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Introduction

As we entered the second year of our Asian SDG Equity and Emerging Markets SDG Equity funds, we could not have anticipated a period as extraordinarily turbulent as 2022.

Asian and emerging markets (EM) have weathered a daunting set of challenges, most notably since Russia's invasion of Ukraine in February. The supply shocks that resulted have catalysed a year-long acceleration in global inflationary pressures, and with it intensifying risks around deteriorating living standards coupled with worsening inequalities between and within nations. The United Nations expects the number of people experiencing acute food insecurity to climb to 222 million in 2023, up from 205 million only a few months earlier. The IMF, meanwhile, estimates that the budgetary cost of protecting vulnerable households in the most affected countries amounts to at least \$5 billion.

Many governments have turned protectionist with their resources, and some have adopted austerity measures to curb the spending power of consumers in the hope of cooling inflationary pressures. Putting it all together, we are facing a period of high uncertainty, rising economic insecurity, and pronounced threats to social cohesion around the world. Put simply, the global economy and the path to a fairer and more sustainable future have never looked more fragile as we write our second Asian and EM Sustainable Development Report.

While these issues are indeed sobering, they also present an opportunity to cultivate innovative solutions.

As oil prices remain at high levels and energy security concerns become increasingly pertinent, many countries are directing their focus towards renewable energy and efficiency gains, strengthening the outlook for companies exposed to the electrification theme. This is an area where businesses in Asian markets and EM are particularly prominent in the global supply chain, offering innovative and profitable solutions. And there's been good progress here: the number of people without access to electricity dropped from 1.2 billion people a decade ago to 733 million by the end of 2020.4

Meanwhile, hot on the heels of a global pandemic that saw vulnerable groups suffer disproportionately, social injustices and worsening inequalities garnered much deserved attention, especially around the role that **gender**, socio-economic status and regional disparities play in health, education and economic outcomes. The good news is that much can and is being done to change this situation. For example, Latin America and South Asia have gone a long way to close the financing gap for small and medium enterprises (SMEs) that support entrepreneurship and job creation, often in rural areas. Between 2019 and 2020, these two regions comfortably outpaced the growth required to meet the 2030 targets outlined by the United Nations.⁵

Still, the OECD finds that current investment levels fall short of what is needed to ensure that we achieve the United Nations' Sustainable Development Goals (SDGs) – and their overarching ambition to establish a more equitable and sustainable future for all – by the targeted 2030.

The estimated funding gap to meet the SDGs in developing countries amounts to \$3.9 trillion annually. The message is clear: we need a step change in the level and targeted nature of investment towards furthering sustainable and inclusive development. Capital allocation into companies seeking to cultivate dynamic, innovative or affordable solutions to these problems at scale – whether by protecting our planet and its resources, enabling financial inclusion or offering affordable essential goods to remote communities – has never been more important.

Furthermore, we believe these companies are poised to deliver superior long-term financial returns by pursuing profitable growth avenues, benefiting from rising demand for products that contribute positively to society and the environment.

We hear the call to action, and we are working to unearth the companies answering.



David SmithSenior Investment Director



Catriona Macnair
Investment Director

 $^{^{\}perp}$ WFP and FAO (2022). Hunger Hotspots. FAO-WFP early warnings on acute food insecurity: October 2022 to January 2023 Outlook. Available at https://docs.wfp.org/api/documents/WFP-0000142656/download/?_ga=2.126555400.425123115.1671031722-352886531.1671031722 (Accessed 24 April 2023).

² International Monetary Fund (2022). Tackling the Global Food Crisis: Impact, Policy Response, and the Role of the IMF. Available at https://www.imf.org/en/Publications/IMF-Notes/lssues/2022/09/27/Tackling-the-Global-Food-Crisis-Impact-Policy-Response-and-the-Role-of-the-IMF-523919 (Accessed 24 April 2023).

³ United Nations Conference on Trade and Development (2023). Global Investment Trends Monitor, No. 44. Available at https://unctad.org/publication/global-investment-trends-monitor-no-44 (Accessed 24 April 2023)

⁴ World Bank (2022). Tracking SDG 7: The Energy Progress Report 2023. Available at https://un-energy.org/wp-content/uploads/2022/06/sdg7-report2022-full_report.pdf (Accessed 24 April 2023).

⁵ Global Impact Investing Network (2022). Progress toward SDGs across financial inclusion investments in emerging markets. Available at https://thegiin.org/assets/GIINSIGHT%20 --%20Progress%20toward%20SDGs%20across%20financial%20inclusion%20investments%20in%20emerging%20markets.pdf (Accessed 24 April 2023).

⁶ OECD (2022). Global Outlook on Financing for Sustainable Development 2023. Available at https://www.oecd.org/publications/global-outlook-on-financing-for-sustainable-development-2023-fcbe6ce9-en.htm (Accessed 24 April 2023).

Why abrdn?



While EM economies are home to over 80% of the world's population, they capture a much smaller share of global financing, with market capitalisation and private debt lagging global levels relative to GDP.



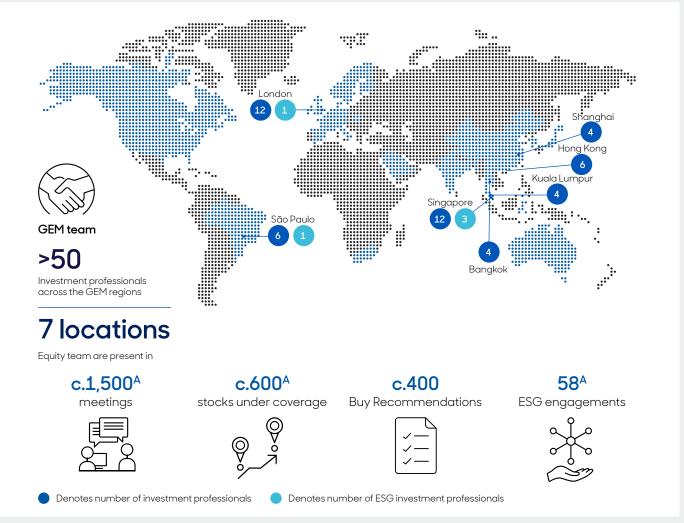
Since the outset of the COVID-19 pandemic in 2020, an estimated 101 million people fell into extreme poverty in EM economies.⁷



49 of the 50 most polluted countries globally are EM economies – and of those, 23 exceed the global average by over 30 times.8 These countries have natural resources that are indispensable in the fight against climate change, being home to almost all tropical rainforests in the world.

Quite simply, the United Nations' "blueprint to achieve a better and more sustainable future for all" can only be achieved if developed markets and EM alike channel capital and coordinate their response to advance progress.

At abrdn, we have a long track record of investing in Asian markets and EM. Our team of 50+ investment professionals, including five dedicated ESG specialists, is present in seven locations around the world, gathering insights from Shanghai to São Paulo. This enviable research capability is complemented by a sizeable sustainability group.



Source: abrdn, 31 December 2022. A: Based on GEM sustainable team, in 2022.

⁷ IMF Fiscal Monitor (2022). Available at Online Annex 1.1 (Accessed 05 April 2023).

BIQAir (2022). World's most polluted countries & regions (historical data 2018-2022). Available at https://www.iqair.com/world-most-polluted-countries (Accessed 05 April 2023).

Process and outcomes

We have identified eight **pillars of impact** that distil the 17 United Nations Sustainable Development Goals (SDGs) into investable themes. We aim to invest in companies whose products and services demonstrate clear and material alignment with the SDGs, and who provide local solutions to major global problems such as climate change, unsustainable consumption and production, and social inequality.

How we determine alignment with the SDGs

Clear and material alignment is demonstrated by having a minimum of 20% of the company's capital expenditure, operating costs or research and development spend linked to the SDGs. We also invest in SDG Leaders – companies that are integral to supply chains enabling progress towards the SDGs, and meet the 20% materiality requirement, but whose impact is not reliably measurable, at present, via their final product or service.

To be eligible for investment, companies need to be addressing an unmet need - a gap towards achieving the targets set out in the SDGs. In the process of establishing the credibility of unmet needs that the company can address, we refer to the United Nations' own data bank as well as World Bank data, local government statistics, the contrast of local markets versus OECD averages for key indicators, and inter-country regional disparities.

A distinct Sustainable Development Governance group is responsible for peer reviewing possible candidates for universe inclusion and makes the ultimate decision on alignment and eligibility. In addition to an experienced cross-asset-class team with a broad range of skills, illustrated below, this group also incorporates invaluable independent oversight from abrdn's Sustainability Group.

Sustainable Development Governance group

The pod



Catriona Macnair
Investment
Director



David Smith
Senior Investment
Director



Fraser Harle ESG Analyst & Investment Manager



Jerry Goh ESG Analyst & Investment Manager



Nina Petry Investment Manager



Daniel Ng Investment Manager



Mubashira Bukhari Khwaja Investment Director

Other Article 9 portfolio managers

Global Impact Climate & Environment



Sarah Norris Head of ESG -Equities



Dominic Byrne
Deputy Head of
Developed Markets
Equities



Tony Hood Investment Manager, Developed Markets Equities



Blair Couper
Investment
Manager,
Developed Markets
Equities



ESG experts

Chiweshenga
Senior Sustainability
Manager,
Sustainable
Investing



Ann Meoni Senior Sustainability Analyst, Sustainable Investing

Emerging Markets SD Corporate Bond



Samuel Bevan Investment Director, Emerging Markets Debt



Liam Blaikie Investment Analyst, Emerging Markets Debte

Global Smaller Companies SD



Andrew Paisley
Head of
Smaller
Companies



Abby Glennie Deputy Head, Smaller Companies



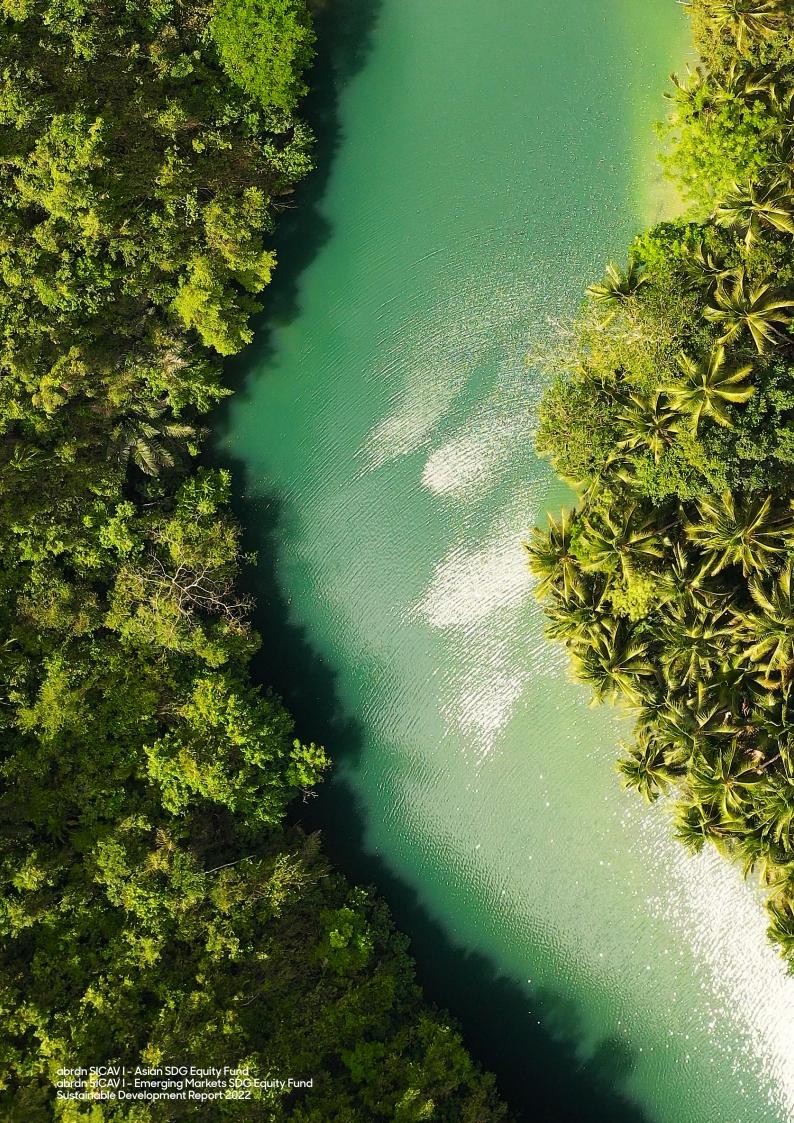
Tzoulianna Leventi ESG Analyst & Investment Analyst, Smaller Companies

⁹ Where disclosure on these metrics is insufficiently granular, we turn to a minimum 20% of revenue or profit. In the case of the Financials sector, materiality can be measured on the basis of each corporate's exposure to underserved client groups within their loan or customer mix.

Process and outcomes

SUSTAINABLE GOALS DEVELOPMENT GOALS	Pillars	Sub-themes
12 RESPONSE AND PROCECULAR AND PROCE	Circular Economy	Resource efficiency Material recovery and reuse
7 HITEMANIAN 13 CHIMIT CONTROL	Sustainable Energy	Access to energy Clean energy Energy efficiency
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Food & Agriculture	Access to nutrition Food quality Sustainable agriculture
1 NOTERTY AND SOLUTION 124 MILES IN SOLUTION	Water & Sanitation	Access to water & hygiene Clean water Water efficiency
3 COOD MALITY 3 COOD MALITY 4 PRINT PRIN	Health & Social Care	Access to healthcare & social care Enhanced healthcare Drug development
8 SECOND ROBERT NOR AND TO REDUCE TO RECORD ROBERT NOR AND TO	Financial Inclusion	Access to financial services
9 NOCOTO DOCUMBNIA 11 SECONOMICO 17 PRINCEDENT 17 PRINCEDENT 18 PRINCEDE	Sustainable Real Estate & Infrastructure	Affordable housing Eco-construction Improved access
4 county 5 county Charles Char	Education & Employment	Access to education and skills development Quality employment and job creation





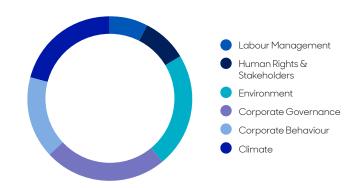
Engagement: A Pathway to Impact

While we believe the companies we select for our portfolios are actively contributing to achieving the SDGs through their business activities, our work does not stop once we have determined material alignment. Our sizeable team of analysts proactively and frequently engages with companies on all aspects of stakeholder value, to better understand a company's alignment to the SDGs, encourage improved disclosure to evidence the good work they're doing, and address shortfalls related to ESG more broadly.

We believe that when a company offers a product or service that addresses environmental or social needs, reporting on related measurable outcomes helps to give shareholders a truer, more holistic picture of the company's progress. Reporting and disclosure standards vary across the globe, and they are not yet where we would like to see them, particularly in Asian and Emerging Markets. By working with portfolio companies to enhance and improve disclosure around alignment and related outcomes, we believe that our holdings will be increasingly recognised by the market for their positive contributions to society and the environment.

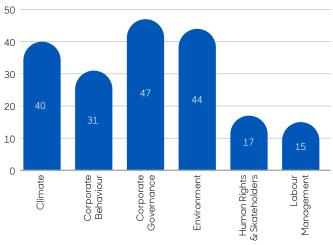
Combining abrdn's long-term investment horizon and established corporate relationships with our concentrated portfolios and consistent messaging around SDG-related disclosures, we hope to steadily move from a case study-based report to one which consistently reports on the aggregate pillar-level outcomes generated by the companies in which we invest within the two funds.

% of meetings with investee companies where we discussed



Based on meetings with current portfolio holdings only, between January 1, 2022 and March 31, 2023.

Number of meetings with investee companies where we discussed



Based on meetings with current portfolio holdings only, between January 1, 2022 and March 31, 2023.





Snapshot of Recent Engagements

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Company	Country	Most recent engagement	Topic(s) discussed	Engagement outcome
Gentera	Mexico	Mar 2023	Lending practices	We have repeatedly discussed Gentera's lending rate policies, as we are mindful of predatory practices that can do more harm than good. In our discussions we have been reassured that Gentera intends to pass the benefits of continued cost efficiency efforts, contained asset quality and higher returns to its customers through lower borrowing rates – particularly repeat customers who have cultivated an established track record of good credit behaviour. Despite higher base rates worldwide, Gentera has no plans to increase annual payment rates in its key market of Mexico.
Vesta	Mexico	Mar 2023	Environmental disclosure	From our initial investment in Vesta, we have engaged with management to highlight the data disclosures we would like to see to continuously evidence alignment of its development activities with the SDGs. In the last year we have observed a significant step-up in this re-gard, as Vesta's disclosure now includes green-certified square meters and CDP climate reporting.
Ningbo Orient Wires & Cables	China	Jan 2023	ESG strategy and progress	After writing a letter to Ningbo Orient's management, we met company representatives to discuss material ESG risks, including environment impact assessment, opportunities in clean technology, toxic emissions and waste, as well as paths to improve its low MSCI ESG rating of CCC. The company is currently gathering data for an inaugural ESG report. Management appreciated our feedback and we agreed to continue discussing best practices.
Raia Drogasil	Brazil	Nov 2022	Labour management	As part of a recent engagement, management reiterated that the company's ultimate goal is to improve the health of its customers. To do that, they need to foster talent: Raia Drogasil is developing a learning and development program for aspiring pharmacists that has already seen the company grant over 800 scholarships in 2021, and over 100 employees graduated from the program in the twelve months to November 2022.
Shenzhen Mindray	China	Sep 2022	Labour management, human rights & stakeholders	Mindray provided useful details as we sought to better understand its commitment to making healthcare technology accessible, strengthening our conviction in its alignment to the UN SDGs. We encouraged the company to improve disclosure in human capital management and product quality. Management requested specific advice and feedback that we expect to see reflected in their next ESG reports.
Contemporary Amperex Technology (CATL)	China	Mar 2023	Environmental impact and carbon footprint	CATL's Sichuan site is the company's first zero-carbon factory globally, a critical first step towards reducing emissions in battery production. We started engaging with CATL on its carbon footprint and timeline to reach carbon neutrality in 2022. The Sichuan facility is an important step in ensuring that the production processes for environmentally-friendly technologies do not offset the benefits.

Snapshot of Pipeline of Engagements

Company	Country	Points for engage- ment	Purpose of engagement
Clicks Group	South Africa	Disclosures related to SDG alignment	While Clicks offers exceptionally granular disclosures, we would like to have details on the capital expenditures allocated to pharmacies specifically, as the Group currently discloses new stores and new pharmacies as a single bundled item.
ICICI	India	Environmental impact	ICICI Bank has an exclusion list for new project finance proposals, which could mean active efforts to reduce the level of financing directed to high-emissions sectors (such as oil & gas). However, disclosure on which sectors are included is lacking. ICICI also is yet to commit to a long-term net-zero target, despite the Indian government's objective to run a net-zero economy by 2070.
Terna Energy	Greece	Disclosures related to SDG alignment and Board composition	While Terna has at times disclosed avoided emissions from wind power generation, we would like to see consistent disclosures in line with leading renewable players. We would also like more detail on the company's Board of Directors succession plan and balance of skills, which we feel is sub-optimal.
Mercado Libre	Brazil	Disclosures related to SDG alignment	We are engaging with MELI to improve disclosures that evidence material alignment with SDG 1. This includes the percentage of revenues (rather than just GMV) derived from SMEs, as well as the number of SME sellers on the platform, the proportion of SMEs led by women, and the growth in these metrics year over year.
LONGi Green	China	Supply chain management	A continuation of the existing engagement path to ensure that LONGi's traceability and audit practices are adequate, especially when it comes to sourcing polysilicon.

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.

Sustainable Energy

Increasing renewables, decreasing emissions and improving access

Energy is central to almost every environmental and social issue the world faces, and 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 **733 million people lack access to electricity** and over **2.4 billion** people still use **dangerous and inefficient cooking systems**. ^{10,11}

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

- Build renewable power generation in India and develop green corridors for the transmission of renewable energy, helping to reduce the reliance of the country's grid on thermal coal
- Generated enough renewable energy to avoid 12.1 million tonnes of CO2e emissions, equivalent to 1,525,007 homes' energy use for one year¹²
- Manufacture and widely distribute solar inverters and energy storage solutions in order to help resolve intermittency issues and better integrate renewables into global energy matrices
- Research, produce and distribute batteries and battery components for electric vehicles



¹⁰ United Nations (2022) Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all (Online). Available at https://unstats.un.org/sdgs/report/2020/goal-07/(Accessed 05 April 2023).

¹¹ United Nations (2022) Sustainable Development Goals Report 2022 (Online). Available at https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf (Accessed 05 April 2023).

¹² Calculated on 25 April 2023 using the Greenhouse Gas Equivalencies Calculator | US EPA based on emissions avoided data reported by the companies.





Greece Utilities - Generation



SDG 7.2

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

Proprietary ESG Rating

2 - Leader

MSCI ESG Rating

Α

ESG Risks

- · Supply chain oversight
- Biodiversity and land use
- Bribery and corruption
- Health

ESG Engagement

We have formally requested improved SDG-related environmental disclosures. The company was very receptive in person and during our follow-up email correspondence, and shared KPIs with us shortly after. We await the upcoming Sustainability Report to monitor progress.

Theory of Change

Unmet need

Greece generates the vast majority of its electricity from fossil fuel sources.¹³ It also faces an electricity deficit and on-shores electricity from neighbouring lignite-reliant countries, with a worse related emissions profile and at a cost above that of the marginal build-out for new capacity in Greece.

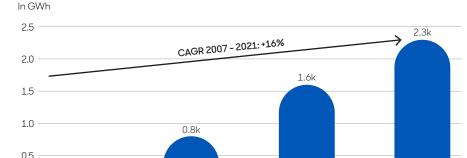
Intentionality

Terna Energy is a vertically integrated Greek renewables player. It is the leading wind power player in the country, with wind accounting for 97% of installed capacity. The business is positioned to alleviate the carbon footprint of the Greek electricity market, plugging the shortfall in production and reducing reliance on fossil fuels. Terna Energy intends to boost its renewable generation capacity to 3GW by 2025.

Materiality

Nearly 100% of Terna Energy's capital expenditures is allocated to building new renewables capacity every year, demonstrating material alignment with SDG 7.2. Accordingly, Terna's renewable energy production has increased significantly over the years.

Energy produced



2012

Measurable output

ΩN

0.3k

2007

KPIs	2022	2021
Renewable energy production (GWh)	2,415	2,293
Avoided emissions (in tonnes of CO ₂ e)	1,119,436	1,066,103
Installed capacity (MW)	905	895

2017

2021

[©] GEK Terna Group.

¹³ International Energy Agency (2023). Available at https://www.iea.org/countries/greece (Accessed 24 April 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, and the COVID-19 pandemic was a setback across the board, as decades of progress in reproductive health, maternal health and child health could be stalled or reversed. Specifically, the United Nations highlights lower global life expectancy, decreasing immunisation coverage, increase in prevalence of anxiety and depression and an increase in deaths from tuberculosis and malaria.¹⁴

Our alignment process for Health & 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 under-served areas. The pandemic also halted progress on universal health coverage, and health workers – already in short supply in many regions – have been stretched to their limits. Scaling up investment in health systems and drug development is essential to address the shortfall in healthcare services.

Core themes include...

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

Companies in our portfolio...

- Administered over 3 million doses of COVID-19 in 2021-2022
- Opened over **2,000 new pharmacies** in areas facing a shortfall in essential healthcare coverage
- Extended bursaries amounting to over US\$ 1 million to future healthcare professionals and offered training programmes to nearly 2,000 pharmacy interns and students



¹⁴ United Nations (2022) SDG 3 (Online). Available at https://sdgs.un.org/goals/goal3 (Accessed 16 February 2023).





South Africa Consumer Staples – Pharmacy Retailing



SDG 3.8

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.

Proprietary ESG Rating

1 - Best in Class

MSCIESG Rating

Α

ESG Risks

- Board composition
- Anti-competitive behaviour
- · Labour management

ESG Engagement

Through the years we engaged with Clicks on the long tenures of directors. In the last two years, we have seen Clicks introduce four independent directors to the Board, bringing the level of independence up to 50%. We are currently engaging with the company on SDG-related disclosures regarding its presence in township locations.

Theory of Change

Unmet need

Access to affordable medicines is an integral aspect of universal health coverage. In addition to medicine availability issues that are pronounced across Sub-Saharan Africa, South Africa suffers from a healthcare personnel shortage that is acutely felt in the pharmacy space, with only 30 registered pharmacists per 100,000 people – one-third of the OECD average.

Intentionality

Ensuring that essential medicines are available and affordable on a sustainable basis is central to Clicks' business model. Already the leading pharmacy operator in South Africa, Clicks aims to expand its footprint by opening 30-35 new pharmacies each year. To address the pharmacist shortage in South Africa, Clicks offers annual bursaries to Pharmacy students and provides assistance with internships.

Materiality

Clicks allocates a large portion of capital expenditures to expanding its store and pharmacy footprint. In 2022, 57 new stores and 52 new pharmacies comprised approximately **40% of Clicks' capital expenditures**, evidencing material alignment to SDG 3.8. In fiscal year 2023, Clicks expects to spend ZAR 477mn (51% of its budgeted capex) on store expansion, including 40-50 new pharmacies.

Measurable output

KPI	FY22	FY21	FY20
Pharmacies added	52	36	40
% of store base with pharmacy	75%	74%	73%
Pharmacy interns trained	104	125	112
Investment in bursaries to Pharmacy students (US\$)	315,441	385,563	371,866



Circular Economy

Doing more and better with less

Every year we dump over 2.24 billion tonnes of waste on the planet. If all this waste was put on trucks, they would go around the world **24 times**. ¹⁵ 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**. ¹⁶

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 least 33% of global waste is not managed in an environmentally safe manner.¹⁷

Core themes include...

- · Waste prevented, recovered and/or recycled
- · Forest area protected and preserved
- Investment in transition to less resource-intensive or more recyclable products

Companies in our portfolio...

- Use recycled materials to make recyclable products, incentivising the transition to more sustainable packaging solutions
- Allocate research and development resources to innovative products that promote the circular economy principles to reduce, reuse and recycle
- Contribute to periodical soil census research that informs environmental policies and strategies in China



 $^{^{15}\,}https://www.theworldcounts.com/challenges/planet-earth/waste/global-waste-problem.$

¹⁶ The World Bank (2021) More Growth, Less Garbage (Online). Available at https://openknowledge.worldbank.org/handle/10986/35998 (Accessed 08 February 2023).

¹⁷ 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 15 February 2023).



CTI華測檢測

China Industrials – Testing Laboratories



SDG 15.3

By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

Proprietary ESG Rating

2 - Leader

MSCIESG Rating

Unrated

ESG Risks

- Human capital management
- · Service quality and credibility
- Data security

ESG Engagement

Through continuous engagement we have seen Centre Testing's (CTI's) ESG rating climbing from 4 (Laggard) to 2 (Leader). CTI published its inaugural Sustainability Report in 2021 covering key topics of concern and showcased its inhouse training model as we discussed its human capital management. Going forward, we will work with CTI to refine and improve disclosures evidencing the company's alignment with the SDGs.

Theory of Change

Unmet need

As China grew into the world's second-largest economy, the country's impact on the environment surged. Today, China faces issues around air quality, water scarcity and soil contamination, as its economy accounts for **one-third of global greenhouse gas emissions**. Soil erosion has repercussions beyond the loss of arable land, as it has led to increased pollution and sedimentation in streams and rivers, disrupting wildlife and increasing the risk of events such as flooding. Meanwhile, **21% of China's disease burden** is related to environmental pollution and air quality issues. Testing and monitoring environmental impacts is central to achieving the aims of the SDGs, as national strategies to address issues such as soil erosion require accurate information on the rate and spatial distribution of degradation. As the sum of the s

Intentionality

CTI provides testing, inspection and certification services to the government and corporations. This includes testing for harmful emissions in the air and contaminants in water, as well as issuing certifications. These services enable firms and governments to monitor and eventually resolve soil pollution and restore the ecological balance that is needed.

Materiality

CTI derives 23% of revenues from environmental testing.

Measurable output

KPI	2022	2021
Verifications of CO2 emissions	100	Not disclosed
Verifications of greenhouse gas emis-sions	500	Not disclosed
ISO 14064* inspections	160	Not disclosed

^{*} ISO 14064 is an international standard for quantifying, reporting, and verifying greenhouse gas emissions as part of the ISO 14000 environmental management standards. ISO 14064 can be a tool to help organizations measure and reduce their carbon footprints.

© CTI

¹⁸ World Bank (2022). China's Transition to a Low-Carbon Economy and Climate Resilience Needs Shifts in Resources and Technologies. Available at https://www.worldbank.org/en/news/press-release/2022/10/12/china-s-transition-to-a-low-carbon-economy-and-climate-resilience-needs-shifts-in-resources-and-technologies (Accessed 28 April 2023).

¹⁹ World Wildlife Fund (2023). What is Erosion? Available at https://www.worldwildlife.org/threats/soil-erosion-and-degradation (Accessed 28 April 2023)

²⁰ Xia, Q., Zhang, X., Hu, Y. et al. (2022) The superposition effects of air pollution on government health expenditure in China – spatial evidence from GeoDetector. BMC Public Health 22, 1411. Available at https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-13702-y (Accessed 28 April 2023).

²¹ Liu, B. et al. (2020). The assessment of soil loss by water erosion in China. International Soil and Water Conservation Research, Volume 8, Issue 4. Available at https://www.sciencedirect.com/science/article/pii/S2095633920300472 (Accessed 28 April 2023).

Education & Employment

Creating opportunities for marginalised or vulnerable people

Achieving full and productive employment and decent work for all requires businesses to invest in and support the development of their employees. Global efforts to reduce social inequalities and 'build back fairer' after COVID-19 must have education and employment at their core.

During the pandemic, entrenched inequities in education worsened, and the problems don't stop there: amidst rising inflation, supply chain disruptions and the ripple effects of the war in Ukraine, **global unemployment is above pre-pandemic levels** with worker productivity lagging in the least developed countries.^{22,23} In many countries, informality in the labour market increased and will likely stay elevated, as will the level of vulnerability related to per-capita income and living conditions.²⁴

As we look for companies positively impacting education services, we target those that expand access to affordable, quality education, and recognise the importance of prioritising diversity and reaching all socio-economic groups. And 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 – in addition to employee safety and equality.

Core themes include...

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

Companies in our portfolio...

- Offered financial education to over **6,500 female entrepreneurs** in Latin America
- Created over 10,000 blue-collar jobs in rural Poland in the last two years, with wages exceeding the country's minimum wage by double-digits





¹⁶ The World Bank (2021) More Growth, Less Garbage (Online). Available at https://openknowledge.worldbank.org/handle/10986/35998 (Accessed 08 February 2023).

¹⁷ 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 15 February 2023).



Brazil Consumer Discretionary – Retailing





SDG 8.3

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

Proprietary ESG Rating

2-Leader

MSCIESG Rating

Α

ESG Risks

- Privacy and Data Security
- Lending practices in Mercado Credito

ESG Engagement

We are engaging with MELI to improve SDG-related disclosures around the presence of SMEs on their platform and the value created by this cohort.

Theory of Change

Unmet need

The COVID-19 pandemic caused major setbacks in the path towards achieving decent work for all, and those in informal employment were disproportionately affected.²⁵ Brazil, like the rest of Latin America, has a high portion of its current workforce in informal employment: 40% as of 2021, which compares with about 16% in high-income countries.²⁶ Securing the income of these workers is integral to achieving the overarching aims of SDG 8, as is enabling SMEs, which comprise nearly all businesses in Latin America, to formalise and scale their operations through digital platforms and e-commerce marketplaces.²⁷

Intentionality

MercadoLibre (MELI) is the only truly pan-Latin-American e-commerce marketplace, operating across 18 Latin American countries. The heart of MELI's operations is their marketplace, where the majority of sellers are small and medium enterprises. The platform supports entrepreneurship, enables market access and promotes employment formalisation.

Materiality

SME sellers comprised **70% of MELI's gross merchandise value** (GMV) in 2022. We estimate that these sellers contribute **38.5% of MELI's net revenues**, demonstrating material alignment with SDG 8.3.

Measurable output

KPI	FY22	FY21	FY20
Number of SMEs on the platform	500,000+	500,000+	n/a
Items sold by entrepreneurs and SMEs (millions)	840	745	n/a
Estimated GMV of items sold by SMEs (US\$ millions) ²⁸	24,114	19,846	14,649



Over **480,000 SMEs** make profits from operating on Mercado Libre, and over 1 in 4 SMEs operating on MELI earn **51-90% of their total income** on the platform.²⁹



MELI is the main source of income for 900,000 families in Latin America, creating an average of six jobs per hour.



1 in every 4 SMEs on MELI is headed by awoman.

© Mercado Libre.

²⁵ United Nations (2022) Sustainable Development Goals Report 2022 (Online). Available at https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf (Accessed 05 April 2023).

²⁶ International Labour Organization (2023) Women and men in the informal economy: A statistical update. Available at https://www.ilo.org/wcmsp5/groups/public/---ed_protect/--protrav/---travail/documents/publication/wcms_869188.pdf (Accessed 13 April 2023).

²⁷ World Bank (2021) Shifting Gears: Digitization and Services-Led Development. Available at Shifting Gears: Digitization and Services-Led Development (worldbank.org) (Accessed 13 April 2023).

²⁸ Based on MercadoLibre's 2022 ESG Report. Available at https://mercadolibre.gcs-web.com/static-files/2814b1b6-9dc4-46f8-b4e1-991dda147f32 (Accessed 13 April 2023).

²⁹ Euromonitor International (2021) Impacts that Matter: How the Mercado Libre ecosystem creates value in Latin America. Available at https://mercadolibre.gcs-web.com/static-files/ee248c9d-dc90-4f80-8eb5-26eff3df1c44 (Accessed 13 April 2023).

Financial Inclusion

Tackle poverty in all its dimensions

Underserved groups are often marginalised or excluded from financial systems, which negatively impacts 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. But there are still 1.7 billion adults – close to **one-third of the global population** – 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.³⁰

COVID-19 led to the **first rise in extreme poverty in a generation**, and the war in the Ukraine further derailed progress, with the UN now projecting a 16% increase in number of people living in extreme poverty.³¹

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.

Core themes include...

- Extending financial services to unbanked individuals
- Addressing insurance gaps to help preserve accumulated household wealth
- Increasing access to credit for SMEs

Companies in our portfolio...

- Offer microlending services to underserved groups in Indonesia, Mexico and Peru, supporting MSMEs and helping to bridge gender gaps in access to financing
- Extended over **\$10** million in housing finance to lower income groups in 2022
- Work to tackle pronounced insurance gaps across
 Africa and Asia





³⁰The World Bank (2022) Financial Inclusion Overview (Online). Available at http://www.worldbank.org/en/topic/financialinclusion/overview (Accessed 15 February 2023).

³¹ United Nations (2022) SDG 1 (Online). Available at https://sdgs.un.org/goals/goal1 (Accessed 15 February 2023).



India
Financials - Housing Finance





SDG 1.4

Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services; ownership and control over land and other forms of property; and financial services, including microfinance.

Proprietary ESG Rating

2 - Leader

MSCIESG Rating

Unrated

ESG Risks

- Lending practices and pricing
- Financial literacy programmes

ESG Engagement

We have started engaging with Aptus on the need for formal and structured ESG-related disclosures, as well as highlighting the positive outcomes to which Aptus contributes. At the company's last AGM, we voiced our concerns regarding independence levels on the Board of Directors as it poses risks to oversight and the protection of minority interests.

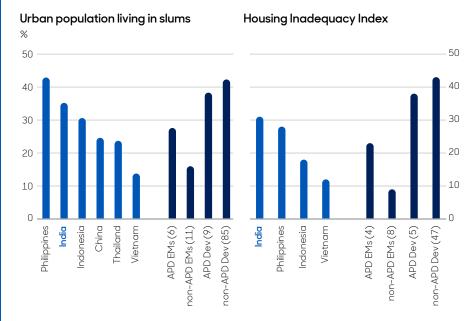
Theory of Change

Unmet need

Over **62 million families** in India are in need of affordable housing, with 43 million of these households living in rural areas. The significant shortfall in affordable and adequate housing – which extends to lack of access of clean water, sanitation and security of tenure – is primarily driven by the country's economically weaker section and lower-income group segment.³² The level of housing inadequacy in India is higher than in other developing economies, as is the share of the population living in slums.³³

Intentionality

Aptus is a fully retail-focused housing finance company serving low- and middle-income self-employed customers in rural and semi-urban markets of India. With over half of its business derived from home loans and over 70% of customers in low-income groups, Aptus' strategy is closely tied to facilitating access to property ownership where it is most needed and most scarce. The company has routinely reiterated its focus on tickets sizes in the range of US\$6,000-18,000.



Source: International Monetary Fund (IMF).

[©] Aptus

³² Habitat for Humanity (2023). Available at: Housing Poverty in India: Tacklings Slums & Inequalities (habitatforhumanity.org.uk) (Accessed 05 April 2023).

³³ International Monetary Fund (2022) Housing Market Stability and Affordability in Asia-Pacific. Available at https://www.imf.org/-/media/Files/Publications/DP/2022/English/HMSAAPEA.ashx (Accessed 05 April 2023).



<u>APTUS</u>®

Financials – Housing Finance

Materiality

Illustrating material alignment with SDG 1.4, **73% of Aptus' customers are self-employed, 66% are low earners**, and **41% are new to credit**. Among their borrowers, Aptus highlights families managing small businesses like independent pharmacies and bakeries, as well as vegetable vendors and fruit merchants.

Measurable output

Home and small-business loans provided to... (in millions of US\$):

	9 months to Dec. 2022	FY22	FY21
Low-Income Group (LIG)	159	162	120
Self-employed individuals	151	156	128
Borrowers new to credit	80	86	73

Aptus has a March fiscal year-end.







In the last decade, we have made notable progress towards financial inclusion, as global account ownership increased from 51% in 2011 to 76% in 2021.³⁴ Digital tools such as mobile money have been notable enablers of progress, allowing users to safely and inexpensively access the full spectrum of financial services, from payments and current accounts to savings, loans, investments and insurance.

While mobile money has played a role in financial inclusion globally, it stands out in a place whose financial inclusion rates had long lagged the rest of the world: Sub-Saharan Africa.

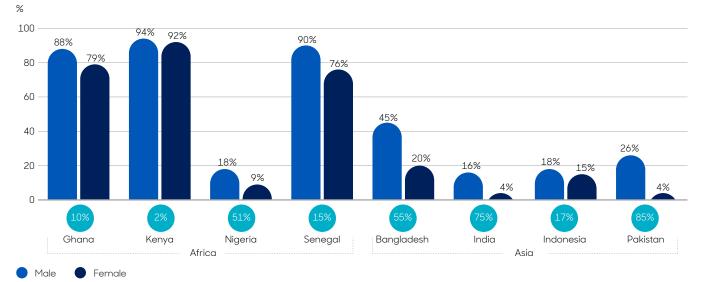
When Kenyan telecommunications services provider Safaricom launched its mobile wallet, M-PESA, in 2006, just 26% of the country's population had access to formal financial services. Today, over 80% of the population has an account at a financial institution or with a mobilemoney service provider, above the world average of 76%.

Kenyans own over 5% of the world's 586 million active mobile-money accounts.³⁵

With over 80% market share in mobile money, it's hard to deny the integral role that Safaricom played and continues to play in the country's development. M-PESA has become synonymous with Kenya's successful progress towards financial inclusion, highlighted by the United Nations as the pioneer of this model and an example of the kinds of products that can tackle the limitations from traditional financial systems.³⁶

And their success doesn't stop there. According to the World Bank, there are early indications that mobile money accounts may be helping to close a longstanding gender gap in access to financial services. Regarded as one of the most mature mobile-money markets globally, Kenya also stands out for relatively low gender disparity in access to these services.

Male and female mobile money account ownership in 2022, by country (percentage of the total adult population)



Source: 2022 GSMA Consumer Survey

[©] Safaricom.

³⁴ World Bank (2022). The Global Findex Database 2021. Available at https://www.worldbank.org/en/publication/globalfindex (Accessed 18 April 2023).

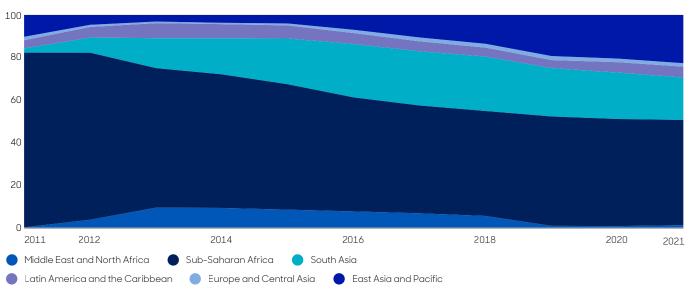
³⁵ GSMA (2023). State of the Industry Report on Mobile Money 2023. Available at https://www.gsma.com/sotir/(Accessed 18 April 2023).

³⁶ UN Capital Development Fund (2022). Where in the World is Mobile Money Prominent? Available at https://www.uncdf.org/article/7904/where-in-the-world-is-mobile-money-prominent (Accessed 18 April 2023).



Active mobile money accounts

The number of customer accounts that have been used to perform at least one mobile money payment during the last 90 days of each year. %



Source: GSMA (2022).

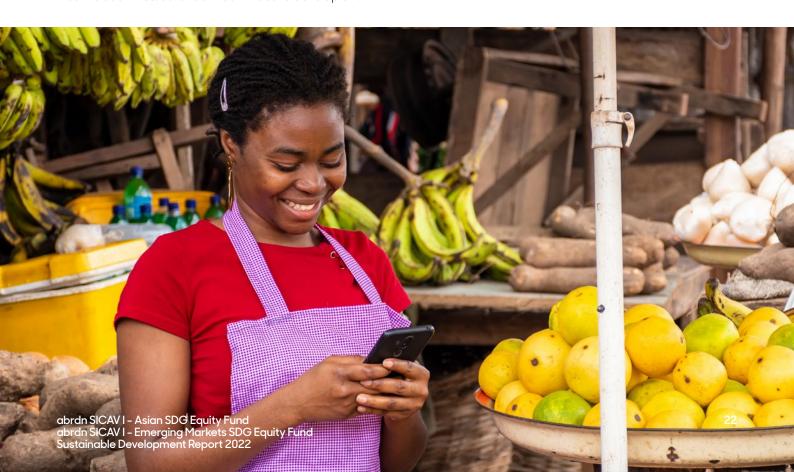
Note: North America is not shown because mobile money accounts are not used across this region.

As a result, Safaricom is no longer investable for us, for the best of reasons: the gap we originally identified in Kenya no longer exists.

There is much left to improve: the poorer half of the Kenyan population lags the overall account ownership rate, and despite meaningful progress the country hasn't achieved the 100% ownership we observe in some high-income countries. Safaricom continues to develop and

deliver meaningful solutions. However, owing in large part to M-PESA, Kenya no longer meets our criteria for identifying countries with a demonstrable unmet need in financial services. Its story is testament to the potential of public companies to deliver a measurable, lasting impact.

We need more Safaricoms, and we are hopeful that they are out there.



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.³⁷

Still, an estimated **1** in **10** people worldwide are suffering from hunger, and nearly 1 in 3 (a staggering **2.3** billion people) were moderately or severely food insecure in 2021, meaning they lacked regular access to adequate food. This represents an increase of almost 350 million people since the beginning of the COVID-19 pandemic

in 2020. 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 food security globally.³⁹

Our Food & Agriculture pillar covers both social and environmental concerns, with a twin focus around addressing hunger and nutrition, and at the same time promoting the sustainable use of the world's resources. We therefore look at access to nutrition, improved nutrition and services for farmers, as well as how food is produced and the effects of farming on land, water and biodiversity.

Core themes include...

- Deployment of sustainable agricultural practices
- · Higher crop yields through land and animal productivity
- · Increasing nutritional content.

Companies in our portfolio...

 Collected and recycled 250 tonnes of carton boxes through specialised facilities and diverted 25,721 tonnes of waste from landfill.



³⁷ WWF (2023). Available at https://explore.panda.org/forests#thousand-cuts (Accessed 05 April 2023).

³⁸ United Nations (2022) SDG 2 (Online). Available at https://sdgs.un.org/goals/goal2 (Accessed 16 February 2023).

³⁹ 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 05 April 2023).



Vitasoy International Holdings Ltd. 維他奶國際集團有限公司

Hong Kong Consumer Staples - Packaged Foods & Meats



SDG 13.2

Integrate climate change measures into national policies, strategies and planning.

Proprietary ESG Rating

1 - Best in Class

MSCIESG Rating

Α

ESG Risks

- Product safety and quality
- Opportunities in nutrition and health
- · Packaging material and waste

ESG Engagement

We recently discussed Vitasoy's approach to sustainable soy sourcing and supply chain management, as well as their approach to climate change and energy/water intensity. The conversation was very encouraging and reaffirmed our view of the company as progressive leaders in this area.

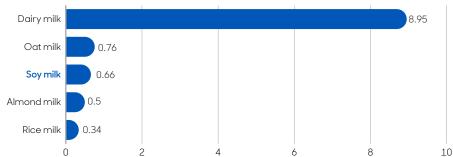
Theory of Change

Unmet need

Food and agriculture account for **one-quarter of the world's greenhouse gas emissions**. ⁴⁰ The contribution of livestock – and cattle in particular – to these emissions is notable. Dairy farming emits high levels of methane, significantly contributing to emissions of other greenhouse gases as well. Shifting dietary habits towards plant-based foods and dairy alternatives is integral to reducing the environmental effects of agriculture and food production. Soy milk requires significantly less land and water per unit of product than dairy milk, and emissions intensity is meaningfully lower, making this a more environmentally-friendly alternative to dairy milk. ⁴¹

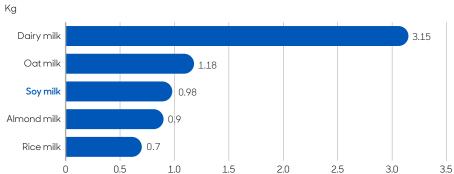
Land use

m²



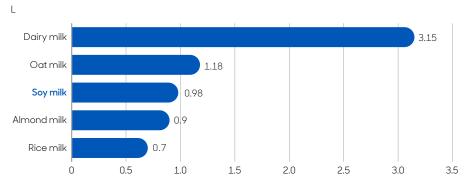
Source: Joseph Poore and Thomas Nemecek (2018).

Greenhouse gas emissions



Source: Joseph Poore and Thomas Nemecek (2018).

Freshwater use



Source: Joseph Poore and Thomas Nemecek (2018).

[©] Vitasoy International Holdings Ltd.

⁴⁰ Our World in Data (2019). Food production is responsible for one-quarter of the world's greenhouse gas emissions. Available at https://ourworldindata.org/ food-ghg-emissions (Accessed 14 April 2023).

⁴¹ J. Poore and T. Nemecek (2018). Reducing food's environmental impacts through producers and consumers. Available at https://www.science. org/doi/10.1126/science.aaq0216 (Accessed 14 April 2023).



Vitasoy International Holdings Ltd. 維他奶國際集團有限公司

Hong Kong Consumer Staples - Packaged Foods & Meats

Intentionality

Vitasoy is a producer of plant-based food and beverages, primarily soy milk and associated milks, as well as tofu and tea. The company's plant-based products are a less emissions-intensive alternative to dairy, and align the company with SDG target 13.2.

Materiality

Plant-based offerings contribute **87% of Vitasoy's revenues**, demonstrating material alignment with climate-change mitigation efforts.

Measurable output

KPI	FY22	FY21	FY20
Carbon intensity (kg of CO2e per kg of product)	0.68	-	-
Scopes 1 & 2 carbon intensity (kg of CO2e per kg of product)	0.128	0.125	0.126

 $\label{thm:cope} \mbox{Vitasoy's first Scope 3 emissions assessment was made during FY22}.$



Sustainable Real Estate and Infrastructure

Providing affordable and eco-friendly buildings and improving connectivity

As the global population grows and people move to urban areas in increasing numbers, the built environment has a key role to play in supporting social and environmental goals. The buildings and construction sector accounts for over a third of global energy use and produced 37% of global CO2 emissions. 42 While many countries have stated their ambitions to increase energy efficiency and mitigate the environmental effects of buildings and construction, this needs to be matched by policy, regulatory action and continued investment. While a substantial number of buildings will need to undergo a deep retrofit as part of wider net-zero plans, the current pace of retrofitting stands at only 1-2% of leasable area in mature cities. 43

Besides 'green' building, we need to see progress on equitable infrastructure: **one billion people reside in slums**, principally across Asia and Africa, and **99% of the world's urban population** breathe polluted air.⁴⁴ Well-planned and well-managed urban development can generate inclusive prosperity and equity.

Our 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 affordable housing, efficient building practices, environmentally friendly construction materials and solutions, and increased connectivity.

Core themes include...

- Investment in buildings and floor space awarded green certification
- Efficient, sustainable, resilient and inclusive infrastructure solutions
- Improving connectivity and access to services such as public transport and internet

Companies in our portfolio...

- Promote more sustainable consumption patterns through automated parcel machines, a lower-emission alternative to last-mile home delivery, across Poland
- Committed to consistently pursuing green certifications for new and existing commercial and industrial buildings in Mexico, the Czech Republic, Romania and the Philippines
- Launched 3,159 affordable housing units in the Philippines



⁴² Global Alliance for Buildings and Construction (2023). Available at https://globalabc.org/our-work/tracking-progress-global-status-report (Accessed 05 April 2023).

⁴³ World Economic Forum (2021). Available at https://www.weforum.org/reports/green-building-principles-the-action-plan-for-net-zero-carbon-buildings (Accessed 05 April 2023).

⁴⁴ United Nations (2022) SDG 11 (Online). https://sdgs.un.org/goals/goal11 (Accessed 05 April 2023).





Mexico Real Estate - Industrial Warehousing



SDG 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Proprietary ESG Rating

2 - Leader

MSCIESG Rating

Α

ESG Risks

- Carbon intensity
- · Supply chain oversight

ESG Engagement

We consistently monitor Vesta's progress towards sustainability targets and have engaged with management on best practices. While Vesta's reporting has improved markedly in the last two years, we continue to engage on disclosure of ESG KPIs impacting management remuneration. With a young property portfolio and a high pace of development, we feel Vesta could set higher targets for green certification and continue to discuss this possibility with the company.

Theory of Change

Unmet need

Disruptions caused by the COVID-19 pandemic and the war in the Ukraine meaningfully boosted demand for resilient and reliable supply chains. Operating large and high-spec warehouses is energy-intensive due to lighting, heating, cooling and air conditioning needs, and this compounds the issue of carbon emissions during the construction process. All in all, buildings and construction account for **over one-third of global CO2 emissions and energy demand**. Yet, globally only about one-quarter of industrial properties have green certifications, with EM and North America as notable laggards. It is increasingly important to pair the growth of warehousing space with more and better sustainability initiatives.

Intentionality

Vesta is a developer and operator of Class A industrial properties in Mexico. Most of Vesta's tenants are large companies and multinationals with their own sustainability and decarbonisation targets, reflecting growing client demand for properties that can help to reduce energy consumption in their warehousing operations. Green-certified buildings are cost-efficient for tenants, who save an estimated 11% on operating costs in the first year and 23% in five years. Accordingly, Vesta's active development strategy aims specifically at delivering more efficient, greener buildings to its customers, and the company has committed to having all its new inventory buildings meet sustainability standards and certification requirements.

Materiality

Vesta has committed to meeting third-party certification requirements for all of its inventory buildings. In 2022, these buildings comprised **96% of Vesta's capital expenditures**. In 2023, they will comprise 95% of capital expenditures, demonstrating material alignment with the goal to upgrade infrastructure and retrofit industries to make them more sustainable and resource-efficient.

Measurable output

KPI	2022	2021	2020
Square feet of green-certified GLA	5,006,584	2,866,930	3,604,631
% of GLA green certified	14.9%	9.1%	11.4%
Emissions per million square feet of GLA (kg of CO ₂ e)	22,780	24,484	34,059

© Vesta.

⁴⁴ Global Alliance for Buildings and Construction (2022). Global Status Report for Buildings and Construction. Available at https://globalabc.org/our-work/tracking-progress-global-status-report (Accessed 14 April 2023).

⁴⁵ MSCI ESG Research (2022). Industry Report: Real Estate Management & Services. (Accessed 17 August 2022)

⁴⁶ Holman Fenwick Willan (2023). European Logistics and Supply Chain Sustainability Report. Available at https://www.hfw.com/european-logistics-and-supply-chain-sustainability-report-2022 (Accessed 14 April 2023).

Compared with non-certified buildings, green buildings report 25% lower energy consumption, 11% lower water consumption, and 35% lower CO₂ emissions.⁴⁸



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.⁴⁹

Meanwhile, 2 billion people lack safely managed drinking water, while 1 in 4 people worldwide lack access to reliable handwashing facilities. 50 To reach universal coverage of these services, which are essential to global health, the UN estimates that the current rates of progress would need to increase fourfold. 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.

With a growing global population and the 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.

Our Pillar looks for companies whose products and services improve access to clean water and sanitation, and efficiencies in existing infrastructure.

Core themes include...

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

Neither the Asian SDG Equity fund nor the Emerging Markets SDG Equity fund currently have exposure to companies in this pillar.

The companies available to us in the Water & Sanitation space tend to operate at the intersection of the public and private sectors. We struggle to find high-quality companies aligned to this pillar that meet the dual-outcome mandate of the funds: outputs that contribute to a fairer and more sustainable future for all, alongside the potential for strong financial returns.

In the past, we invested in a utilities operator supplying water in the Eastern seaboard of Thailand, a region facing water stress levels ranging from medium-high to extremely high. While the company was materially aligned with the aim of SDG 6 to ensure access to clean water and sanitation, a significant portion of revenue was tied to a government contract that expired, putting financial returns at risk – and concurrently illustrating the challenge of investing at the intersection of public and private interests.

We continue to search for companies that contribute to achieving the SDGs through clean water and sanitation.



⁵⁰ 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 05 April 2023).



⁵¹ World Resources Institute Aqueduct Country Ranking (wri.org) (Accessed 01 May 2023).

SDG Leaders

Establishing access to safe, clean and sustainable facilities

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

We have been conservative in the way we approach this. In a construct that allows 'SDG Leader' classification for any firm that is involved in a value chain, the net is unfairly and unreasonably wide. To counter this, we have instead focused 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.

Leaders 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
- · Reliable lithium battery functionality
- · Improved energy efficiency to optimise resource use
- Reducing overall cost and time to discover essential medicines

Companies in our portfolio...

- Install submarine cables to evacuate power from Chinese wind farms and facilitate connection to the mainland power grid
- Produce high-quality and reliable electrolyte materials in Korea that are paramount to the performance of large batteries used within electric vehicles and energy storage solutions
- Support smaller biotechnology firms in China and India, contributing to lower costs and production efficiency by offering their technical know-how and manufacturing expertise



Taiwan
Information Technology – Semiconductors





SDG 9.4

2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Proprietary ESG Rating

1 - Best in Class

MSCIESG Rating

AAA

ESG Risks

- Water intensity
- Energy consumption
- Human capital management

ESG Engagement

Water and energy efficiency have been key areas for discussion since we started investing in TSMC as a firm. We have discussed TSMC's management of water scarcity through water efficiency, water recycling, and the development of alternate water sources. Through the years we seen TSMC commit to using renewable energy sources, and we continue to discuss how the company can work with various local agencies and renewable developers to accelerate the development of renewable capacity in Taiwan.

Theory of Change

Value chain

Semiconductors perform a wide range of functions for electronic products and systems, and are seen as an enabling technology, facilitating the delivery of solutions in at least one (and possibly more) of our impact pillars.

Intentionality

TSMC is the world's largest foundry, and accordingly it plays a central role in innovation and product development. In 2022, TSMC manufactured 12,698 products for various applications spanning high-performance computing, smartphones, the Internet of Things (IoT), automotive, and digital consumer electronics. TSMC's ongoing research and development directly enables lower energy consumption per unit of production compared to older technologies, in alignment with the aims of SDG 9.4 to "upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency", as well as target 7.3 to "double the global rate of improvement in energy efficiency".

Materiality

The majority of TSMC's research and development budget is allocated to extend their technology leadership, increase energy efficiency and create value for the semiconductor industry by enabling more efficient innovation. Activities that contribute to energy efficiency capture 70-80% of TSMC's research and development spend.

Enabling progress towards the SDGs

TSMC's energy-efficient chips reduce the cost (both dollar and environmental) of computing, while enabling the delivery of technologies that are critical to achieving the SDGs, including for example the provision of renewable energy, the development of smart grids, the penetration of electric vehicles, and the delivery of mobile-enabled healthcare.

© tsmc

⁵² TSMC. About TSMC. Available at https://www.tsmc.com/english/aboutTSMC (Accessed 17 April 2023).

abrdn SICAV I - Emerging Markets SDG Equity Fund

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 long-term growth by investing in companies in EM countries that, in our view, will make a positive contribution to society through their alignment with the United Nation's Sustainable Development Goals ('SDGs'). The Fund aims to outperform the MSCI Emerging Markets Index (USD) benchmark before charges.

Fund manager(s)	Catriona Macnair
Launch date	09/12/2020
Fund size	\$30.03m
Base currency	USD
Number of holdings	55*
Investment style	Active
SFDR ⁵³ Classification	Article 9

^{* 58} holdings in total which this includes 3 untradeable local Russian securities marked to zero.

Source: abrdn, 31 March 2023.

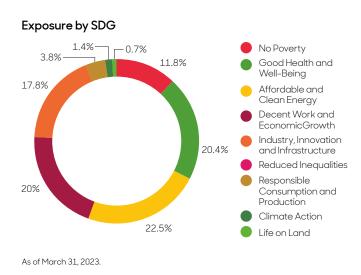
Top 10 Holdings

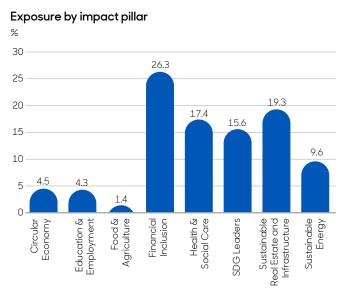
Company	Weight (%)	Pillar	SDG
TSMC	8.0	SDG Leaders	9 NOMERIC MONORIDA
AIA	3.8	Financial Inclusion	8 RECONT MORE AND COMMUNIC COMMUNIC
Dino Polska	3.1	Education & Employment	8 RECOMPRISE AND RECOMPRISE CONTROL CONTROL CONTROL
ICICI Bank	3.1	Financial Inclusion	8 HEEM HORE AND TOCHONGE GROWING
Bank Rakyat Indonesia	2.8	Financial Inclusion	1 ¹⁰⁰ POVERTY 市 : 中中:
Banorte	2.7	Financial Inclusion	1 ¹⁰⁰ Privater
LG Chem	2.6	Sustainable Energy	7 AFFORMALI FAND CLEAN MINISTO
Raia Drogasil	2.6	Health & Social Care	3 MONTHELSEING
Power Grid Corp	2.5	Sustainable Energy	7 APROBABLE AND CLAN MODELY
Shenzhen Mindray	2.5	Health & Social Care	3 NOO HALLEN

Source: abrdn, 31 March 2023. 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.

⁵³ Sustainable Finance Disclosure Regulation (SFDR) Introduced by the European Commission (EC) and effective in March 2021, the regulation requires fund managers like abrdn to provide sustainability-related information about the funds they offer. The goal is to ensure investors have the information they need to make investment decisions in line with their sustainability goals and preferences. Articles 8 and 9 of the SFDR respectively prescribe the detailed disclosure requirements for products that promote environmental or social characteristics and products that have sustainable investments as their objective.

abrdn SICAV I - Emerging Markets SDG Equity Fund





As of March 31, 2023.



abrdn SICAV I - Asian SDG Equity Fund

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 long-term growth by investing in companies in Asia Pacific (excluding Japan) countries that, in our view, will make a positive contribution to society through their alignment with the United Nation's Sustainable Development Goals ('SDGs'). The Fund aims to outperform the MSCI AC Asia Pacific ex Japan Index (USD) benchmark before charges.

Fund manager(s)	David A Smith
Launch date	25/08/2020
Fund size	\$45.29m
Base currency	USD
Number of holdings	51
Investment style	Active
SFDR Classification	Article 9

Source: abrdn, 31 March 2023.

Top 10 Holdings

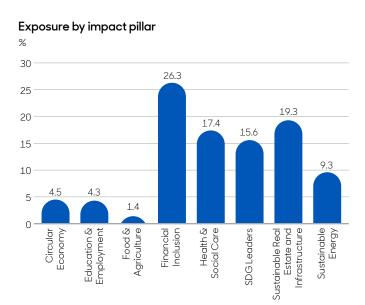
Company	Weight (%)	Pillar	SDG
TSMC	8.6	SDG Leader	9 NOCETO MANCHEN
AIA	5.5	Financial Inclusion	1 Posser. 市·中·市
CSL LTD	4.2	Health & Social Care	3 CORD HALFING
Housing Development Finance Corp	3.4	Financial Inclusion	1 Martin
Goodman Group	2.8	Sustainable Real Estate & Infrastructure	9 INCREMENTAL INFORMATION AND PROPERTY AND P
ASML	2.8	SDG Leader	9 INCREMENTAL MANAGEM
LG Chem	2.7	Sustainable Energy	7 AUTOMORIES AND CICAN CHIENCY
ICICI Bank	2.6	Financial Inclusion	8 eccari seen see
CATL	2.5	Sustainable Energy	7 AUTOMORIES AND CILIA MODEST
Power Grid Corp	2.5	Sustainable Energy	7 ATTENDED AND CLEAN METERS

Source: abrdn, 31 March 2023. 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.

abrdn SICAV I - Asian SDG Equity Fund

Exposure by SDG No Poverty 2.5% 15.1% Good Health and 3.5% Well-Being 23.1% Affordable and Clean Energy Decent Work and EconomicGrowth Industry, Innovation and Infrastructure Sustainable Cities and Communities Responsible Consumption and Production Climate Action 23.9% Life on Land

As of March 31, 2023.



As of March 31, 2023.



Contact us

Asian and Emerging Markets Sustainable Development Team

Responsible for portfolio construction



Catriona Macnair



Mubashira Bukhari Khwaja



David Smith



Nina Petry



Fraser Harle



Jerry Goh



Daniel Ng

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 these funds 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**.

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

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