Global Equity Impact Fund Annual Report 2021

December 2021

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Contents

"It's surely our responsibility to do everything within our power to create a planet that provides a home not just for us, but for all life on Earth."

Sir David Attenborough

Welcome to the 2021 Global Equity Impact Fund report

It has now been two years since the start of the COVID-19 pandemic and we have a clearer understanding of the social, environmental and economic costs.

The United Nation's (UN) own progress report on the Sustainable Development Goals (SDGs) points to education setbacks, lack of social safety nets, and woefully underfunded healthcare systems. We entered 2021 with a phenomenal amount of hope and expectation around how the world would respond to the pandemic and 'build back fairer'. We hoped countries would take the opportunity to 'reset' and focus on building greener and more equitable societies.

Some of this has come to fruition with COVID vaccines developed in record time. However, the pandemic response also exposed the ugly realities around vaccine deployment and divergent economic recoveries. The World Bank estimates that the richest 20% of the world's population will have recovered half their pandemic-linked losses in 2021, while the poorest 20% will have lost an additional 5% of their income. [i]

The United Nations Environment Programme (UNEP) is especially damning: "The opportunity to use COVID-19 fiscal rescue and recovery spending to stimulate the economy while fostering a low-carbon transformation has been missed in most countries so far. Poor and vulnerable countries are being left behind." [ii]

With COP26 held in our own backyard in Glasgow we expected to see concrete environmental policy supporting net-zero pledges. There were new pledges from India to reach net zero by 2070 and China promising that emissions will peak by 2030, and we saw a more coordinated pledge around methane. But the congress fell flat by most accounts, with a lack of policy hindering any real progress. The UNEP highlights that there is a fifty-fifty chance global warming will exceed the 1.5 degree target over the next two decades and that current emissions targets do not put us on track to meet 2030 or even 2050 net-zero pledges. [iii]

We need our governments to do more, but it is clear we cannot wait for promised policy and we increasingly look to companies to drive change. We need the innovative healthcare solutions that developed the COVID vaccine; we need the disruptive education solutions that kept children in (virtual) classrooms despite school closures; we need insurance targeting the protection gap in emerging Asia where health issues can cause bankruptcy. And we need companies to accelerate the renewable energy shift through their own direct purchases of power.

Recent market performance has been volatile and raised questions over whether 'Environmental, Social and Governance' (ESG) or 'impact investing' was a bubble. We disagree. Doing good and generating returns go hand-in-hand and do not become mutually exclusive overnight. It is the case that the disappointment of COP26 has weighed on energy transition company share prices, and the shift in interest rate expectations has been a drag for long-term growth companies. However, we firmly believe that unmet needs are untapped sources of unmet demand and represent attractive opportunities for companies with the right products and services to deliver meaningful impact and superior long-term returns.

At the same time we believe it is getting harder for investors to define and identify 'impact' funds. With the Sustainable Finance Disclosure Regulation (SFDR), EU Taxonomy and various country sustainability labels competing for investors' attention, it is hard to know what to trust. As an example we were especially disappointed to see the European Union (EU) include natural gas in its sustainable lexicon. We agree that to meet climate goals there will inevitably be a transition period, but there is nothing sustainable about a transition. Sustainable by definition means lasting and we see natural gas as transitory. It is merely a stop-gap, and one to be transitioned away from quickly. We worry the EU's decision has opened the door to sanctioned greenwashing.

This year's note might sound a bit more downbeat but it is not our intent to be defeatist. The urgency in our tone should be palpable. Now more than ever we need to allocate capital to companies who are delivering solutions to the world's biggest problems. We must be discerning, but we need to act. We are running out of time.

Dominic Byrne

Head of Global Equities

Sarah Norris

Investment Director

Pillar headline impacts

Positive outputs from holdings in the portfolio:

Circular economy

500,000 tonnes of material recycled

Education and employment

7,362,000 students reached with education services

Financial inclusion

147,941,300 underserved individuals provided with basic financial services

Food and agriculture

Feed additive developed that can reduce methane emissions from dairy cows by **30%**

Health and social care

3,396,200,000 doses of medicine provided under tiered pricing and affordability programmes

Sustainable energy

258,770,301 metric tonnes CO2e emissions avoided

Sustainable real estate and infrastructure

1,691 affordable houses built

Water and sanitation

45,858,600,000 gallons of water saved

Portfolio impact

How is impact defined?

We use the UN's 2030 Agenda and its 17 Sustainable Development Goals to help us define positive impact and target the most pressing global issues. Ultimately, we are looking for companies providing local solutions to three major global problems: climate change, unsustainable consumption and production, and social inequality.

What are our impact objectives

With this in mind we have identified eight 'pillars of impact' that address these broad challenges and align with the UN's overarching agenda of creating a more peaceful and prosperous society and environment. We aim to invest in companies whose products and services in each of these pillars and measure how the products help countries achieve the UN's sustainable development agenda.

How do we identify opportunities and assess our investments

To help us identify impact investments we use a 'theory of change' approach we call 'Impact Maturity'. We examine a company's inputs, activities, outputs, outcomes, and impacts in three "impact maturity" stages: intentionality, implementation, and impact.

Intentionality: Over $133 billion invested by companies in the Fund in developing products or services targeting positive outcomes. While this looks like a big number, this represents 2% of the of $5 trillion the UN estimates is required to meet the SDGs.

Implementation: Over $733 billion of revenue generated by companies in the Fund from products or services aligned to one of our pillars.

These figures include the investment and development of new technologies and sales of products that aim to increase the energy efficiency of data centres; support renewable energy storage and distribution; expand education opportunities to rural and low-income students; improve access to priority health concerns; conserve natural resources; and expand access to nutrition, to name just a few.

How do we monitor company progress in achieving impact?

Company self-disclosure is a crucial part of our approach to impact investing. We believe that if a company intends to deliver a product to address a specific environmental or social need, the impact must be reported. Therefore we heavily rely on engagement with companies and our conversations with the supervisory board, executive management teams, and divisional heads.

The following pages summarise the impact companies in the portfolio have delivered this year. We agree with the Global Impact Investing Network's stance that "context is critical to interpreting impact results in a robust and reliable way." In addition to case studies and pillar level data, we also analyse the impact companies delivered according to country and region. And we compare this to international sources, most frequently the World Bank databank, to understand how the impact delivered compares to the underlying country-specific issues and needs. Above all, we aim to frame the local impact delivered against the global issues our portfolio targets.

i World Bank (2021) Growth in a Time of Crisis: What's Ahead for Developing Economies. Accessed 17 February 2022 (Available at: https://live.worldbank.org/economic-growth-in-a-time-of-crisis)

ii United Nations Environment Programme (2021) Emissions Gap Report. Accessed 17 February 2022 (Available at : https://www.unep.org/resources/emissions-gap-report-2021)

iii United Nations Environment Programme (2021) Emissions Gap Report. Accessed 17 February 2022 (Available at : https://www.unep.org/resources/emissions-gap-report-2021)

iv The GIIN (2019) Evaluating Impact Performance [Online]. Accessed 22 January 2020 (Available at https://thegiin.org/research/publication/evaluating-impact-performance)

abrdn's impact pillars

Sustainable development goals	Pillars	Sub goals
12 Responsible consumption and production; 15 Life on land	Circular economy	Resource efficiency Material recovery and reuse
4 Quality education; 5 Gender equality; 8 Decent work and economic growth; 10 Reduced inequalities	Education and employment	Access to education and skills development Quality employment and job creation
1 No poverty; 8 Decent work and economic growth; 10 Reduced inequalities	Financial inclusion	Access to financial services
1 No poverty; 2 Zero hunger; 14 Life below water; 15 Life on land	Food and agriculture	Access to nutrition Food quality Sustainable agriculture
1 No poverty; 3 Good health and well-being; 5 Gender equality	Health and social care	Access to healthcare and social care Enhanced healthcare Drug development
7 Affordable and clean energy; 13 Climate action	Sustainable energy	Access to energy Clean energy Energy efficiency
9 Industry, innovation and infrastructure; 11 Sustainable cities and communities; 17 Partnerships for the goals	Sustainable real estate and infrastructure	Affordable housing Eco-construction Improved access
1 No poverty; 6 Clean water and sanitation; 14 Life below water	Water and sanitation	Access to water and hygiene Clean water Water efficiency

Circular economy

Doing more and better with less

The world generates **2.01 billion tonnes of municipal solid waste annually** and high income countries generate about 34% of this, or **683 million tonnes**, despite accounting for only 16% of the world's population. 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 'closed loop solutions' which 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.

Case study: Autodesk

Autodesk is a US-based software provider that works with the architecture, engineering and construction industry. Estimates suggest that up to 30% of construction material is wasted on-site and the manufacturing industry itself is responsible for 19% of global greenhouse gas emissions. Autodesk's modelling software specifically helps customers reduce material waste and emissions in the design and construction of new buildings.

Autodesk provides case studies demonstrating emissions and waste. For example, with Autodesk's software, a ski equipment manufacturer is reducing the amount of waste it generates by about two pounds of landfill per ski. But the sustainability report lacks company-wide disclosure on waste savings or energy efficiencies.

We met with the Head of Sustainability at Autodesk to discuss their climate and impact reporting and we were encouraged with their roadmap. Autodesk acknowledge any measurement improvements will require 'simulated' or estimated savings and are cautious about over-stating their impact. But they are working with the European Union to develop a framework that allows them to identify expenses, revenues and ultimate impact within the circular economy that is taxonomy aligned.

It is obvious Autodesk is approaching impact reporting carefully and thoroughly and wants to provide substantive information that can be verified. The meeting in particular highlighted the pitfalls of third party data providers and the importance of businesses calculating impact themselves.

We are hopeful for the next impact report and impressed with Autodesk's engagement and willingness to keep an open dialogue with investors on how best to report and evidence green revenue alignment, waste savings, and avoided emissions among other metrics.

Positive outputs from holdings in the portfolio

250 million mobile phone

batteries recycled.

2 million e-bike

batteries recycled.

25,000 electric vehicle

batteries recycled.

500,000 tonnes of materials recycled

equivalent to the weight of 75,000 elephants.

Key ESG risks

Close looped solutions often rely on natural capital, i.e. the shift away from plastic towards paper. Therefore, considering the impact on biodiversity and understanding how forestry assets are managed and certified are key considerations. And recycling efforts come with their own emissions and environmental impact, so evaluating the efficiency of recycling operations and what happens to waste that cannot be recycled also warrants investigation.

Education and employment

Creating opportunities for marginalised or vulnerable people

Full and productive employment and decent work for all requires businesses to invest in and support the development of their employees. COVID has wiped out **20 years of education gains** and led to the loss of the equivalent of **255 million full-time jobs**. Global efforts to reduce social inequalities and 'build back fairer' must have education and employment at their core.

As we look for companies positively impacting education services, we target companies that directly 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 education opportunities, as well as employee safety and equality, and seek to include companies that protect against discrimination and give voice to the marginalised.

Key ESG risks

When we evaluate positive impact of education and education solutions we look at quality indicators including graduation rates and affordability or wage growth and training programmes. Key risks to these outcomes include data privacy, given the amount of online training; regulatory adherence and compliance with education standards; treatment of the workforce; and other adverse indicators. We actively engage to better understand how companies manage some of these ESG risks.

Positive outputs from holdings in the portfolio

7,362,000 students

reached with education services, about a third of the people it would take to hold hands around the equator.

5,580,000 scientific

and medical journals or e-books published.

16,050 people

of marginalised demographics hired, almost enough people to fill Madison Square Garden Center in New York City.

18,000,000 monthly visits

to scientific research journals, equivalent to roughly 7% of monthly Microsoft Teams active users.

Contributions to positive outcomes

We use World Bank, UN, and government data sets to understand where specific education and employment needs reside and seek out companies that focus on local solutions. The internationally-adopted framework for measuring progress towards the UN's goal of quality, inclusive education for all focuses first on access, then on completion followed by learning outcomes.

We can measure access, but understanding how these products and services impacted the quality of education, or outcomes is more difficult. Some companies in the Fund rely on surveys to gauge their impact on student grades and others point to graduation rates. While we do not have complete data sets, we are encouraged that the companies we are invested in are working to define and report on what it means to improve the 'quality' of education.

The Fund again invested in companies principally focused on tertiary education and scientific research. These companies offered affordable distance learning, student loans, textbook rentals and online learning platforms that reached over **7 million students, equivalent to 3.5% of total gross enrolment**.

In **North America**, companies held in the Fund reached over **6 million students**, or about **32%** of total gross enrolment. And in **Brazil**, companies educated **762,000 students**, equivalent to 9% of gross enrolment in Brazil and 3% of gross enrolment in Latin America.

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 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** –that 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.

COVID has led to the **first rise in extreme poverty in a generation**, with the global poverty rate projected to be 7% in 2030. Our pillar identifies companies operating in countries and regions where there is low penetration of basic financial services for individuals as well as for micro, small and medium-sized enterprises (MSMEs).

Case study: HDFC

Unmet need

According to most recent data, there is a 51 million unit housing shortage in India. 21% of households are in urgent need of housing and a further 46% of households are living in inadequate housing conditions.

Intentionality

HDFC is an Indian financial services company specialising in mortgages. The business strategy is to increase home ownership in India, specifically in the low cost and affordable housing segment. To ensure affordability and access, interest rates are set in line with the national bank.

Implementation

The lower cost segments represents 16% of the overall loan book by value and 33% by volume. And during the pandemic, HDFC worked with the national bank on restructuring loans to help reduce defaults and non-performing loans.

Impact

HDFC do not report overall customers in its lower income groups which is a topic of our engagement. However, in 2020 HDFC had 2,300 home loan customers that utilised the Credit Linked Subsidy Scheme (CLSS), which is indicative of their commitment to this segment.

Positive outputs from holdings in the portfolio

52,146 bank branches

in rural/
underserved areas.

147,941,000 underserved individuals

provided with basic financial services, more than the population of Mexico.

$11,662,725,000 loaned

to MSMEs.

24,000,000 MSMEs

supported with basic financial services.

Key ESG risks

With a significant unmet need around basic financial services, we are mindful of predatory lending or products that can do more harm than good and push people back into extreme poverty. We therefore focus on lending practices, financial literacy programmes, and interest rate charges to determine fair pricing of products and understand how financial institutions work to tailor transactional, payment, savings, credit or insurance offerings to specific customer needs. And we monitor default rates, non-performing loan ratios, and churn rates (among other things) to ensure that financial inclusion goes hand in hand with financial awareness.

Contributions to positive outcomes

The Fund continued to invest in companies whose technology platforms supported mobile wallets for individuals outside the traditional banking ecosystem, provided mortgages for first time home buyers and used a river boat to sail down the Amazon to reach underserved communities.

The contribution of companies to tangible solutions is obvious in **Indonesia**, where only **48% of the population has access to a basic financial account**. Companies in the **Fund provided nearly 6 million underserved and unbanked individuals** with new accounts and loans which is **equivalent to 6%** of the total under/unbanked population in Indonesia.

This year, the Fund increased its investment in companies targeting the **'insurance protection gap'** in Asia. The insurance gap refers to the prevalence of under- and non-insured in emerging markets. The risks of the gap are manifest in health and mortality and the crippling effect of out of pocket expenses from unexpected illnesses or in the event of extreme weather and the impact on agriculture-based livelihood. Insurance is a vital tool to protect against these key concerns, and the focus is not exclusively on individuals below the poverty line, but also on the emergent middle class that has just recently moved out of poverty.

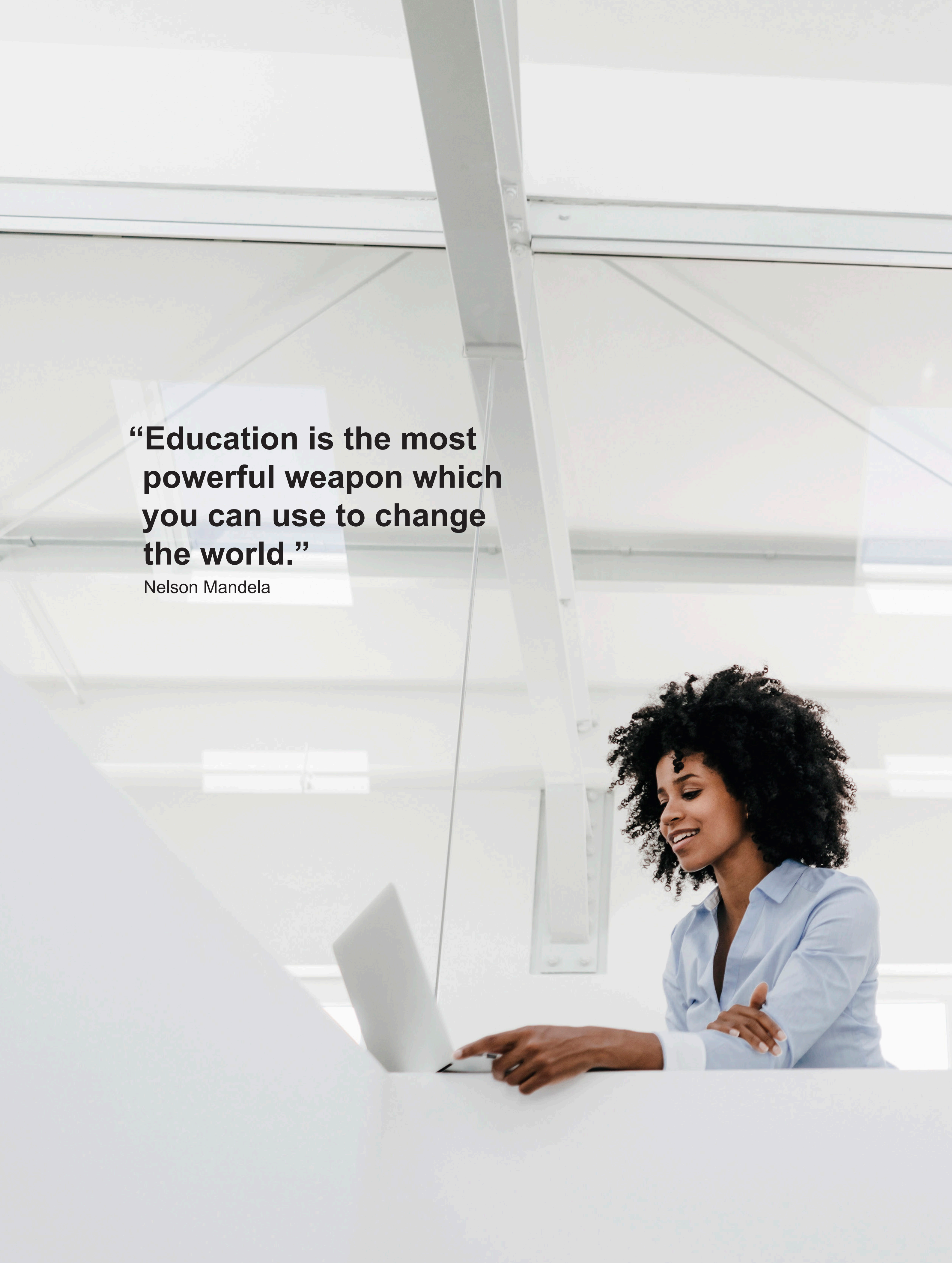
There is clearly significant unmet need, **but this need represents significant demand** and an opportunity for businesses with innovative solutions, tailored to specific socio-economics needs.

In India, the most recent World Bank data showed that social insurance programmes covered just 17.7% of the population and the adequacy of the insurance programmes in place was 4.5%. Companies in the Fund offered insurance services that covered 38,000 people, a drop in the ocean compared to the over 1 billion people without coverage. In China however, the Fund invested in companies whose coverage equates to 12% of the nearly 600 million people that do not have insurance.

Asian Insurance Protection Gap

	Coverage of social insurance programmes (% population)	**Adequacy of social insurance programmes (% of total welfare of beneficiary households)**	**New insurance policies provided by companies in the Fund as a percent of un/under insured**
India	17.7%	4.5%	0.02%
Thailand	3.5%	86.5%	7.10%
Malaysia	8.5%	55%	6.92%
China	35.6%	55.6%	11.88%

Companies held in the fund also had operations in Brazil, Mexico, India, Pakistan, Myanmar, Ghana, Nigeria, Kenya, Tanzania, Rwanda and Zambia. In these countries, access to financial services ranges from 21% in Pakistan to 80% in India.



"Education is the most powerful weapon which you can use to change the world."

Nelson Mandela

Food and 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 earth's natural resources. The resources required to feed the global population are already putting unsustainable demands on land, oceans, forests and biodiversity. And still, in 2019 **26.4% of the global population** experienced food insecurity.

Our Food and 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 impact of farming practices on the land, water, and biodiversity.

Key ESG risks

The key risks we consider centre on avoiding genetic modification and antibiotic resistance in crops, instead wanting to see improved biodiversity and reduced desertification. We also aim to avoid deforestation and marine 'dead zones'. And we are hyper-aware of working conditions and human rights within supply chains for food companies.

Positive outputs from holdings in the portfolio

$34,000,000 invested

in sustainable agriculture practices.

Feed additive developed

that can reduce methane emissions from dairy cows by c30% and ammonia emissions by c18% in pigs.

Omega-3 fatty acids

Marine algal oil that contains twice the levels of Omega-3 fatty acids as fish oil.

Spotlight Innovation: DSM

We highlighted DSM as a case study in in our annual report last year. A Dutch ingredient business, DSM's focus is 'creating brighter lives for all'. Within its nutrition business it uses natural and bio-based alternative ingredients to deliver solutions for customers.

We engaged with DSM on their data disclosure and were impressed with their focus on life cycle analysis and science-based targets, as well as the inclusion of carbon pricing within capex decisions and feasibility studies. We also appreciated the frank conversation around the difficulties of quantifying the impact of different products because of the thousands of product lines.

Products like 'Clean Cow', its feed additive that reduces bovine methane emissions, have garnered significant attention. But with a broad research platform, we wanted to highlight two other products DSM is developing to address key agriculture needs that align with our Pillar.

ProAct is another animal feed supplement that targets emissions. It increases the amount of digestible protein in feed, which ultimately allows for a reduction the overall protein content of feed. This improves the digestibility of proteins, thereby **reducing nitrogen emissions to the environment by up to 17%**.

The improved protein digestion also enables greater flexibility in feed formulation. With more diverse ingredients, DSM hope to reduce reliance on soy and thereby helping to cut deforestation for soy cultivation. DSM estimates the use of ProAct equates to an average reduction of 8% (25kg) in the amount of soybean meal required per ton of broiler feed. If ProAct were to be used globally in broiler diets, DSM estimate it would permit the replacement of 7.2 million tonnes of soybean meal annually, or 9.0 million tonnes of soy, thereby **reducing deforestation by 3.1 million hectares a year**.

DSM has also enhanced Dyneema with bio-based feedstock. Dyneema is a fibre that serves a wide range of applications, from ropes to fabrics sportswear. Introducing bio-based feedstock allows DSM to reduce its use of fossil-based resources. Production of 1 metric ton of bio-based Dyneema generates **five metric tonnes less CO_2e** than the same volume of fossil-based Dyneema.

Health and social care

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

Health and social care standards vary dramatically with each country facing unique issues. The UN focused its 2030 Agenda on: reproductive, maternal, new-born and child health; specific infectious and non-communicable diseases; mental health and environmental risks; as well as health systems and funding. But because of the pandemic, **a decade of progress in reproductive health, maternal health and child health could be stalled or reversed**.

With all healthcare services essential to those receiving them, we use the UN's objectives and the World Health Organisation's top ten causes of death to define our healthcare priorities. We look for companies focusing drug discovery on priority diseases and preventative medicine, improving accessibility and affordability of treatment, availability of doctors and nurses, and system funding.

Case study: Insulet

Unmet need

Diabetes the is the number one noncommunicable disease globally and in 2019 was the ninth leading cause of death. Managing diabetes can be challenging due to the need for multiple daily injections or use of a continuous infusion pump.

Intentionality

Insulet's aim is to reduce the burden of diabetes care and to revolutionise diabetes treatment. It is a disruptor in the diabetes market, challenging existing means of administering insulin by focusing on reducing pain and complications around injections and simplifying traditional pumps to ensure more efficient and effective diabetes care.

Implementation

Children are cited as key customers due to the greater oversight offered by their pumps and the greater freedom of wearable versus traditional pumps.

Impact

Their insulin pump reduces the number of injections its 250,000 customers need, as well as simplifies traditional infusion treatments. Further, several studies show superior efficacy of Insulet's products in glycaemic control compared to injections and continuous insulin infusion.

Positive outputs from holdings in the portfolio

383,116,400 patients

reached with affordable healthcare services.

3,396,200,000 doses

of medicine provided under tiered-pricing/ affordability schemes.

$225 in average savings

per prescription achieved for customers.

259,006 doctors and nurses

trained and supported in underserved areas.

Key ESG risks

Drug development without affordability programmes and equitable pricing structures limits the ultimate impact the products could have. Other key considerations in our risk analysis include animal husbandry policies and approaches, product safety, appropriate marketing practices, and bribery and corruption policies.

Contributions to positive outcomes

According to the WHO, in 2019 more than half of the 55.4 million deaths globally were due to ten top causes, seven of which are noncommunicable diseases (NCDs). NCDs including heart disease, diabetes and kidney disease accounted for 44% of all deaths globally. In lower-middle income countries malaria, HIV/AIDS, road injury, and cirrhosis of the liver are also leading causes of death.

Companies held in the Fund developed, manufactured and distributed a range of medications and vaccinations targeting noncommunicable diseases and viruses and priority healthcare concerns.

Reach of access programmes

Pneumococcal vaccine: Respiratory diseases are a key cause of death globally and companies in the Fund provided pneumococcal vaccines to 10 Gavi-eligible countries reaching 17 million patients

HIV: 38 million people were living with HIV in 2019 and companies in the Fund had licensing agreements to provide 17 million patients access to treatments across 84 countries

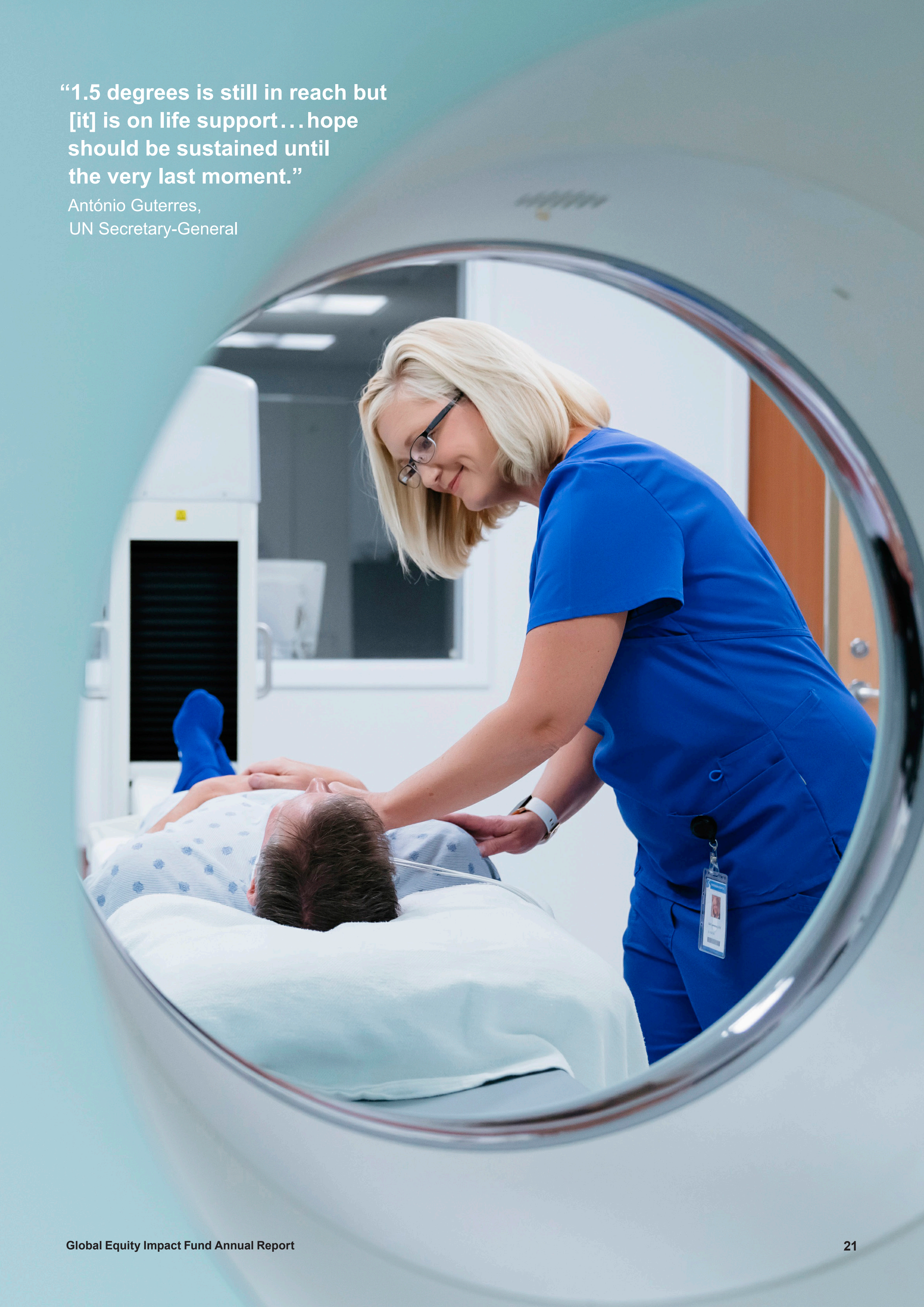
Diabetes: According to most recent World Health Organisation data 422 million people have diabetes. Companies in the Fund provided 32.8 patients with diabetes treatment.

Maternal care: 94% of all maternal deaths occur in low and lower-middle income countries and companies in the Fund provided 13 million women with improved quality of care and access to contraception.

Additionally companies in the fund provided mental health services to 6,500 paediatric patients, vaccines for 25 million people with rotavirus and closed 104 million ‘gaps in care’, addressing the discrepancy between clinically recommended care and actual care.

"1.5 degrees is still in reach but [it] is on life support…hope should be sustained until the very last moment."

António Guterres,
UN Secretary-General



Sustainable energy

Increasing renewables, decreasing emissions and improving access

Energy is central to almost every environmental and social issue the world faces and touches most aspects of daily life—fuels for cooking, heating, mobility, communication, and education. Despite this, **759 million people lack access to electricity** and over **2.6 billion** people still use **dangerous and inefficient cooking systems**. And while we've seen laudable global commitments on climate change, further action is needed on modern renewable energy.

Our Sustainable Energy pillar considers three areas of energy: clean energy solutions, initiatives that promote energy efficiency, and services to expand access to energy.

Case study: Azure Power Global

Unmet need

India, while making strides in overall access to energy, still relies on traditional fossil fuel energy sources and there is a significant need to transition to more sustainable sources to meet carbon and climate commitments, as well as address the pollution issues in the country.

Intentionality

Azure Power is a solar power producer in India with over 7GW of solar power assets, in operation on under development. The strategy and investment focus of the business is to be the cheapest energy provider across India, driving down the levelised cost of energy to make it more accessible across India.

Implementation

100% of revenue comes from renewable energy generation in India.

Impact

Azure has 7GWs of solar power in its portfolio with 2GWs of operational capacity including 45 utility scale projects. The 5GWs of capacity under construction and the pipeline is spread across multiple projects in Rajasthan, Gujarat, Karnataka, Punjab, Andhra Pradesh, Telangana, Uttar Pradesh, Assam, Chhattisgarh, Bihar, Maharashtra, and Delhi.

Positive outputs from holdings in the portfolio

168,859 photovoltaic inverters

sold to support solar power generation.

154,491 MW

of renewable energy capacity installed, roughly equal to the total renewable energy capacity in Brazil.

258,770,301 metric tonnes

of CO_2e emissions avoided, equivalent to 106 million flights return between Johannesburg and Singapore.

Key ESG risks

A key consideration is the emission intensity of production and whether this offsets the emission reduction offered from products in use. We also examine safety and injury rates, bribery and corruption, supply chain oversight, impact on climate change and biodiversity and any legacy exposure to fossil fuels. Many energy generation companies are undergoing a green transformation, shifting their business models toward renewable power sources so it is essential to understand exposures to fossil fuel and commitments to exit, balanced with the need for security of supply.

Contributions to positive outcomes

Despite strong commitments globally to tackle emissions and increase renewable energy capacity and improve access to affordable clean energy, fossil fuels still dominate consumption. However, companies held in the Fund made strong contributions to renewable global capacity expansion via regional investments as seen below:

Installed renewable-energy capacity

	Total renewable capacity (MW)	Installed/operated renewable capacity by companies in the Fund (MW)	Installed/operated renewable capacity as a percent of total renewable capacity
Argentina	14072	240	1.71%
Bolivia	1057	35	3.31%
Chile	12794	249	1.95%
Denmark	9677	3887	40.17%
Germany	131739	1883	1.43%
Jordan	1903	40	2.21%
New Zealand	7418	95	1.28%
Poland	12220	413	2.28%
Saudi Arabia	413	159	38.5%
Senegal	230	23	10%
The United Kingdom	**47676**	**5037**	**10.57%**
Ukraine	**12171**	**319**	**2.62%**
The United States	**292065**	**22467**	**7.69%**

Companies held in the fund also had operations in Austria, Belgium, Canada, Chile, China, the Czech Republic, El Salvador, Finland, France, Germany, Greece, India, Italy, Ireland, Kenya, Kazakhstan, Mexico, New Zealand, the Netherlands, Norway, Panama, Poland, Romania, Russia, Serbia, South Africa, Spain, Sri Lanka, Taiwan, Thailand and Vietnam.

"The truth is there are no climate leaders. Not yet. At least not among high-income nations."

Greta Thunberg

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 39% of global CO2 emissions. But further development is needed. One billion people reside in slums, principally across Asia and Africa. Only half the world's urban population enjoys convenient access to public transportation.

Our Sustainable Real Estate and Infrastructure Pillar focuses on a variety of key 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 internet and telecom connectivity. These are all global priorities, and we use the World Bank Database to understand the different types of unmet real estate and infrastructure needs in different regions and countries.

Case study: Equinix

Unmet need

According to the International Energy Agency, global data centre electricity use in 2020 was 200-250 TWh, or around 1% of global final electricity demand. And energy used for cryptocurrency mining consumes an additional 100 TWh. This is only likely to increase thanks to rising global internet traffic and data demands.

Intentionality

Equinix is working to reduce the environmental footprint of its data centres, investing more than $129 million in energy efficiency upgrades, retrofits and improvements and committing to increase renewable energy consumption from 90% currently to 100%.

Implementation

About 69% of Equinix's global data centre footprint is green certified.

Impact

Equinix data centres consumed 6,460 GWh, of which 90% was renewable energy and its power usage effectiveness (PUE) improved to 1.5. PUE is a measure of how efficiently Equinix is powering its customers' IT equipment. An improvement from 1.57 in 2018 to 1.51 currently indicates improved efficiency across Equinix's portfolio of data centres.

Positive outputs from holdings in the portfolio

5,849 GWh

of renewable energy used to power data centres, equivalent to 550,000 US homes electricity usage in a year.

1,691

affordable houses built in the UK

173,650,000

metric tonnes of CO2e emissions reduced/avoided, equivalent to 105 million return flights between New York and London

15,733,000

underserved customers with mobile subscriptions

Key ESG risks

We are cognisant of key ESG concerns within these areas, which include issues related to connectivity solutions such as privacy rights, online abuse, the digital divide, land rights & community relations, network shutdowns and bribery and corruption. We also examine risks from construction and building safety, supply chain oversight, life-cycle analysis and circular designs, biodiversity, and climate change.

Water and sanitation

Establishing access to safe, clean and sustainable facilities

Water supports all life and is a precious and finite resource; however data suggests 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 basis are experiencing rapid increase or decreases in surface water area. This is compounded by pollution and the persistent loss and degradation of wetlands and freshwater biodiversity. And 2 billion people lack safely managed drinking water and 3.6 billion people lack safely managed sanitation.

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 sanitations and improve efficiencies in existing infrastructure.

Case study: Tetra Tech

Unmet need

Water scarcity, flooding and lack of proper wastewater management continue to hinder social economic development. Unfortunately, this is the new normal in many parts of the world, with water use increasing globally by about 1% per year according to the FAO.

Intentionality

Tetra Tech is a leading resource management consultant, specialising in water services. Its corporate strategy focuses on helping clients develop more resilient water supplies and more sustainable management of water resources. Key investment is in contractors and consultants that can help with sustainable design projects, resource conservation programmes and integrated water management services.

Implementation

Over 50% of revenues are tied to water environment services and infrastructure. In 2020, Tetra Tech worked on more than 65,000 projects across over 100 countries and has flagged $22 billion of planned resiliency projects on water reuse and conservation including managing water supplies, wastewater treatment, storm water management, and flood protection

Impact

Tetra Tech produced an estimated 125.65 million gallons per day of new clean water based on the number of clean water projects published in their sustainability report. We are engaging with Tetra Tech regarding their disclosure and several recommendations for enhancement.

Positive outputs from holdings in the portfolio

45,848,600,000 gallons of water saved

enough to fill over 69,400 Olympic size swimming pools.

Key ESG risks

We focus on pricing for services to ensure access is fair and affordable, resilience of infrastructure to climate change, as well as water quality and the materials used in water infrastructure. There are also social issues to consider around migration and wider government policies, when we assess how companies products and services tackle water and sanitation needs.

Conclusion

With the uncertain backdrop and widening social and economic gaps between developed and developing countries, it is unsurprising we are seeing a change in how risks are perceived. According to the World Economic Forum's risk survey, our perception of the most severe global risks over the next ten years have shifted.

Previously the top risks were exclusively environmental and social risks. And now debt crises and geopolitical confrontation join a list that includes climate action failure, extreme weather, social cohesion erosion and infectious diseases.

Risks and unmet needs are not one dimensional, and we do believe the most pressing global problems are interlinked. Failure to address climate change will have severe economic and geopolitical consequences. So we see the broadening of the WEF's top ten risks as an indication of how environmental and social issues are even more deeply embedded:

"A bifurcated economic recovery [from COVID] is likely to prompt an upsurge in economic migration. At the same time, worsening extreme weather and a rise in political instability, state fragility and civil conflict are likely to further swell refugee numbers."

The need to act remains evermore pressing. We remain convinced we are witnessing a structural shift as environmental and social risks become the dominating influence on consumers and ultimately businesses, even if government policy has been slow. And this creates opportunities. We are excited to see the innovations companies bring to tackle these challenges.

About us

As a leading global asset manager, we believe that investing sustainably can help generate long-term value for our clients. We offer an extensive and growing range of investment solutions, as well as the very highest levels of service and support.

When we invest our clients' capital, environmental, social and governance (ESG) considerations are an integral part of our decision-making. By understanding how ESG factors affect our investments, we believe we can generate better outcomes for our clients, society and the wider world.

To help us achieve this, our dedicated, 20-strong ESG Investment team works closely with colleagues across all asset classes to support this work. A further 30 dedicated ESG asset-class analysts provide an additional layer of expertise.

“Because when women have equal futures, families and communities and countries are stronger. When they get an education that means their children are getting an education. This is a fact”

Barack Obama

Contact us

Impact Investing Team

As well as those shown in the team, we have had significant valuable contributions from our regional equity teams over the year. Members of our equity investment teams regularly join our discussions on impact ideas and contribute research for the fund. We are very grateful for the support of our colleagues and look forward to continuing to work with them.

Amanda Young
Chief Sustainability Officer

Dominic Byrne
Head of Global Equities

Chris Haimendorf
Senior Investment Director

Elizabeth Chiweshenga
Senior ESG Investment Analyst

Sarah Norris
Investment Director

Fionna Ross
Senior ESG Investment Analyst

Hugues Maclean
Investment Director

Andrew Patrick
Senior PortfolioManager

Housekeeping notes: In the previous pages, we aggregated company data by impact pillar to illustrate the positive social and environmental contributions. Where possible, we also analysed the data collected from companies to datasets from international organisations, including the Access to Medicine Index, the International Energy Agency, the World Bank and the World Health Organisation. We take a conservative view in our reporting, with companies only appearing in one pillar. This approach focuses the portfolio on purposeful impacts and avoids double-counting. In addition, in mapping the portfolio's outcomes, we only include companies that have reported the data, with revenue breakdown sometimes used as a proxy for regions. The impact data collected is pro-rated to match the holding period in the Fund to the nearest month.

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Please consider these risk factors:

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- The use of derivatives carries the risk of reduced liquidity, substantial loss and increased volatility in adverse market conditions, such as a failure amongst market participants. The use of derivatives may result in the fund being leveraged (where market exposure and thus the potential for loss by the fund exceeds the amount it has invested) and in these market conditions the effect of leverage will be to magnify losses.
- The fund invests in equity and equity related securities. These are sensitive to variations in the stock markets which can be volatile and change substantially in short periods of time.
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- Interpretation of 'Impact Investing' will vary according to beliefs and values. Consequently the fund may invest in companies which do not align with the personal views of any individual investor.
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