This is a marketing communication. Please refer to the fund's prospectus and Key Investor Information Document (KIID or KID) before making any final investment decision.

# abrdn SICAV I - Emerging Markets SDG Corporate Bond Fund

Annual SDG Report 2023

abrdn.com

# Contents



> The SDGs aren't just a list of goals. They carry the hopes, dreams, rights and expectations of people everywhere.
>
> **António Guterres, United Nations Secretary-General, September 2023**

> Rather than seeing problems, we see opportunities and seek out investments in sustainable solutions to deliver 'profit with purpose'
>
> **Samuel Bevan, Investment Director, abrdn, December 2023**

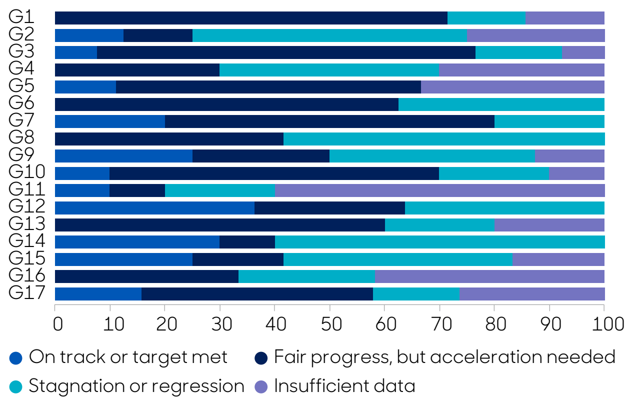
# Introducing the Annual SDG Report 2023

**Welcome to the second edition of the Annual SDG Report for the Emerging Markets SDG Corporate Bond Fund. This report will introduce abrdn's framework for investing towards the United Nations' (UN) Sustainable Development Goals (SDGs). It will showcase innovative companies whose bonds the Fund holds that are helping to deliver sustainable solutions to some of the world's biggest problems – from decarbonising the electricity grid in India, to increasing access to safe sanitation throughout Brazil, to addressing the financing needs of Peruvian entrepreneurs.**

When the UN unveiled the SDGs in 2015, it gave voice to a widely shared aspiration: to secure the well-being of people everywhere, and to ensure that our planet thrives long into the future.

As we reach the halfway point for the 2030 goals, the **progress report** is a sobering read. Only 15% of the targets are on track, half are off track and, most worryingly, 37% have seen no progress or have gone backwards[1].

**Progress assessment for the 17 goals based on assessed targets, 2023 or latest data (percentage)**




However, there are still bright spots. Clean energy adoption in the electricity sector has ramped up with developing countries installing a record-breaking amount of renewables per capita. Furthermore, 3G mobile connection coverage has advanced to reach 95% globally, up from 78% in 2015[1]. Finally, we continue to see improving availability of impact data, providing key insights into where to focus investment and how to evaluate its success. The importance of improving impact data is something we have publicly supported via the **Impact Disclosure Taskforce.**

## Turning challenges into opportunities

While we recognise the scale of the challenge ahead, we also see opportunities.

For example, expanding healthcare insurance could have prevented 381 million people from being pushed into extreme poverty by out-of-pocket healthcare spending. Addressing housing shortages would tackle the issue of a quarter of the global urban population living in slums. Developing public transport would provide access to the half of the global urban population without it while having a huge climate multiplier[1].

The challenges are wide-ranging, in turn creating a diverse opportunity set of companies helping to solve them.

## A 'just transition' for Africa

The halfway point has also borne witness to a year with innumerable climate anomalies. While flooding, wildfires, drought and cyclones don't discriminate, the resources available to the developed countries dwarf those of emerging countries. Indeed, 2023 has officially been declared the warmest year since global records began in 1850.[2] Of greater concern, the 10 warmest years over the 174 years since records began all occurred in the last decade.

[1] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at **SDG Indicators (un.org)** (Accessed April 2024)
[2] National Centers for Environmental Information (2024). **Annual 2023 Global Climate Report**. Available at **Annual 2023 Global Climate Report | National Centers for Environmental Information (NCEI) (noaa.gov)** (Accessed March 2024)

# Introducing the Annual SDG Report 2023

Fifty-four million Kenyans use less electricity in total than 40 million Californians consume playing video games over the course of a year[3]. This is a stark reminder that a local lens must be applied. A **'just transition'** for emerging countries and, in particular, Africa must be prioritised. Africa is home to 60% of the world's best solar resources, yet only 1% of installed solar capacity[4]. The opportunity to provide modern energy services with renewables at the core is enormous and can lift millions out of poverty.

Africa's population is growing faster than any other continent. By 2030, nearly one in three people of working age will live there. Demand for mobile and internet connectivity is set to grow rapidly alongside population growth and economic development. Despite strong recent progress, infrastructure issues persist in Sub-Saharan Africa with only 39% of the population using the internet and 18% lacking access to 3G mobile in 2022[1]. We invest in bonds issued by companies building the essential infrastructure required to increase connectivity. Listen to our **Sustainability Inspires Podcast with Helios Towers**, which is building telecom towers across the region, to hear how effective business strategy can help meet the 2030 goals.

African governments also have a key role. We were encouraged to see Cote d'Ivoire return to capital markets in January 2024 and issue its inaugural **sustainable bond**. The proceeds from this are ring-fenced for environmental and social projects, such as a national literacy programme, maternity wards, social housing, rural electrification, and forestry protection. Even more encouragingly, other African sovereigns are set to follow its example and are developing their own sustainability frameworks.

## Time to refocus

We see the UN SDG progress report as a rallying cry for governments, corporates and the general public to refocus on the 2030 targets and make the SDGs an integral part of decision-making.

We are incredibly proud that our Fund was named Global ESG Fixed Income Fund of the Year (2024) by Environmental Finance. This recognition is a testament to the hard work the team put in to identify sustainable solutions that are contributing to meeting the SDGs.

We will continue to champion portfolio management that positions the SDGs at the heart of every investment decision.

And we will continue to invest in bonds from pioneering companies that seek to deliver profit with purpose.

**Samuel Bevan**

Investment Director London

**Siddharth Dahiya**

Head of EMD Corporate London

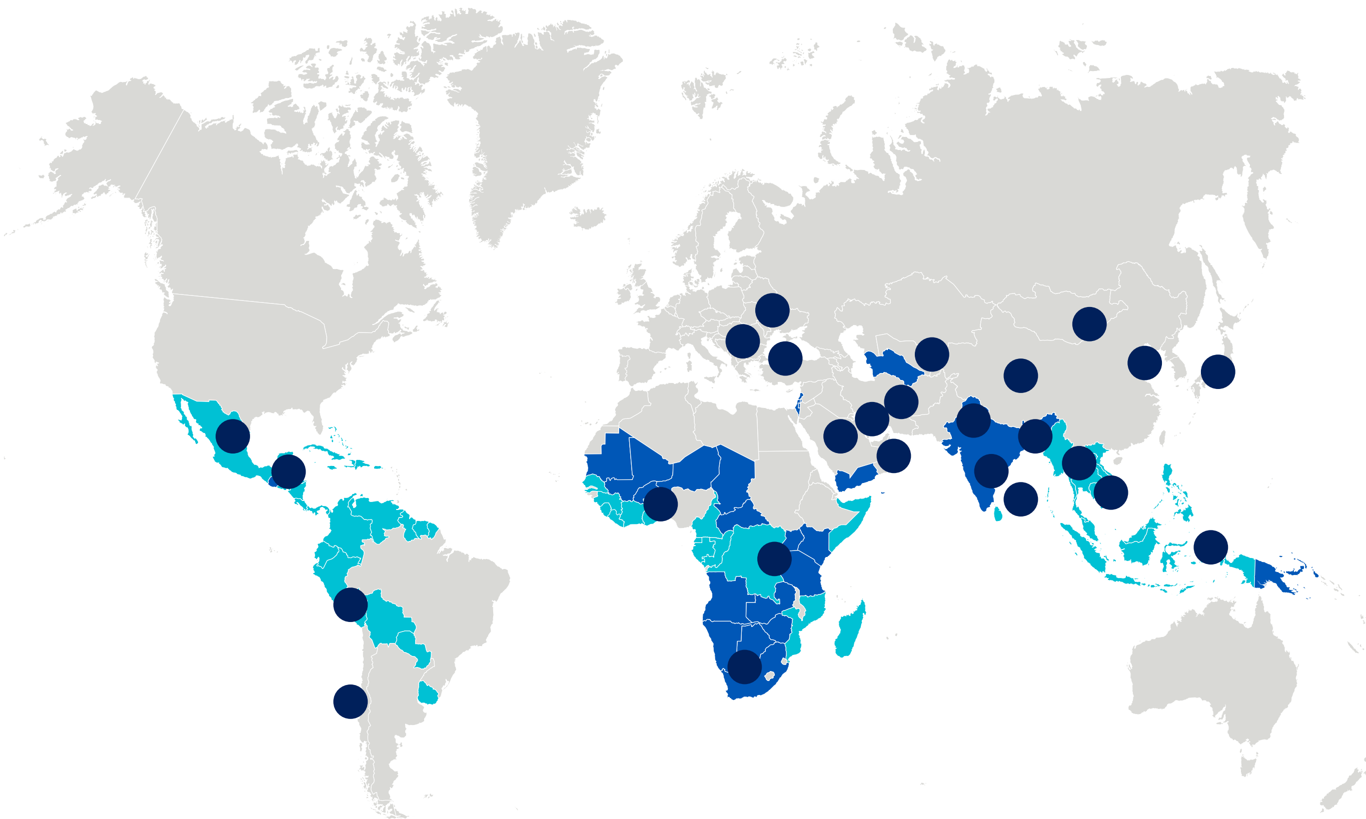
[3] Energy For Growth Hub (2019). **Bitcoin, gaming and the chasm of global energy inequality - Energy for Growth Hub** (Accessed April 2024)
[4] IEA (2022). **Africa Energy Outlook 2022. Key findings – Africa Energy Outlook 2022 – Analysis - IEA** (Access April 2024)

# Importance of the SDGs for Emerging Markets

The UN SDGs provide a framework to create positive change by setting out a blueprint to achieve a **better and more sustainable future** for all. The 2030 goals encompass 169 targets that touch on themes including reducing inequalities, supporting climate solutions, and enabling responsible consumption and production. The SDGs have global support and were adopted by the UN's 193 member states in September 2015.

Emerging market countries are at the heart of the challenges identified by the SDGs. **While they are home to over 80% of the world's population and generate over half of the world's GDP, emerging countries hold less than 20% of global financial assets[5].**

The funding gap to meet in the SDGs in emerging markets by 2030 is substantial, with the Organisation for Economic Co-operation and Development (OECD) forecasting US$4.0 trillion per year in additional investments is required[6]. Just over half of this is for energy transition, with public debt markets playing a crucial role in providing funding. We believe targeted investment in sustainable development is the solution to tackling these challenges.



Almost all tropical rainforests in the world are in emerging markets[A]

49 of Top 50 most polluted countries globally are emerging markets[B]

1 in 10 people live in extreme poverty, including 40% of those living in Sub-Saharan Africa[C]

[A] Earth Observatory, Nasa, December 2022. [B] IQAir, December 2022. [C] World Bank, December 2023.

[5] OECD, April 2024.
[6] UNCTAD, April 2024.

# Significant Opportunity in Sustainable Solutions

The SDGs can be used to identify unmet needs, which represent a source of untapped demand and growth opportunities in emerging markets.

**1 NO POVERTY**

## 1.7bn

unbanked adults worldwide[A]

**2 ZERO HUNGER**

## 1in3

people struggle with moderate to severe food insecurity[B]

**3 GOOD HEALTH AND WELL-BEING**

## 1in2

waiting for essential healthcare services[C]

**6 CLEAN WATER AND SANITATION**

## 3.6bn

lack access to safe sanitation services[D]

**8 DECENT WORK AND ECONOMIC GROWTH**

## 90%

informal employment in least-developed countries[E]

**11 SUSTAINABLE CITIES AND COMMUNITIES**

## 1in4

live in slums in urban areas[F]

**7 AFFORDABLE AND CLEAN ENERGY**

## +2100%

volume growth in electric vehicles by 2030[G]

**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**

## >US$23tn

investment in climate-smart infrastructure by 2030[H]

**11 SUSTAINABLE CITIES AND COMMUNITIES**

## 48%

urban population lack access to convenient public transport[I]

**7 AFFORDABLE AND CLEAN ENERGY**

## +7x

increase in renewables spend for EM emerging markets by 2035[J]

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**

## <10%

of plastic produced is recycled, with 17m MT currently in oceans[K]

**13 CLIMATE ACTION**

## 7.6bn MT

of net $CO^2$ is absorbed by the world's forests annually[L]

Source: abrdn, [A] World Bank 2023, [B] FAO, 2022; [C] WHO, 2017; [D] WHO, 2023; [E] ILO, 2022; [F] United Nations, 2022; [G] BofA Global Research, 2022; [H] IFC, 2018; [I] United Nations, 2022; [J] IEA, 2023; [K] UNEP, 2021; [L] Nature Climate Change, 2021

# abrdn's SDG Framework

At abrdn, we've distilled the 17 UN SDGs into **eight pillars of impact** that represent investable themes. The aim is to identify companies with products and services that **demonstrate clear and material positive alignment with the SDGs.** This includes those that provide local solutions to major problems such as social inequality, climate change, and unsustainable consumption and production.

## abrdn's SDG Framework

| Pillars | Sub-themes* | SDG Metrics* |
|---|---|---|
| **Circular Economy** | Resource efficiency<br>Material recovery and reuse | Waste prevented/recycled |
| **Sustainable Energy** | Access to energy<br>Clean energy<br>Energy efficiency | Renewable energy produced<br>Renewables added to grid<br>EV cars produced |
| **Food & Agriculture** | Access to nutrition<br>Food quality<br>Sustainable agriculture | Sustainable agriculture area<br>Forest set aside as protected |
| **Water & Sanitation** | Access to water & hygiene<br>Clean water<br>Water efficiency | Households provided with clean water and/or safe sanitation |
| **Health & Social Care** | Access to health & social care<br>Enhanced healthcare<br>Drug development | Hospital beds provided/added |
| **Financial Inclusion** | Access to financial services | Loans to SMEs<br>Adults with banking access<br>Access to insurance |
| **Sustainable Real Estate & Infrastructure** | Affordable housing<br>Eco-construction<br>Improved access | Mobile and internet coverage<br>Freight by cleaner alternatives<br>Green buildings constructed |
| **Education & Employment** | Access to education and skills<br>Quality employment | Quality jobs created |
| **SDG Transition (Max 10%)** | Labelled bonds from issuers moving towards the SDGs | Case specific |
| **SDG Enabler (Max 20%)** | Companies integral to the supply chain for the SDGs | Case specific |
| **Frontier Sovereigns (Max 10%)** | USD/EUR issues from eligible frontier sovereigns | abrdn ESGP Factors |

SUSTAINABLE DEVELOPMENT GOALS

Source: abrdn, December 2023. *Examples are for illustrative purposes only and do not represent an exhaustive list.

# abrdn's Theory of Change

| Unmet Need | Alignment | Materiality | Intentionality | Measurability |
|---|---|---|---|---|
| Identify a gap towards achieving the SDGs, referring to the UN's data bank and other public sources. | Evidence that the company's activities are addressing the unmet need, outlining which specific SDG sub-goal is being met. | Demonstrate material alignment, a minimum of 20% of capex, opex, R&D or revenues contributing to addressing the SDG. | Evidence the company will continue to actively pursue SDG aligned activities. | Identify x3 quantitative metrics that evidence the company's contribution to addressing the unmet need to measure impact. |

When we identify an SDG contribution, we produce a **comprehensive abrdn SDG Note, incorporating our 'Theory of Change' for each investment**. The SDG Notes are peer reviewed by the Emerging Market Debt SDG Governance Group and need to be unanimously approved before we add them to the SDG investible universe[7]. This Group is chaired by the portfolio managers and includes independent oversight from abrdn's Sustainability Group.

[7] See Section 'Emerging Market Debt SDG Governance Group' for more information on the composition

# Why abrdn for Sustainable Investing in Emerging Markets?

## People, Process, Performance

### People

- **On-the-ground footprint** across emerging markets (EM) with **>100 EM investors** across debt and equity
- More than **30 years' experience investing in EM** with a **stable team**
- **Specialist resources** with 30+ central sustainability experts, nine dedicated ESG specialists and on-desk legal counsel

### Process

- Focus on **proprietary research** and a fundamentals-first approach with ESG embedded
- Use **SDGs to identify unmet needs** as a source of unmet demand
- abrdn's **eight pillars of impact** seeks to promote a diversified strategy
- **Proactive impact measurement and engagement**, with annual SDG reporting

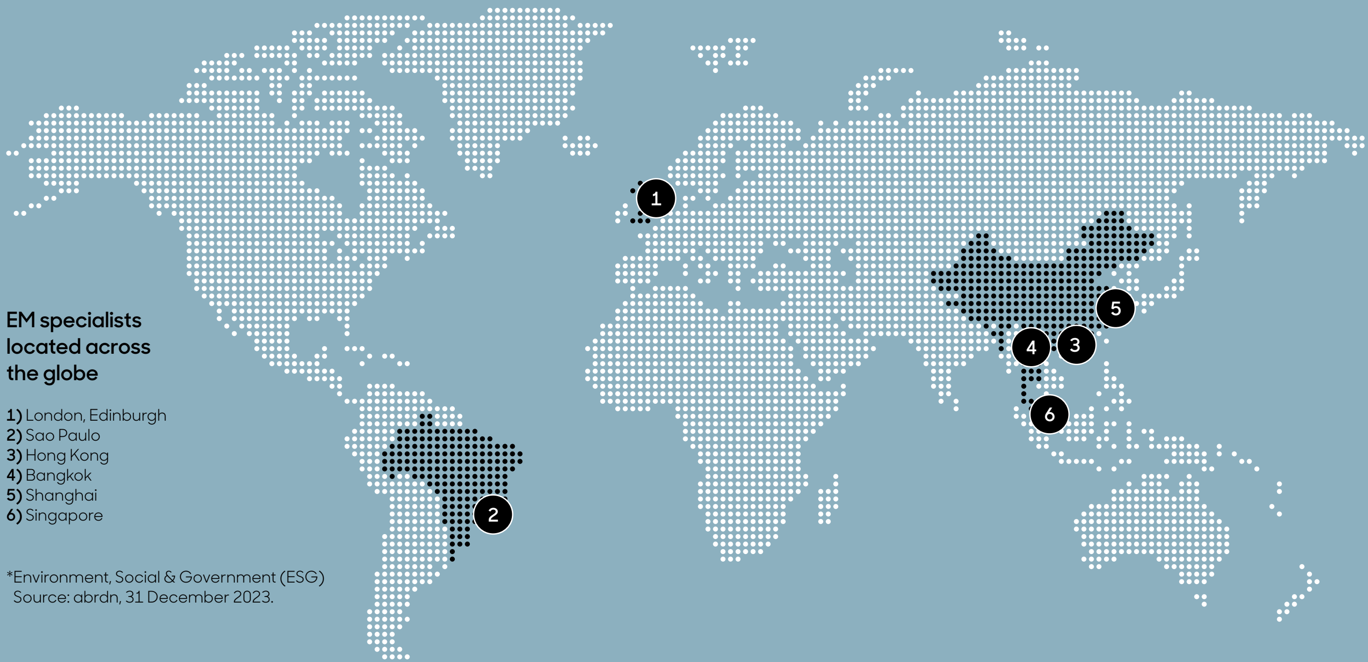
### Performance

- EM SDG Corp Bond is **top quartile** since Inception
- **55% lower carbon intensity** than benchmark
- **MSCI ESG rating A**, Conser A+ Rating and **Environmental Finance's Global ESG Fixed Income Fund of the Year (2024)**
- **First-mover advantage** with only 3% of EM Fixed Income funds designated Article 9
- EM Corp Bond with over 12-year track record is **top quartile** over three years and since inception

Source: abrdn, March 2024.

# Why abrdn for Sustainable Investing in Emerging Markets?

| EM Assets | History of EM investing | EM Research | Resources |
|---|---|---|---|
| US$62bn | 37years<br>EM equity | 80+<br>Countries | 100+<br>Investment professionals |
| US$44bn<br>in EM equity | 30years<br>EM debt | 1,000+<br>Companies | 30+<br>Sustainability specialists |
| US$18bn<br>in EMD | 23years<br>EM corporates | 2,000+<br>Company meetings | 9<br>On-desk ESG specialists |




**EM specialists located across the globe**

**1)** London, Edinburgh
**2)** Sao Paulo
**3)** Hong Kong
**4)** Bangkok
**5)** Shanghai
**6)** Singapore

*Environment, Social & Government (ESG)
Source: abrdn, 31 December 2023.

# Pillar Headline Outputs

**Positive outputs from companies held in the Fund in 2023 included...**

## Circular Economy

**1,211,927 tonnes of waste diverted from landfill**, equivalent to the landfill waste created by 2.7 million Americans annually.[A]

## Health & Social Care

**15,605 hospital beds provided**, enough to serve 3.9 million people, the population of Los Angeles.[B]

## Sustainable Energy

**54,823 gigawatt hours (GWh) of renewable energy produced**, enough to power 16 million households in the UK for a year.[C]

## Food & Agriculture

**Over 1,804,797 hectares of forest set aside for conservation**, enough to cover half the size of Switzerland.[D]

## Financial Inclusion

**US$173 billion in outstanding loans to micro, small and medium-sized enterprises**, equivalent to over half the annual GDP of Finland.[E]

## Sustainable Real Estate & Infrastructure

**81 billion tonne-kilometres of freight transported by cleaner alternatives**, equivalent to half the freight moved by HGVs (heavy goods vehicles) in the UK each year.[F]

## Water & Sanitation

**14,723,087 people provided with clean drinking water**, similar to the combined populations of Denmark and Sweden.[G]

## Education & Employment

No companies held that aligned with this pillar throughout 2023. Currently undergoing thematic research to identify potential investments.

[A] Source: Company data from WE Soda (3-months), Global Waste Index | SENSONEO (Accessed May 2024)

[B] Source: Company data from Rede D'or, Auna and Georgia Capital, World Bank, Hospital beds (per 1,000 people) | Data (worldbank.org). Largest Cities by Population 2024 (worldpopulationreview.com) (Accessed May 2024)

[C] Source: Company data from Renew Power, Greenko, Genneia, ACME Solar and Enel Chile. Average Electricity Usage in the UK: How Many kWh Does Your Home Use? | OVO Energy (Accessed May 2024)

[D] Source: Company data from Suzano, Klabin and CMPC. Countries Compared by Geography > Land area > Sq. km. International Statistics at NationMaster.com (Accessed May 2024)

[E] Source: Company data from ICICI, HDFC, Bank Rakyat, TBC Bank, BBVA Mexico, Banorte, India Infoline (4-months), Bank of Georgia, Davivienda, GNB Sudameris, Shriram, Multibank (10-months), Kasikornbank, Transilvania Bank, Axis Bank (3-months), Industrial Bank of Korea (2-months) and Slovenska Sporitelna (2-months). GDP Ranked by Country 2024 (worldpopulationreview.com) (Accessed May 2024)

[F] Domestic road freight statistics, United Kingdom: 2022 – GOV.UK (www.gov.uk) (Accessed May 2024)

[G] Source: Company data from Manila Water and Aegea (3-months). Population by Country (2024) – Worldometer (worldometers.info) (Accessed May 2024)

# Circular Economy

## Doing more and better with less

Every year 2.24 billion tonnes of waste is dumped on the planet. If all this waste was put on trucks, it would go around the world **24 times**[8]. Consumption patterns are causing international agencies to predict an over 70% increase in annual waste generation by 2050, outpacing the rate of population growth to reach **3.88 billion tonnes**[9].

Poor waste management can have significant environmental and social consequences. The world has finite resources, and we're already consuming at a rate that requires the resources of 1.8 earths a year, according to Earth Overshoot Day. Wasting the amount we do puts further strain on the world's resources.

The concept of a circular economy is to move from a 'make, use, dispose' model to one that enhances and extends the lifespan of products and materials and diverts waste away from landfills. Our Circular Economy pillar targets companies that offer solutions to keep resources in use for as long as possible.

These products are designed to reduce pressure on natural resources and expand recycling services, which is extremely important given that **33% of global waste is not managed in an environmentally safe manner**[10].

[8] https://www.theworldcounts.com/challenges/planet-earth/waste/global-waste-problem
[9] The World Bank (2021) **More Growth, Less Garbage** (Online). Available at **https://openknowledge.worldbank.org/handle/10986/35998** (Accessed February 2024)
[10] The World Bank (2022) What a Waste 2.0 (Online). Available at https://datatopics.worldbank.org/what-a-waste/trends_in_solid_waste_management.html (Accessed February 2024)

# Circular Economy

### Core themes include...

- Prevention, recovery and/or recycling of waste
- Production of recyclable products
- Industrial processes that are materially less resource-intensive than alternatives

### Companies in our portfolio are...

- Producing soda ash with the lowest impact on nature and the environment

# Case Study

**Company name:** West East Soda
**Country:** Türkiye
**Sector:** Basic Materials – Mining
**SDG sub-goal:** 12.4

Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks. Significantly reduce their release to air, water and soil in order to minimise their adverse effects on human health and the environment.

**abrdn ESG risk rating** – Medium

**MSCI ESG rating** – N/A

## ESG risks

- Transitioning to renewable energy
- Natural environment hazards including seismic activity and subsidence
- Water scarcity and water stress

## ESG engagement

A recent site visit to the company's Turkish facilities increased our confidence in its proprietary solution-extraction method and the associated environmental benefits. As WE Soda is the first dedicated soda ash producer to issue debt, our ability to gain a first-hand understanding of the process and industry dynamics enhances our investment decision-making.

## Theory of Change

### Unmet need

Soda ash is the world's tenth most highly consumed inorganic industrial ingredient. It's an essential component in a wide variety of industrial processes with no economically feasible and environmentally viable substitute. WE Soda's solution-extraction process produces natural soda ash with the lowest carbon dioxide equivalent ($CO^2e$) emissions and water intensity. Its solution-extraction process focuses on making the industrial process as circular as possible.

### Intentionality

The entire business model is focused entirely on the production of natural soda ash. The company is also investing additional capital and growing faster than any other soda ash producer globally, supported by financial position and unique operating position. If all growth projects are developed as planned and to full capacity, the company will invest up to approximately US$5 billion in its operations and more than double production capacity by 2030.

### Materiality

EU taxonomy states emissions from the soda ash production processes lower than 0.789 $tCO^2e$ per tonne of product are considered eligible. WE Soda average is 0.47 $tCO^2e$ per tonne (EU Solvay average is 1.34 $tCO^2e$ per tonne). Materiality is met with 92% of revenues.

### Measurability

- 4,847,706 metric tons of waste diverted from disposal
- Reduction of scope 1 & 2 $CO^2$ emissions intensity – 0.334 in 2023 versus 0.343 in 2022 and target of 0.274 by 2027 and 0.206 by 2032
- Transition to renewable energy sources – installed 7megawatts (MW) of solar photovoltaic (PV) capacity during 2023, with a target of 200MW by 2027

Source: WeSoda, December 2023.

# Sustainable Energy

## Increasing renewables, decreasing emissions and improving access

Energy is central to almost every environmental and social issue the world faces. It touches most aspects of daily life, from cooking to mobility to education. While we have made impressive progress in the electricity sector, it represented only one-fifth of global energy consumption in 2019, and progress has been negligible in more significant areas. An estimated **675 million people lack access to electricity** with progress stagnating since 2019 due to a lack of investment in transmission and distribution[11].

While meeting global climate goals is possible, it requires large-scale mobilisation of private capital and deployment of **renewables which are now 30% of global electricity consumption**. Our Sustainable Energy pillar considers three areas of energy: clean energy solutions, initiatives that promote energy efficiency, and services to expand access to energy.

[11] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at SDG Indicators (un.org) (Accessed April 2024)

# Sustainable Energy

## Core themes include...

- Investment in electrification and renewable energy capacity expansion
- Solutions to increase energy efficiency
- Infrastructure enabling the transition to clean energy

## Companies in our portfolio are...

- Building renewable power generation in India to reduce the reliance on thermal coal
- Operating the largest wind farm in Argentina's Patagonian region
- Expanding electricity access to rural Guatemala with a 99% coverage target by 2032
- Manufacturing range-extended electric vehicles and the batteries for electric vehicles
- Constructing transmission lines for renewable power across the Andean region
- Financing renewable finance projects alongside the World Bank in Türkiye

# Case Study

ReNew

**Company name:** ReNew Energy
**Country:** India
**Sector:** Utilities – Renewable Energy
**SDG sub-goal:** 7.2

By 2030, increase substantially the share of renewable energy in the global energy mix

**abrdn ESG risk rating –** Medium

**MSCI ESG rating –** AA

## ESG risks

- Land rights
- Supply chain ESG risks
- Water & biodiversity

## ESG engagement

Recent discussions on land rights as part of a 'just transition' thematic engagement exercise demonstrated that ReNew was well-resourced to manage and mitigate risks around land disputes. ReNew prefers a leasing model when procuring land, ensuring the original landowners retain their titles and can receive a consistent income. See page 18 for more on how we engage on the just transition in the Indian renewables sector.

## Theory of Change

### Unmet need

India maintains a high reliance on fossil fuels for energy generation, accounting for around three quarters of primary energy demand[12]. The government has embarked on the energy transition, with a goal to reach 500 gigawatts (GW) of renewable energy capacity by 2030 (from 176GW in 2023[13]).

### Intentionality

ReNew is India's largest renewable energy company with 8.3GW of commissioned capacity, split evenly between wind and solar. It has also committed a further 5.5GW, taking the potential portfolio up to 13.8GW over the next two to three years and a target of 18GW by 2025. The company is also ramping up module production to increase self-sufficiency.

### Materiality

ReNew is a pure-play renewables company with a portfolio evenly split between wind and solar. Indeed, 100% of revenues and capital expenditure (capex) are committed to building renewable energy across India.

### Measurability

- Produced 18,621,000 megawatt-hour (MWh) of renewable energy, 11% increase versus last year
- Commissioned 940 MW of new renewable energy projects
- ReNew's portfolio contributes 1.9% of India's power capacity and avoids 1.1% of India's power sector emissions

[12] IEA India Energy Outlook 2021, **https://iea.blob.core.windows.net/assets/1de6d91e-e23f-4e02-b1fb-51fdd6283b22/India_Energy_Outlook_2021.pdf**
[13] **https://www.statista.com/statistics/865716/india-total-renewable-energy-capacity/** (Accessed April 2024)

Source: ReNew, December 2023.

# Case Study

## Thematic engagement

### A just transition: India and land rights

In the push to accelerate renewable energy, many investors potentially overlook land rights. Reputational damage, adverse media coverage, and project delays are risks that can arise from land conflicts.

### Who owns the land?

With India's ambitious renewables capacity target, vast quantities of land are required for solar farms. And while solar farming requires a great deal of land, especially in areas where the sun's intensity is highest, it can come at the expense of local communities using it for livestock grazing and farming purposes – both reasons critical to their survival. These common lands, often referred to as orans by locals, have been used for generations by communities with no legal ownership of the land, which is a common practice in India.

### Company engagements are essential

Corporate engagement and due diligence are important avenues investors can use to help mitigate risk and facilitate change. In 2023, we engaged Indian renewable companies on land procurement practices, to identify parts of the process prone to risk of land disputes. We also shared investor expectations on practices to ensure fair procurement of land.

### We've identified four stages of land procurement best practice:

1. Physical assessment of the land site
2. Verification of land ownership titles
3. Establishing agreements with landowners
4. Ongoing management of community relations

## Four stages of land procurement best practice explained

**Stage 1:** Procure dryland or non-agricultural land where limited or no cultivation is done and located at a minimum distance away from local villages to ensure no risk of relocation or resettlement; any required land status conversions do not lead to loss of livelihoods (especially in a lease model where landowners are compensated on a recurring basis).

**Stage 2:** Companies should conduct land title searches that cover the last 30 years using in-house and third-party legal counsel. They will also conduct due diligence to ensure there's no outstanding land litigation or encumbrance of property.

**Stage 3:** Payments to be made directly into landowners' bank accounts, with no cash transactions or transfer of payment via an intermediary; fair and transparent compensation – land purchase price is based on similar market transaction rates, lease rental payments are based on crop yields, paying a premium above income from farming the land with annual increase during the lease.

Stage 4: Aim to ensure preservation of livelihoods through corporate social responsibility activities, education, skills training, and employment opportunities; promote economic mobility in local communities.

Furthermore, encouraging transparency allows companies to demonstrate they have properly assessed these concerns. There must be free, prior, and informed consent from existing landowners and land beneficiaries for the approval of such projects. Some companies operating here are acutely aware of these issues and are taking clear measures to ensure land is obtained fairly.

# Food & Agriculture

## Providing quality food and preventing land degradation

According to the UN, the world's population is projected to reach **9.8 billion** in 2050 and 11.2 billion in 2100, amplifying the demands we place on the Earth's natural resources. The resources required to feed the global population are already putting unsustainable demands on land, oceans, forests and biodiversity. In fact, **10 million hectares of forest are destroyed every year.** Commercial agriculture is the largest driver of deforestation, followed by subsistence agriculture[14].

Higher food prices mean hunger levels are what they were in 2005. **Nearly one in three people were suffering moderate or severe food insecurity** in 2021 (i.e., lacked regular access to adequate food)[15]. A confluence of disruptions – from climate-related shocks to the outbreak of Covid-19 to the war in the Ukraine – has undermined global food supply systems and posed additional threats to global food security[16].

Our Food and Agriculture pillar covers both social and environmental concerns. Its twin focus seeks to address hunger and nutrition, while promoting the sustainable use of the world's resources, including forestry assets. We look at access to nutrition, improved nutrition and services for farmers, as well as how food is produced and the affect farming practices have on the land, water, and biodiversity.

[14] WWF (2023). Available at **https://explore.panda.org/forests#thousand-cuts** (Accessed April 2024)
[15] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at **SDG Indicators (un.org)** (Accessed April 2024)
[16] United Nations (2022) **The Sustainable Development Goals Report 2022** (Online). Available at **https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf** (Accessed April 2024)

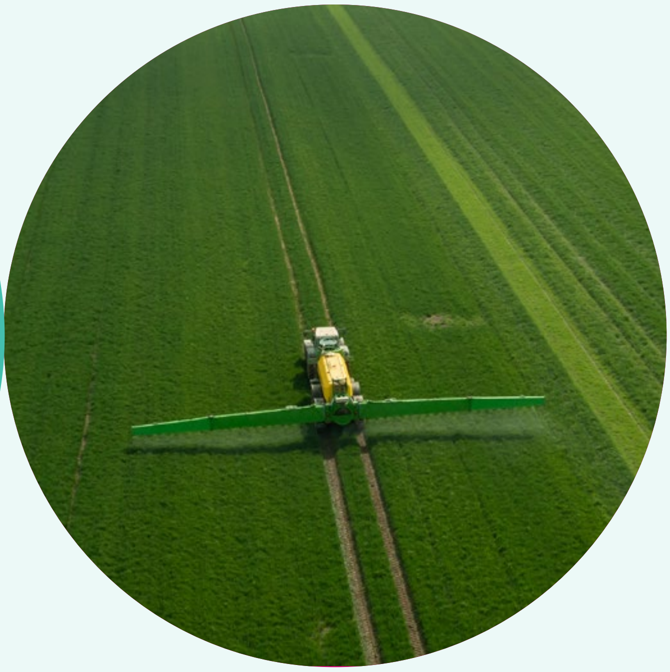
# Food & Agriculture

### Core themes include...

- Deployment of sustainable agricultural and forestry practices
- Higher crop yields through productivity, including providing financing to small-scale farmers
- Increasing nutritional content

### Companies in our portfolio are...

- Setting aside almost two million hectares of forestry for conservation in high-risk biomes
- Providing over US$100 billion in lending facilities to sustainable agriculture practices across Brazil
- Using precision farming to become the largest global producer of non-GMO (genetically modified) corn



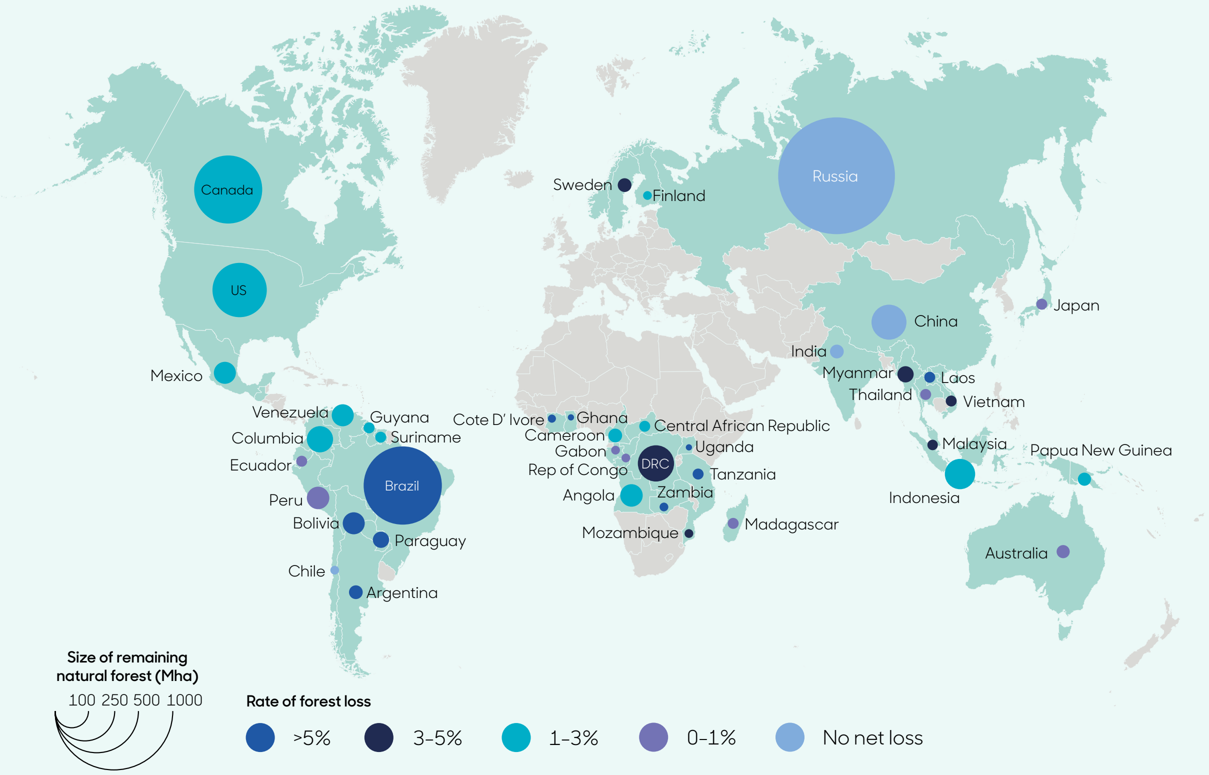
# Food & Agriculture

## Thematic research

The Sustainable Insights and Investing team, which is part of abrdn's Sustainability Group, regularly publishes thematic research on sustainability issues that it believes could present opportunities and risks for investors.

Through this research, the team highlighted that the increasing focus on nature and biodiversity loss and evolving regulation on deforestation would be a key issue for companies linked to forest-risk commodities, either directly or via their supply chains. These include cattle, palm oil, soy, timber and plantation wood fibre, cocoa, and coffee.

### The main remaining natural forests globally and the current rate of forest loss




Source: map only covers the 40 countries with the highest remain primary forest cover. All other countries are in grey.

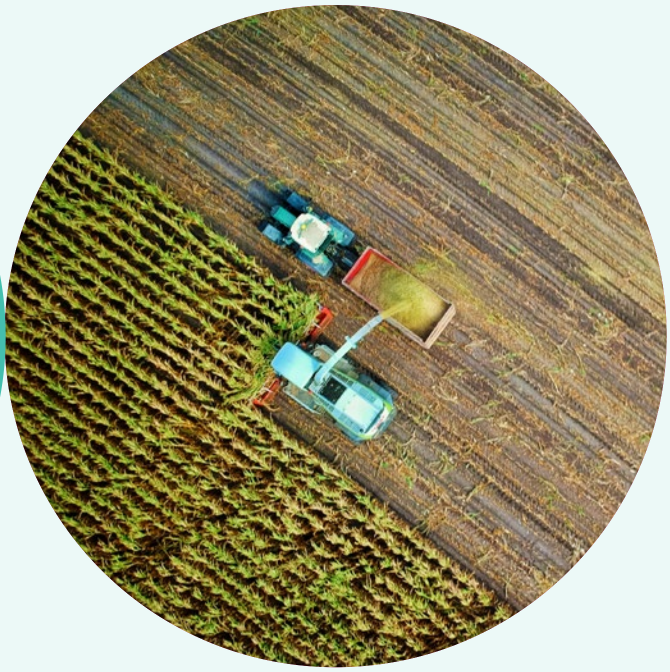
As shown on the map, deforestation rates are highest in South America. While regulation and enforcement of regulation are key to halting deforestation, companies have an important role to play. Organisations who recognise their dependence on nature have strong no-deforestation and no-conversion policies. Furthermore, they manage existing forestry assets in a sustainable manner to ensure the long-term resilience of the ecosystems on which they rely. Companies embedding these practices are in a better position to meet the evolving global regulatory landscape.

# Food & Agriculture

15 LIFE ON LAND

Based on abrdn's research on deforestation, we have a preference for companies managing forestry assets that set aside areas of natural forest for conservation that are significantly above the legal minimum. This demonstrates a commitment to promoting biodiversity and protecting wildlife. We found market leaders operating in the high-risk biomes in Brazil. Many have pledged to maintain natural forest for conservation, while also practising sustainable management of commercial forestry assets. We see these companies as materially and positively contributing to SDG 15.2.

SDG 15.2: Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.



** The source is for the Info on the right hand side, it was in the PPT supplied**

Source: abrdn, Statista, World Bank, United Nations, IFC. © owned by each of the corporate entities named in the respective logos. Companies selected for illustrative purposes only to demonstrate the investment management style described herein and not as an investment recommendation or indication of future performance.

## Theme

Responsible Consumption & Production

## Problem

Deforestation in Brazil is at the highest rate in a decade

## Solution

Sustainably managed forests and certified wood

## Pillar

Food & Agriculture

## Opportunities

Klabin

cmpc

suzano

# Case Study

**Klabin**

**Company name:** Klabin
**Country:** Brazil
**Sector:** Materials – Paper Products
**SDG sub-goal:** 15.2

Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

**abrdn ESG risk rating -** Medium

**MSCI ESG rating -** BBB

## ESG risks

- Water usage
- Forestry management
- Carbon emissions

## ESG engagement

We had a positive meeting with Klabin in November 2023, where we discussed the recent changes to its board and governance.

## Theory of Change

### Unmet need

In 2023, the world lost 3.7 million hectares of primary tropical forest, equivalent to nearly 10 football fields per minute[17]. The world's growing demand for commodities, including timber & paper products, is seen to be a primary driver behind deforestation. Through sustainable forestry management and conservation, Klabin aspires to be the global benchmark for responsible solutions in sustainable, renewable and recyclable forestry products.

### Intentionality

Klabin was the first pulp and paper producer in the Southern hemisphere to obtain Forestry Stewardship Council (FSC) certification with 100% of its forestry assets certified. Circularity sits at the heart of Klabin's business model, from using reusable and renewable inputs to producing recyclable and biodegradable forestry products.

### Materiality

We evaluate materiality based on revenues from sustainably managed forestry assets in pulp and paper segments. Klabin sets Aside 42% of forestry assets for conservation, while 57% of its wood supply is from internal sources. That means 29% of the total wood it uses is set aside for conservation.

### Measurability

- Set aside 300,000 hectares of forestry assets for environmental conservation, equivalent to 42% of the total
- 100% of its owned forestry area in FSC (Forest Stewardship Council) certified
- 90.9% of energy used is from renewable sources

[17] **Forest Pulse: The Latest on the World's Forests | World Resources Institute Research (wri.org)** (Accessed April 2024)

Source: Klabin, December 2023.

# Water & Sanitation

## Establishing access to safe, clean and sustainable facilities

Water supports all life and is a precious and finite resource. Yet, data suggests that progress on establishing universal access to basic sanitation and encouraging both the protection and responsible use of ocean resources is woefully lagging. **One-fifth** of the world's river basins are experiencing rapid increases or decreases in surface water area. This is compounded by **pollution** and the **persistent loss and degradation** of wetlands and freshwater biodiversity[18].

Specifically, **27% of the world's population doesn't have access to drinking water and 43% don't have access to safe sanitation**. Water utility companies must help address this situation.

Meanwhile, two billion people lack safely managed drinking water, while one in four people worldwide lack access to reliable handwashing facilities. **Almost half of the global population lacks access to safe sanitation**.

To reach universal coverage of these services, the UN estimates that the current rates of progress would need to increase sixfold for drinking water and fivefold for sanitation. This could mean saving 829,000 lives annually – the number of people who die each year from diseases directly attributable to unsafe water, inadequate sanitation and poor hygiene practices. Our pillar looks for companies whose products and services improve access to clean water and sanitation, and enhance efficiencies in existing infrastructure.

With a growing global population and increasing prevalence of extreme weather events, more efficient use and management of water are critical to meeting increased demand and managing risks from droughts and flooding. Some 2.4 billion people live in water-stressed countries, of which 800 million live in high or critically high areas. Improving water-use efficiency is vital and is also an area of focus for this pillar.

[18] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at **SDG Indicators (un.org)** (Accessed April 2024)

# Water & Sanitation

### Core themes include...

- Access to clean drinking water
- Water treatment systems and initiatives to reduce water consumption
- Provision of safe and reliable sanitation services

### Companies in our portfolio are...

- Providing water services to over eight million people in the Filipino capital Manila
- Connecting homes to safe sanitation services for the first time across Brazil

# Case Study

aegea

**Company name:** Aegea
**Country:** Brazil
**Sector:** Utility – Water
**SDG sub-goal:** 6.2

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

**abrdn ESG risk rating –** Medium

**Sustainalytics ESG rating –** Low Risk

## ESG risks

- Ensuring services remain affordable and universal
- Environmental practices and hydrology risks
- Bribery given government contracts and regulatory oversight

## ESG engagement

Recent engagement evidenced the reassuring progress made in terms of managing governance risks with the adoption of international best practices with third-party oversight. Mandatory compliance training for staff and independent audit and risk teams also reflected best practice. Disputes around weak environmental practices at the company's concessions pre-date its involvement and it has committed capex towards the clean-up. Aegea offers social tariffs, benefiting 10% of households.

## Theory of Change

### Unmet need

Aegea operates water and sewage concessions in Brazil. Its services cover more than 30 million people across different states. The company purchased these concessions at state public auctions, and aims to turn around these mismanaged projects. Aegea is committed to investing heavily to improve water and sewage connectivity. It also has contractual targets to increase water coverage to 99% by 2031 and sewage coverage to 90% by 2033 from the current 83% and 50% respectively. This goal is in line with Brazil's recent sanitation bill. Aegea is also targeting increasing access to the population, specifically for low-income households on social tariffs.

### Intentionality

Clear intentionality as financial success is intrinsically linked to improving access to water and sanitation services in Brazil, thereby aligning to SDG 6.1 and 6.2. Aegea issued a sustainable Eurobond in September 2023, demonstrating a commitment to green and social investments.

### Materiality

High discretionary capex towards improving water and sewage access, which represents most of the total spending. It is using the remaining capital to maintain current quality, equating to 100% alignment to the SDG. The concession contracts require committed front-loaded capex.

### Measurability

- Households supplied with water and/or sewage services increased to 12,080,000, up 50.5% year-on-year[19]
- Water loss rate on water distribution fell to 44.8%, down from 46.6% a year earlier
- 522,300 families benefitted from the social tariff, up from 94,700 in 2020

[19] Aegea 4Q23 Results. **Results Center – Aegea** (Accessed April 2024)

Source: Aegea, December 2023.

# Health & Social Care

## Ensuring access to quality, affordable essential care and enhancing care outcomes

Health and social care standards vary dramatically across the globe. The Covid-19 pandemic was a setback across the board, as decades of progress in reproductive health, maternal health and child health stalled or reversed. The **maternal mortality rates remain three times higher than the 2030 target**. Looking closer, 70% of those occurred in Sub-Saharan Africa, despite an increase in skilled health personnel present at birth, up to 70% from 59% in 2015[20]. The UN highlights lower global life expectancy; decreasing immunisation coverage; increasing in prevalence of anxiety and depression; and a rise in deaths from tuberculosis and malaria[21]. Drug development breakthroughs can make a huge difference, with AIDS-related deaths down 52% versus 2010 [15].

Our alignment process for Health and Social Care targets two facets of reliable, equitable and effective services: access and innovation. We look for companies supporting and enabling drug discovery on priority diseases; improving accessibility and affordability of treatment; and **contributing to broader coverage of essential health services in underserved areas**. The pandemic halted progress on universal health coverage and scaling up investment in health systems and drug development is essential to address the shortfall. Also important is solving the shortage of health workers, which remains most acute in Sub-Saharan Africa and Southern Asia.

[20] United Nations (2022) **The Sustainable Development Goals Report 2022** (Online). Available at **https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf** (Accessed April 2024)
[21] United Nations (2022) **SDG 3** (Online). Available at https://sdgs.un.org/goals/goal3 (Accessed February 2024)

# Health & Social Care

### Core themes include...

- Affordable access to health and social care
- Drug development for priority diseases
- Broader coverage of essential services

### Companies in our portfolio are...

- Providing life-saving oncology treatment and research in the Andean region
- Building greenfield hospitals in Brazil to close the shortage in hospital beds
- Operating pharmacies across the whole of Peru

# Case Study

**Company name**: Rede D'or Sao Luiz
**Country:** Brazil
**Sector:** Healthcare - Hospitals
**SDG sub-goal:** 3.8

Ensure healthy lives and promote well-being for all at all ages: achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

**abrdn ESG risk rating -** Medium

**MSCI ESG rating -** BBB

## ESG risks

- Maintaining healthcare quality
- Labour relations given highly unionised workforce
- Upgrading buildings and green construction

## ESG engagement

Recent engagement focused on new carbon targets and expansion pipeline, as well as the integration of the healthcare insurance business.

## Theory of Change

### Unmet need

Rede D'Or Sao Luiz operates the largest independent private hospital network in Brazil, helping to alleviate the pressure on the under-resourced public sector. Per head healthcare expenditure in Brazil significantly lags Organisation for Economic Co-operation and Development (OECD) countries and the number of operational beds per population falls below the World Bank guidelines. Rede D'Or is expert in oncology and funds an Institute for Research and Education that was central in preventing the spread of Zika virus. The company has a strong pipeline of expansion projects with a target of adding close to 7,000 beds by year-end 2025. Most of its clients are from low- and middle-income backgrounds, with services offered via employer-backed healthcare insurance plans.

### Intentionality

Founder Jorge Moll Filho is a cardiologist-turned-entrepreneur. The company's sole business is healthcare provision and healthcare insurance, with plans to continue to rapidly expand number of operational beds.

### Materiality

77% of capex goes towards brownfield and greenfield hospital expansion, adding new beds to the system.

### Measurability

- Total number of beds at Rede D'or hospitals increased to 11,737, an addition of 1,119 beds since 2021
- Rede D'or performed 498,100 surgeries, up +6.3% year-on-year
- Number of hospital beds per 1,000 inhabitants in Brazil was 1.99 in 2022, down from 2.17 in 2012[22], and below the World Bank guidance for a minimum of 3.0

[22] **Hospital beds per thousand inhabitants in Brazil 2022 | Statista** (Accessed: April 2024)

Source: Rede D'or Sao Luiz, December 2023.

# Financial Inclusion

## Tackle poverty in all its dimensions

Underserved groups are often marginalised or excluded from financial systems, which negatively affects many other areas of their lives. Financial services act as a gateway to improving access to basic necessities like electricity, water, healthcare, housing and education. Yet, there are still **1.7 billion adults who do not have access to financial products or services**. About half of these adults are women, poor households in rural areas, or those out of the workforce[23].

Covid-19 led to the **first rise in extreme poverty in a generation**. The war in Ukraine further derailed progress, with the UN projecting that **670 million people live in extreme poverty**, a 16% increase[24]. Our pillar identifies companies operating in countries and regions where there is low penetration of basic financial services for individuals, as well as those extending credit to micro, small and medium-sized enterprises (MSMEs) or groups that struggle to access financing.

[23] The World Bank (2022) **Financial Inclusion Overview** (Online). Available at **http://www.worldbank.org/en/topic/financialinclusion/overview** (Accessed 15 February 2023)
[24] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at **SDG Indicators (un.org)** (Accessed April 2024)

# Financial Inclusion

## Core themes include...

- Extending financial services to underbanked individuals
- Addressing insurance gaps to help preserve accumulated household wealth
- Increasing access to credit for small and medium-sized enterprises (SMEs)

## Companies in our portfolio are...

- Targeting the MSME funding gap in Indonesia by focusing on rural and remote islands
- Offering affordable vehicle loans to individuals and SMEs in India
- Providing housing loans to first-time buyers with low incomes in South Korea
- Advancing affordable insurance in the Caribbean
- Promoting financial inclusion and literacy throughout Colombia

# Case study

Shriram Finance

**Company name:** Shriram Transport
**Country:** India
**Sector:** Financials – Commercial Vehicle Financing & Leasing
**SDG sub-goal:** 9.3

Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.

**abrdn ESG risk rating –** Medium

**MSCI ESG rating –** BBB

## ESG risks

- Transition to electric vehicles and Indian emission standards
- Digitalisation of payment collections
- Industry risk of mis-selling of financial products

## ESG engagement

Shriram shared with us its role in providing access to capital for first-time vehicle buyers, which represent up to 70% of its customers. The company has an impressive number of initiatives targeted at females, including driving training programmes, SMEs lending and education schemes. We also discussed its electric vehicle (EV) ambitions but note that the cost remains too high for many of its low-income customers.

## Theory of Change

### Unmet need

Rural India has a transportation deficit and communication between the villages and nearby towns is limited because of lack of adequate infrastructure and poor road quality. Many farmers and small business owners cannot afford to pay upfront for commercial vehicles to grow their business. In India, around 80% of cars are financed and nearly 100% of commercial vehicles are bought on loans[25]. As a result, commercial vehicle loans are highly correlated with rural economic development.

### Intentionality

India's financial inclusion is still at a nascent stage. The market for second-hand commercial vehicle financing is underpenetrated with private financiers offering high interest rates taking the majority of the market share. Shriram is filling the gap to reach the underbanked population.

### Materiality

Used and new vehicle loans are 95.9% of the loan book. Also, 88% of Shriram's branches are located in rural and semi-urban locations.

### Measurability

- 91% of loans are to customers in rural and semi-urban areas
- 7.71 million customers
- 70% of customers are first-time buyers

[25] Car Loans: Outstanding auto loans hit new high in FY21 – Times of India (indiatimes.com)

Source: Shriram Transport, December 2023.

# Sustainable Real Estate & Infrastructure

## Providing essential infrastructure, eco-friendly buildings and improving connectivity

As the global population grows and people increasingly move to urban areas, the built environment has a key role to play in supporting social and environmental goals. The **buildings and construction sector accounted for over a third of global energy use** and produced **37% of global $CO^2$ emissions in 2022**[26]. Many countries have stated their ambitions to increase energy efficiency and mitigate the environmental impact of buildings and construction. However, this goal must be matched by policy, regulatory action and continued investment. A substantial number of buildings will need to undergo a deep retrofit as part of wider net-zero plans. The current pace of retrofitting, however, stands at only 1-2% of leasable area in mature cities[27].

Besides 'green' buildings, we need to see progress on equitable infrastructure: over **one billion people reside in slums**, principally across Asia and Africa, and **99% of the world's urban population breathe polluted air**[28]. Well-planned and well-managed urban development can generate inclusive prosperity and equity.

abrdn's Sustainable Real Estate and Infrastructure Pillar focuses on a variety of issues facing industry, infrastructure and sustainable cities and communities. This includes the provision of essential infrastructure; affordable housing; efficient building practices; environmentally friendly construction materials and solutions; and increased connectivity.

[26] Global Alliance for Buildings and Construction (2023). Available at **https://globalabc.org/our-work/tracking-progress-global-status-report** (Accessed April 2024)
[27] World Economic Forum (2021). Available at **https://www.weforum.org/reports/green-building-principles-the-action-plan-for-net-zero-carbon-buildings** (Accessed April 2024)
[28] United Nations (2022) **SDG 11** (Online). **https:/ /sdgs.un.org/goals/goal11** (Accessed April 2024)

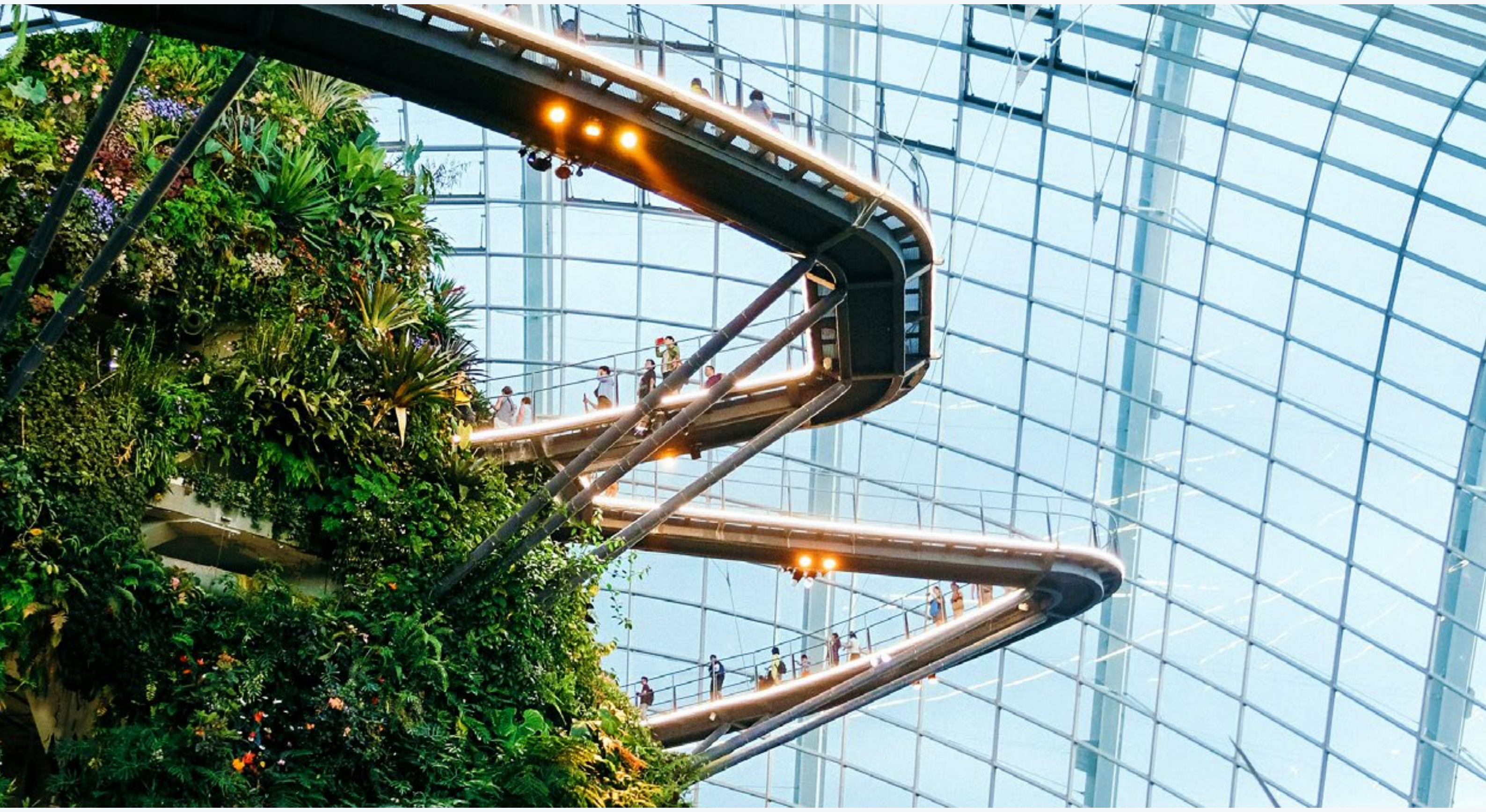
# Sustainable Real Estate & Infrastructure

### Core themes include...

- Green buildings and eco-construction
- Affordable housing
- Access to essential infrastructure, such as public transport and the internet

### Companies in our portfolio are...

- Operating and constructing electrified metro services in Santiago and Lima
- Building green warehouses in China, the Czech Republic and Romania
- Designing cleaner alternatives to air conditioning in the Middle East
- Providing cleaner alternatives to road haulage in Brazil, Chile and Georgia
- Connecting people across Sub-Saharan Africa to the internet for the first time



# Case study

LET'S GROW TOGETHER

**Company name:** Axian Telecom
**Country:** Madagascar, Tanzania, Togo, Uganda
**Sector:** Telecommunications – Wireless
**SDG sub-goal:** 9.c

Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and fair access for all.

**abrdn ESG risk rating –** Low

**Sustainalytics ESG rating –** Medium Risk

## ESG risks

- Anti-competitive regulation
- Increased regulatory scrutiny around customer data protection
- Key man risk – single shareholder, founder and Chairman

## ESG engagement

Recent engagement demonstrated the company's willingness to expand mobile and data services to rural populations through the deployment of new telecom towers. It recognises the payback on these investments could be 20+ years given the low ARPU (average revenue per unit) in these areas, but is happy to take a long-term view.

## Theory of Change

### Unmet need

Internet penetration in Africa is below 50% in Axian's core countries of operation. As of early January 2024, around 74% of the web traffic in Africa was via mobile phones, over 14 percentage points higher than the world average. Furthermore, almost all African countries have a higher web usage on mobile devices compared to other devices. This is partly due to mobile connections being cheaper and not requiring the infrastructure needed for traditional desktop PCs with fixed-line internet connections[29].

### Intentionality

Axian has set out multiple strategic targets aligned with UN SDGs 4, 5, 8 and 9 across Tanzania, Togo and Uganda.

### Materiality

Materiality is met through both revenues, with over 70% coming from the mobile and fixed business and another 20% from mobile financial services. Materiality is also meet through capex, with almost 100% of expansionary capex linked to growth of network and penetration across key markets.

### Measurability

- Increasing 4G network coverage by adding 1,250 new antennas in Tanzania
- Increasing subscribers by an average of 600,000 each year from 2021–2025, with 300,000 net adds in 2023
- Increasing number of users on Tanzania's Mobile Financial Services platform to 7.8 million active users, up from 6.6 million users year-on-year

[29] **Africa: internet penetration by country 2024 | Statista (Accessed April 2024)**

Source: Axian Telecom, December 2023.

# Education & Employment

## Creating opportunities for marginalised or vulnerable people

The global economy is battling multiple crises, with the challenging economic conditions forcing more workers into informal employment. **Today, informal employment is as high as 90% for the least-developed countries versus 58% globally**. Women suffer disproportionally with four-fifths of jobs created being informal, against two-thirds for men[30]. This equates to around two billion workers in precarious jobs, most lacking any form of social protection. A lack of formal employment can act as a blocker to financial inclusion because it reduces the ability to borrow formally and receive a pension.

Youth unemployment rates are significantly higher than the rates for adults, with nearly a quarter of young people worldwide not in education, employment or training. Notably, young women are more than twice as likely as their male counterparts to find themselves in this situation. This equates to **32% of young women are not in education, employment or training**. Creating decent work opportunities for the most vulnerable is part of the solution.

[30] United Nations (2023). **The Sustainable Development Goals Report 2023: Special Edition**. Available at **SDG Indicators (un.org)** (Accessed April 2024)

# Education & Employment

The UN encourages employment creation in medium-high and high-technology industries with the energy transition set to be contribute to significant net job growth. The share of medium-high and high-technology jobs within total manufacturing remains low in Sub-Saharan Africa and the least-developed countries, at 22% and 11% respectively. This compares with 48% in Europe and Northern America and 47% in Eastern Asia. The 2030 target for the least-developed countries is 24.2%.

Achieving full and productive employment and decent work for all requires businesses to invest in and support the development of their employees. In defining 'fair' employment opportunities, we place a premium on wage growth and development opportunities – especially in underserved areas and for groups on the lower rungs of the income ladder – and employee safety and equality. We also look for companies positively impacting education services. In our portfolio, we target companies that expand access to affordable, quality education, and recognise the importance of prioritising diversity and reaching all socioeconomic groups.

### Core themes include...

- Quality employment opportunities
- Access to education and skills development
- Value created for those in informal employment or self-employment

The Fund does not currently have exposure to companies in this pillar.

Our Sustainable Insights and Investing team is conducting thematic research into this pillar to help us identify potential investment opportunities. The focus of this research is on the job creation, increasing skilled formal employment, reducing youth unemployment and boosting female labour participation.

# SDG Transition

## Labelled bonds from issuers moving towards the SDGs

In 2023, the Fund initiated a new process for investing in ring-fenced labelled bonds issued by companies in the early stages of aligning with the SDGs, or 'SDG Transition' companies. This approach **allows targeted financing for companies demonstrating their commitment to transitioning towards the SDGs**. The Fund can invest a maximum of 10% in SDG Transition companies.

The rationale behind this addition extends beyond identifying well-aligned companies today: it enables the Fund to actively support issuers that may not meet the materiality criteria for SDG alignment, but who are on a trajectory to become well-aligned thanks to their targeted SDG-aligned investment and capital allocation. This proactive strategy contributes to wider societal and environmental objectives. It also fosters positive change within transitioning companies and accelerates their progress towards meeting the SDGs. These investments ultimately promote a more sustainable and responsible business landscape.

To qualify as an SDG Transition issuance, the bond must meet specific and stringent criteria. It **must be a ring-fenced green, social, or sustainable bond that passes abrdn's Labelled Bond Framework**, which assesses whether the bond meets international standards. There must also be an expectation that **the issuer will meet the minimum materiality threshold for SDG contribution in the medium-term** and thereby graduate from the SDG Transition sleeve. Furthermore, the entire business must not fail negative ESG screens and must pass the DNSH (Do No Significant Harm) assessment.

This innovative approach expands the Fund's scope and supports companies on their journey towards sustainability by striking a balance between current SDG alignment and fostering future alignment.

The following table showcases two issuers, Aldar and Cemex, whose labelled bonds were assessed under the framework, demonstrating the SDG Transition process in action.

SUSTAINABLE DEVELOPMENT GOALS

| | Aldar/Real Estate/UAE | Cemex/Materials/Mexico |
|---|---|---|
| **Bond** | ALDAR 4 ⅞ 05/24/33 | CEMEX 9 ⅛ PERP |
| **Why considered** | Green bond with proceeds used for increasing proportion of LEED certified green buildings | Green bond with proceeds going towards energy efficiency and new green development |
| **Labelled bond assessment** | Passes as in line with international practices. Proceeds fully allocated to SDG-aligned activities | Fails as lookback period is too long and unambitious carbon reduction targets |
| **Other relevant information** | Intentionality evidenced via new 2030 sustainability targets. Strong labour and environmental policies | N/A |
| **SDG Sub-Goal Alignment** | 11.6 | N/A |
| **Investment decision** | Approve as SDG Transition | Reject as SDG Transition |

Source: abrdn, January 2024 © owned by each of the corporate entities. Companies selected for illustrative purposes only to demonstrate abrdn' investment management style and not as an indication of performance

# SDG Enablers

## Companies integral to the supply chain for the SDGs

The Fund can also invest up to 20% in what we call SDG Enablers. These are companies whose products and services **enable an SDG-aligned value chain,** facilitating the delivery of solutions in at least one (and most likely many) of our eight impact pillars. While these businesses are integral to progressing towards the SDGs, they don't themselves have a direct and measurable positive benefit. In creating this basket of SDG Enablers, we avoid 'double counting' the positive operational outcomes derived along the length of the value chain.

Our approach here is conservative. The net is wide for a construct that allows 'SDG Enabler' classification for any firm that is involved in a value chain. To counter this, we focus on companies that play **an essential and material role in delivering positive social and environmental outcomes**, and without whom many of the products that have a positive effect on our impact pillars would not be possible. This means avoiding companies that are several steps removed from the ultimate positive outcome.

SDG Enablers are playing a central role in achieving the SDGs, but they are doing so one step removed from the direct positive change – **playing a crucial role in enabling rather than driving positive change**.

### Core themes include…

- Facilitating access to renewable energy
- Improved energy efficiency to optimise resource use
- Providing concessionary financing to financial institutions serving the underbanked

### Companies held in the Fund are…

- Increasing energy efficiency across numerous industries by producing smaller semiconductor wafers that directly help its customers consume less energy
- Supporting SMEs via intermediaries with low-interest-rate financing in Peru
- Developing memory semiconductors that double energy efficiency

# Case Study

## SDG Leaders

**Company name:** Corporación Financiera de Desarrollo
**Country:** Peru
**Sector:** Financial
**SDG sub-goal:** 8.3

Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of MSMEs enterprises, including through access to financial services.

**abrdn ESG risk rating -** Low

**MSCI ESG rating -** BBB
(upgraded from BB in May 2023)

### ESG risks

- Small portion of loans towards mining activities
- Close links to the Peruvian government and involvement in government-controlled projects
- Human capital development

## Theory of Change

### Unmet need

According to the OECD, in 2020, 99.5% of Peruvian companies were SMEs and they employed 89.4% of the private sector's workforce. Among these enterprises, only 9.4% had access to the formal financial system in 2020[31]. Cofide supports access to finance as Peru's development bank. It is 100% owned by the Peruvian government and is a key participant in the government's economic and development programmes, focussing on infrastructure, financial development, microfinance and productive sectors.

### Intentionality

Cofide's mission highlights its role in Peru's economic and social development programmes, with expertise in the creation of new financial products and structures for underserved markets. In particular, it focuses on the micro and small enterprise lending sector, and helps finance infrastructure and environmental projects.

### Materiality

65.5% of gross loans relate to traditional intermediation to primarily support MSMEs.

### Enabling SDG progress

Cofide lends to financial intermediaries at preferential rates with the proceeds ring-fenced for on-lending to SMEs in Peru. The company doesn't directly lend to the SMEs, so Cofide is an SDG Enabler. It also plays a key role in helping SMEs maintain financial access in economic crises, including during Covid-19.

[31] **34. Peru | Financing SMEs and Entrepreneurs 2022 : An OECD Scoreboard | OECD iLibrary (oecd-ilibrary.org) (Accessed April 2024)**

Source: Corporación, December 2023.

# Emerging Market Sovereigns

## abrdn's ESGP approach

### abrdn ESGP Factors

| Environmental (25%) | Governance (25%) |
|---|---|
| **SDG 7 and SDG 13** | **SDG 9 and SDG 16** |
| Air pollution | Voice and accountability |
| Carbon intensity | Government effectiveness |
| Renewable energy | Regulatory quality |
| | Rule of law |
| | Open budget index |
| **Social (25%)** | **Political (25%)** |
| **SDG 3, 4, 5, 9 and 10** | **SDG 16** |
| Access to electricity | Corruption perception |
| Life expectancy | Political stability |
| Quality of infrastructure | State fragility |
| Gender inequality index | Press freedom |
| GINI coefficient | |
| Mean years of schooling | |
| Infant mortality | |

Frontier countries are some of those most in need of sustainable development financing. However, their financial markets are often insufficiently developed for native companies to issue public debt.

abrdn's proprietary **Environmental, Social, Governance and Political Score is applied to the entire sovereign emerging market** universe to filter out the worst-performing countries.

We assess sovereigns using a range of quantitative metrics across the four pillars to determine an overall score. We also apply a qualitative overlay to determine the trajectory (direction of travel) of the country on these issues and the scope for improvement in each measure.

The Fund can own a maximum 10% in hard currency bonds issued by frontier sovereigns, with a maximum 0.75% per individual sovereign.

# Case Study

## Benin

| | |
|---|---|
| **ESGP Score** | 36 |
| **E Score** | 34 |
| **S Score** | 18 |
| **G Score** | 49 |
| **P Score** | 46 |
| **Direction of Travel:** | Neutral |

The Republic of Benin is a tropical country in West Africa. It's small and less economically developed than other countries in the region, with a GDP per capita of just over US$4,000 (IMF 2022 estimate), which puts it in the bottom quintile of countries globally. Benin's geography makes it particularly vulnerable to the effects of global warming. Heavy reliance on subsistence agriculture means it is exposed to increasingly unreliable precipitation, while rising sea levels threaten much of the population, which lives in low-lying coastal areas.

The relatively low level of economic development has not constrained Benin in its commitments to the UN SDGs. To implement the 2030 Agenda, the country adopted ambitious measures to incorporate the 17 SDGs into its national planning and its budgetary and fiscal policies. The task is tall, the Ten-Year Action Framework for Accelerating SDG Implementation (2021-2030), published in November 2020, estimated the cost of accelerating measures for achieving the SDGs at around 18 billion euros for the period 2021-2025. The involvement of international financing therefore became paramount.

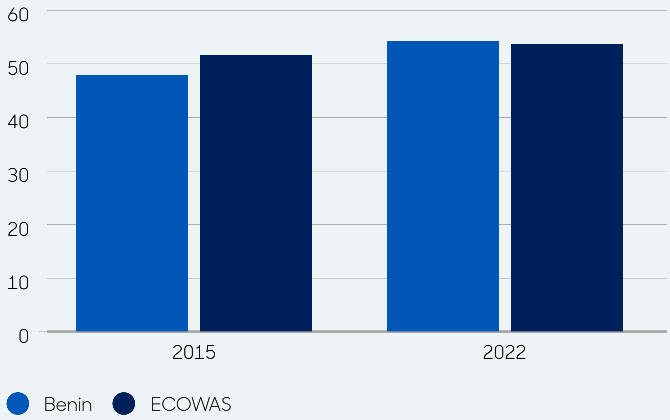
In July 2021, Benin published its SDG Bond Framework, aligning its sovereign financing plans with the 2030 Agenda. An independent external review confirmed that the framework complies with sustainable best-practices and obtained the highest score from Vigeo Eiris. This was followed by a bond issuance, marking the first ever Eurobond for the SDGs on the African continent. Almost half of the bond proceeds were allocated towards social spending, particularly education and health programmes, as well as support for youth and women's employment.

To ensure transparency and accountability, Benin committed to publishing regular reports on the use of the SDG bond proceeds. Furthermore, the country established a partnership with the UN Sustainable Development Solutions Network (SDSN). This will assess the progress and efforts made by the government and will conduct comparative analysis with other countries in the sub-region. Benin has published two annual reports since (in 2022 and 2023), while investors can also follow Benin's progress across various development metrics on SDSN's website.

The UN's 2023 Sustainable Development Report placed Benin among the countries with "strong commitment" to the SDGs. The country ranked fifth out of 74 globally, highlighting its commitment and efforts in its implementation of the 2030 Agenda.

In 2024, Benin was among the first sub-Saharan African countries to regain market access and its improvement was also recognised by a credit rating upgrade by S&P.

### SDG Index Score, 2015-2022




Source: Benin Sustainable Development Report 2023

# Engagement: A Pathway to Impact

## Regular, proactive and action-oriented

The companies we select for the Fund are actively contributing to achieving the SDGs through their business activities. Yet, our work does not stop once we have determined material SDG alignment. Proactive and regular engagement is the cornerstone of our investment process. Our **intention is to drive positive behavioural change, with a focus on improving access to impact data** and addressing shortfalls related to ESG factors.

Our Sustainability Group and on-desk ESG specialists collaborate with our EM Corporate Debt and EM Equity teams to actively engage with emerging market issuers. We believe this complementary relationship is advantageous, as we can pool our collective expertise to advocate positive change, while making better-informed investment decisions. In 2023, our EM Debt and Equity teams completed over 2,000 meetings with emerging market issuers.

### Our leading role in improving impact data disclosures

We believe that when issuers offer a product or service that addresses environmental or social needs, reporting on related measurable outcomes helps give stakeholders a truer, more holistic picture of their progress. Reporting and disclosure standards vary across the globe and emerging market issuers tend to be earlier on in their sustainability journey than developed market peers. That's why engagement and educating companies around investor expectations is vital. By working with portfolio companies to enhance and improve disclosure around alignment and related outcomes, we believe that the companies whose bonds we hold will be increasingly recognised by the market for their positive contributions to society and the environment.

Combining abrdn's long-term investment horizon, established investee relationships and consistent messaging around SDG-related disclosures, we hope to steadily move from a case study-based report to one which consistently reports on the aggregate pillar-level impacts generated by the issuers in which we invest.

### Our approach to engagement

By engaging companies, we can find inefficiencies, improve disclosures, encourage better behaviour, mitigate risks, and drive positive change and financial performance. Therefore, we aim to set milestones with issuers where we believe it will encourage action. Once a milestone is set, we plan to follow up with the issuer on an annual basis to track progress and set new milestones once these are achieved. We initiate and close off milestones via our lifecycle approach: identity, acknowledge, plan, execute and close.

**Engagement types**

| Priority engagement | | | Continuing engagement |
|---|---|---|---|
| **Respond** | **Enhance** | **Thematic** | **Review** |
| Reacting to an event or newsflow that may affect a single investment or a section of similar investments | Designed to seek change that, in our view, would minimise risk and enhance company value | Focus on a particular ESG theme, such as climate change, diversity and inclusion or modern slavery | Ongoing diligence and stewardship; frequent interactions led by the investment team |

**Engagement lifecycle**

| Identify | Acknowledge | Plan | Execute | Close |
|---|---|---|---|---|
| We have identified specific concerns to be raised with the company | The concern has been acknowledged | There is a credible plan to mitigate the issue | The plan is being executed to address our concerns | The plan has been successfully delivered and this issue is closed |

**Informed and constructive engagement helps foster better companies**

# Engagement: A Pathway to Impact

## Engagements in 2023

Over 2023, we completed 62 engagements with companies whose bonds the Fund held, of which 18 were priority ESG engagements. Thematic engagement priorities centred on decarbonising the cement industry and a just transition in India. Success stories include setting milestones for embedding Science-Based Targets with a number of issuers, providing feedback on green and social bond frameworks, supporting the full decommissioning of coal from one of the Chilean generators, and furthering the rollout of renewables in sub-Saharan Africa.

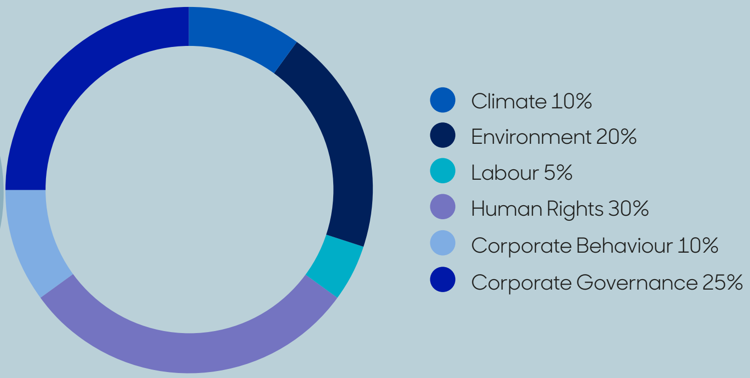
| Company | Topic | Engagement Summary | Investment View Change |
|---|---|---|---|
| Millicom International Cellular SA | Labour Management, Human Rights & Stakeholders Corporate Behaviour, Corporate Gov & Disclosure | Discusses involvement of Xavier Niel (owner of iliad) who has taken a 27% stake, and appointed a CEO while Mauricio Ramos will transition to be independent Chair. Ramos framed Niel's involvement as a positive in accelerating the turnaround and providing support. We will look closer at what that means for governance. | Reinforces |
| Bharti Airtel Ltd | Human Rights & Stakeholders | We covered ESG as part of our general meeting with management; on 5G the company is finding that a doption is gradual as handset prices remain high. We touched on rural penetration as it is expanding into 60,000 villages. This also aids access to finance as the company also operates a payment bank and other digital services. | Reinforces |
| National Central Cooling Co PJSC | Climate Change, Environment, Corporate Governance | We discussed retrofitting of Tabreed's district cooling infrastructure to increase energy efficiency. It is also considering ways to reduce energy consumption and has had conversations with the Ministry of Energy on this topic. Overall, it was a positive meeting. | Enhances |
| Rede D'Or Sao Luiz SA | Human rights & stakeholders, Corporate Governance | IR highlighted the inclusion of quality of clinical procedures as key performance indicator for not only senior management but also IR, who is not involved with policy or practice. This signals strong culture within the company. Also, he reiterated the strategy to price no higher than national average so from an accessibility angle, the company offers above average quality service at an average price. | Enhances |
| Shui On Land Ltd | Climate Change, Environmental, Corporate Governance | The company are a clear leader in terms of sustainability adoption within China real estate and continue to show good progress towards its 2030 Sustainability Targets. Encouraging to see its SBTi 1.5 degree target approved and the addition of independent non-exec to the Board. Also positive to see certified buildings in commercial increase to 95% and MSCI upgrade to A. | Enhances |

# Engagement: A Pathway to Impact

| Company | Topic | Engagement Summary | Investment View Change |
|---|---|---|---|
| SK Hynix Inc | Climate Change, Corporate Governance, Labour Management | We discussed ESG at a roadshow. The company has a series of ESG goals as part of its ESG strategy framework from carbon targets to D&I. We asked for more details on these targets and the company informed us that 2020 is the baseline for these targets and it aims to meet them by 2030. | Reinforced |
| Manila Water Co Inc | Climate Change, Environment, Human Rights & Stakeholders | MWC's role in ensuring safe and accessible water in Manila and regions where it operates remains to be significant. There are strong safeguards around ensuring round the clock accessibility, such as strengthened infrastructure and systems and flexible payment schemes for the most vulnerable. We view the recent tariff hikes as reasonable and in line with broader inflation. MWCs GHG targets currently do not have a base year and is intended to be aspirational. While this is not ideal, the company is embarking on details in the 2H23. We will follow up on this as a milestone. | Enhances |

Source: abrdn, above are examples rather than exhaustive list.

## Engagement Topics 2023



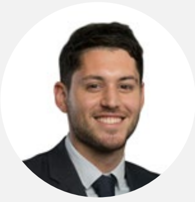
# EM Debt SDG Governance Group

## Experienced and stable team with a broad range of specialist skills

The Fund is managed by the EM Corporate Debt Team: an experienced and talented team managing US$4.3bn in direct EM corporate debt mandates.[32]

We created the EM Debt SDG Assessment Group to oversee the abrdn's SDG process. The Group meets weekly to peer review the SDG Notes, discuss thematic sustainability research and determine eligibility for inclusion in SDG-aligned portfolios. This Group is chaired by the portfolio managers and includes independent oversight from abrdn's Sustainability Group. Representatives of our Equity teams and on-desk ESG specialists are part of the Group in order to ensure a consistent approach to SDG alignment. The SDG Notes need to be unanimously approved to be added to the SDG investible universe.

### EM Corporate Debt, London



**Samuel Bevan (13)**

Investment Director
London

**Siddharth Dahiya (18)**

Head of
EMD Corporate
London

**Kevin Craig (29)**

Investment Director
Edinburgh

**Max Wolman (24)**

Investment Director
London

**Liam Blaikie (7)**

Investment
Manager
London

**Lochlann Kerr (11)**

Senior Investment
Manager
London

### Specialist Fixed Income

**Marianne Zangerl (16)**

Head of ESG –
Fixed Income
London

**Kate McGrath (7)**

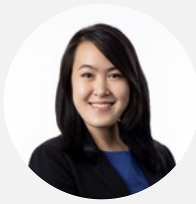
ESG Investment
Manager –
Fixed Income
Edinburgh

**Scott McQuiston (4)**

ESG Investment
Analyst –
Fixed Income
Edinburgh

**Henry Loh (11)**

Head of Asian Credit
Fixed Income – Asia
Singapore



**Nicole Lim (7)**

ESG Investment
Manager Fixed
Income – Asia
Singapore

[32] Source is abrdn as 31 December 2023

# EM Debt SDG Assessment Group

## Sustainability Group

**Elizabeth Chiweshenga (10)**

Senior Sustainability Manager
Edinburgh

**Ann Meoni (20)**

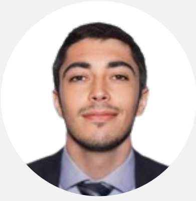
Senior Sustainability Manager
Edinburgh

**Anna Moss (3)**

Senior Sustainability Analyst
Edinburgh

**Nick Gaskell (3)**

Senior Sustainability Analyst
Edinburgh



**Alexandre Popa (3)**

Sustainability Analyst
London

## Specialist Equity

**Catriona Macnair (15)**

Investment Director
Edinburgh

**Fraser Harle (8)**

Investment Manager
London

**Sarah Norris (12)**

Head of ESG – Equities
Edinburgh

# Sustainability Data

**Please refer to the fund's prospectus and Key Investor Information Document (KIID) or Key Information Document (KID) as applicable for full details of the risks and costs of investing in the fund before making any final investment decision.**

**The value of investments, and the income from them, can go down as well as up and an investor may get back less than the amount invested.**

## Fund objective

The Fund aims to achieve a combination of income and growth by investing in emerging market corporate bonds (loans to companies), which follow the Investment Manager's "Emerging Markets SDG Corporate Bond Investment Approach" (the "Investment Approach").

The Fund aims to outperform the JP Morgan ESG CEMBI Broad Diversified Index (USD) before charges.

## Fund characteristics

| | |
|---|---|
| **Investment universe** | Emerging Market Companies (USD/EUR/CHF/GBP)<br>& Frontier Market Sovereigns (USD/EUR/CHF/GBP) |
| **Launch date** | 01/12/2021 |
| **Base currency** | USD |
| **Number of holdings** | 118 (as of 31 March 2024) |
| **Assets under management** | US$138.8m (as of 31 March 2024) |
| **Fund Manager** | Emerging Market Debt |
| **Investment style** | Active Fixed Income |
| **SFDR Classification** | Article 9 |
| **ESG exclusions** | • Non-compliance with the UN Global Compact, ILO or OECD guidelines for Multinational Enterprises.<br>• Companies that derive over 5% of revenues from tobacco, gambling, alcohol, adult entertainment and conventional weapons production.<br>• Companies that derive any revenues from oil & gas production, thermal coal extraction and controversial weapons production.<br>• Power generation companies with a carbon emission intensity inconsistent with the Paris Agreement 2 degrees scenario.<br>• Power generation companies that derive over 5% revenues from thermal coal power or are directly involved in new investments in thermal coal or nuclear power generation.<br>• Companies deemed to have a 'High' abrdn ESG Risk Rating.<br>• Sovereign and quasi-sovereign bond issuers that are excluded by abrdn's ESGP Framework. |

# Sustainability Data

## Key data and portfolio ratings

**55%**
Lower-carbon intensity relative to the benchmark

**62**
Engagements covering ESG topics

**1st**
Quartile Peer Group MSCI Quartile Rating

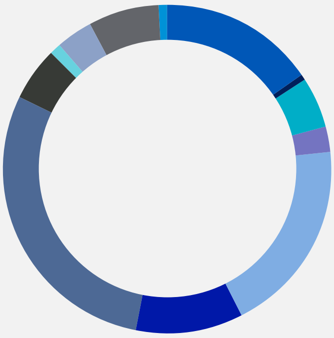
**A**
Fund MSCI ESG Rating

'A+' rating from Conser

Environmental Finance 2024 Award Winner

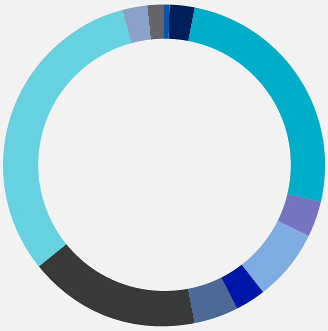
# Sustainability Data

## Fund – UN SDG Alignment



- No Poverty 15.39%
- Zero Hunger 0.65%
- Good Health & Well-Being 5.04%
- Clean Water & Sanitation 2.48%
- Affordable & Clean Energy 19.16%
- Decent Work & Economic Growth 10.52%
- Industry, Innovation & Infrastructure 29.08%
- Sustainable Cities & Communities 5.23%
- Responsible Consumption and Production 1.08%
- Life on Land 3.60%%
- Partnerships for the Goals 7.16%
- Cash 0.61%

## Fund – Impact Pillar



- Cash 0.61%
- Circular Economy 2.55%
- Financial Inclusion 25.62%
- Food & Agriculture 3.58%
- Frontier Sovereign 7.16%
- Health & Social Care 3.10%
- SDG Enablers 4.34%
- Sustainable Energy 17.33%
- Sustainable Real Estate & Infrastructure 31.77%
- Water & Sanitation 2.48%
- SDG Transition 1.46%

### Sustainable development characteristics

### Core Investment Themes

#### Reducing Inequalities (61% of portfolio)

Access to basic goods and services, such as healthcare, water, financial services and communication

#### Climate Solutions (33% of portfolio)

Focus on renewable energy, low-carbon cities and energy efficiency

# Sustainability Data

## Responsible Consumption and Production (5% of portfolio)

Circular economy solutions and sustainable production practices

## Top 10 holdings

| Company | Pillar | Primary SDG | Active Weight |
|---|---|---|---|
| Indonesia Infrastructure Finance | Sustainable Real Estate & Infrastructure | SDG 11 - Sustainable Cities and Communities | 1.89% |
| BBVA Mexico | Financial Inclusion | SDG 8 - Decent work and economic growth | 1.85% |
| Prudential Asia | Financial Inclusion | SDG 3 - Good health and well-being | 1.74% |
| Tower Bersama | Sustainable Real Estate & Infrastructure | SDG 9 - Industry, Innovation and Infrastructure | 1.72% |
| Banque Ouest Africaine de Developpement | Sustainable Real Estate & Infrastructure | SDG 9 - Industry, Innovation and Infrastructure | 1.72% |
| Sociedad de Transmision | Sustainable Energy | SDG 7 - Affordable and Clean Energy | 1.68% |
| Lima Metro | Sustainable Real Estate & Infrastructure | SDG 11 - Sustainable Cities and Communities | 1.66% |
| Tabreed | Sustainable Real Estate & Infrastructure | SDG 9 - Industry, Innovation and Infrastructure | 1.63% |
| Philippines Development Bank | Sustainable Real Estate & Infrastructure | SDG 9 - Industry, Innovation and Infrastructure | 1.63% |
| Manila Water | Water & Sanitation | SDG 6 - Clean Water and Sanitation | 1.63% |

Source: abrdn. As of 31 December 2023.

# Sustainability Data

## Carbon analysis

Carbon footprinting refers to the use of various carbon metrics that are a useful starting point for understanding exposure to carbon within a portfolio and can be informative in identifying potential climate risks. Carbon metrics are also one of the various metrics that can help investors better understand the impact of their investment on the climate.

We split carbon metrics out by Scope 1, 2 & 3 in line with the Greenhouse Gas Accounting Protocol Standards best practises.

It is important to consider that carbon footprinting has inherent limitations. Firstly, emissions data is backward-looking and should be complemented with forward-looking analysis of the entity's transition plans. Secondly, each carbon metric has its own idiosyncratic strengths and weaknesses, and each metric can be driven by short-term volatility unrelated to emissions. Lastly, emissions are not necessarily the most appropriate indicator of climate risk. For example, there are many climate solutions that operate within carbon intensive sectors, potentially falsely implying elevated climate risks when compared to other sectors or a broad market benchmark.

## Carbon data disclosure

| Data Disclosure | Portfolio | Benchmark |
|---|---|---|
| Number of Holdings with Data | 81 | 1,169 |
| Trucost Data Coverage (%) | 67.9 | 81.0 |

Utilities, energy and basic materials companies are responsible for roughly 85% of the scope 1 and 2 emissions intensity of the Bloomberg Barclays Global Aggregate Index, but these sectors only account for around 16% of the weight of the index. By contrast, financials and consumer sectors account for roughly 62% of the index weight, but only emit 6% of its scope 1 and 2 carbon emissions on a revenue intensity basic.

## Fund carbon footprint

| Asset Class | Scope 1 | Scope 2 | Scope 3 | Scope 1 and 2 | | Scope 1, 2 and 3 | | Data Coverage % | | Weights at 31.12% | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Portfolio | Portfolio | Portfolio | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark |
| Corporate bonds (tCO2e.$m invested) | 45.17 | 23.51 | 157.78 | 68.68 | 168.90 | 226.46 | 1111.35 | 47.35 | 58.25 | 92.14 | 99.78 |

# Sustainability Data

## Portfolio carbon intensity versus benchmark

### Portfolio carbon intensity

**Weighted average carbon intensity**

Weighted average carbon intensity (WACI) is a measure of carbon emissions normalised by revenues. Since revenues are a relevant comparison point across all issuers, the metric can be used for portfolio decomposition and attribution analyses across sectors and asset classes. The WACI is calculated by summing the product of each company's weight in the portfolio or loan book with that company's carbon-to-revenue intensity. The avoidance of approaching with the WACI approach means that there is no directs connection to the real-world emissions.

## How carbon intensive are the holdings in my portfolio?

| Asset Class | Scope 1 | Scope 2 | Scope 3 | Scope 1 and 2 | | Scope 1, 2 and 3 | | Data Coverage % | | Weights at 31.12% | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Portfolio | Portfolio | Portfolio | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark |
| Corporate bonds (tCO2e.$m invested) | 75.64 | 103.42 | 445.77 | 179.06 | 439.49 | 624.83 | 2139.47 | 65.83 | 80.98 | 92.14 | 99.78 |

Scope (1-3) emissions definitions – 1: Direct emissions 2: Indirect emissions 3: Upstream and Downstream Value Chain emissions. In the case of sovereign emissions the concept of 'scoped' are more nascent compared to their use in corporate emissions reporting. In this instance, the sovereign emissions reported above represent the country territorial emissions plus imported emissions. Government emissions data includes both sovereign and quasi-sovereign holdings. Trucost data is partly based on estimated figures. Therefore, the reporting should be estimated based on the best available data and used for guidance. Coverage % based on number of holdings.

## Total portfolio emissions versus benchmark

| Asset Class | Scope 1 | Scope 2 | Scope 3 | Scope 1 and 2 | | Scope 1, 2 and 3 | | Data Coverage % | | Weights at 31.12% | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Portfolio | Portfolio | Portfolio | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark | Portfolio | Benchmark |
| Corporate bonds (tCO2e) | 2734.93 | 1423.87 | 9554.18 | 12582.48 | 12582.48 | 13712.98 | 82792.41 | 47.35 | 58.25 | 92.14 | 99.78 |

# Sustainability Data

## MSCI ESG ratings

MSCI company ratings are provided to enable comparisons with investments held elsewhere in a standardised format. We conduct our own proprietary research which may lead us to have a view different to that expressed by the MSCI score.

MSCI rates companies on a AAA-CCC scale according to their exposure to ESG risks and how well the manage those risks relative to peers.

The Fund MSCI ESG Quality Score assesses the resilience of a fund's aggregate to long-term ESG risks and is provided on a 1-10 scale, with 10 being the highest possible fund score. The Fund MSCI ESG Rating measures the resiliency of portfolios to long-term risks and opportunities arising from environmental, social and governance factors. The Fund ESG Rating is calculated as a direct mapping of the "Fund MSCI ESG Quality Score" to letter rating categories.

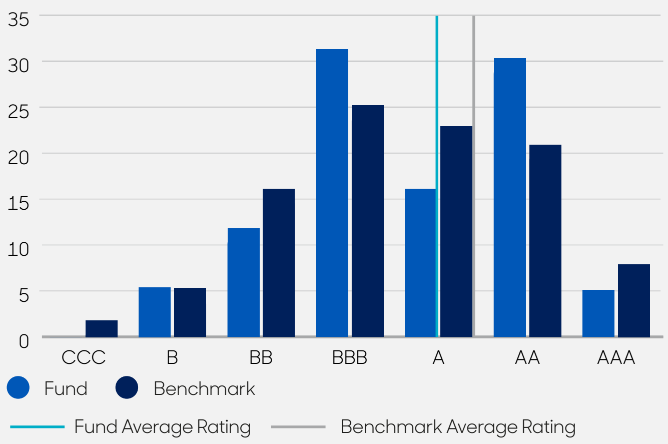
**The Fund MSCI ESG Rating is** A

## MSCI Fund ESG Quality Scores

| | Overall Score (1-10) | Benchmark Average |
|---|---|---|
| Fund | 6.0 | 5.9 |
| Environmental | 6.6 | 5.6 |
| Social | 5.5 | 5.4 |
| Governance | 6.0 | 4.7 |

Source: abrdn derived average based on underlying MSCI company scores.

## MSCI ESG rating distribution Fund and benchmark




Source: abrdn derived averages based on underlying MSCI company ratings.

| | Fund | Benchmark |
|---|---|---|
| MSCI data coverage (by market value) | 70.0 | 83.8 |

MSCI ESG Rating: This is sourced direct from the vendor and includes MSCI adjustments incorporating positive & negative ESG trends and ESG laggard metrics in the calculation of the rating. MSCI ESG Rating Distribution: The Fund and benchmark averages are calculated based on the individual security level MSCI scores. Therefore, the ratings are not directly comparable. In both calculation methodologies Portfolio and Benchmark are reweighted on pro rata basis to reflect holdings where MSCI data is available.

# Important Information

**The value of investments and the income from them can go down as well as up and investors may get back less than the amount invested. Past performance is not a guide to future results.**

To help you understand this fund and for a full explanation of risks and the overall risk profile of the fund and the share classes within them, please refer to the Key Investor Information Documents available in the local language, and Prospectus available in English, which are available on our website abrdn.com. The Prospectus also contains a glossary of key terms used in this document. A summary of investor rights can be found in English on our website **abrdn.com/corporate/legal**.

The fund are a sub-fund abrdn SICAV I, a Luxembourg-domiciled UCITS fund, incorporated as a Société Anonyme and organized as a Société d'Investissement á Capital Variable (a "SICAV"). A summary of investor rights can be found in English on our website abrdn.com/corporate/legal. Any decision to invest should take into account all objectives of the fund. To help you understand the fund and for a full explanation of risks and the overall risk profile of the fund and the shareclasses within them, please refer to the applicable Key Investor Information Document or Key Information Document available in the local language, and Prospectus available in English, which are available on our website **abrdn.com**. The Prospectus also contains a glossary of key terms used in this document. This fund concerns the acquisition of units or shares in a fund, and not in a given underlying asset such as a building or shares of a company.

Details of our Sustainable and Responsible Investment Approach are published at **abrdn.com** under Sustainable Investing.

**In Spain** abrdn SICAV I has been registered with the Comisión Nacional del Mercado de Valores under the number 107.

**In Switzerland:** The information contained in the document is only intended for qualified investors pursuant to Art. 10(3) and (3ter) of the Swiss Federal Law of Collective Investment Schemes ("CISA"). The information is being given only to those persons who have received this document directly from abrdn Investments Switzerland AG and must not be acted or relied upon by persons receiving a copy of this document other than directly from abrdn Investments Switzerland AG.

**In the United Kingdom:** Deemed authorised and regulated by the Financial Conduct Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorisation, are available on the Financial Conduct Authority's website. Under Luxembourg law, there is no compensation scheme available to UK investors in fund managed by such firms, which includes this fund.

The fund has been authorised for public sale in certain jurisdictions and private placement exemptions may be available in others. It is not intended for distribution or use by any person or entity that is a citizen or resident of or located in any jurisdiction where such distribution, publication or use would be prohibited.

This information is intended to be of general interest only and should not be considered as an offer, investment recommendation or solicitation to deal in the shares of any securities or financial instruments. Subscriptions for shares in the fund may only be made on the basis of the latest prospectus, relevant Key Investor Information Document (KIID) or Key Information Document (KID) and, in the case of UK investors, the Supplementary Information (SID) for the fund which provides additional information as well as the risks of investing. These may be obtained free of charge from the Fund Management company abrdn Investments Luxembourg S.A. 35a, Avenue J.F. Kennedy, L-1855 Luxembourg or the local paying agents detailed below. All documents are also available on **abrdn.com**. The Fund Management company may terminate arrangements for marketing the fund under the Cross-border Distribution Directive denotification process.

**In Switzerland** these documents along with the fund's articles of association can be obtained from the fund's Representative and Paying Agent, BNP Paribas Securities Services, Paris, succursale de Zurich, Selnaustrasse 16, CH 8002 Zürich, Switzerland (Tel. 058 212 63 77). These documents and the articles of incorporation are available in English/ Italian/German/ French free of charge on **abrdn.com**. In Italy these documents can be obtained from one of the Paying Agents listed in the prospectus of the fund. **In Germany** these documents can be obtained from the Paying Agent Marcard, Stein & Co. AG, Ballindamm 36, D-20095 Hamburg, in Austria from the Fund's Representative and Paying Agent Raiffeisen Bank International Aktiengesellschaft, Am Stadtpark 9, A-1030 Wien. **In France**, these documents can be obtained from the Centralising Correspondent Agent: BNP Paribas Securities Services, 3, rue d'Antin, 75002 Paris, France. **In Belgium,** these documents can be obtained from the Fund's Paying Agent, BNP Paribas Securities Services, Succursale de Bruxelles, 489, Avenue Louise, 1050 Bruxelles.

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