable energy sources	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.1m tonnes ii. 118 GWh		100%
Octopus Renewables	Builds and operates renewable energy assets	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.2m tonnes ii. 549 GWh		100%

Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Ørsted (Equity)	Directly contributes towards a world running on green energy.	# CO ₂ emissions saved	7.6m tonnes		100%
Renewables Infrastructure Group	Renewable energy infrastructure in the UK and Northern Europe, with a focus on operating projects	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 1.9m tonnes ii. 5,376 GWh		100%
Societe Generale (Green Bond)	Green bond issued to finance green projects	# CO ₂ emissions saved	7.6m tonnes		100%
SolarEdge (Equity)	Directly contributes towards making solar energy more efficient and more affordable.	i. # CO ₂ emissions saved ii. of solar optimised homes	i. 23m tonnes ii. 2.3m homes		100%
Swedbank (Green Bond)	Green bond issued to finance green projects	i. # CO ₂ emissions saved ii. GWh of Renewable energy generated	i. 0.1m tonnes ii. 238 GWh		100%

Environmental solutions



Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Ansys	Helps reduce resource use through its simulation technology, which leads to cost and efficiency savings	Case Study	n/a		100%
Chile	Green bond issued to fund green projects in areas such as clean transportation, energy efficiency, renewable energy	# CO ₂ emissions avoided	70,900 tonnes per year		100%
Colombia	Green bond issued to target investments in sustainable water management, clean and sustainable transport, and ecosystem services and biodiversity	Case study	n/a		100%
Fibria	Green bond issued to achieve sustainable forest management, restoration of native forests and conservation of natural biodiversity	# CO ₂ emissions avoided	5.0m tonnes per year		100%
Hannon Armstrong	Infrastructure solutions that reduce carbon emissions and increase resilience to climate change	i. # CO ₂ emissions avoided ii. # Megalitres of water saved	i. 6.0m tonnes per year ii. 15,899 megalitres of water saved		100%
Horiba	Enables the reduction of CO ₂ emissions and the improvement of environmental practices through its range of measurement and monitoring tools.	Case study	n/a		n/a

Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Intesa Sanpaolo (Green Bond)	Green bond issued to finance green projects such as renewables or improving building efficiency	# CO ₂ emissions avoided	2.1m tonnes		100%
Johnson Controls	Directly contributes to the design, retrofit of smart and efficient buildings. This indirectly helps address climate change with residential and commercial buildings accounting for almost 40% of total energy use, which is more than the transportation and industrial sectors.	# CO ₂ emissions avoided	35.2m tonnes saved since 2000 (4.6m tonnes saved in 2021)		61%
Mercedes Benz (Two Green bonds)	Green bond issued to finance low emission vehicles	Case study	n/a		100%
onsemi	Enables the reduction of CO ₂ emissions through its extended range of energy-efficient semiconductors, with its positive impact being particularly felt in the transport industry.	Case study	n/a		41%
Schneider Electric	Enables the reduction of CO ₂ emissions through its range of energy efficient solutions designed for buildings and infrastructure.	# CO ₂ emissions avoided	347m tonnes avoided by EcoStruxure customers		80%
Unibail-Rodamco-Westfield (Green Bond)	Green bond issued by one the world's largest shopping centre owners to improve building efficiency	Case study	n/a		100%
Vodafone (Green Bond)	Green bonds issued to fund eligible projects that fall into either of the following areas: Energy Efficiency, Renewable Energy and Green Buildings	# CO ₂ emissions avoided	41,700 tonnes per year		100%
Volvo Cars (Two Green Bonds)	Green bonds issued to finance the company's production of battery electric vehicles	Case study	n/a		100%
Xylem (Green Bond)	Water technology equipment designer and manufacturer	i. # CO ₂ emissions avoided ii. # Megalitres of water saved	i. 19,400 tonnes* per year ii. 1.1m megalitres of water saved		100%

*We have adjusted our forward-looking calculation for Ceres Power's impact, resulting in a large decrease in the KPI figure.

**We have used the annual emissions avoided figures for 2021 and 2020, rather than cumulative, which is why these figures are lower than those included in last year's report.

Circular economy



Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Ball Corporation (Equity)	Sustainable aluminium packaging for beverage, personal care and household products	Case study	n/a		n/a
Boston Properties (Green Bond) Maturity: Dec 2028	Large developer, owner, and manager of office workplaces. Green bond issued to improving building energy efficiency	i. # CO ₂ emissions avoided ii. Sum of # of megalitres of water saved, tested, treated or provided	i. 6,123 tonnes per year ii. 12.3 megalitres of water saved		100%
Brambles	Helps preserve natural resources such as water and wood, minimise waste and reduce carbon emissions through its sharing business model.	i. # water saved ii. # CO ₂ emissions avoided	i. 4,470 megalitres of water saved i. 2.5m tonnes of CO ₂ saved		100%
DS Smith	Directly helps reduce the amount of waste generated by packaging. According to Eurostat, the average European generates 170kg of packaging waste per year.	# of trees saved	~58m trees		100%
Prologis (Green Bond)	Owner of large-scale logistics industrial facilities. Green bond issued to improve energy efficiency of buildings	i. # CO ₂ emissions avoided ii. Sum of renewable energy generated	i. 0.1m tonnes ii. 12.9 GWh renewable energy generated		100%
Republic Services	Provides a solution to growing waste levels from population growth and promotes sustainable waste collection practices.	# materials handled per year	101.6m tonnes		78%
Rockwool	Helps drive better sustainability in building construction via more resource-efficient and fire-resistant products. Rockwool insulation is also fully recyclable.	# CO ₂ emissions avoided over the lifetime of insulation sold in one year	210m tonnes for products sold in 2020		90%



Better health, saving lives



Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Agilent	Helps improve lab economics and accelerate time to results. Helps develop biology-based solutions to some of our planet's largest societal challenges such as healthcare, energy and the environment.	# of installed base	265k+ labs		100%
Cochlear		# of implants provided	40k+ implants		100%
Fresenius Medical Care	Directly helps maintain lives via its life saving blood cleansing procedure that substitutes kidney function in case of kidney failure.	# of patients treated or served	>345,000 patients		100%
Grifols	Helps treat a number of medical conditions such as immunodeficiency diseases and haemophilia via the separation of proteins from blood plasma.	i. # of blood donations tested ii. # tested per minute	i. 36m blood donations ii. >200 people every minute with >70 donations tested per minute		82%
Illumina	Helps improve human health by diagnosing different diseases and guiding individual patient care via next-generation genome sequencing.	# of samples sequenced	280 petabases (1,000 trillion base pairs of DNA sequence)		100%
Novo Nordisk	Helps address the rising prevalence of diabetes, a condition that affects more than 420m people worldwide.	# of people treated or served	34.6m patients		100%
Quest Diagnostics	Helps detect and prevent non communicable diseases, covering a wide range of areas including cardiovascular, infectious diseases and immunology. As a high-quality but low-cost provider, Quest provides affordable access to those who need it the most.	# of test forms processed	218m test forms		81%
Thermo Fisher Scientific	Helps customers accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics, deliver medicines to market and increase laboratory productivity.	# of people treated or served	~400k people		100%
UnitedHealth	Helps promote access to healthcare with its 22% market share in Medicare (retirees) and 9% in Medicaid (low-income, long-term care).	# of underserved and low-income people insured	17.2m people		100%


Better work and education









Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Amerisafe	Provides workers' compensation insurance to small-medium-sized high hazardous industries, aiming to improve safety standards and practices.	# of policies	>8,400 policies		100%
Cogna Educação	Aims to fill the need for education for the lower-middle segment of the Brazilian population. Given its scale and discounted fees, Cogna is the most affordable and effective private option.	# of students educated	2.7m students		100%

Social inclusion



Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
AIA	The largest independent, publicly listed pan-Asian insurance group	# of people served in low-income groups or mass retail market	39m customers		100%
Bank of Georgia	Aids financial inclusion, in a society left with little infrastructure following the end of communism. 61% of group profits are derived from low-end and mass market customers.	# of people served in low-income groups or mass retail market	2.9m customers		80%
Bright Horizons	Provides family support services for dependents of all ages, meeting short-term and long-term needs. In particular, Bright Horizons forms a viable option for women to have their children cared for, while still participating in the workplace.	# women labour force participation	~32,000 via full service children's centres 2.6m via back-up centres		100%
Chile (Social Bond)	Social bond issued to provide COVID-19 pandemic social support	# of \$bn invested in developing economies by Supranationals	\$2bn invested		100%
HDFC Bank	Directly contributes towards encouraging and expanding access to banking, insurance and financial services for all.	# of accounts opened to economically weakened sections/low-income groups	2.6m accounts		38%
Home REIT	Providing affordable accommodation to the homeless in the UK	# of beds provided	11,131 beds provided		100%

Company	Impact	KPI explanation	KPI measurement	Primary SDG	SDG alignment
Inter-American Development Bank Currency: IDR Maturity: Feb 2023	Provides financial and technical support to middle- and low-income countries across Latin America and the Caribbean	# of \$bn invested in developing economies by Supranationals	\$100m invested (size of issuance)		100%
International Bank for Reconstruction and Development Currency: BRL Maturity: Jan 2024	Lending arm of The World Bank providing loans, guarantees, risk management products and advisory services to middle and low income countries	# of \$bn invested in developing economies by Supranationals	\$52m invested (size of issuance)		100%
International Bank for Reconstruction and Development (pandemic bond) Currency: GBP Maturity: July 2023	Lending arm of The World Bank providing loans, guarantees, risk management products and advisory services to middle and low income countries	# of \$bn invested in developing economies by Supranationals	\$1.9bn invested (size of issuance)		100%
Inter-American Development Bank Currency: USD Maturity: Jan 2044	Provides financial and technical support to middle- and low-income countries across Latin America and the Caribbean	# of \$bn invested in developing economies by Supranationals	\$0.5bn invested (size of issuance)		100%
Sanlam	Insurance group providing services in South Africa, India, Malaysia and other emerging markets	# of people served in low-income groups or mass retail market	9.3m customers		30%
Katitas	Provision of affordable housing through the purchase and renovation of vacant homes.	# of customers, revenues or assets from underserved or under- represented markets	Katitas has sold 64,000 homes. With Japan having on average 2.71 people per household, we estimate that KATITAS could have reached >173,000 people and reaches ~8,000-12,000 people per annum based on the 3,000-5,000 homes the company tends to sell in a year.		100%

Measurement case studies

For companies whose positive impact has been difficult to quantify, we have provided case studies highlighting what we believe to be their impactful nature.

Ansys (equity)

Ansys is a world leader in engineering simulation software. Its unrivalled ability to integrate various branches of physics (thermodynamics, electromagnetism, quantum, optics, atomic) allows its customers to efficiently perform complex simulations within a real-world environment.

Ansys has, for example, designed a system for Climeworks, creator of the first commercially available carbon-capture technology. Climeworks' CO₂ collector system captures, filters and concentrates the gas, which can then be used by greenhouses, the food and beverage industry, and manufacturers of renewable products. To optimise the system, Climeworks used computational fluid dynamics and structural simulation obtained through Ansys.

onsemi (equity)

On Semiconductor Corporation (trading as 'onsemi') manufactures energy-efficient power and sensing components. These are used across a variety of green technologies, enabling its customers to contribute towards reducing emissions and limiting global warming.

For example, its products are used in power management and energy storage systems, which will be essential as renewable energy grows its share of the global energy mix. Similarly, the widespread adoption of electric vehicles will require increasing numbers of traction inverters, DC-DC converters and fast vehicle chargers, which require components such as onsemi's MOSFETs (metal-oxide semiconductor field-effect transistors) and IGBTs (insulated-gate bipolar transistor module technologies).

Horiba (equity)

Horiba specialises in state-of-the-art measuring equipment and analytical devices, used across a wide range of medical, environmental and automotive applications.

For example, Horiba has designed and manufactured a motor exhaust gas analysis system that measures pollutants in exhaust gas. This system is used by major automobile manufacturers, as well as testing and research agencies, around the world. The company also offers a suite of testing solutions for electric vehicles, ranging from battery cells and brakes to automatic driving systems.



Inter-American Development Bank (supranational bond)

The Inter-American Development Bank (IADB) is an organisation that finances development in Latin America and the Caribbean, working to help countries develop in a sustainable, climate-friendly way. We are invested in one of their general bonds and one pandemic specific bond. Below we outline two examples of projects that have received IADB funding.

In 2020, an US\$80 million project was commissioned to facilitate the energy transition of the Bahamas to increase the use of renewable energy, which currently stands at less than 1% of the Bahamas' entire energy matrix. This included solar-powered microgrids, a programme for small-scale rooftop renewable-energy generation, and utility-scale solar projects, saving more than 25,000 tonnes of CO₂ per year. The funds also went towards fixing critical energy infrastructure and resuming electricity services on islands affected by Hurricane Dorian. These projects also offer communities employment opportunities in construction, and training for installing and maintaining the solar equipment. This project supports seven of the UN's Sustainable Development Goals including SDG 5: Gender equality and 13: Climate action.

During the COVID-19 pandemic US\$470 million was spent on improving telemedicine¹ in Argentina to help vulnerable people with the effects of the pandemic, and to help reduce mortality rates from the disease. The number of offices using the network more than doubled, going from 300 to 800, and an equally impressive increase of medical professionals, technicians and administrators were all using the network. This increased care through telemedicine by five times, and generally improved the quality of care provided since second opinions and specialised services were more accessible.

NB Disclosure on allocation of funds to specific projects is not available, and so there is no guarantee our funds went towards the specific examples above.

International Bank for Reconstruction and Development (green bonds)

In 2008, The World Bank issued the world's first Green Bond. Since then, the World Bank has issued more than \$8bn in Green Bonds through over 90 transactions in 18 currencies. The International Bank for Reconstruction and Development (IBRD), the World Bank's lending arm, has continued to be an active player in the space. We are invested in a number of Green Bonds issued by the IBRD in various currencies including BRL and MXN.

Under the World Bank's Green Bond Framework, eligible green projects may include projects that target (a) mitigation of climate change including investments in low-carbon and clean technology programmes, such as energy efficiency and renewable energy programmes and projects, or (b) adaptation to climate change, including investments in flooding protection, sustainable forest management, and agricultural systems.

In Mexico, one such project is the Integrated Energy Services Project. The aim of the project is to increase access to efficient and sustainable integrated energy services in predominantly indigenous rural areas of Mexico and to achieve reduction of greenhouse gas emissions by using renewable energy in rural areas for the provision of electricity. As a result of this project, 2,235 rural households receive electricity from renewable sources annually.²

Another project is the Mexico Efficient Lighting and Appliances Project, which was completed in 2014 (the IBRD contributed \$250m to the total cost of the project). The project promoted the efficient use of energy and mitigated climate change by increasing the adoption of energy-efficient technologies at the residential level. The project contributed to the development of a sustainable market for energy efficiency equipment among the large and fast-growing energy end-use sectors for lighting, refrigeration and air conditioning. Over its 5-year life, the project resulted in 45.8m light bulbs being exchanged and 1.9m appliances replaced.²

¹Using technology to provide healthcare over large distances.

In Brazil, the IBRD financed a mixture of clean transportation, water management, and waste management green projects in 2021. One example of a water management project is the Paraiba Water Resources Project, launched in 2019. It is estimated that 235,000 beneficiaries have been provided with reliable water services as a result of this project. In addition, The World Bank estimates that 27,846 tonnes of CO₂ are avoided annually with four million people benefiting directly or indirectly from the project.²

NB Disclosure on allocation of funds to specific projects is not available, and so there is no guarantee our funds went towards the specific examples above.



Colombia (sovereign green bond)

Colombia debuted its first green bond in October 2021, the first Latin American government to issue a green bond in the local market. Its framework has robust governance procedures and is aligned with ICMA's four green bond principles, which ensure integrity in the green bond market and promote transparency, disclosure and reporting.

The proceeds will be split between a large variety of impactful eligible categories. The portfolio for this issuance consists of 27 projects with 40% of capital designated to sustainable water management, 27% to clean and sustainable transport, 16% to ecosystem services and biodiversity, 14% to non-conventional energy sources, energy efficiency and connectivity, and 3% to waste and circular economy and sustainable agricultural production. Through a number of these categories, Colombia's use of proceeds from this bond will also help support progress towards its commitment to reduce carbon emissions by 51% by 2030.

There is clear alignment to a wide range of the UN's Sustainable Development Goals including: SDG 6: Clean water and sanitation, SDG 7: Affordable and clean energy, SDG 9: Industry, innovation and infrastructure, SDG 11: Sustainable cities and communities, SDG 12: Responsible consumption and production, SDG 13: Climate action, SDG 14: Life below water, and SDG 15: Life on land, as well as the objectives of Colombia's National Development Plan.

²<https://thedocs.worldbank.org/en/doc/1e29bb23045f3ee645a59a86c3349c73-0340022022/original/Website-FY21-World-Bank-IBRD-Green-Bond-Project-Tables.pdf>



Chile (social bond)

Chile is a leader when it comes to green sovereign debt, as demonstrated by being the second country in the world to achieve climate bond certification from the Climate Bond Initiative. It follows in this trend with its social bond issuance, having issued nine social bonds in the last two years. Chile has a strong mission statement that is aligned with its sustainable bond framework. The bond's governance is good, with a transparent process outlined for the selection of projects and is well-reviewed in its second party opinion. The eligible projects contribute to a wide range of social SDGs, primarily towards SDG 1: Zero poverty and SDG 10: Reduced inequalities, but also contributing to SDG 3: Good health and well-being, SDG 4: Quality education, SDG 8: Decent work and economic growth, and SDG 11: Sustainable cities and communities. Chile has demonstrated a commitment to social issues such as income poverty, demonstrated by income poverty falling from 68% in 1990 to 8.6% in 2017.

The use of proceeds is split between general social purposes and pandemic relief, with around 60% of the expenditures related to social projects and 40% specifically to alleviate the socioeconomic consequences of the COVID-19 pandemic. The projects included are varied but can go towards support for the elderly, those with special needs from vulnerable sectors, low-income families, human rights victims, community through job creation, as well as affordable housing, access to education, food security, access to essential services including health, and a focus on unemployment stemming from crises, as well as support for SMEs.

Mercedes-Benz Group (green bond)

Mercedes-Benz Group is a global automotive company headquartered in Germany. While we view private cars as being an inefficient mode of transport when it comes to carbon emissions, they are undeniably an inevitable part of the transportation system for the foreseeable future, and therefore we believe in investing into green bonds that facilitate the development, manufacturing and infrastructure relating to electric, hybrid, and hydrogen cars.

Mercedes-Benz is one of the world's largest manufacturers of commercial vehicles, and, as such, its actions will play a vital role in the automotive climate transition. The company has committed to reducing the CO₂ emissions from its production operations by 50% by 2030, and to reach carbon neutrality by 2039. They have also committed that from 2022 onward, all Mercedes-Benz's own plants will be carbon neutral worldwide. Also from 2022, Mercedes-Benz will have battery electric vehicles in all segments, and from 2025, customers will have the option for an all-electric alternative for every model.

Mercedes-Benz's first and second green bonds, issued in September 2020 and March 2021, are dedicated to the cause of climate change mitigation and low-carbon projects, with the majority of proceeds to be spent on clean transportation and some on energy efficiency. This consists of the development and production of zero-emission vehicles, and the development, production and recycling of batteries / fuel cells.

Financed projects include the Mercedes-Benz EQS, their first all-electric luxury saloon with state-of-the-art battery technology that can travel over 700km on a single charge, which exceeds Tesla's long range version of its Model S car. The EQA and EQB are new entry-level electric models, which have 95% recoverability at end of life, and meet high sustainability standards. Financing has also contributed to the success of 'Mercedes me Charge', one of the world's largest charging networks, powered by green electricity. Customers have been charging throughout Europe, Canada and the United States since 2021, with charging points in over 30 countries currently.

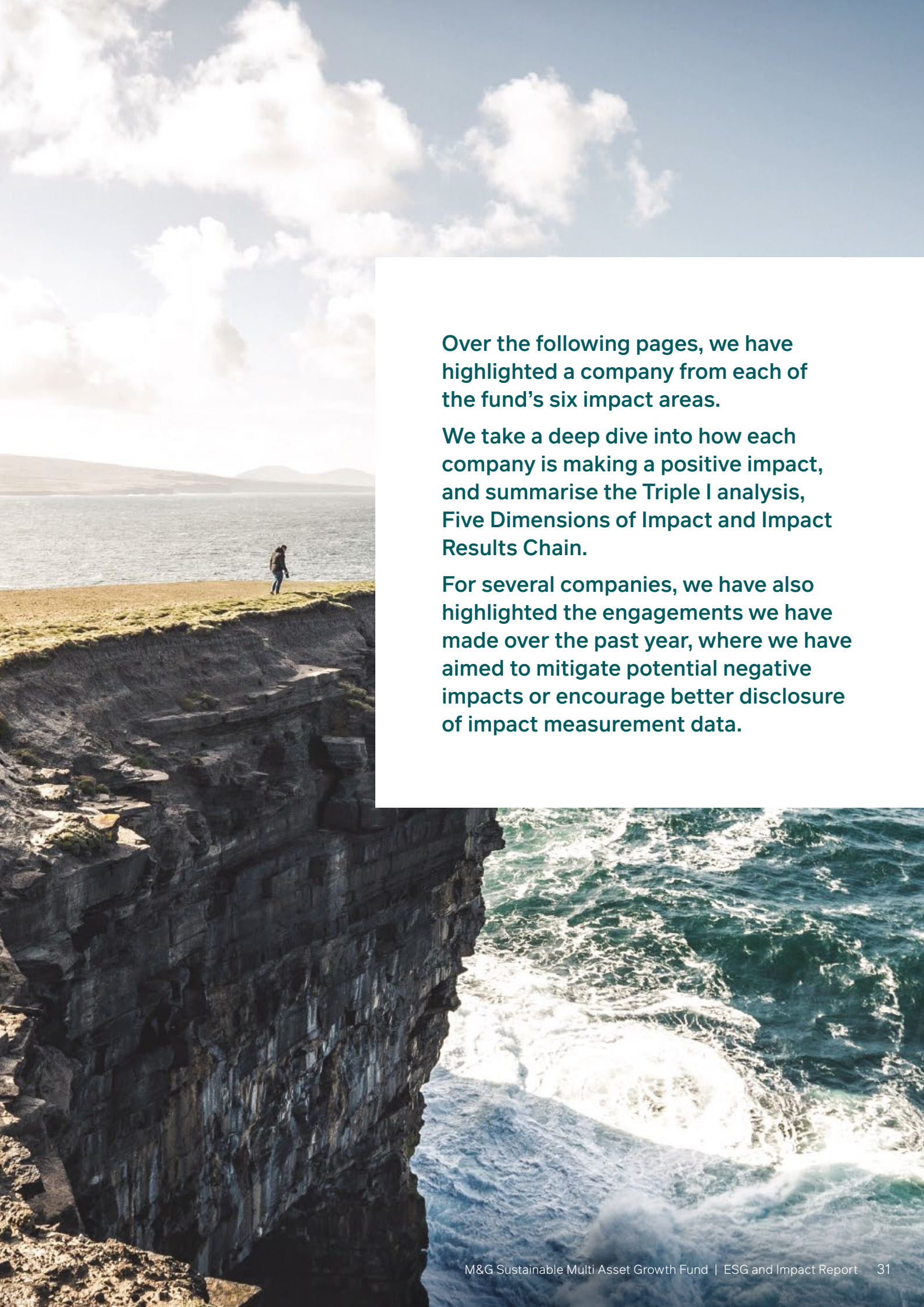


Unibail-Rodamco-Westfield (green bond)

Unibail-Rodamco-Westfield is one of the largest providers of shopping centres, managing 78 globally. More recently it further diversified its offering by adding offices and convention centres to the portfolio. URW has a history of sustainability as part of its business strategy. This has been recognised by its inclusion in multiple sustainable indices. Its 'Better Places 2030' strategy, introduced in 2016, includes both a commitment to a reduction of the environmental footprint and an increased social engagement by 'integrating CSR into the Group's entire value chain'. This is achieved through the three pillars: Better Spaces, aiming for a low-carbon economy and sustainable mobility, Better Communities, which integrates business activities within local communities, and Better Together, which empowers teams on sustainability and diversity.

The 2014 green bond was used to improve the energy efficiency of three shopping centres in France, reducing their energy intensity compared to their opening year by 47%, 24% and 23% respectively, and their carbon intensity by 78%, 37% and 55% respectively. Retrofitting buildings to improve energy efficiency is a vital part of the climate transition, as buildings generate nearly 40% of annual global GHG emissions. In the wake of the Paris Climate Agreement, France committed to cutting greenhouse gas emissions by 2050 to 75% below 1990 levels. To help achieve this ambitious target and as part of its energy transition strategy, France wants to lower final energy consumption to 50% below 2012 levels by 2050. The residential and non-residential building sector currently accounts for 45% of final energy consumption and 27% of the country's greenhouse gas emissions. Lowering energy use in this sector is therefore a key part of achieving these ambitious energy and climate targets, and this green bond has directly contributed to those goals. To align with these goals, URW has committed by 2030 (vs 2015) to cutting carbon emissions across their value chain by 50%, which is supported by pledges to reduce emissions from construction by 35%, from operations by 80%, from transport by 40%, and to improve the energy efficiency of their assets by 30%. As at the end of 2022, URW had reduced its carbon emissions by 41.3% versus the 2015 baseline level.





Over the following pages, we have highlighted a company from each of the fund's six impact areas.

We take a deep dive into how each company is making a positive impact, and summarise the Triple I analysis, Five Dimensions of Impact and Impact Results Chain.

For several companies, we have also highlighted the engagements we have made over the past year, where we have aimed to mitigate potential negative impacts or encourage better disclosure of impact measurement data.

Case study

Greencoat Renewables



Impact area:

Climate action

Asset class:

Listed
Infrastructure

Primary SDG:

SDG 7:

Affordable and clean energy

KPI (1):

CO₂
emissions saved

KPI (2):

GWh
renewable energy generated

KPI measurement:

15.1m tonnes
2,487_{GWh}

Greencoat Renewables is an owner and operator of renewable infrastructure energy assets. The company is currently invested in wind farms in the Republic of Ireland and France, with plans to expand to other European countries.

Necessary for the climate challenge

Climate action has never been more urgently needed than it is now, as demonstrated by the 2021 Intergovernmental Panel on Climate Change (IPCC) August 2021 report. The report stated that limiting global warming to 1.5-2°C is only possible if drastic and immediate cuts are made to global emissions. A key part of this is increasing capacity of renewable energy sources, which Greencoat Renewables is active in through its interests in operating wind farms.

In order to meet existing net-zero targets alone, Europe needs to more than double its generating capacity by 2030, equating to a €500bn capital requirement by early 2030. Greencoat Renewables can play an important role in this essential financing requirement. The company's geographical focus in the Republic of Ireland means it could have a material part to play in contributing to the country's goal of having 70% of its energy coming from renewable sources by 2030. As of 2021, the Republic of Ireland has 4.3GW of installed wind power capacity, the third-highest per capita in the world. In 2020 wind turbines generated 38% of Ireland's electrical demand.

Clear positive impact

Greencoat Renewables' activity contributes to provide access to affordable, reliable, sustainable and modern energy to all (SDG 7) – the energy produced by Greencoat Renewables' assets powers half a million homes per year. In the year preceding 30 June 2021, the company produced 1,461GWh of renewable energy, avoiding 590,000 tonnes of CO₂ emissions. By acquiring and running operating sites to a high standard they ensure reliable production and are freeing up capital for constructors to start work on new renewable developments.



III in brief

Investment

- Compelling business model, supported by regulatory framework
- Attractive valuation along with strong inflation-linked cashflow generation

Intention

- Committed to the investment in and maintenance of wind farms

Impact

- 2,487GWh of renewable energy generated in 2022

Five Dimensions of Impact in brief

□ What

Ensures access to affordable, reliable and sustainable energy through the increase of renewable energy in the global energy market.

○ Who

Greencoat's renewable energy benefits individuals and companies, and ultimately the wider environment.

≡ How much

Green energy comprises 100% of Greencoat's total power generation.

+ Contribution

Portfolio energy generation avoided 685,997 tonnes of CO₂

△ Risk

The need for energy security could slow down the green energy transition and reduce the impact of companies like Greencoat Renewables, as governments aim to 'keep the lights on' using any available power sources.

Case study

Volvo Cars



Impact area:

Environmental solutions

Asset class:

Green bond

Primary SDG:

SDG 11:

Sustainable cities and communities

KPI:

CO₂
emissions avoided

KPI measurement:

1.87m tonnes
avoided through the sale of
battery electric vehicles

Volvo Cars is a global auto manufacturer headquartered in Gothenburg, Sweden. In 2022, the company sold 615,121 cars across China, USA, UK, Sweden and Germany.

Sustainable transport

Transport continues to have a very high reliance on fossil fuels and accounted for around 37% of global CO₂ emissions in 2021 according to the International Energy Agency.¹ It is therefore crucial that the auto sector continues to target significant reductions in emissions, namely through the electrification of its fleet.

Ambitious plans

In this context, Volvo Cars has committed to becoming a fully electric car maker by 2030 (ie targeting all new car sales in 2030 to be electric) and becoming climate neutral by 2040. As part of this strategy the company is focussing exclusively on fully electric vehicles and has no plans to manufacture hybrid vehicles. In 2022, Volvo Cars sold 66,749 battery electric vehicles (BEVs), representing 10.9% (up from 3.7% in 2021) of its total cars sold.

To help achieve the ambitions mentioned above, the company has issued two green bonds (in 2020 and 2022) which we have invested in. The proceeds deployed have been used exclusively to (re)finance investments and expenditures for the design, development and manufacturing of BEVs. Eligible projects also include building new manufacturing facilities and upgrading/modifying of existing manufacturing facilities to produce BEV components such as EV Batteries and powertrains.

¹ <https://www.iea.org/topics/transport>



III in brief

Investment

- Opportunity to access a long-term structural theme like electrification of vehicles at an attractive valuation (coupon at issuance of 4.25% pa)
- Credit rating of BB+ (S&P) with potential for upgrade to investment grade

Intention

- All proceeds of green bond used to finance the company's plans to become a fully electric car maker by 2030 (as measured by new sales)
- The company also plans on becoming climate neutral by 2040

Impact

- Helps to reduce CO₂ emissions by selling battery electric vehicles instead of traditional vehicles

Five Dimensions of Impact in brief

□ What

The company is a global auto manufacturer with sales in China, US, UK and Europe.

○ Who

Volvo Cars' electric vehicles are used by individuals who purchase the cars and by used-car buyers.

≡ How much

The company sold 66,749 battery electric vehicles in 2022, representing around 10% of its total sales.

+ Contribution

Volvo Cars' plan to fully transition to zero emission electric vehicles is amongst the most ambitious in the industry. Significant CO₂ emissions can be avoided by replacing traditional vehicles with electric vehicles.

△ Risk

High potential Scope 3 emissions from supply chain risks especially with regards to rare metals use in components.

Ball Corporation



Impact area:

Circular economy

Asset class:

Equity

Primary SDG:

SDG 12:

Responsible production
and consumption

KPI:

n/a

KPI measurement:

n/a

Ball Corp is the world's largest aluminium can manufacturer and is one of our circular economy investments. The company is committed to increasing the global recycling rate (currently at 69%) for aluminium cans, bottles and cups to 90% by 2030. According to a 2018 report from the World Bank², without urgent action, global waste will increase by 70% on 2018 levels by 2050. It predicts rapid urbanisation and growing populations will cause global annual waste generation to reach 3.4 billion tonnes over the next 30 years, up from 2.0 billion tonnes in 2016. High-income countries are generating 34% of the planet's waste, despite only accounting for 16% of its population. This ratio is even more stark for the US, with its being responsible for 12% of the planet's waste, yet only comprising 4% of the global population³.

Impact data and reporting

Of the three main materials used for drinks containers – aluminium, PET plastic and glass – aluminium is by far the least damaging to the planet. It can be recycled infinitely; indeed, 75% of aluminium ever produced is still in use today. The recycling process for aluminium is also simpler, leading to a 69% global recycling rate, compared to a recycling collection rate of only 43% and 46% for PET and glass respectively. According to our estimates, if US consumers consumed all their drinks from aluminium containers instead of all PET, they would reduce the amount of material that would end up in landfill or being incinerated by 64% and avoid an estimated 5.5m tonnes of CO₂ emissions annually (equivalent to removing c. 1.2m cars from the road). If this was instead of all glass, this reduction would be 94% and c. 22.2m tonnes of CO₂ emissions annually (equivalent to 4.8m cars removed from the road). With an estimated aluminium can market share of 42% in both the US and European markets, Ball Corp is well-positioned to serve the transition to more sustainable and circular packaging.

² 'Waste 2.0: A Global Snapshot of Solid Waste'
– <https://openknowledge.worldbank.org/handle/10986/30317>

³ <https://www.theguardian.com/us-news/2019/jul/02/us-plastic-waste-recycling#:~:text=The%20US%20represents%20just%204,generate%2027%25%20of%20that%20waste.>



III in brief

Investment

- Ball Corp is the world's largest aluminium can manufacturer with a dominant market share

Intention

- Ball Corp is targeting a 55% reduction in carbon emissions across its entire value chain (Scope 1, 2 and 3). They have developed an in-depth, long-term climate transition pathway toward net zero prior to 2050

Impact

- Promotes the circular economy by using recycled aluminium in its cans
- Helps to avoid landfill waste as a result

Five Dimensions of Impact in brief

□ What

The world's largest aluminium can manufacturer.

○ Who

Ball Corp operates over 60 manufacturing plants in 26 countries around the world located near customers. Some of its largest clients are well-known beverage companies.

≡ How Much

The company shipped over 108 billion cans worldwide in 2022, with an average recycled content of 66%. Per metric ton, the manufacturing of recycled aluminium generates up to 95% fewer carbon emissions than primary aluminium.

+ Contribution

Per metric ton, the manufacturing of recycled aluminium generates up to 95% fewer carbon emissions than primary aluminium. The company is targeting a 55% reduction (vs 2017) in carbon emissions across its entire value chain (Scope 1, 2 and 3).

△ Risk

Ball Corp's Scope 3 emissions are very significant due to the nature of the business. In fact, the company reports that its Scope 3 emissions have increased by 37% between 2017 and 2021.

Agilent Technologies



Impact area:

**Better health,
saving lives**

Asset class:

Equities

Primary SDG:

SDG 3:

Good health and well-being

KPI:

of installed base

KPI measurement:

265,000

labs with installed equipment

Agilent Technologies serves the life sciences, diagnostics and applied chemical markets, providing application-focused solutions that include instruments, software, services and consumables for the entire laboratory workflow. Agilent's mission is to 'deliver trusted answers and insights that advance the quality of life'. It delivers on this mission by providing instruments and tools to advance the development of therapies. Its customers include pharmaceuticals, biotechnology companies and academic and government researchers.

Enabling innovation

With ageing populations and the increasing prevalence of lifestyle diseases, global healthcare demand is set to grow over the coming decades. Innovation will be crucial to meet this need, and global pharmaceutical and biotech R&D is forecast to grow significantly over the coming years. Healthcare capacity and efficiency will need to increase if we are to meet this growing demand.

Agilent will play a key role in driving innovation within the healthcare industry and beyond. The company is what we call an 'enabler' – it enables others (namely researchers and healthcare companies) to create positive impacts. Agilent provides scientists and researchers with the tools necessary to study diseases, develop new drugs, create new diagnostic tests and much more. Agilent platforms play a key role during various phases of the CAR-T therapy treatment cycle such as potency testing, cell fitness and cell quality.

Agilent's commitment to innovation also applies to its own operations. Every year, it invests 8-9% of revenues into research and development (R&D), with more than 16,400 employees working on new technologies. As a trusted partner of researchers across the healthcare industry, Agilent has a unique insight into customer bottlenecks and barriers to progress, which feeds into its innovation and product development.

Impact

Agilent contributes to the UN's SDG 3: Good health and well-being by enabling others to develop treatments for diseases and help countries manage health risks. Agilent provides a range of instruments and consumables to industries who use them for research and development within healthcare or analysis of substances eg water. A portion of the business is dedicated to even more innovative uses, including cell analysis and work in genomics. Agilent also contributes to SDG 6: Clean water and sanitation and SDG 12: Responsible consumption and production through its instruments that analysis substances within water, soil and air.

This holding is made even more impactful by its scale; in 2020 Agilent had the largest life science tool installed base globally, with 600,000+ pieces of equipment in 260,000+ customer labs.



III in brief

Investment

- Agilent sells instruments (42% of revenues) and consumables and services (58% of revenues) predominately to healthcare companies and researchers

Intention

- Agilent's mission is to 'deliver trusted answers and insights that advance the quality of life'

Impact

- Agilent has the largest life science tool installed base globally, with 600,000+ pieces of equipment in 260,000+ customer labs

Five Dimensions of Impact in brief

□ What

Provides instruments, software, services and consumables for the entire laboratory workflow.

○ Who

Its customers include pharmaceuticals, biotechnology companies and academic and government researchers.

≡ How much

Agilent manufactures and distributes instruments and consumables to customers in 110 countries.

+ Contribution

Provides scientists with the equipment needed to conduct research and develop products, driving innovation in the healthcare industry and ultimately improving patient outcomes.

△ Risk

The purchase of equipment is a large upfront cost for laboratories and research departments. A reduction in research funding would have a negative impact for Agilent and the wider life science industry.

Case study

Cogna Educação



Impact area:

Better work and education

Asset Class:

Equity

Primary SDG:

SDG 4:

Quality education

KPI:

of students educated

KPI measurement:

2.7m
students

Cogna Educação is a Brazilian company specialising in educational services for children, young people and adults. Cogna provides a flexible, cost-effective option for those looking to improve their educational attainment, whether they are at school, attending university or working.

Improving access to education

Cogna makes a positive impact, in our view, by improving access to education, especially for those in the lower and middle-income populations in Brazil. When it comes to university admission, affluent children in Brazil often attend expensive private schools and progress into good quality public universities, crowding out less privileged students. This creates a barrier for less-affluent children, especially after the Brazilian government cut its subsidies in this area. Cogna provides an affordable alternative route.

However, Cogna's services are also used by older students who may already be working but want to learn new skills or develop professionally. This is primarily achieved through the use of its flexible and digital learning services, which allow users to learn alongside their other day-to-day responsibilities.

Distance learning opportunities

Cogna's digital and hybrid learning platforms offer greater accessibility and flexibility for students who require distance learning due to their location, or work or family commitments. The company has offered distance learning for many years, but has made a more meaningful strategic shift towards a capital-light, digital and hybrid learning business, which it expects to comprise approximately 70% of revenues by 2025.

Unsurprisingly, the COVID-19 pandemic presented a challenge for Cogna, with lockdown measures and financial hardships resulting in fewer admissions and more student dropouts. Overall student numbers fell, with an increase in online learning more than offset by falling in-person admissions. Encouragingly, student numbers recovered and have since grown for two years straight. Today, Cogna serves 2.7 million students across Brazil.

Commitments for a better world

In 2021, the company launched its 'Commitments for a Better World' manifesto. This is a collection of targets aligned with the UN Sustainable Development Goals, designed to make the company more sustainable for the benefit of stakeholders and wider society. The manifesto covers areas ranging from the use of renewable energy and improving workforce diversity, to local community programmes and the inclusion of ESG targets in management remuneration.



III in brief

Investment

- Offers a broad and high-quality range of educational services
- One of the largest private educational organisations in the world, with 5,600 partner schools and 2,517 distance-learning centres

Intention

- Cogna's purpose is 'to impact people through education for a better world'
- Aims to provide educational attainment for the lower-middle income groups in Brazil

Impact

- Provides affordable and accessible education
- Reaches 2.7 million students across Brazil

Five Dimensions of Impact in brief

□ What

Cogna provides accessible education opportunities, particularly for underserved populations.

○ Who

Serves 2.7 million students across Brazil, ranging from young children to adults studying part-time around their work commitments.

≡ How much

100% of Cogna's revenue stems from affordable and accessible educational services.

+ Contribution

Cogna is one of the largest private educational organisations in the world, with 5,600 partner schools and 2,517 distance-learning centres, reaching more than 1,900 municipalities.

△ Risk

Tough economic conditions could result in reduced admissions and higher dropout rates, as students – particularly in lower income groups – prioritise work over education. This would reduce the impact of Cogna's activities.

Case study

International Bank for Reconstruction and Development



Impact area:

Social inclusion

Asset class:

Supranational
Bond

Primary SDG:

SDG 8:

Industry, innovation
and infrastructure

KPI:

invested in developing
economies by Supranationals

KPI measurement:

\$52m

(size of issuance we invested in)

The International Bank for Reconstruction and Development (IBRD), part of the World Bank, mobilises finance for middle-income countries to support the UN's Sustainable Development Goals. We are invested in one of their general bonds.

Promoting financial inclusion and stability

IBRD approved US\$4.0 billion of lending to the Middle East and North Africa region in 2021, as well as another US\$114 million for the West Bank and Gaza. These funds are supporting a wide range of activities, including reforming education, strengthening health systems and modernising social protection. One major area of development is green economy, with a focus on reducing emissions, promoting sustainable transport and mobility, and diversifying energy sources. For example, US\$250 million was used for the Morocco Green Generation Program-for-Results, which will increase job opportunities and income for youth in rural areas, and improve efficiency, climate resilience, and environmental sustainability of the agrifood value chain. In Egypt, funding has gone towards development in the form of a US\$200 million investment into the Greater Cairo Air Pollution Management and Climate Change Project, which has goals to reduce emissions from major sectors and similar areas. This is mainly focusing on lowering vehicle emissions, improving solid waste management, and climate impact mitigation.

Engaging for improved disclosures

In East Asia and Pacific US\$6.8 billion was approved by the IBRD for development in various areas. With the COVID-19 pandemic, emergency projects in hard-hit countries became a key area of focus for funds, with financing for medical and laboratory supplies, training medical staff, and strengthening national public health systems. A significant example is the 2020 response in Mongolia, where funds were reallocated to provide immediate financing to support emergency needs as well as for preparation for future health crises. Medical and personal protective equipment and ventilators were provided to hospitals across the country, as well as training for emergency care staff, infection control measures and public information campaigns. In 2021, an additional US\$51 million was approved to provide fair and affordable access to COVID-19 vaccines through effective delivery, logistical support, information campaigns and staff training. There was additional support to deal with other impacts from the pandemic, including social insurance relief for 120,000 people enrolled in the country's voluntary plan, workers and employers, as well as education support, benefiting more than 1 million children.

NB Disclosure on allocation of funds to specific projects is not available, and so there is no guarantee our funds went towards the specific examples above.



III in brief

Investment

- The largest development bank in the world, providing financing to middle-income countries
- AAA credit rating; Issuance priced in BRL

Intention

- 100% of bank operations are linked to sustainability and UN SDGs
- Strategic priorities include helping governments reduce poverty and spur sustainable growth

Impact

- Middle-income countries have more than 70% of the world's poor people, often in remote areas

Five Dimensions of Impact in brief

□ What

The International Bank for Reconstruction and Development (IBRD) is the lending arm of the World Bank. The IBRD is owned and governed by its 189 member states, with each country represented on the Board of Governors.

○ Who

The World Bank Group engages with middle-income countries (MICs) both as clients and shareholders.

≡ How much

The size of the issuance we participated in was 210m BRL, equivalent to \$52m

+ Contribution

IBRD offers innovative financial solutions, including financial products (loans, guarantees, and risk management products) and knowledge and advisory services (including on a reimbursable basis) to governments at national and subnational levels.

△ Risk

Disclosure on allocation of funds to specific projects is not available, making it difficult to attribute funds to specific SDGs.

Closing remarks



Youssef Bougroum
Multi Asset Analyst

We hope you find this report gave you an insight into the meaningful impact that our investments are having across impact areas and asset classes. Over the past couple of years, progress towards the SDGs has been tentative at best. We believe that the world is currently on track to deliver just seven of the 17 goals, with no significant progress towards 13 of the goals in the past year.

According to our latest **SDG Reckoning** report, there have been marginal improvements towards two of the goals in the past year. These are SDG 3: Good health and well-being, and SDG 9: Industry, innovation and infrastructure. Conversely, progress towards SDG 7: Affordable and clean Energy, and SDG 10: Reduced Inequalities, has decelerated. Read the full report at: mandg.com/views-and-insights/2022/can-the-world-catch-up

These developments suggest that private capital will continue to play an increasing role over the next few years to finance more sustainable outcomes for all. Despite the performance headwinds of 2022 faced by some sustainability-associated assets, we think that the long-term trends towards sustainability remain intact, and in some cases (like renewable energy) have accelerated.

Thank you for reading and as usual please reach out to us with any feedback or thoughts.

Appendix

ESG exclusion criteria

ESG exclusion criteria

Exclusion criteria	Sector	Threshold
Environmental	Thermal coal extraction	0% of revenues
Social	Adult entertainment	0% of revenues
Social	Alcohol for consumption	0% of revenues
Social	Controversial weapons	0% of revenues
Social	Gambling	0% of revenues
Social	Tobacco	0% of revenues*
Environmental	Unconventional oil and gas extraction	Maximum 10% of revenues
Environmental	Conventional oil and gas extraction	Maximum 60% of revenues**
Environmental	Electricity power generation	Power production max. 10% from coal, max. 30% from oil and gas or max. 30% from nuclear fuel sources Companies breaching these limits may be included in exceptional cases if they have a clear transition strategy towards low-carbon power production (max. 5% total limit at fund level)
Social	Other weapons	Maximum 10% of revenues

The table above summarises the main exclusions and restrictions criteria for environmental and social issues, that are applied to the potential investments. The list is monitored on an ongoing basis.

*Tobacco: maximum 0% revenue threshold for production, maximum 10% revenue threshold for distribution.

**Conventional oil and gas extraction: maximum 60% of revenue from conventional oil and gas extraction, excluded if revenue from renewable sources or natural gas extraction is less than 40%.

MSCI ESG quality scores

The table below shows how ESG quality scores determined by MSCI align with its ESG ratings in alphabetical formats.

MSCI ESG quality scores vs ESG ratings

ESG quality score	ESG rating
8.6-10.0	AAA
7.1-8.6	AA
5.7-7.1	A
4.3-5.7	BBB
2.9-4.3	BB
1.4-2.9	B
0.0-1.4	CCC

Source: MSCI, December 2022.





