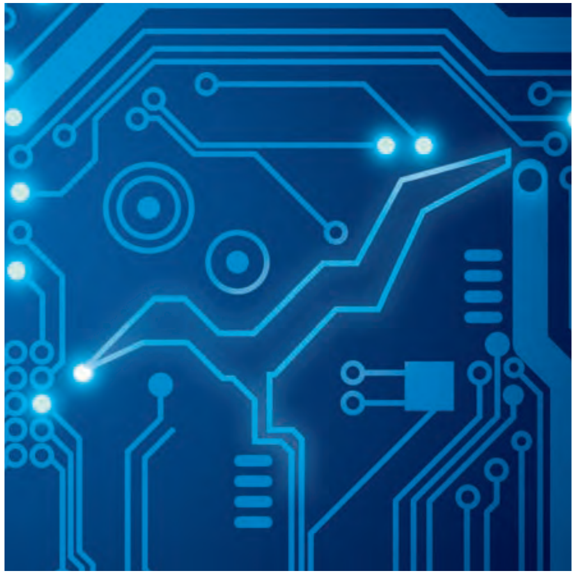
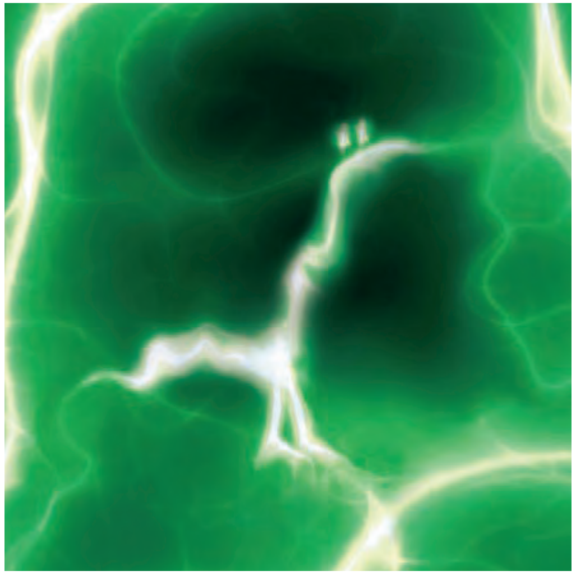
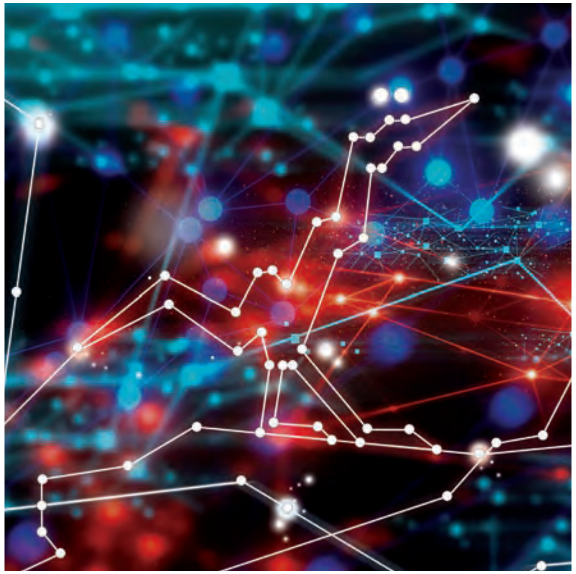
Marketing communication




Impact Report 2022

Artemis *Positive Future*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Objective

The Artemis Positive Future Fund's objective is to grow capital over a five-year period by investing in companies which meet the managers' criteria for positive environmental and/or social impact. The fund managers pursue this goal by identifying companies that create transformational rather than incremental change.

Performance

Category	2022	2021	2020	2019	2018
Artemis Positive Future Fund	-32.0%	N/A	N/A	N/A	N/A
MSCI AC World NR Index (GBP)	-8.1%	N/A	N/A	N/A	N/A
IA Global	-11.1%	N/A	N/A	N/A	N/A

Past performance is not a guide to the future. Source: Lipper Limited. All figures show total returns with dividends and/or income reinvested, net of all charges. Performance does not take account of any costs incurred when investors buy or sell the fund. Returns may vary as a result of currency fluctuations if the investor's currency is different to that of the class. This class may have charges or a hedging approach different from those in the IA sector benchmark. Sector is IA Global. Benchmark disclaimer: A widely-used indicator of the performance of the Global stockmarket, in which the fund invests. It acts as a 'comparator benchmark' against which the fund's performance can be compared. Management of the fund is not restricted by this benchmark.

THE BIG EXCHANGE

The Artemis Positive Future Fund is listed on The Big Exchange's platform of funds that have been selected for their positive contribution to people and the planet.

Risks

Market volatility risk

The value of the fund and any income from it can fall or rise because of movements in stockmarkets, currencies and interest rates, each of which can move irrationally and be affected unpredictably by diverse factors, including political and economic events.

Currency risk

The fund's assets may be priced in currencies other than the fund base currency. Changes in currency exchange rates can therefore affect the fund's value.

Emerging markets risk

Compared to more established economies, investments in emerging markets may be subject to greater volatility due to differences in generally accepted accounting principles, less governed standards or from economic or political instability. Under certain market conditions assets may be difficult to sell.

Concentration risk

The fund may have investments concentrated in a limited number of holdings. This can be more risky than holding a wider range of investments.

Charges from capital risk

Where charges are taken wholly or partly out of a fund's capital, distributable income may be increased at the expense of capital, which may constrain or erode capital growth.

Specialist investment objective risk

The fund will only invest in companies which have a positive environmental and/or social impact. It is also prevented from investing in companies which conduct certain types of activities. The universe of potential investments available to the fund will therefore be smaller than if no such restrictions were applied. If a company in which the fund invests no longer meets the criteria for investment and/or is not making sufficient progress on improving its operational performance, the manager will seek to sell the investment. The price which may be obtained for selling an investment in these circumstances might be lower than that which could have been obtained had the sale not been required.

Defining and explaining some terms

B Corp

B Corporation 'B Corp' status is awarded to for-profit companies in recognition of their social and environmental performance. B Corp status is conferred by B Lab, a global non-profit organization.

Classified and declassified boards

Classified boards, sometimes known as staggered boards, create separate classes of directors who are elected for multiple-year terms, with one class coming up for re-election each year. When a board is classified, activist investors can only replace a majority of the directors over the course of multiple annual meetings. In the case of a declassified board, an activist investor can replace all of the directors at one annual meeting. Advocates of declassified boards argue that annual elections increase accountability and responsiveness to shareholders.

CO2e emissions

Measuring CO_2 equivalent ('CO2e') emissions provides a standardised way of measuring a range of greenhouse gas emissions through reference to their effect on the climate. The Intergovernmental Panel on Climate Change (IPCC) has defined the "Global Warming Potential' of a range of greenhouse gases such as methane or nitrous oxide in comparison to carbon dioxide.

ESG

Consideration of environmental, social and governance factors (ESG) can be used to evaluate a company's sustainability. Environmental factors look at a company's impact of the natural world, social factors examine how a company treats people (inside and outside the company) and governance analysis considers how a company is run.

Free float

Free float refers to the proportion of a company's shares that are publicly traded and are not restricted (held by insiders or governments).

Public Benefit Corporation (PBCs)

Public Benefit Corporation (PBC) status is relatively new corporate form introduced across the majority of US states during the last decade. PBC status places a legal obligation on the company and a fiduciary duty on its directors to consider its impact on multiple stakeholders – not just its shareholders. For PBC's, sustainability is a core principle rather than an afterthought.

SDGs

The UN Sustainable Development Goals (SDGs) are a collection of 17 interlinked global goals (underpinned by 169 detailed underlying 'targets') designed as a "blueprint to achieve a better and more sustainable future for all." (See How we use the UN Sustainable Development Goals).

Science Based Targets Initiative (SBTi)

The Science Based Targets initiative was established in 2015 to help companies to set targets for reducing their emissions. Science-based targets show companies and financial institutions how much and how quickly they need to reduce their greenhouse gas (GHG) emissions to prevent the worst effects of climate change.

Scope 1/2/3 emissions

The Greenhouse Gas Protocol categorises GHG emissions as follows.

Scope 1 emissions – These measure the greenhouse gas (GHG) emissions that a company makes directly. Examples include burning gas to run its boilers or using diesel to run its vehicles.

Scope 2 emissions – These are the greenhouse gas emissions for which a company is indirectly responsible. When the electricity a company buys for heating and cooling buildings is generated by burning fossil fuels, Scope 2 emissions are created.

Scope 3 emissions – These comprise all of the emissions that a company is indirectly responsible for, both up and down its value chain. They include the greenhouse-gas emissions that are embodied in the products or services a company buys from its suppliers and the emissions its products create when its customers use them.

Single share-class

A single share-class structure – 'one share, one vote' – offers equal rights and responsibilities to all of a company's shareholders. Under a dual or multiple share-class structure, different classes of shareholder can be granted a different level of voting rights – or even no voting rights. It can be used to allow founders to maintain control without retaining a majority stake, by owning a separate class of shares with disproportionate voting power relative to their economic interest. Critics say the practice entrenches managers and can lead to misalignment of incentives; supporters say it allows companies to pursue long-term goals.

Stock pledging

Stock pledging is a practice whereby stock is pledged as collateral against personal borrowing. Many executives and company founders have a significant portion of their wealth tied up in their company's shares. Stock pledging allows them to monetize their assets without having to sell them. But large pledges could pose risks to other shareholders.

Introduction: Clients deserve real impact

Welcome to our second annual Impact Report. We hope it helps readers understand how we consider 'impact' as part of our investment process. More importantly, we hope our clients are just as interested in the real-world effect their investments are having as they are in the returns they generate. As such, this report is an important way for us to demonstrate the positive impact that the companies we invest in are making.

In response to feedback on last year's report, we have provided significantly more detail on each of the companies that the fund invests in. We hope readers appreciate this honest appraisal of each of our companies':

- Impact;
- Investment thesis; and
- ESG performance.

We would welcome any feedback on this more detailed approach.

As regards last year, as impact investors, we would be remiss if we failed to comment on the various criticisms of ESG during 2022. The last 12 months have seen significant challenges to the sustainable investing movement, in terms of performance as well as accusations of 'greenwashing' – the misleading application of the ESG label to financial products. And sadly, in one respect, that criticism was well-deserved: ESG is failing to deliver on its promises. There are a growing number of worthy sounding initiatives which rarely oblige their signatories to actually become sustainable. And for those that do set useful targets, the deadlines for hitting them tend to be so distant that companies are, in effect, excused from taking meaningful action today.

An end to greenwashing?

That we are now seeing a regulatory crackdown on 'greenwashing' is welcome progress. As a team, we have an aggregate of over 50 years of experience in impact investing. Our view is that business-as-usual shouldn't be rebranded as sustainable - but it often has been.

The financial services industry has (unfortunately) done what it has so often done before: taken a good idea, spotted a commercial opportunity and then stretched it beyond the realms of credibility. That regulators in the EU and UK are now setting a higher bar for funds wishing to use a 'sustainable' label is therefore to be welcomed. It strikes us that 'intentionality' – an explicit desire to contribute to measurable improvements in social or environmental outcomes – has, to this point, been lacking in many so-called 'sustainable' funds.

When we launched the Artemis Positive Future strategy in 2021, we deliberately aimed to achieve the highest standards in the market and to invest in companies that were genuinely impactful. To this end, '*intentionality*' is a critical component of the analysis we undertake to measure the positive impact of the companies that we consider. This is entirely different to taking an existing strategy and optimising it for ESG risk.

Ultimately, the basic question that we – and the wider financial services industry – must ask ourselves is this: when clients say they want to invest sustainably, what sort of companies are they expecting us to invest in on their behalf? In companies that go about business-as-usual – but with incremental improvements? Or in companies whose deliberate and explicit goal is to do things differently?

Fossil fuels: There is no going back

In February 2022, Russia invaded Ukraine. In March, we wrote two short pieces for our Positive Sum blog (which you can find on the Artemis website) on what this meant for energy markets and how we invest our clients' capital:

- *The other problem with fossil fuels*... highlighted the fragility of a global energy system built on fossil fuels and why we felt that this crisis would be pivotal, hastening a permanent shift to clean energy.
- *Is ESG increasing our fuel bills?* addressed the mistaken narrative that rising energy prices were a result of the costs of the clean-energy transition.

Were we right? History – and returns we generate for our clients over the coming years – will be the judge. But The International Energy Agency (IEA), in its 2022 edition of its World Energy Outlook[1], provided a raft of evidence and analysis to support the conclusions we reached back in March:

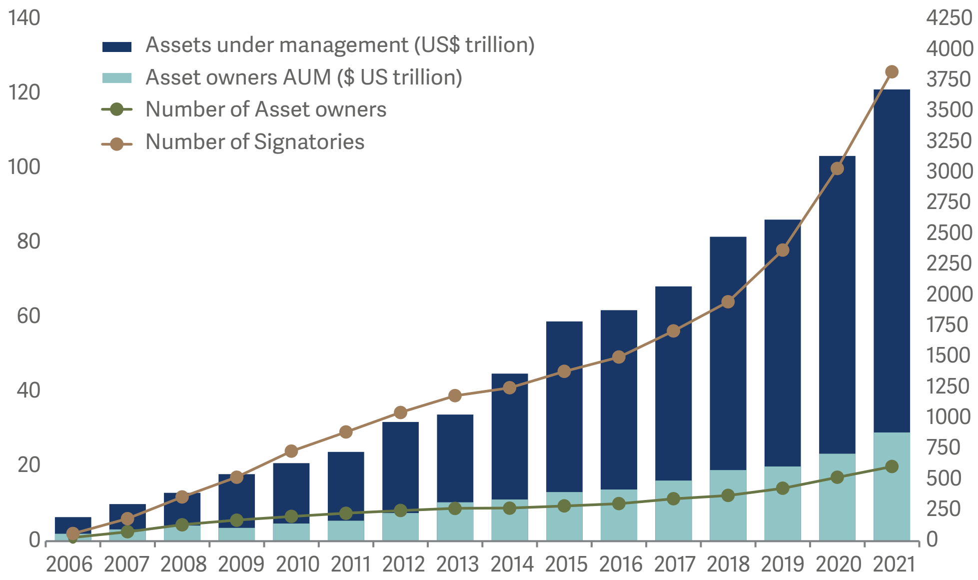
"The environmental case for clean energy needed no reinforcement, but the economic arguments in favour of cost-competitive and affordable clean technologies are now stronger – and so too is the energy security case. This alignment of economic, climate and security priorities has already started to move the dial towards a better outcome for the world's people and for the planet."

We believe 2022 marked a pivotal moment for the world for two reasons. First, regulators signalled they are alert to 'greenwashing' and will try to stamp it out. Second, the invasion of Ukraine – and the response to it – brought forward the point at which demand for fossil fuels peaks and goes into irreversible decline. There is no going back.

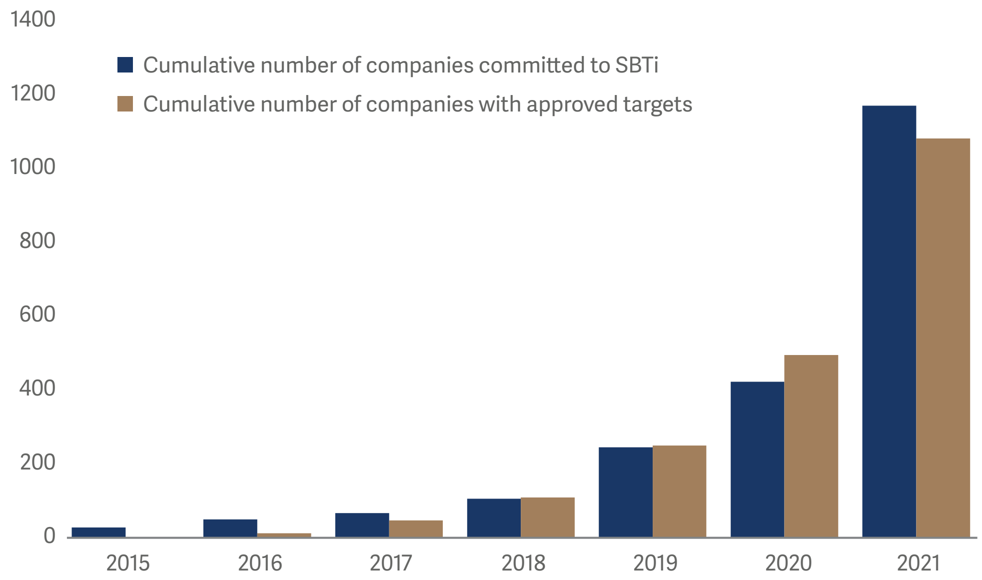
Making the global economy truly sustainable demands fundamental structural change rather than incremental improvements.

[1] World Energy Outlook 2022 – Analysis – IEA.

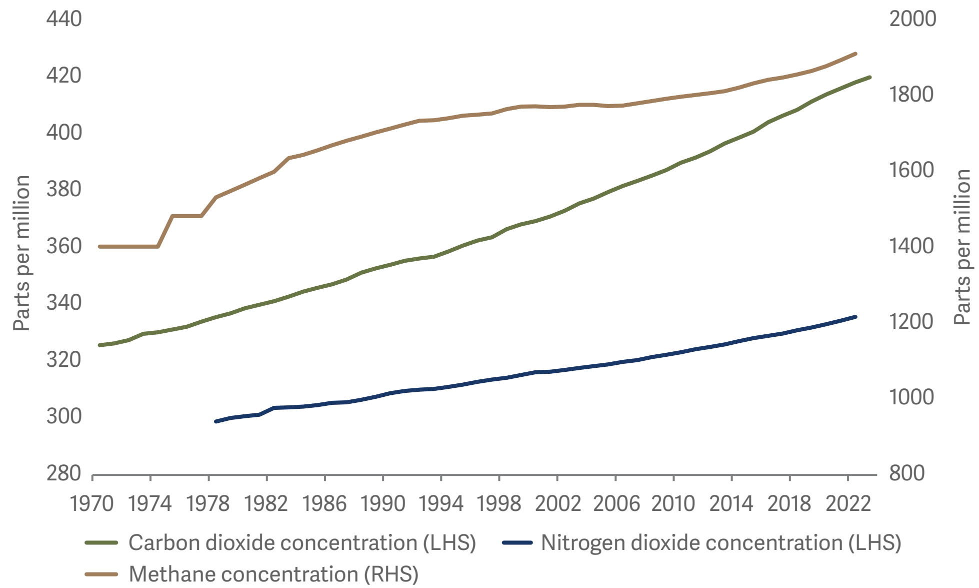
There has been a rapid growth in the number of asset managers committing to the United Nations (UN) principles for responsible investment...



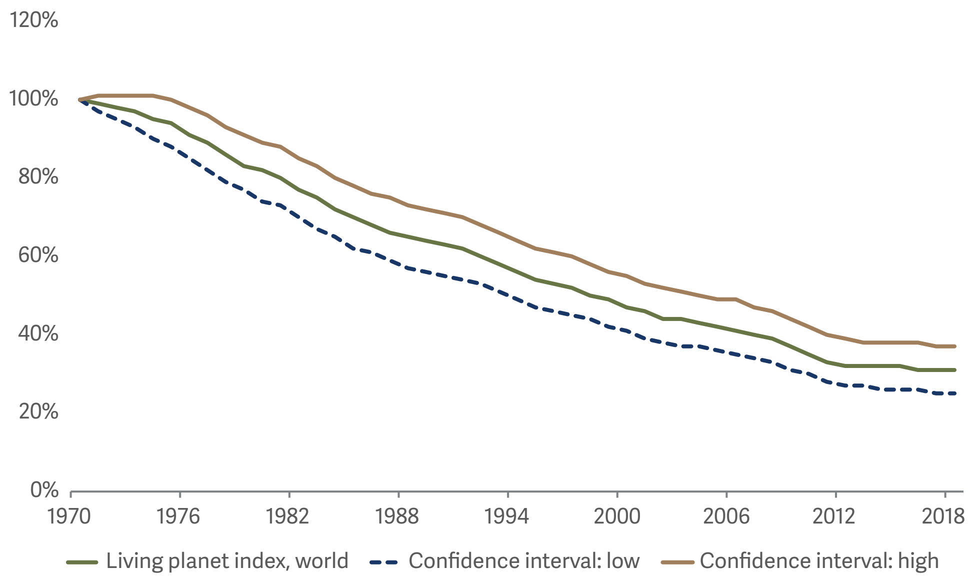
And a growing number of companies have committed to the science-based targets initiative (SBTi) for reducing emissions



Despite the commitments made by investors and companies, concentrations of greenhouse gases in the atmosphere have continued to increase



And the world's wildlife is in decline



Investment philosophy – Theory of change

The aim of the Artemis Positive Future strategy is twofold. Our goals are to:

- accelerate the transition to a positive future; and
- create wealth for our clients.

We do this by investing in companies that can disrupt established industries and which have a demonstrable positive environmental and/or social impact.

This report details the way in which the companies we invest in are making a positive impact.

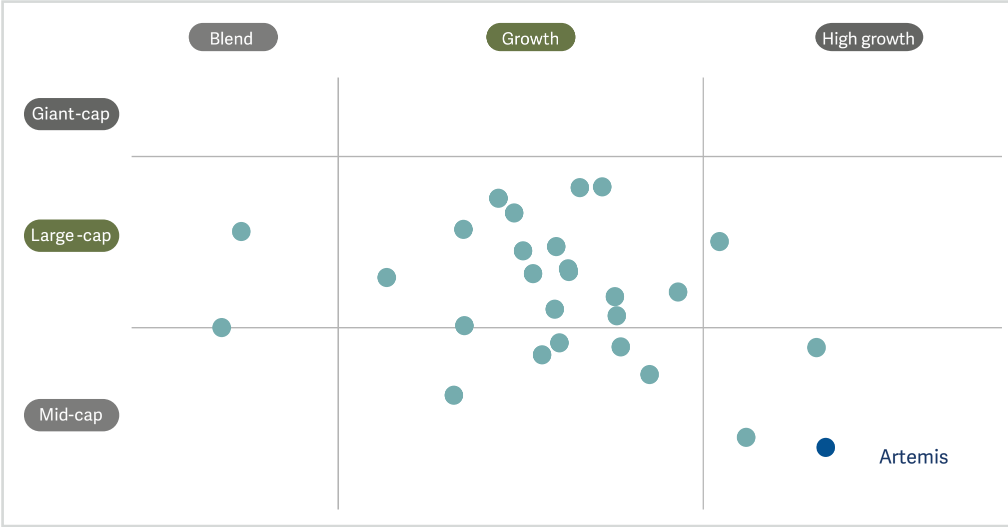
Theory of change

Most 'responsible' investors invest in established companies. Almost by definition, this means they tend to favour the status quo over change. But, it seems obvious (to us) that tweaking traditional investment approaches and making incremental moves towards greater sustainability are unlikely to be able to address the (growing) challenges that we all face. What is actually required is transformational change – change to a future that is ten times better as opposed to incremental improvements to the status quo.

> "New needs emerge as societies evolve. When such changes happen, new entrants, unencumbered by a long history in the industry, can often more easily perceive the potential for a new way of competing. Unlike incumbents, newcomers can be more flexible because they face no trade-offs with their existing activities."
>
> *Michael E. Porter, What is Strategy? Harvard Business Review*[1]

History shows that transformational change typically occurs where there is disruptive innovation and disruptive innovation is often the preserve of high-growth (companies growing their revenues at rates greater than the market average) businesses. We therefore invest in high-growth, purpose-driven, innovative businesses because we believe this style of investing enables us to deliver the most impact in a listed-equity market context while simultaneously creating the most long-term value for our clients.

As a result, our portfolio looks different to those of our peers. We have a clear bias towards high-growth companies – those whose sales and revenues are growing more rapidly than those of most listed businesses. We also have a bias towards mid-cap stocks.[2]



Source: Morningstar as at 31 December 2022.

The most significant sustainability challenges create the biggest investment opportunities

We remain firmly of the view that the best long-term growth opportunities within equity markets are to be found among innovative companies that are addressing the most significant sustainability challenges. And while the challenges the world faces are significant, the meeting point of two powerful dynamics – supply and demand – give us hope as investors and as citizens.

- The demand stems from the unprecedented sustainability challenges the world faces.
- The supply is created by technology-led disruptive innovation.

We invest at the point where supply meets demand – in companies that are harnessing technology to deliver positive change, which simultaneously creates opportunities for their investors. In this context, our primary task is to think long term and to spend our time learning about the evolution of these two dynamics. By doing so, we will be better placed to identify the companies that can disrupt the unsustainable status quo – and capture significant economic value as they do it.

[1] Porter, M.E. (1996) What Is Strategy? Harvard Business Review, 74, 61-78. IT and Competitive Advantage: A Study from Micro Perspective.

[2] Companies are considered to be large-, mid- or small-cap based on the market capitalisation of a company, which is its overall value; the greater the value, the larger the cap. Morningstar defines large-cap companies as those that account for the top 70% of the capitalisation of a stockmarket. Mid-cap stocks represent the next 20% and small-cap stocks make up the remainder.

Impact highlights 2022

Impact – products (per £1m invested)*

Carbon
1.1k tonnes
CO_2 saved/avoided/captured

Water
>40k litres
of water treated/saved/re-used

Waste
>450k beverage
containers recycled

Health
12 patients
treated

Education
>1k students
received higher education, training courses & educational assistance

Impact – practices

96% less operational greenhouse gas emissions than benchmark**

46% more female board diversity than benchmark***

16.3% EU Taxonomy climate aligned****

38% Net Zero aligned to net zero pathway, or is aligning towards a net zero pathway*****

These positive impacts have been generated by portfolio companies. Our provision of capital for the long-term aims to support and maximise portfolio companies positive impact.
We have consolidated company impact outcomes where possible, but not all companies report impact data that can be consolidated.
Headline impact statistics whilst useful may hide the nuance of an individual portfolio company's activities e.g. in healthcare some companies may treat hundreds of thousands, whilst another may only treat a relatively small number of very sick.
Headline impact statistics also don't necessarily capture the disruption and change that individual companies are driving in their respective industries. In developing a sustainable alternative, they are forcing their peers to respond and become more sustainable – in this their materiality extends beyond their own operations.
Source: *Artemis as at 31 Dec 2022 **MSCI ESG Carbon Calculator, 31 Dec 2022 ***MSCI, 31 Dec 2022 ****Artemis estimates base on company disclosures and analysis vs. the EU Taxonomy Technical Screening Criteria *****According to the Institutional Investors Group on Climate Change (IIGCC)'s Net Zero Investment Framework. Note – Benchmark is the MSCI AC World Index.

Exclusions & ESG

Our investment process has a number of quantitative and qualitative steps. Together, they help us arrive at a portfolio of what we believe are positively impactful stocks.

Exclusions: Defining what we can't invest in

Our first step is to exclude companies whose products and services are widely regarded as being detrimental to the environment or to society at large. The exclusions we currently apply are:

- **Alcohol:** companies that derive more than 5% of their revenue from alcohol;
- **Tobacco:** companies that derive more than 5% of their revenue from tobacco;
- **Weapons:** companies that produce or sell civilian firearms and/or manufacture or sell armaments, nuclear weapons or associated strategic products;
- **Nuclear power:** companies that mine uranium, own or operate nuclear power stations, generate nuclear power or supply key nuclear-specific products and services;
- **Gambling:** companies that derive more than 5% of their revenue from gambling;
- **Animal testing:** companies that produce or sell cosmetics tested on animals;
- **Adult entertainment:** companies that own an adult entertainment company or produce adult entertainment;
- **Genetic modification:** companies involved in the uncontrolled release of genetically engineered organisms into the environment;
- **Fossil fuels:** companies that:
  - own oil & gas reserves; or
  - engage in conventional or unconventional oil and gas production and processing; or
  - own thermal coal reserves, mine thermal coal or derive more than 10% revenue from thermal coal-based electricity generation.
- **Biodiversity and land use:** Companies that we determine are implicated in severe controversies related to their use or management of natural resources; and
- **Companies that we determine to be in breach of the UN principles on human rights, labour rights**, the environment and corruption.

Applying these exclusions removes around a fifth of our investable universe. But while these exclusions help to define what we definitely can't invest in, their impact on defining ***what we can invest in*** is limited. So, this is only the first stage of our process.

ESG – A 'risk'? Or an opportunity?

The consideration of ESG – environmental, social and governance – issues, alongside traditional financial analysis is a well-established concept. But for the impact investor (in fact, for all investors) focusing on ESG only as a 'risk' to be managed falls short of connecting positive impact with investment opportunity. As we explain in the Investment Philosophy section of this report, we believe that the compelling need to make the global economy more sustainable will create tremendous opportunities for companies that are positioned on the right side of the structural change that sustainable development requires.

That is not to say that how a company operates doesn't matter. It does. And we therefore look for evidence of sound management and effective implementation. It is just that operational ESG factors are rarely unique, nor do they tend to be central to a company's competitive positioning (which is what will ultimately determine its success).

Why is this? As the old saying goes, 'imitation is the sincerest form of flattery'. Over time, companies simply imitate their peers – so today's sustainability 'best practice' becomes the common practice of tomorrow. This convergence happens fastest in those sectors where those practices are most material.

It is our belief that investing for positive impact requires a dynamic strategy. It needs to consider the sustainability of a company's products (which determine its competitive positioning) alongside its practices and aspects of its corporate social responsibility that are less easily measured (such as its culture) and which can't be captured in simple exclusions or ESG scores that are based on relative assessments versus industry peer groups.

By definition, a truly sustainable company is likely to look very different from its business-as-usual peers.

Doing things differently: a corporate structure for sustainable companies

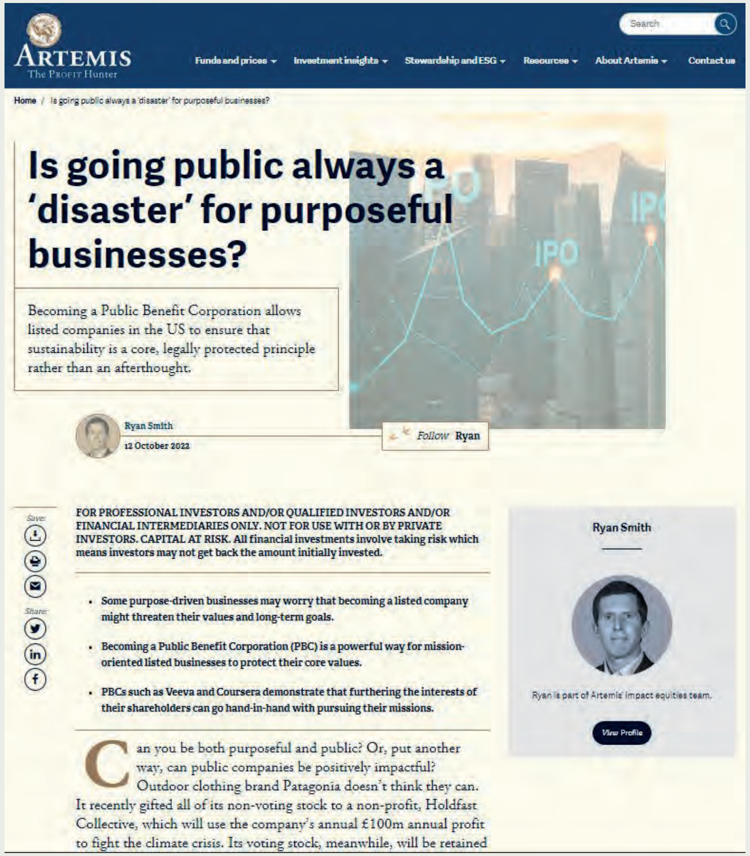
We are all aware that many companies like to speak boldly about their commitments to social responsibility – but that their actions are often weak and sometimes completely at odds with those statements. These commitments are also rarely legally binding. One way to overcome this (for US-listed companies at least) is through public-benefit corporation (PBC) status.

This relatively new corporate form has been introduced across the majority of US states during the last decade – and the clue to its objectives lies in its name. PBC status places a legal obligation on the company and a fiduciary duty on its directors to consider its impact on multiple stakeholders – not just its shareholders. For PBCs, sustainability is a core principle rather than an afterthought.

For more on PBCs, see our Positive Sum blog: [Is going public always a 'disaster' for purposeful businesses]?

PBCs were first allowed in Delaware, the state in which the vast majority of US public companies are incorporated, in 2015. Although, to date, relatively few public companies have taken the bold step of aligning their core values with their legal charter. And of those that have, many have chosen to become a PBC before going public, thereby avoiding the challenge of seeking (sometimes fickle) shareholder approval.

While being simultaneously purposeful and public is an undoubtedly a challenge, we would argue that it is not impossible. Seeking public-benefit corporation status is a powerful way for mission-orientated listed businesses to maintain their course. The two companies in our portfolio that are also public-benefit corporations – Veeva and Coursera – are good examples of companies demonstrating that their missions can go hand-in-hand with promoting the interests of their shareholders.



B-Corps and PBCs – clarifying the difference

B-Corp	Public Benefit Corporation
A certificate awarded to companies who meet standards of social and environmental impact	A legal structure ensuring the business considers its impact on all of its stakeholders.
No legal obligations	Legally embeds stakeholder governance into a company's DNA
A non-profit (B Lab) acts as an independent monitor of corporate social performance	Public benefit corporations are not required to meet B Lab's standards

How we measure impact

> "Creating social impact through an innovative and profitable business model reshapes the nature of competition and makes social impact a part of capitalism itself. This requires going way beyond a checklist of material factors."
>
> *Michael Porter, Where ESG Fails*[4]

Product impact framework	Concept	In-depth analysis
Intentionality	Is the company's vision and mission consciously aligned with positive impact?	• **Mission** • **Focus** • **Authenticity** • **Transparency**
Additionality	Is the company attempting to disrupt an unsustainable incumbent system?	• **Counter-positioning** • **Shift in basis of competition** • **Innovation** • **Industry incumbency**
Materiality	Will the company have a significant positive impact on the world if it executes its strategy successfully?	• **SDG alignment** • **Ability to scale** • **Market size** • **Geographic focus**

A company's products and services are the most important determinants of its strategic positioning and are critical to its success. As the Harvard economist and business strategist Michael Porter frames it, a company's positive (or negative) impact also stems mostly from those same products and services. So, we give detailed consideration to understanding the 'product impact' of the companies that we invest in. We do this via a framework that considers intentionality, additionality and materiality – three widely recognised principles of impact investing.

Our analysis of product impact is both qualitative and quantitative; and results in scores for 'intentionality', 'additionality' and 'materiality'. The sum of these scores is the 'product impact' score which ranges from -9 to +9. A minimum score of +3 is required if a company is to be included in our portfolio. For example:

e.g. SolarEdge Technologies Inc.		
Intentionality (3)	Additionality (3)	Materiality (3)
• "Shaping the future of sustainable energy production, storage and e-mobility through innovation"	• Innovation remains key differentiator • Solar penetration still remains relatively low in the US ~2.5% of generation	• SolarEdge estimates 23m tonnes of greenhouse gas emissions are avoided annually through the use of its installed systems' (Source – 2021 Annual Sustainability Report

We believe significant positive impact and high returns are most likely to emerge where there is transformational change and disruptive ('additional') innovation that is both intentional and material. Since such transformational change is simultaneously value-destructive and value-creating, the goal of our product impact framework is to help us identify companies that can capture the value created by change while avoiding those where it puts value at risk

[4] Where ESG Fails | Institutional Investor Where ESG Fails Michael Porter, George Serafeim, and Mark Kramer. October 16, 2019.

How we use the UN Sustainable Development Goals (SDGs)

The UN Sustainable Development Goals (SDGs) are a collection of 17 interlinked global goals (underpinned by 169 detailed underlying 'targets') designed as a "blueprint to achieve a better and more sustainable future for all." They are the big sustainability challenges the world faces. And although the goals were designed to be adopted by governments, they have also been widely accepted by the investment community.

Since the SDGs were designed for governments, not all of them are directly 'investable'. For example, some focus on activities that companies have little influence over, e.g. SDG 16 (Peace, justice and strong institutions). Therefore, while the SDGs provide a reasonable route map towards a positive future, prudence is required.

We don't rely on a company's self-reported alignment with an SDG

We take a rigorous approach to SDG mapping. Each company we invest in is mapped to a primary SDG at the underlying target level. We consider how a company's products and services align to the SDGs and map its revenues to the underlying Sustainable Development Goals

SDG alignment contributes to the score we assign for 'materiality' which itself is a component of the overall score we assign for a company's product impact (see How we measure impact).

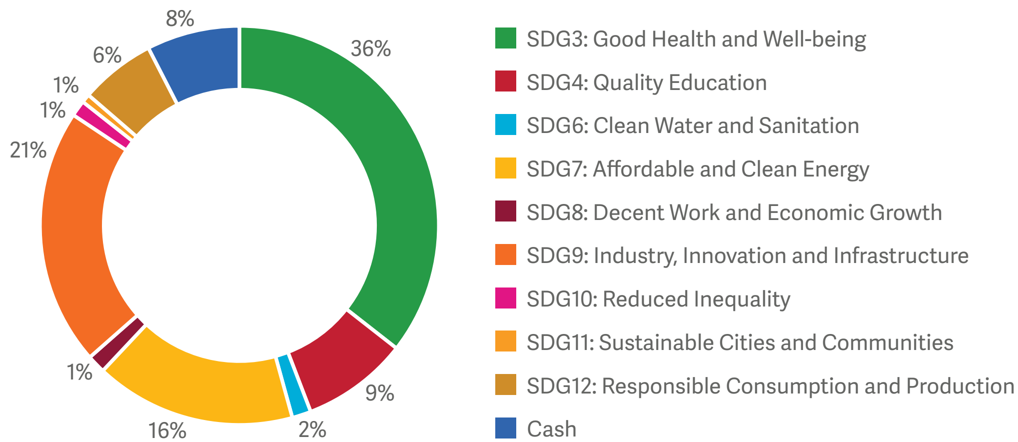
How some of our companies align with the SDGs

SUSTAINABLE DEVELOPMENT GOALS

Universal Display – PHOLED (Phosphorescent Organic Light Emitting Diode) screens are 40% more energy efficient than their LCD equivalents, are significantly lighter (so they use less plastic) and don't contain hazardous substances such as cadmium or indium phosphide. Universal Display's product is therefore reasonably aligned with UN SDG 9 – 'Industry, Innovation and Infrastructure'. But while significant improvements in energy efficiency are critical in the face of unwavering consumer demand for consumer electronics, PHOLED screens are – for now – used mainly in high-end consumer electronics. Universal Display therefore receives a low score for Materiality and a lower overall Product Impact score of 3/9.

Coursera – Coursera is the world's largest online education platform. It has 97 million registered learners (FY 2021), 60% of whom were registered outside the US and Europe. Coursera's product has a high degree of alignment with a number of the targets underpinning SDG 4 – 'Quality Education'. It therefore receives a high score for Materiality and a high Product Impact score of 9/9.

Portfolio weight by UN SDG Q4 2022



Source: Artemis.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Our portfolio

Theme	The problem	The solution	Portfolio holdings by theme		UN SDGs
Circular economies	Since the industrial revolution, the linear economy model has been dominant: goods are manufactured, used and then discarded. That wasteful model is responsible for many of the environmental externalities that we all experience.	Increasing circularity in material use.	Tomra		12
Efficiency kings	Unsustainable consumption and production are closely linked to climate change, pollution and biodiversity loss. We need to decouple economic growth from environmental degradation.	Efficient manufacturing, energy-efficient products, process efficiency enhancements and increased product safety.	Disco Energy Recovery Halma	Teradyne Universal Display Veeva	6 & 9
Electric shock	The climate crisis is the biggest environmental problem facing humanity. Keeping global warming below 1.5°C requires huge investment in the decarbonisation of our energy, industrial and transportation systems.	Reducing emissions through using renewables and low-carbon power, electric transport and electrified heating sources.	Aehr Test Systems Alfen ChargePoint Deme	First Solar Nibe Industrier SolarEdge Tesla	7
Entrepreneurial enablers	The lifeblood of the economy resides in small independent businesses, which provide the bulk of employment – and GDP – in many countries.	Software tools enabling people to create new businesses.	Shopify		8
Healthy healthcare	As the global population ages, healthcare systems face rising demand and increasing costs. The pandemic has only exacerbated those stresses.	Healthcare products that can simultaneously improve patient outcomes and reduce healthcare system costs.	Amplifon Cochlear Dexcom DiaSorin Insulet	Iqvia Penumbra Staar Surgical Veracyte	3
Impact communicators	Mobile access has revolutionised commerce in emerging economies – but levels of digital inclusion, educational access and financial inclusion significantly lag those in the West. Meanwhile, extreme weather events, cybercrime and terrorist events pose an increasing threat to people and property everywhere.	Low-cost mobile telecommunication in developing countries, emergency notification systems.	Airtel Africa Everbridge		10 & 11
Low-carbon food	Changing what we eat is critical to tackling climate change. It is also fundamental to reducing pollution, reducing water stress and increasing biodiversity.	Plant-based protein.	Vitasoy		12
Mission inclusion	Higher education is a cornerstone of sustainable development. But today's educational systems exhibit a large disparity in access to education – and completion of qualifications – based on wealth.	Online university courses, student support services, English language testing and student placement, education support software.	Chegg Coursera IDP Education PowerSchool		4
Unsung eco warriors	The climate crisis may be the biggest environmental problem that humanity faces – but it isn't the only one. We also face biodiversity loss, air pollution and water contamination.	Scientific research, environmental consulting and monitoring, infrastructure services.	Badger Infrastructure Montrose Environmental Oxford Instruments Tetra Tech		6 & 9
Witness the fitness	39% of adults worldwide are overweight. There is strong scientific evidence that people who exercise regularly have a lower risk of developing many long-term (chronic) health conditions.	Low-cost fitness equipment and low-cost gyms.	Basic-Fit Mips Planet Fitness		3

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Company reports

Aehr Test Systems

Positive impact thesis

Aehr Test Systems makes equipment for testing a new generation of silicon carbide-based semiconductors. Silicon carbide (SiC) is a breakthrough technology used across multiple industries; already found in electric vehicles (EVs) it also has potential applications in other renewable technologies including industrial electrical motors.

Traditional, silicon-based semiconductors work well in low-voltage applications (like computers) but are less well suited to environments where they need to handle large amounts power (such as the batteries in electric vehicles). The significantly lower resistance of silicon-carbide-based semiconductors compared to their silicon-based precursors when operating at higher voltages makes them more efficient, meaning chips can be smaller and operate at higher frequencies. This, in turn:

- enables greater battery efficiency;
- reduces weight;
- lowers system cooling needs; and so
- increases the range and reduces the cost of electric vehicles.

Investment thesis

The adoption of silicon carbide modules for power conversion in electric vehicles represents a tipping point for the technology. Semiconductor manufacturing companies are beginning to scale up production, which will reduce costs over the longer term.

Aehr Test Systems has been developing solutions for testing silicon carbide for a number of years (initially to serve the silicon photonics industry). As such, it has amassed unique intellectual property relating to the testing of silicon carbide wafers. Testing these wafers is more efficient than testing the devices that incorporate them and allows manufacturing flaws to be identified earlier in the production process. Aehr's 'FOX-XP' testing system makes the cost of this early testing of wafers comparable to traditional 'back-end' testing.

It is estimated that worldwide production of SiC today is only about 2%[5] of the volume that will be required in 2030. Significant investment in wafer manufacturing – and so in wafer testing – will be needed over the next three-to-five years. Historically, the semiconductor testing market has been a 'winner takes most' market, with successful testing systems becoming broadly adopted and difficult to displace. We expect most SiC manufacturing companies to adopt Aehr's FOX-XP system and expect the company's revenue growth to be very strong for several years as customers expand their capacity to meet the demand for SiC-based power electronics. Over the longer term, Aehr should benefit as the adoption of silicon carbide expands beyond EVs as costs decline and the market opportunity expands.

ESG performance

Aehr is a small company with fewer than 100 staff and currently makes limited E&S disclosures. That said, manufacturing and assembly – which is undertaken in Freemont, California – must, of necessity, take place to a very high standard and the company is in full compliance with all applicable health, safety and environmental regulations.

Corporate governance is good and Aehr has a single share class, a declassified board, good shareholder rights and generally receives high support from its shareholders at its AGMs.

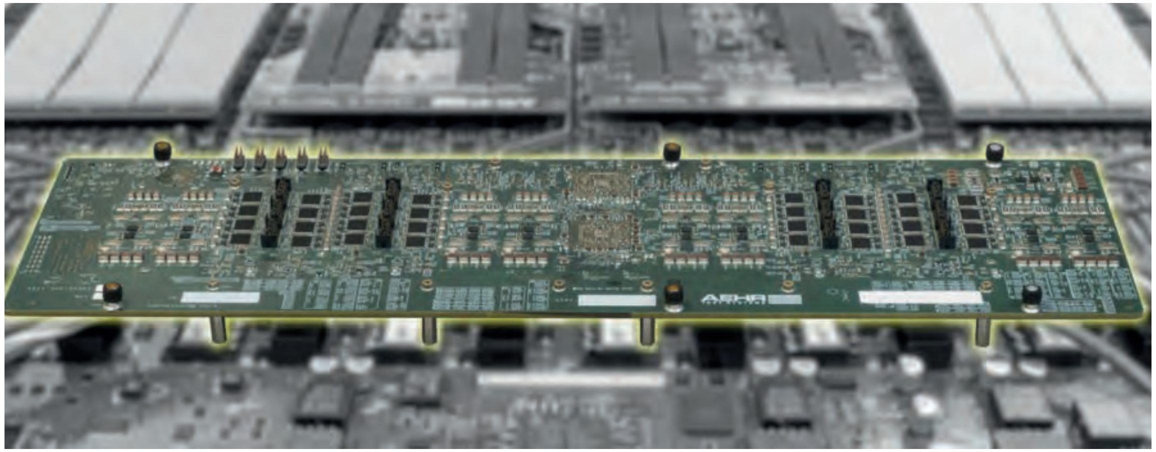
The executive team is long-serving, highly experienced and owns around 10% of Aehr's stock. Its non-executive directors have appropriate experience, although the average age of the board is rather high. Its compensation policies are uncontroversial in terms of their scale but could perhaps be structured better; the disclosure of targets is lacking.

Country	US
SDG alignment	7
Product impact score	6
Sales growth FY1	+33.6%
Sales growth FY2	+49.8%
Gross margin	48.2%
Portfolio weight	0.92%

Theme: Electric shock

Headline impact statistic

Silicon carbide increases battery efficiency by 5-10%, meaning less cobalt, less lithium and fewer rare earth minerals will be needed for the transition to electric vehicles.[6]



[5] Cannacord Genuity estimates.
[6] Source: *Semiconductor Today* Adoption of 800V in mass-market EVs to boost transition of power electronics to SiC (semiconductor-today.com).

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Airtel Africa

Positive impact thesis

Access to basic, affordable, pre-paid mobile handsets has revolutionised telecommunications access and transformed African society. Prior to the arrival of mobile networks, the provision of vital infrastructure across much of Africa – including landline telecoms networks – was extremely poor. The economic ripples of efficiency, innovation and inclusion enabled by mobile access have been enormous.

Airtel Africa is a London-listed provider of telecoms, internet services and payment systems focusing on markets across Sub-Saharan Africa. We believe it has a high degree of alignment with several of the UN Sustainable Development Goals:

- SDG 4 (Quality education);
- SDG 5 (Gender equality);
- SDG 8 (Decent work & economic growth); and
- SDG 10 (Reduced inequality).

That said, mobile penetration in the region is still only 46% (although an estimated 77% of the population have a registered SIM card) and only 28% of the population are connected to the internet (versus a global average of 75%).[7]

Investment thesis

With much of the continent having little access to fixed-line telecommunications, mobile telecoms networks play a critical role in African society. Airtel Africa is a FTSE 100-listed company offering mobile telecoms services – something we in the West are lucky enough to take for granted – in 14 African markets. It is the number one or number two operator by market share in 13 of those markets. (Source: Airtel Africa Annual Report & Accounts 2022).

Our investment style can be thought of as 'investing in small companies making a big impact'. Our rationale is that small, fast-growing businesses creating new, disruptive and more sustainable products and services are by definition more positively impactful; large companies are often wedded to the unsustainable status quo. But there can be exceptions to this 'small-is-beautiful' rule: size and scale of the right kind can be hugely impactful. Airtel Africa is one such example; providing sub-Saharan Africa with access to mobile telecommunications and the internet is a size and scale problem.

In this context, the backing (and deep pockets) of majority shareholder Bharti Airtel, the Indian telecommunication company, is useful. Together, Bharti and Airtel Africa's boards have decades of mobile-telecoms experience. The backing that Mastercard and Western Union provide to its Mobile Money business gives us further comfort.

We believe the company has a strong competitive position in each of the countries in which it operates. Access to mobile phones still remains low in absolute terms and relative to levels in the West. Airtel Africa has significant room to grow revenues both by expanding its subscriber base and by selling more services to its existing customers as the mobile services ecosystem develops.

ESG performance

Airtel Africa's ESG performance is improving. Its E&S disclosures appear to lag its peers, but they are now receiving much more attention. An inaugural sustainability report was published in October 2022. This included disclosure of its scope 1, 2 and 3 greenhouse-gas emissions, a commitment to reducing its carbon footprint in line with the Science Based Targets initiative (SBTi) and to reaching net zero by 2050.

Although Airtel Africa operates in West Africa, it is UK-listed and so follows UK listing rules on corporate governance. One caveat: the company is majority owned by Bharti Airtel which therefore exercises significant influence over its board.

Country	UK
SDG alignment	10
Product impact score	8
Sales growth FY1	+12.6%
Sales growth FY2	+8.8%
Gross margin	72.3%
Portfolio weight	1.30%

Theme: Impact communicators

HEADLINE IMPACT STATISTIC

134.7m mobile subscribers.[8]

[7] Source: GSMA The Mobile economy in Sub-Saharan Africa The Mobile Economy Sub-Saharan Africa 2022 (gsma.com).
[8] Source: Airtel Africa Sustainability Report 2022 airtel africa sustainability report 2022.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Alfen

Positive impact thesis

Alfen is enabling the energy transition and helping disruptive innovations within the energy market to take hold. It does this by designing, developing and manufacturing smart grid, energy storage and EV charging equipment which it sells individually or as combined 'integrated solutions' to clients. Its customers include major European utilities, energy companies, vehicle manufacturers, local authorities, regional councils and charge-point operators.

- Alfen's charging equipment addresses charging equipment addresses 'range anxiety', which is still the biggest impediment to EV adoption.
- Alfen's energy storage equipment is key energy storage is key to the energy transition. It will support higher levels of renewable energy (where output is variable) in the overall power mix at lower cost.
- Alfen's smart grids enable smart grids enable greater grid flexibility, thereby accommodating more decentralised and intermittent wind and solar installations.

Investment thesis

Alfen was founded in 1937 as a manufacturer of high- and low-voltage equipment and until the early 2000s it focused on transformer substations. It moved into charging points in 2008 and added energy storage solutions in 2013. The current team deserves great credit for positioning the business for growth beyond its existing niche in the Netherlands and seeing the global opportunity in the grid transition.

One of the strengths of this business lies in its integration of design and component assembly across multiple markets. In Europe, it has scale advantage within vehicle charging and small electrical infrastructure projects. First-mover advantage is powerful in Alfen's markets; its existing clients are likely to turn to existing suppliers when they add to their charging networks. On-going servicing of installed equipment (which lasts for years) is an additional revenue stream.

Alfen is a beneficiary of strong multi-year trends in electrical vehicle sales and in the growth of renewable energy, both of which are supported by declining technology costs and by government support. The combined effect is leading to accelerated installation of charging points and growing investment in grid-balancing storage and smart grid technology. It has a proven record of generating high returns on capital while growing quickly and we believe the sustainability of both is underappreciated over the next five-to-10 years.

ESG performance

Alfen is well-managed and engineering-focused. There has been a much greater focus on sustainability in its recent financial reports, including the publication of operational emissions data and a recent commitment to science-based targets for reducing emissions. The management team is long-serving and corporate governance is to a high standard.

Country	Netherlands
SDG alignment	7
Product impact score	7
Sales growth FY1	+66.0%
Sales growth FY2	+27.0%
Gross margin	34.2%
Portfolio weight	3.31%

Theme: Electric shock

Headline impact statistic

Alfen's equipment avoided potential emissions of 3.8 million tonnes of CO_2e in financial year 2022 – up 73% on the previous year.[9]

[9] Source: Alfen Annual Report 2022.

Amplifon Spa

Positive impact thesis

Amplifon is a world leader in making and selling low-cost hearing aids.

Hearing loss is described as the 'invisible disability'. If left unaddressed, hearing loss can negatively impact many aspects of life, including:

- communication;
- the development of language and speech in children;
- cognition;
- education;
- employment;
- mental health; and
- interpersonal relationships.

The World Health Organisation (WHO) estimates that untreated hearing loss represents a global annual cost of approximately one trillion US dollars due to health-sector spending, lost productivity and related social costs. In high-income countries, hearing-aid adoption (the ratio of those who use a hearing device to those with some level of hearing loss) is around 40%, but it is still very low in emerging economies (5-10%)[10].

Investment thesis

Amplifon is the biggest hearing aid retailer in the world. In terms of the number of hearing aids sold, turnover, its distribution network and geographical presence, it is the market leader.

At the same time, the retail market for hearing aids is highly fragmented: 50%[11] of the market is accounted for by independent players or small chains. So Amplifon still has only an estimated 11%[12] market share globally. Historically, Amplifon's strength has been its retail network, but technology and the user experience increasingly underpin its growth.

The company places huge emphasis on the customer experience – particularly on the skills of its hearing-care specialists in performing hearing tests, advising on the most suitable devices, ensuring they fit correctly and allowing its customers to make the most of hearing-aid technology.

Amplifon's scale means it has significant leverage with its suppliers. It has recently launched an own-brand hearing aid. These are cheaper to the end customer but also generate higher margins for Amplifon. In addition, the prevalence of hearing loss is growing, driven by increasing life expectancy and noise exposure. Currently the hearing-aid market is estimated to be worth €15bn and is expected to grow in the range of 4-5%[11] per annum. We expect Amplifon's market share to continue to grow and for its margins to expand through a combination of both organic growth and M&A, as it consolidates smaller players in the hearing-aid industry.

ESG performance

To date, the company has issued six annual sustainability reports and its sustainability disclosures are comprehensive. Amplifon signed two sustainability-linked credit facilities – where the interest rate is linked to its sustainability objectives – in 2022. With over 9000 points of sale in over 25 countries, managing its carbon footprint is challenging but it has a target for at least 70% of the electricity used in its offices and shops to come from renewables by 2023, up from 30% in 2021. At the same time, however, it currently lacks targets for reducing its emissions in absolute terms.

Amplifon was established in 1950 by Algernon Charles Holland to provide hearing care for soldiers injured in World War Two. The founding family still owns 42% of the shares. So, while the company is able to maintain its mission, corporate governance errs in favour of the controlling shareholder.

Country	Italy
SDG alignment	3
Product impact score	7
Sales growth FY1	+2.8%
Sales growth FY2	+6.7%
Gross margin	77.9%
Portfolio weight	5.60%

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

Amplifon's hearing products are used by around 800,000 patients every year. [14]

[10] Source: World Health Organization. Deafness and hearing loss (who.int).
[11] Bernstein estimates.
[12] Amplifon 2022 Annual Report.
[14] Source: Amplifon Corporate PPT Titolo/ Progetto (amplifon.com).

Badger Infrastructure Solutions

Positive impact thesis

The infrastructure environment beneath our city streets is increasingly crowded while also being critical to the delivery of essential services such as electricity, water and telecoms and for the removal of wastewater. One of the most common reasons for accidents during excavation work is accidental strikes when 'daylighting' (digging holes or trenches to repair existing pipes or cables or to lay new ones). Badger's precise, non-destructive, truck-mounted 'hydrovac' excavating systems use pressurised water to soften soil, which is then removed by a powerful vacuum system. They are safer and cause less damage than traditional excavation techniques.

Badger services a range of industries, with utilities being the largest. Ageing infrastructure across the US and the need to make that infrastructure more resilient to the effects of climate change will continue to be tailwinds to demand for its services.

Investment thesis

Badger is disrupting a basic but essential industry: digging holes in crowded urban environments. The traditional approach was to use mechanical excavation or hand digging. For many years, oil & gas was the only sector where hydrovac excavation – which avoids the risk of sparking – had any meaningful foothold. But given our increasingly busy underground infrastructure, heightened environmental – and safety – awareness and the potential for efficiency gains that hydrovac excavation can offer, Badger now provides services to a wide range of industries. It expects the market will eventually grow to be seven to nine times its size today. Badger's exposure to the oil & gas sector has shrunk and now mostly relates to repairing and cleaning up existing underground oil pipe works when they leak.

With around 1400 trucks in operation and the largest branch network of its type, Badger is the biggest hydrovac operator in North America (and thus the world)[15]. As such, it is the only player with sufficient scale to respond to state-wide emergencies (its hydrovac trucks have been used to defrost vital infrastructure when temperatures have plummeted in the US) and 30% of sales are nationwide[16]. Badger can operate with materially higher margins than its peers thanks to its ability to manufacture its own specialist trucks in Red Deer, Canada. The company has successfully expanded beyond its Canadian roots, such that 80% of sales are now in the US[16].

[15] www.irbadgerinc.com/overview/default.aspx
[16] Badger Infrastructure Solutions Annual Information Form, 2022
[17] Source: Common Ground Alliance 2019 DIRT Report 2019 DIRT REPORT (commongroundalliance.com).

ESG performance

Badger published its first ESG report in May 2021. The company's compliance with health and safety regulations is excellent and safety performance is a differentiator when competing for business. In the past, operator retention was an issue, but the company has made good strides here, establishing a 'Badger University', introducing mentorship schemes and recruiting female, ex-military and First Nations/indigenous operators.

While this is not a founder-run business with a profound mission, Badger's high-quality management team has demonstrated a long-term approach and vision around the future of hydrovac excavation which has successfully driven the market's expansion. Corporate governance is uncontroversial, and the company has historically received high levels of shareholder support at its AGM.

Country	Canada
SDG alignment	9
Product impact score	3
Sales growth FY1	+7.9%
Sales growth FY2	+10.9%
Gross margin	24.4%
Portfolio weight	1.58%

Theme: Unsung eco warriors

HEADLINE IMPACT STATISTIC

Damage to underground infrastructure in the US alone costs an estimated at $30 billion per annum. [17]

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Basic-Fit NV

Positive impact thesis

Basic-Fit is the largest and fastest-growing value-for-money fitness chain in Europe; it has more members and more clubs than its rivals. Its aim is to use technology and innovation to democratise fitness. Its founder, a former Dutch professional tennis player named René Moos, remains as CEO, owns 16% of the business and has a clear vision of bringing low-cost fitness to all of continental Europe.

Whatever your age, evidence shows that being physically active can help you to lead a healthier, happier life. People who exercise regularly have a lower risk of developing many long-term (chronic) conditions, such as:

- heart disease
- type 2 diabetes
- stroke
- some types of cancer (including bowel cancer and breast cancer).

Research also shows that physical activity improves self-esteem, mood, sleep quality and energy levels as well as lowering stress and reducing the risk of clinical depression, dementia and Alzheimer's disease[18].

Investment thesis

Basic-Fit is counter-positioned, undercutting higher-cost peers to expand the addressable market of people who can afford to join a gym.

All of Basic-Fit's gyms are company owned, giving it a high level of centralised control over the operating model, marketing, sales and costs. Centralised control has also allowed it to make good progress in reducing the environmental footprint of its operations (although these are already relatively low, as its gyms do not include swimming pools or saunas).

Basic-Fit deliberately clusters its gyms to allow cross-club usage (near work or home). This increases retention while also disincentivising competition near the cluster. In response to the pandemic, it developed high-quality bundled digital content allowing its members to work out at home while also increasing user engagement, improving customer retention and increasing the value generated from each member.

As a recognised and trusted value-for-money brand, Basic-Fit currently achieves a return on invested capital of more than 30%. We believe the market underappreciates the extent to which the size of its potential addressable market makes a similar level of return repeatable over the next five-to-10 years.

ESG performance

Basic-Fit's ESG performance is fair and improving, with sustainability reporting having been integrated into its report and accounts since 2019. One recent focus has been on rolling out an automated, real-time monitoring system across its clubs to better manage water usage and emissions as part of its target to of reaching net zero by 2030.

Corporate governance is fair. A significant (24%) vote against its remuneration report in 2020 saw it improving its disclosures on executive compensation. Basic-Fit is run by its founder: chief executive and significant shareholder René Moos, whilst its board comprises a mix of individuals with experience gained in Dutch multinationals. One possible area for improvement: the gender diversity of its board could be higher, particularly given the majority of Basic-Fit's workforce is female.

Country	Netherlands
SDG alignment	3
Product impact score	7
Sales growth FY1	+114.0%
Sales growth FY2	+30.9%
Gross margin	97.9%
Portfolio weight	1.66%

Theme: Witness the fitness

HEADLINE IMPACT STATISTIC

3.35 million gym memberships in 2022 – up 51% from 2021.[19]

[18] www.nhs.uk/live-well/exercise/exercise-health-benefits

[19] Basic-Fit press release: full-year 2022 results 230313 Basic-Fit FY2022 BFIT.pdf.

ChargePoint Holdings Inc.

Positive impact thesis

ChargePoint's stated mission is to "move all people and goods on electric power". It pursues this goal by installing hardware and software for charging electric vehicles (EVs).

'Range anxiety' continues to be the biggest impediment to the adoption of electric vehicles. ChargePoint has played a key role in addressing this by rolling out EV charging infrastructure across the United States: it has installed seven times more chargers than the country's next-largest player[20]. It is now expanding in Europe. To this point, its focus has been on the mass rollout of low-level chargers as opposed to fast-chargers, use of which is more akin to the traditional model of refuelling internal combustion engines (ICE).

Investment thesis

ChargePoint was a first mover in the US EV charging infrastructure market. Its clear intention was to disrupt the existing transportation paradigm and deliver a future which transportation is freed from its dependence on internal combustion engines. Having installed seven times more charge points in the US than any competitor, it has a clear scale advantage.

By not selling energy or owning the charge points, it is counter-positioned relative to other EV charging infrastructure providers. Instead, it acts as a partner to businesses and other enterprises – such as workplaces, retail outlets and parking lots – who wish to deploy EV charging points as a source of additional revenue or as a service to their customers or employees.

Once installed, it is hard for customers to switch away from Chargepoint's hardware. There is a strong incentive for its customers to add more of the same brand of charging points rather than switching. In addition to selling charging hardware, ChargePoint sells the associated software which provides the business with a high-margin subscription revenue stream. Despite its rapid growth in recent years, 60% of revenue growth still comes from existing customers.

The bipartisan Infrastructure Investment and Jobs Act passed in 2021 and last summer's Inflation Reduction Act, together dedicate $7.5 billion to building EV charging infrastructure on federal highways. They also provide millions in tax incentives that will make it cheaper for businesses to buy and install their own charging equipment. With the number of EVs growing exponentially and the EV-to-charger ratio expected to fall from 20 vehicles per charger to between six-to-10 vehicles per charger, we believe the market is underestimating ChargePoint's growth potential and the size of its market opportunity[20].

ESG performance

As a relatively recently listed company (it made its debut on the NYSE in March 2021) ChargePoint's E&S disclosures are limited. On the plus side, however, its manufacturing is outsourced to established players with well-established ESG credentials.

ChargePoint has a high-quality, long-serving board, which is experienced in technology, private equity, autos, utilities and policymaking (the company advocates strongly for the fair rollout of greater charging networks to maximise adoption of electric vehicles). Pasquale Romano has been its chief executive since 2011 and has been central to creating the company's mission-focused culture.

Not unlike other US technology companies, ChargePoint is classified as 'emerging growth' by the Securities and Exchange Commission, which allows it a number of corporate governance concessions that are not 'best practice' including: a classified board (where directors have different overlapping, multi-year terms); supermajority requirements; and no sunset provisions. Its executive compensation policies are, however, uncontroversial.

Country	US
SDG alignment	9
Product impact score	8
Sales growth FY1	+101.8%
Sales growth FY2	+55.8%
Gross margin	18.5%
Portfolio weight	1.01%

Theme: Electric shock

Headline impact statistic

400,000 tonnes greenhouse-gas emissions avoided in FY2022.[21]

[20] BNEF, Public EV Charging Update, April 2023.
[21] Source: 2022 & 2023 CHPT 10-Ks.

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Chegg

Positive impact thesis

Higher education is a cornerstone of sustainable development – and of innovation. It teaches skills, creates knowledge and promotes freedom, tolerance and dignity. Investing in it is also among the fastest and cheapest ways for a developing country to end poverty.

The services Chegg offers represent a step change from the traditional alternative: the printed university textbook. They are more interactive, accessible, flexible, searchable, mobile and therefore inclusive. This reduced 'friction' versus traditional academic textbooks can improve the learning experience whilst also significantly reducing its cost. Lowering the cost of education makes it available in more countries and to different socioeconomic segments of society.

Chegg serves students from diverse backgrounds:[22]

- 27% of its learners are first-time university students;
- 55% are from minorities;
- 62% are female; and
- 23% are over 25 years old.

Investment thesis

Chegg's original business, textbook rental, arose from it seeing the opportunity to disrupt the outdated and profiteering academic publishing industry. In the same way that Netflix pivoted from renting physical DVDs to online streaming, the spread of high-speed internet connections enabled Chegg to offer services online to students.

Chegg has exhibited strong scale economies over the last few years. It has been able to leverage R&D and spread costs across a growing pool of subscribers. It hasn't needed to invest heavily to acquire new customers: its brand is very strong within its core market and 85%[19] of its new subscribers find the platform organically through word of mouth.

The company is a leader by market share, with strong evidence of scale economics and limited competition. This has hugely positive implications for margins as it grows. Its potential addressable market is vast (especially internationally) and remains underappreciated over a five-year horizon.

ESG performance

Chegg's financial success and positive impact are implicitly aligned with its ability to help reduce some significant socio-economic inequalities, by reducing the cost of education and increasing its reach. Historically, disclosures of its environmental impact were mostly anecdotal, but Chegg completed its first formal ESG materiality assessment in late 2021. This included disclosure of both Scope 1 and Scope 2 emissions (it is working on estimating its Scope 3 emissions).

Chegg has a high-quality and diverse board with directors experienced in tech, education, consulting and private equity. Corporate governance is fair. On the one hand, it has a 97% free float, a single share class and uncontroversial executive compensation. At the same time, it has a combined CEO/chairman and a classified board. Employee engagement and belief in the company's mission is seemingly high and the company has won various 'place to work' awards.

Country	US
SDG alignment	4
Product impact score	7
Sales growth FY1	+0.1%
Sales growth FY2	+7.8%
Gross margin	74.5%
Portfolio weight	1.49%

Theme: Mission inclusion

HEADLINE IMPACT STATISTIC

8.2 million subscribers in 2022.[23]

[22] Chegg, Investor presentation, Nov 2022.
[23] Chegg, Inc. - Chegg Reports 2022 Earnings and Gives 2023 Guidance.

Cochlear

Positive impact thesis

For those with severe hearing loss, a cochlear implant can be profoundly beneficial. With a 60% market share, Cochlear is the global leader in cochlear implant treatments for the moderately to profoundly deaf. It is also the leader in bone conduction implants for people with conductive hearing loss, mixed hearing loss and single-sided deafness.

Cochlear devised the first cochlear implant and continues to lead the category through innovation. In recent years, it has been able to leverage new technologies (such as smartphones and big data) to enhance its product offering. Cochlear's implants represent a step change in the standard of care for profound hearing loss and deliver huge economic and personal positive impact:

- Children who receive cochlear implants have better speech skills, a greater likelihood of acquiring oral language and more success in integrating into schools. Cochlear implants can also have a beneficial impact on educational outcomes and on the overall quality of life (although, of course, many factors other than implants also influence these results).
- In recent years, the use of cochlear implants has been expanded to adults with severe-to-profound sensorineural hearing loss (which arises from damage to the nerves of the inner ear). Their recipients show improved speech perception and better health-related quality of life.

Cochlear's own studies suggest implants generate an estimated net societal benefit of more than $6 billion over multiple lifetimes of improved health outcomes, educational cost savings and productivity gains.

Investment thesis

Cochlear's strategic positioning is clear, and its leadership team is both experienced and well-regarded, with a clear mandate to deliver on the company's long-term goals.

Its business model exhibits scale economics and high switching costs. Clearly, cochlear surgery, which entails hours of brain surgery, is a major decision. There is a degree of risk involved and it inevitably inspires anxiety. As a result, trust in Cochlear's product and brand plays a critical role in reassuring its patients. Once surgically implanted, the processor is upgraded every three-to-seven years over the course of patient's lifetime.

This business exhibits a high return on invested capital. It also has a very large market opportunity before it, with a potential patient population of 15 million people globally. Only 3%[24] of adults with severe hearing loss currently have cochlear implants. In our view, the opportunity for Cochlear to maintain its rapid growth and returns on invested capital are underappreciated on a three-to-five- year view.

ESG performance

Cochlear is a high quality, established business with good ESG practices and disclosures. Corporate governance is good, executive compensation is uncontroversial and it typically receives high levels of shareholder support at its AGM. Sustainability reporting is well developed with high quality annual disclosures and the company appears progressive on diversity and talent management. Five of its six manufacturing sites are powered by renewables and the company has made net-zero commitments (operational emissions by 2030 and across its whole value chain by 2050) aligned with the Science Based Target Initiative (SBTi).

Country	Australia
SDG alignment	3
Product impact score	8
Sales growth FY1	+10.4%
Sales growth FY2	+11.8%
Gross margin	74.9%
Portfolio weight	5.52%

Theme: Healthy healthcare

Headline impact statistic

40,000 patients have either one or two cochlear or acoustic implants.[25]

[24] Cochlear Limited, Investor presentation, May 2019.
[25] Source: Cochlear FY2022 Results Presentation.

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Coursera

Positive impact thesis

Higher education is a cornerstone of sustainable development and of innovation. It teaches skills, creates knowledge and promotes freedom, tolerance and dignity. With one of the highest fiscal multipliers, education is also the fastest and cheapest way for a developing country to end poverty.

Coursera was founded in 2012 with a vision of providing life-transforming learning experiences to learners around the world. Today, it is a global online learning platform that offers anyone, anywhere, access to online courses and degrees from leading universities and companies. It thereby offers an alternative to the traditional model of classroom-based learning which isn't always keeping up with the rapidly changing skillsets that are required and is increasingly expensive or sub-optimal for non-traditional or remote learners. With a bold mission statement that refers to the foundational nature of education in society, Coursera has an experienced and passionate management team which has a clear strategic vision for the business which is clearly positive impact.

Coursera is one of relatively few US-listed companies to have been incorporated as a Delaware Public Benefit Company (PBC), which means its mission, 'to provide universal access to world-class learning so that anyone, anywhere has the power to transform their life through learning', is legally hard-wired into its articles of association.

Investment thesis

Coursera has leveraged internet access and global connectivity to transform the adult and higher-education landscape through a unique combination of high-quality content and scale. This powerful combination drives virtuous network effects: content providers (universities and enterprises) are attracted by the higher standard of its students; those high-quality students, are in turn, attracted by the content on the platform.

As it grows, the (relatively) fixed costs of running the platform are spread across more users, generating scale economies. The business is also developing an increasingly recognised brand with consumers and enterprise customers.

Educational expenditure is expanding at an enterprise level (up-skilling and re-skilling) and is expected to be worth ~$400Bn in 2025 (HolonIQ Global Education Technology in 10 Charts). The online degree market alone was worth ~$150m in 2022 (Statista). Coursera's market share should grow if the power of its platform is proven so we believe there is enormous room for its revenues to grow from their current levels ($520 million in 2022). We believe the positive unit economics of its business model are largely misunderstood due to its heavy investment in long-term growth.

ESG performance

Coursera published its second impact report in November 2021 and is a certified B Corp as well as being publicly incorporated as a Public Benefit Corporation.

Having become a public, listed company in March 2021, Coursera is still classed as an 'emerging growth' company, which allows it certain corporate governance exemptions, including disclosures on executive compensation. That said, corporate governance seems fair, with a high-quality board with experience in tech, US education and consumer discretionary and a single share-class structure (albeit with staggered board elections and supermajority requirements).

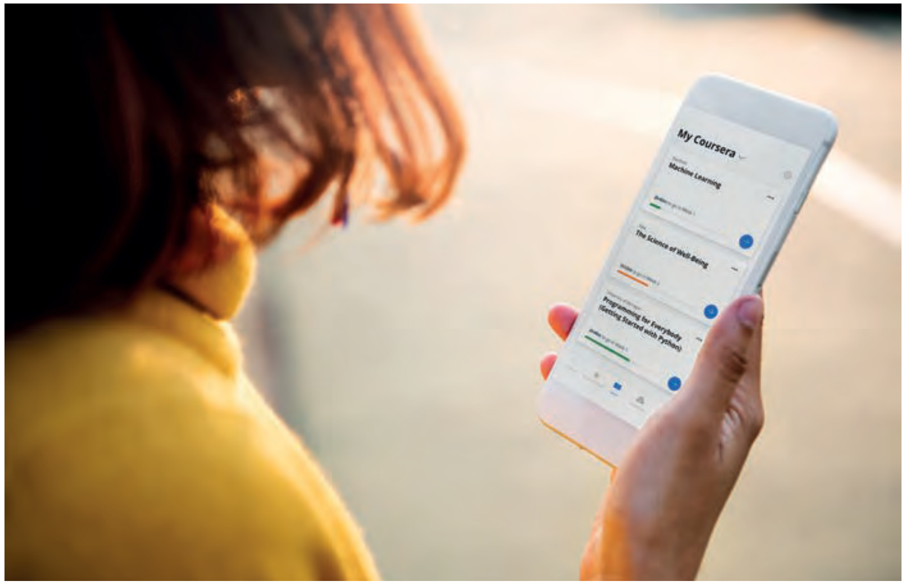
Co-founder and chairman Andrew Ng is one of the world's most famous computer scientists. An adjunct professor at Stamford University and former chief scientist at Baidu he also co-founded Google Brain. He holds around 5% of Coursera's stock.

Country	US
SDG alignment	4
Product impact score	9
Sales growth FY1	+26.2%
Sales growth FY2	+19.8%
Gross margin	64.0%
Portfolio weight	0.88%

Theme: Mission inclusion

HEADLINE IMPACT STATISTIC

118 million registered learners.[26]



[26] Source: Coursera as at 31 December 2022.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Deme Group

Positive impact thesis

Deme is a specialist offshore contractor offering wind-turbine installation, dredging and cabling. The development of meaningful amounts of offshore wind will be critical if governments are to meet their climate objectives. Offshore wind energy is therefore expected to grow significantly, from an installed base of 52GW in FY2021 to 290GW by 2030[27].

Dredging, meanwhile, is critical for flood prevention and protection of marine infrastructure. Over the longer term the need for dredging is expected to grow as sea-levels rise and coastal populations experience extreme weather events with increasing frequency.

Although it only publicly listed in June 2022, Deme was an early mover into European offshore wind market in 2000. More recently, it has taken a lead position in nascent offshore wind in the US, floating wind and in adjacent markets like offshore island construction and green hydrogen. With 20 years' experience, Deme has, by a significant margin, installed more offshore wind turbines than any of its peers. Its environmental business, developed to complement its dredging activities, works in a variety of areas including soil remediation and sediment treatment.

Investment thesis

Deme (Dredging, Environmental & Marine Engineering) is a global leader in dredging (60% of sales) and offshore wind turbine installation (30% – and growing fast). It is a one-stop-shop contractor in offshore wind, undertaking all major activities including constructing foundations, installing turbines and associated activities relating to laying cables and building substations.

Forward thinking, the company was an early investor in offshore wind installation back in the early 2000s – before other companies saw the opportunity. It is repeating this approach in emerging technologies like energy islands and wind-generated hydrogen.

The offshore wind industry is enjoying a period of structural growth which is expected to continue through to 2030 and beyond. This is driving demand for the specialist vessels needed to install wind turbines offshore (those vessels are expensive and take a few years to build, meaning barriers to entry are high). Turbines are also getting bigger and the number of ships capable of delivering these mega turbines is limited. Currently the estimated global installation fleet is 33 vessels, with only approximately half of these capable of installing 'next generation' (15GW+) turbines. Deme, however, have a significant number of these, with more on order.

ESG performance

Deme's operations have a potentially significant impact on the environment. Dredging can be a high-impact activity and the emissions associated with the company's fleet of vessels are significant. But this must all be seen in the overall context of an offshore wind turbine's life cycle, where the 'carbon payback period' is typically less than a year.

The company's ESG disclosures are comprehensive. Its long-term debt repayments, meanwhile, are linked to sustainability KPI's. It is targeting a 40% reduction in emissions (versus their 2008 levels) by 2030 and net zero by 2050[27].

Deme Group is controlled by majority shareholder Ackermans & van Haaren. This is reflected in the composition of its board, many of whom are Ackerman employees. That said, the board appears to bring a good level of experience to bear, with its members having backgrounds in accounting, civil engineering and law. The company's executive team has decades of appropriate experience– the CEO is a qualified maritime engineer – and are long-serving.

Country	Belgium
SDG alignment	7
Product impact score	7
Sales growth FY1	+1.4%
Sales growth FY2	+8.9%
Gross margin	38.5%
Portfolio weight	1.15

Theme: Electric shock

Headline impact statistic

Deme installed over 2500 wind turbines in 2021.[28]

[27] BNEF, Offshore Wind Market Outlook, Dec 2022
[28] Source: Deme Group Sustainability Report 2021

Dexcom

Positive impact thesis

There is no known cure for diabetes, which is an increasingly common cause of death and serious disability. Its impact is compounded by a growing obesity crisis with the result that it imposes huge costs on healthcare systems: one in every four dollars of healthcare spending in the US is devoted to caring for people with diabetes[29].

Dexcom is a US-listed manufacturer of continuous glucose monitors (CGM). Worn by Type 1 and some Type 2 diabetics, these monitors provide near real-time (every five minutes) updates on a patient's glucose levels. This enables better management of the disease versus (traditional) irregular blood glucose sampling using a finger prick, which typically checks the glucose level three to four times a day. The next step is to pair the CGM with an insulin delivery system and make them work together to supply insulin when it is needed and in the right volumes – an arrangement that would dramatically improve patient outcomes.

Investment thesis

Dexcom was the first company to develop and market implantable blood glucose sensors that the human body didn't reject. It subsequently added a variety of other technologies (a transmitter, a receiver, an algo) to make it all work and refined the form factor over time.

The greater accuracy of Dexcom's devices versus its peers have made them highly attractive to insulin-dependent (Type 1) diabetics. The product is effectively sold by consultant endocrinologists to their patients – so quality matters. Customer loyalty is high because of the critical function the device provides for diabetics at relatively low cost. Dexcom also offers a lower-priced direct-to-consumer offering, the Dexcom One, for low-income consumers. This leverages the company's manufacturing platform to produce a limited functionality device at a lower price point.

Clinical evidence suggests that Dexcom has the best CGM on the market and, having won in the market for managing Type 1 diabetes, we believe its new products and investments in distribution will see it taking a significant share of the far larger market for managing Type 2 diabetes in the near future. Lower-priced products will allow it to succeed internationally, where it has historically had a relatively low presence. We believe these dynamics for Dexcom's revenues over the next three-to-five years are being underappreciated by the market.

ESG performance

Dexcom's sustainability disclosures lag some of its peers. That said, the company published its third annual sustainability report in the first quarter of 2022 and recently implemented sustainability software to track emissions of greenhouse gases from its facilities with a view to establishing an emissions 'baseline' in 2022. Anecdotal evidence, meanwhile, suggests that diversity is taken seriously, and that employee engagement is high.

Corporate governance is uncontroversial and better than many medical-device companies. It has recently taken steps to declassify its board and improve proxy access. The chief executive and a significant number of the company's operational staff are long-serving, and the CEO is well-regarded by the market, having led the business through a very successful growth phase. One small caveat: the leadership team currently has no meaningful ownership of Dexcom shares.

Country	US
SDG alignment	3
Product impact score	7
Sales growth FY1	+18.6%
Sales growth FY2	+19.7%
Gross margin	64.1%
Portfolio weight	2.63%

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

1.25 million users.[30]

[29] American Diabetes Association. Economic costs of diabetes in the US in 2017. Diabetes Care. 2018
[30] Source: Dexcom.

Diasorin

Positive impact thesis

Italy's DiaSorin manufactures and sells diagnostic testing kits, automated testing technology and associated equipment for in-vitro (outside the body) diagnosis. Millions of DiaSorin's tests are used worldwide each year. The company states that 10 people come into contact with one of its tests every second. Typically, these use samples of blood or other bodily fluids. Its tests essentially take two forms:

- Immunoassay – which targets antigens (proteins) on the surface of cells.
- Molecular diagnosis – which looks at genetic material within cells.

DiaSorin's tests are used globally to identify a range of communicable and non-communicable diseases, including:

- Hepatitis;
- Lyme disease;
- Covid-19 and other respiratory infections;
- Tuberculosis (TB); and
- Zika.

They also used to enhance understanding of:

- Bone and mineral disorders;
- Autoimmune diseases;
- The endocrine system;
- Hypertension; and
- Cancer.

Thanks to being both quick and cost-effective, these tests offer benefits to both patients and healthcare systems.

Immunoassay and molecular diagnostics are – for good reason – replacing traditional lab-based diagnostic techniques, over which they offer a number of advantages. These include:

- Greater sensitivity;
- Faster results;
- Lower costs;
- Less invasive sampling;
- Better diagnosis (reducing the unnecessary use of antibiotics); and
- Enhanced possibilities of personalised medicine.

Investment thesis

We believe the opportunity that awaits DiaSorin in the post-Covid world is greater than many investors appreciate. Widescale, rapid testing for Covid-19 underpinned the way many countries managed the infection during the pandemic, allowing healthcare systems to prioritise treatment for the sick while also allowing the re-opening of the economy. The pandemic accelerated the deployment and use of DiaSorin's machines in hospitals in the EU and US; we believe this is unlikely to change.

Recent news also indicates that some of DiaSorin's tests may receive higher reimbursement rates as healthcare systems move towards a 'total cost of care' approach and the wider benefits of early and accurate diagnostic testing receive wider appreciation. Its collaboration with Chinese regional governments provides further opportunities.

Although DiaSorin isn't founder-run, we believe its management think like founders and pursue a long-term vision. Its chief executive, Carlo Rosa, has been with the company since a management buyout in 2000. They have avoided entering the over-populated parts of the diagnostics market and instead built a business focused on niche areas with higher margins. By partnering with clinics, collaborating with competitors and pursuing organic growth, they have expanded the business in a self-funded way. DiaSorin now has facilities across the globe including five major test centres.

ESG performance

DiaSorin has reported on sustainability since 2014 and its environmental and social disclosures are generally to a very high standard.

On governance, the company is effectively controlled by its chairman, who has 60% of the voting rights. This has allowed the company to take a sensible and steady approach to growth, but it is an arrangement that brings risk for minority shareholders. The all-Italian board, meanwhile, lacks independence. That said, there have been no related-party transactions and its executive compensation policies are uncontroversial, although long-term incentive awards to executives do lack performance conditions.

[31] Source: @diasoringroup.

Country	Italy
SDG alignment	3
Product impact score	7
Sales growth FY1	+4.2%
Sales growth FY2	+0.7%
Gross margin	66.2%
Portfolio weight	5.48

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

"Every second 5 lives are touched by a DiaSorin test worldwide" [31]

DISCO

Disco

Positive impact thesis

Semiconductors and digitalization underpin many of the technologies – including many green technologies – that we take for granted in fields such as communication, transport, healthcare and education.

Disco makes equipment and consumables used in making semiconductors but is also well-positioned to accelerate growth in the power semiconductor market. Traditional silicon-based semiconductors work well in low-voltage applications (like computers) but are less well suited to applications where they need to handle large amounts power (such as batteries in electric vehicles).

Founder-run, the company differentiates itself by the degree to which its corporate values are incorporated into its day-to-day operations. It places enormous emphasis on providing holistic services to its clients and was early to incorporate life-cycle analysis of its products and to offer refurbishment and recycling. As such, it was the first company in the Japanese production machinery industry to receive designation as a 'Nationwide Recycler of Designated Industrial Refuse'.

Investment thesis

Rapid growth in demand for a range of products and infrastructure - electric cars, hyper-scale data centres and 5G smartphones - is driving demand for semiconductors and in turn, for, Disco's chip dicers and grinders. Disco's tools and consumables are used for cutting (kiru), grinding (kezuru) and polishing (migaku). Many of its customers (of whom TSMC is the largest) are in the early stages of next-generation chip development, where chip size and arrangement are critical and where precision cutting and grinding reduces electrical resistance.

Disco combines innovation, operational excellence, high-quality service and a direct sales model which makes it the biggest (and best) operator in its sector. It has a market share of over 70% in the dicer and grinder markets. 'Combustibles' make up around 25% of its sales, helping to smooth the cyclical nature of selling capital equipment.

As with Aehr Test, Disco benefits from being part of a 'winner-takes-most' market where its equipment has been broadly adopted and will be difficult to displace. Disco is embedded in its customers' businesses, offering:

- custom design;
- maintenance;
- training;
- disassembly and recycling; and
- test-cutting services (ahead of full-scale production).

Disco is a high-margin business with a very long track record. While appearing to be a mature business, it continues to grow through its exposure to the megatrend of increased semiconductor deployment in multiple end industries. Recent technology advances have seen it producing laser saws, waterjet saws and plasma etchers, where it can leverage its reputation to claim and keep market share.

As for the risk that its competitors catch up? That risk is lower than many expect; as with many truly innovative companies, the competition always seems to be coming, but it never quite seems to get there...

ESG performance

Disclosure – by means of a high-quality website and regular investor and CSR publications –is good. The company strives for operational excellence and was early in seeking accreditation for its operations meeting international quality, environmental and safety standards. It places significant emphasis on providing holistic services to customers rather than simply selling them products; strong trust-based relationships are the result.

Country	Japan
SDG alignment	9
Product impact score	4
Sales growth FY1	+3.0%
Sales growth FY2	-4.2%
Gross margin	63.3%
Portfolio weight	1.50

Theme: Efficiency kings

HEADLINE IMPACT STATISTIC

Silicon carbide increases battery efficiency by 5-10%, meaning less cobalt, less lithium and fewer rare earth minerals will be needed for the transition to electric vehicles. [32]

Disco was the first Japanese company to develop and publish a JSA standard focused on improving the satisfaction of its employees. Disco makes regular data-driven environmental disclosures and recently committed to medium and long-term decarbonisation objectives and is actively rolling out solar PV across its operations.

Established by Mitsuo Sekiya in 1937, members of the Sekiya family continue to manage the business. Corporate governance is typically Japanese. That said, Disco was early in subjecting its annual bonus awards to shareholder approval (not required under Japanese law) and recently appointed its first female (outside) director.

[32] Source: Semiconductor Today Adoption of 800V in mass-market EVs to boost transition of power electronics to SiC (semiconductor-today.com).

Energy Recovery

Positive impact thesis

The world's freshwater resources are being stretched to their limit. How should countries respond? Desalination is certainly expensive, with upfront costs being particularly high. In China and India, where water stresses are increasingly prevalent, the alternative is to use significant amounts of energy to pipe water over huge distances. The industry's critics tend to argue that water-conservation measures are a cheaper, environmentally friendly alternative to desalination. But both approaches will be needed as population growth, urbanisation and climate change bite.

Energy Recovery specialises in making and selling pressure exchange (PX) technology. Traditionally, pressure exchange has been used to reduce energy usage in desalination, leading to the demise of thermal desalination in favour of relatively more efficient reverse-osmosis desalination. Pressure exchange is now finding new uses in treating industrial wastewater and improving the efficiency of CO2-based refrigeration systems as hydrofluorocarbons (HFCs) are retired (HFCs are efficient but also happen to be extremely potent greenhouse gases).

Investment thesis

Energy Recovery's pressure exchanger (PX) technology has reduced the energy cost of reverse-osmosis desalination and allowed it to displace the incumbent technology: thermal desalination. Partly as a result of the reliability of its product (a near-zero failure rate) Energy Recovery has become a virtual monopoly supplier to the vast seawater desalination plants being built in Africa, the Middle East and Asia.

Good customer relationships give the company strong pricing power. Growth in the global desalination market may have slowed but in the face of growing water stresses it is still growing at high single-digit rates and is expected to grow by around 50% over the next five years[33].

As Energy Recovery has continued to invest in its core technology, it became apparent that its solution for managing water pressure and recycling excess energy can also be applied to waste-water treatment and to applications using gases, creating opportunities in non-HFC refrigeration. Diversification into these new markets is core to the company's growth. Longer-term, opportunities exist in hydrogen, salt battery storage, heat pumps, large-scale heating, ventilation, and air conditioning (HVAC) systems and in other technologies that rely on gases.

ESG performance

For a company of its size, Energy Recovery's ESG disclosures are good. It recently undertook a comprehensive materiality assessment and has made various commitments relating to product sales and its own operations, making a push on supply-chain oversight, targeting ISO 45001 (safety) and ISO14001 (environmental management) certification by the end of 2022 and committing to Task Force on Climate-Related Financial Disclosures (TCFD) disclosures by 2024. Energy Recovery recently published its Scope 1-3 emissions but has yet to set targets for their reduction. The bulk of its emissions arise from the smelting of the ceramics used to make its PX equipment.

Corporate governance is good and has been improving with recent changes including declassifying the board and adopting proxy access.

Country	US
SDG alignment	6
Product impact score	6
Sales growth FY1	+21.2%
Sales growth FY2	+10.7%
Gross margin	69.2%
Portfolio weight	1.54%

Theme: Efficiency kings

HEADLINE IMPACT STATISTIC

14.5 million tonnes greenhouse gas emissions avoided in 2021.[34]

[33] Global Desalination Market, 2022-2027, ResearchAndMarket.com
[34] Source: Energy Recovery: About Us.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Everbridge

Positive impact thesis

Founded in the wake of 9/11, Everbridge's software enables its users – including governments, healthcare systems and schools – to manage 'critical events' through mass notification, incident management and public warnings. Everbridge has taken advantage of the ubiquity of mobile phones (most of us now carry a GPS device in our pocket) to create a robust, two-way, population-alerting system.

In its 2019 report, the Global Commission on Adaptation found that the cost-to-benefit ratio for strengthening early-warning systems used ahead of extreme weather events was as high as 10-to-one. In other words, for every $1 invested there was a net economic benefit of $10. Similar studies in Germany, France, the US, Hong Kong, Bangladesh, Cuba and China have all proven the value of early-warning mass-notification systems in protecting human lives and physical assets.

Everbridge's software has also been used in:

- rolling out Covid-19 vaccinations;
- managing IT system failures and cyber-attacks;
- in-transit assessment of medical patients
- managing disruptions to business services including the failure of utilities (as we saw in Texas in 2021)
- locating missing persons

Investment thesis

Like many software stocks, Everbridge had a difficult 2022. But we believe there are early signs of improvement under its new CEO, David Wagner. The business is being streamlined through a reduction in its non-core activities and a pause in M&A.

Its critical event management (CEM) platform can be integrated with information on the location of an organization's people, assets and suppliers to provide a common risk-visualization and management platform to improve management control and visibility at lower costs. It currently has 307 customers on its CEM platform, paying an average of around $450,000 per annum (although the median fee is below this) . Everbridge has an opportunity to grow by selling more of its services to existing enterprise customers as well as acquiring new customers. It is targeting $1billion in revenues from around 1000 customers by 2030.

By refocusing on its core business and leveraging its existing investments, Everbridge should be able to push its operating margins into the high teens and up towards 20%. Recent numbers provide early evidence that this is beginning to happen.

ESG performance

Everbridge's reputation and its IT resiliency are critical to its ability to win deals with large organisations and governments. It is certified by a number of US government agencies including the US Department of Homeland Security, FISMA (Federal Information Security Management Act), FedRAMP and ISO27001. It doesn't, however, currently make any environmental disclosures.

Historically, it has had a strong culture and employee engagement although the sudden departure of the previous CEO in late 2021 called the efficacy of the board (and the wider culture of the business) into question, sent its share price lower and prompted us to withhold our vote for the re-election of the chairman at the 2022 AGM due to the potential lack of oversight. We have also indicated to the company that, in the light of events during 2021, it should adopt best-practice standards for executive compensation going forward.

Country	US
SDG alignment	11
Product impact score	7
Sales growth FY1	+17.1%
Sales growth FY2	+6.3%
Gross margin	72.7%
Portfolio weight	0.70%

Theme: Impact communicators

Headline impact statistic

Six billion 'critical event interactions' in 2021. [35]

[35] Source: Everbridge, Annual Report 2022.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

First Solar

Positive impact thesis

First Solar is the largest manufacturer of solar photovoltaic (PV) modules in the western hemisphere and the largest manufacturer of thin-film solar photovoltaic (PV) modules in the world[36]. Thin-film modules are an alternative to more established crystalline silicon (c-Si) PV panels and while they are not currently as efficient, they offer advantages in high-temperature and high-humidity environments. Thin-film solar modules are also significantly less carbon- and water-intensive to manufacture than crystalline silicon PV panels.

As a US-based manufacturer, First Solar has no exposure to polysilicon imported from China, or to the associated human rights concerns that come with it (45% of the world's polysilicon is produced in the Uyghur Region of China[37]). As a result, it is uniquely positioned to benefit from tax credits in the Inflation Reduction Act (IRA) designed to support the domestic manufacture of renewables in the US and from legislation designed to avoid exposure to (alleged) human-rights abuses in China.

That said, thin-film currently only represents a small fraction of the global solar market and the technology only really has traction in the US. The question is whether First Solar can take advantage of the opportunity the IRA offers to scale up production, bring down costs and so grow its sales overseas.

Investment thesis

First Solar is the only global thin-film solar company and is well-positioned to offer an alternative to polysilicon PV modules, most of which are made in China. It is also the only US-based solar company. We believe its competitive power, in respect to its unique technology and geographical location, means that it will disproportionately benefit from the Inflation Reduction Act as well as from the exponential growth in demand for solar globally.

First Solar's leadership team has been in place for over five years. It has a clear mandate to pursue its strategy of focusing on improving manufacturing efficiencies while creating optionality through a well-funded and experienced R&D team – a team that is currently working on the next generation of solar technologies.

The company currently has around 9GW of manufacturing capacity. This is expected to more than double by 2025. The extent to which it will capture cost efficiencies courtesy of Wright's Law learning curves over the next 10 years while maintaining favourable pricing power has yet to be fully appreciated by the market.

ESG performance

Very few companies' environmental and social disclosures are as comprehensive as First Solar...

- It has published five annual sustainability reports since 2017.
- It is a regular responder to the Carbon Disclosure Project
- It provides full disclosure on its environmental management policies
- It is a signatory to RE100, a renewable energy initiative comprised of businesses committed to 100% renewable electricity.
- It is the first company in the world to offer a recycling program for solar PV panels
- It is the only solar manufacturer with in-house PV recycling capabilities

Corporate governance is good. Its executive team is experienced and generally long-serving. The board is large but sees a reasonable level of turnover with annual elections and there is evidence that the company is responsive to its shareholders (e.g., diversity resolution in 2021). Executive compensation practices are uncontroversial although insider ownership of First Solar's shares isn't particularly high.

Country	US
SDG alignment	7
Product impact score	8
Sales growth FY1	-10.7%
Sales growth FY2	+27.8%
Gross margin	3.4%
Portfolio weight	1.96%

Theme: Electric shock

Headline impact statistic

First Solar's products are installed, offsetting 26 million tonnes of CO2e emissions over their 30-year lifecycle.[38]

[36] www.firstsolar.com/About-Us/Overview
[37] In Broad Daylight, Urghur Forced Labour and Global Solar Supply Chains, Sheffield Hallam University, 2021.
[38] Source: First Solar Sustainability Report 2022.

Halma

Positive impact thesis

'Our purpose is to grow a safer, cleaner, healthier future for everyone, every day'

Halma buys and consolidates businesses exhibiting high growth, strong returns and a positive impact. It has done this successfully for 50 years, exhibiting a consistent focus on sustainability and the long-term throughout. It has only had four executives over the last five decades now has around 50 businesses split across three divisions:

- safety (42% of sales);
- environmental and analysis (29% of sales); and
- medical (29% of sales)[39].

Although Halma's portfolio includes a diverse range of companies, its overall philosophy is very aligned with our calculation that companies positioned to address sustainability challenges benefit from significant tailwinds:

strong growth + sustainable returns + positive impact = long-term sustainable value creation

Investment thesis

Halma is a high-quality business with over 50 years of executing successfully. Its businesses tend to operate as autonomous units but have a general theme of focusing on regulatory driven, structurally growing end markets where spending tends to be nondiscretionary.

The key drivers of its success are:

1. Choosing the 'right' (niche, growing, purposeful, regulated) end markets.
2. Applying Halma's Growth Enablers model to small companies formerly held back by their size (giving them access to Halma's expertise in digitalisation, international sales and talent development).

This model has driven remarkable results for many years. Through a combination of organic growth and M&A, Halma has grown its sales by 15% per annum since listing in 1972. It has delivered record profits for 19 consecutive years and dividend growth of 5% or more for 43 years[39]. We believe that the likelihood that this success proves to be replicable is underappreciated .

ESG performance

Sustainability is a key focus and operationally, a combination of top-down and bottom-up initiatives reflect its decentralised structure. Each company within the group has its own board, with one member being tasked with meeting sustainability objectives. Halma's climate disclosures are to a high standard and the company has made good progress in reducing its absolute emissions. It is targeting net zero by 2040 and pursuing milestones set by the Science Based Target initiative (SBTi) in the interim. Climate and diversity objectives are incorporated into its annual bonus calculations and diversity is high.

Corporate governance is good, and the board is high-quality and experienced. The current CEO, Andrew Williams, is an engineer who joined the organisation in 1994 as managing director of one of Halma's operating companies. He was appointed group CEO in 2005 and is due to be succeeded by the current CFO, Marc Roncetti, in 2023. The quality and stability of Halma's leadership since its listing (the company has only had four chief executives over the last five decades) is reflected in its exceptional financial performance.

Country	UK
SDG alignment	9
Product impact score	7
Sales growth FY1	+9.6%
Sales growth FY2	+6.6%
Gross margin	50.1%
Portfolio weight	2.04%

Theme: Efficiency kings

HEADLINE IMPACT STATISTIC

Companies in the Halma group enable 200 million water tests each year.[40]

[39] Halma Annual Report & Accounts 2022
[40] Halma – Every Drop Counts.

IDP Education

Positive impact thesis

Higher education is one of the cornerstones of sustainable development – and of innovation. It teaches skills, creates knowledge and promotes freedom, tolerance and dignity. With one of the highest fiscal multipliers, education is also the fastest and cheapest way for a developing country to end poverty.

Originally established by the Australian-Asian Universities Cooperation Scheme, IDP Education provides student-placement services and English language training and testing worldwide. Although student placement is mostly a service for those who can afford to study overseas, English language tests remain 'high stakes' requirements recognised by many authorities and institutions for purposes such as education, migration and employment, particularly in medicine and professional services.

Investment thesis

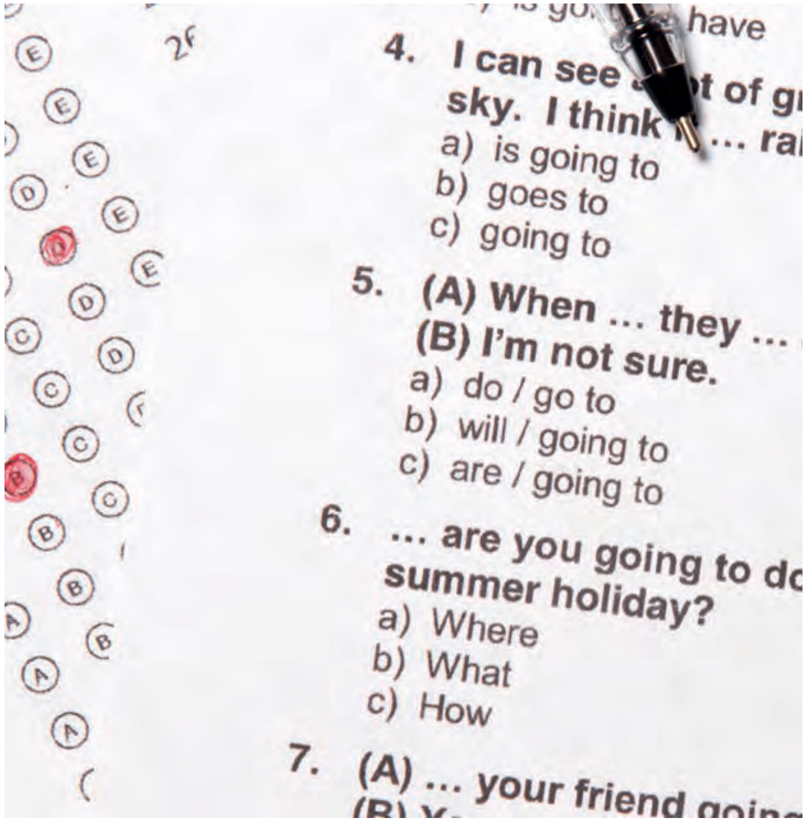
In a fragmented industry, IDP is well-placed to leverage its International English Language Testing System 'IELTS' services and its strong relationships with academic institutions to build a global, lower cost and faster digital platform for overseas student services. IDP has made significant investments in digital and technology, providing services that are transforming student placement from a largely analogue, paper-based process to a digital marketplace for students and institutions.

Although it was disrupted by border closures during the pandemic, student placement remains a growth industry and IELTS testing is highly profitable. Volumes in student placement services are bouncing back. Having invested more in its technology than its competitors and having acquired the rights to administer IELTS testing in more regions (it recently bought IELTS India from the British Council) IDP is winning share in a growing market. This, in turn, should lead to strong revenue growth and improving profitability.

ESG performance

IDP's environmental and social disclosures have historically been limited but are now improving with recent disclosure of its Scope 1 and 2 emissions.

Corporate governance is fair. But while diversity on the board has improved significantly, we are still of the view that more new blood is needed. The company has had issues with executive compensation practices in the recent past and non-exec fees were up 21% in 2022. The chairman has served over 15 years and continues to sit on the audit committee. We voted against the re-election of the chairman at the 2022 AGM. Unfortunately, only around 9% of shareholders shared our view.



Country	Australia
SDG alignment	4
Product impact score	7
Sales growth FY1	+21.9%
Sales growth FY2	+19.3%
Gross margin	60.0%
Portfolio weight	3.23%

Theme: Mission inclusion

Headline impact statistic

1.9 million of IDP's international English language tests were taken in 2022.[41]

[41] Source: IDP Education Annual Report 2022.

Insulet

Positive impact thesis

There is no known cure for diabetes which is an increasingly common cause of death and serious disability. Its impact is compounded by a growing obesity crisis with the result that it imposes huge costs on healthcare systems: one in every four dollars of healthcare spending in the US is devoted to caring for people with diabetes.

Insulet manufactures the Omnipod ('Pod'), an innovative tubeless and waterproof drug delivery device used predominantly for insulin delivery. The Omnipod provides a unique alternative to traditional insulin delivery methods, such as insulin pumps or multiple daily injections. It is smaller and less hassle than its competitors; it can be worn in the shower and while playing sport. The Pod is wirelessly controlled by a handheld device called a Personal Diabetes Manager (PDM) that is simple and intuitive to use. The Pod and PDM communicate with the user's smartphone using Bluetooth, allowing monitoring and sharing of data for both Type 1 and Type 2 diabetes sufferers. Insulet has created a strong community of Omnipod users ('Podders') since 2016 and has a history of creative innovation in diabetes care including an innovative pay-as-you-go pricing model that reduces upfront costs and makes the Pod available through pharmacies, lowering the barriers to its adoption.

In addition, the user interface saw a paradigm shift with the launch of Omnipod 5 which can be directly linked to a continuous glucose monitor (of the type made by Dexcom), offering an 'automated pancreas' to patients for the first time. The evidence suggests that this improves patient outcomes and creates significant costs savings for healthcare systems.

Investment thesis

Insulet has disrupted the traditional tubed insulin-pump market; none of its competitors have been able to develop a product with the same form factor. We believe it is now exhibiting scale economics, having expanded its gross margins meaningfully in the last five years with a clear strategy to drive them higher. The Omnipod is a unique product that creates value from both a patient and healthcare economics perspective and should experience strong demand growth over the next five-to-10 years. Having invested heavily in a combination of direct distribution, automated manufacturing and product innovation, Insulet has created competitive barriers around its products, and we believe that the next few years should see it harvesting returns on these investments in the form of meaningful revenue growth and profitability.

ESG performance

Insulet's ESG performance is good, improving and receiving increasing external recognition. The company has published two sustainability reports and recently undertook a materiality analysis. The most recent report is comprehensive and contains an honest appraisal of the company's impacts, touching on the need for it to adopt a more 'circular economy' approach. Climate disclosures are good although it has yet to set firm targets for reducing its emissions. Insulet has undertaken a multi-year project to install renewables across its operations.

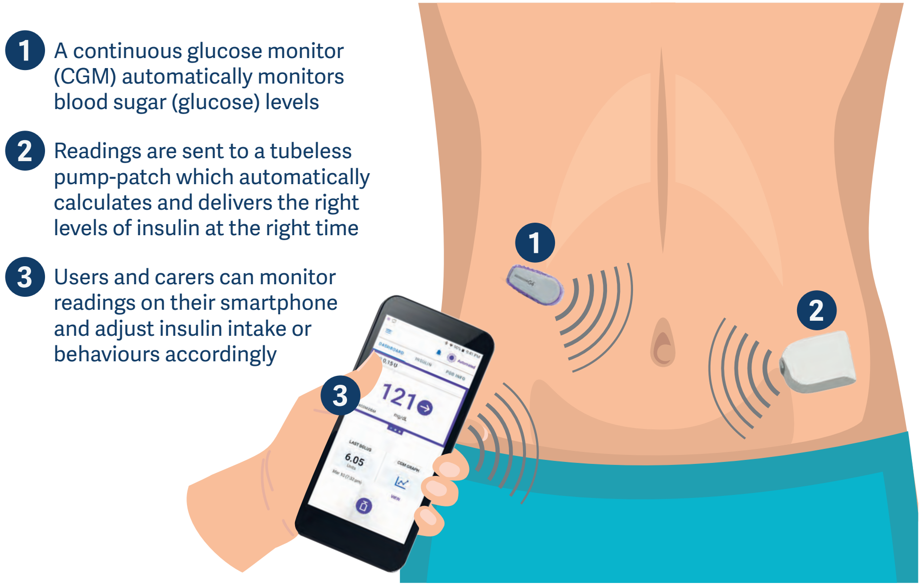
Corporate governance is generally good and its executive pay practices are uncontroversial. Shareholder support at the AGM has historically been high. Insulet's board is high quality with a mix of experience in medicine, med-tech, venture-capital and accounting. The purpose and mission of the team is clearly aligned with the strategy of the business: providing improved outcomes at lower costs. There has been a recent change in the CEO: James Hollingshead took over in May 2022 after former CEO Shacey Petrovic resigned due to family health issues. Previously a member of Insulet's board, James is a highly experienced healthcare executive.

Country	US
SDG alignment	3
Product impact score	7
Sales growth FY1	+16.0%
Sales growth FY2	+16.0%
Gross margin	64.9%
Portfolio weight	2.93%

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

300,000 global users of the Omnipod.[42]



[42] Source: Insulet Sustainability Report 2021.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Iqvia

Positive impact thesis

As a contract research organisation and data analytics provider to the life sciences industry, Iqvia has a long history within the current system of research and drug development. This is an inefficient process with scope for meaningful positive change. Iqvia's role is to improve efficiency within the current system rather than disrupting it. As such, it is delivering meaningful incremental change and enabling customers to accelerate clinical development and to commercialise of innovative medical treatments.

Investment thesis

Formed by the merger of IMS Health and Quintiles in 2016, Iqvia exhibits clear scale economies within the contract research organization (CRO) market. To effectively service the pharmaceutical and biotechnology industry, Iqvia's geographic and capability breadth is key. Its data business, IMS, has historically had a unique patient data set which has proved difficult for the competition to replicate and which it has leveraged well. Switching costs within the data analytics business are also high. As such, the company generates high returns on invested capital and free cashflows.

Although the company's leadership is credible and experienced and has executed well following the merger it is perhaps too transaction-focused and arguably does not exhibit the long-term visionary characteristics of a founder.

We believe that whilst the scale and the value of Iqvia's assets is well understood, the size and economic resilience of the addressable market is currently underappreciated and will remain more robust over the short-to-medium term than many expect.

ESG performance

Iqvia is well-run, but it hasn't historically given much focus to ESG disclosures. Today, however, environmental and social disclosures are improving, and its reporting conforms to various international standards (GRI, SASB, TCFD). Diversity is high (60% female workforce globally and 51% female managers) and, for a company with around 80,000 employees, so is employee engagement. Its laboratories are heavily regulated and are certified to international environmental and safety management standards. It has made good progress in reducing emissions, delivering on its commitment to the Science Based Target initiative (SBTi) and submitting its near- and long-term goals for reducing greenhouse gas emissions for independent approval.

Corporate governance is fair. The board was declassified in 2021 and supermajority requirements removed. Disclosures regarding executive compensation have also improved following a 54% vote against say-on-pay in 2020. That said, CEO compensation remains very generous, driven off a high basic salary and including perquisites which are increasingly uncommon.

Country	US
SDG alignment	3
Product impact score	4
Sales growth FY1	+4.1%
Sales growth FY2	+7.3%
Gross margin	35.1%
Portfolio weight	3.18%

Theme: Healthy healthcare

Headline impact statistic

Iqvia's patient registry platform has enrolled 21 million patients and is deployed across 80+ clinical programs.[43]

[43] Source: IDP Education Annual Report 2022.

Mips

Positive impact thesis

Whatever your age, evidence suggests that being physically active will help you to lead a healthier and happier life. People who exercise regularly have a lower risk of developing long-term chronic conditions such as heart disease, type 2 diabetes, stroke and some cancers, including bowel and breast cancer. Research also shows that physical activity can boost energy, self-esteem and mood, improve sleep quality and reduce the risk of stress, clinical depression, dementia and Alzheimer's disease[44].

Mips helps to make exercise more attractive by making safety helmets... safer. Today, its safety systems can be found in helmets used in cycling, skiing, equestrianism, motocross and other sports. They are also beginning to be used in the industrial safety market. Most helmets that are certified by industry-accepted safety standards can reduce the energy of a straight, linear impact. But in the event of angled impacts (the most common type of impact seen during crashes or falls) a Mips safety system-equipped helmet can help reduce harmful rotational energy.

Investment thesis

Mips has created an asset-light, high-margin and highly cash-generative business. Its ultimate vision is to be the Gore-Tex of helmet safety.

Having operated the Mips helmet test lab for 20 years, it has become the go-to partner for the majority of the sports helmets manufacturers globally. It recently added 'virtual' testing capabilities, reducing time and cost of testing. While there has been significant short-term, post-pandemic weakness in the cycling market, its portfolio of patents gives it a strong competitive position from which to enter adjacent markets.

ESG performance

For a relatively small company (it has fewer than 100 employees), Mips' disclosures are exceptional. Its high-quality investor relations website outlines its strategy, innovation and technology. It also publishes an annual integrated sustainability report and recently committed to the Science Based Targets initiative (SBTi) for reducing emissions. Mips is making good progress in improving the sustainability of its supply chain, where most of the emissions associated with its products are generated (all manufacturing is outsourced).

Corporate governance standards are (fairly) good and improving. Executive compensation practices are uncontroversial and fairly conservative in scale. The authenticity and credibility of Mips' management remains impressive: Peter Halldin, one of the founders, is still its chief science officer.

Country	Sweden
SDG alignment	3
Product impact score	7
Sales growth FY1	+8.2%
Sales growth FY2	+27.3%
Gross margin	43.7%
Portfolio weight	0.61%

Theme: Witness the fitness

HEADLINE IMPACT STATISTIC

12.6 million helmets containing Mips units were sold in 2021.[45]

[44] www.nhs.uk/live-well/exercise/exercise-health-benefits
[45] Source: Mips.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Montrose Environmental Group

Positive impact thesis

Emissions of methane, a powerful greenhouse gas, have accelerated rapidly over the last 50 years. The oil-and-gas industry is responsible for about a third of this increase, with fugitive emissions occurring through venting, leaks and incomplete combustion during flaring.

Meanwhile, PFAS (perfluoroalkyl and polyfluoroalkyl substances) have been nicknamed 'forever chemicals'. The strength of their chemical bonds means they don't break down in the environment. Unfortunately, the more we learn about the impact that PFAS have on our health, the worse the news gets: rather than being non-toxic, many PFAS are potentially harmful even at very low concentrations.

Montrose Environmental has particular strengths in testing air quality (principally for methane) and in testing for – and then remediating – pollution by PFAS.

Investment thesis

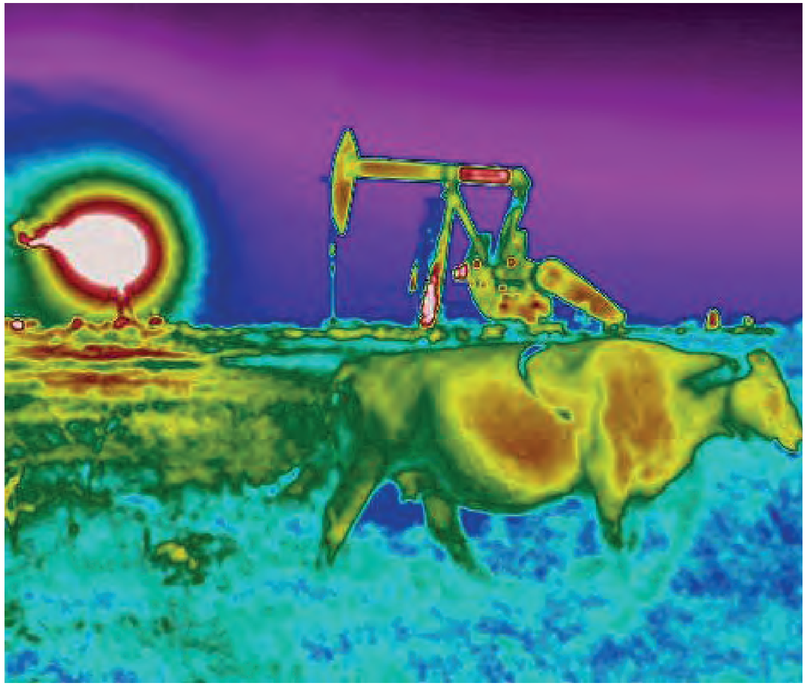
The environmental services industry in the US has traditionally been very fragmented, with many operators being small companies or part of much larger organisations. Montrose's strategy is to consolidate smaller operators with the aim of providing a one-stop shop for environmental services. By rolling up smaller operators, it can help them continue their growth and tap into larger opportunities while simultaneously strengthening its own nationwide platform.

We believe a multi-year growth opportunity awaits Montrose, as regulatory tailwinds drive non-discretionary spending on environmental compliance. In late 2022, the US Environmental Protection Agency expanded on a 2021 ruling on methane emissions; oil & gas drillers will now be obliged to find and plug leaks at all of their wells in the US – not just the biggest ones. This triples the number of well sites that will require monitoring. With regards to PFAS, regulators in the US and Europe are beginning to enact legislation to enforce the clean-up of 'forever' chemicals from our environment. Montrose has significant technology and expertise in this area. The engineering projects it can win here will have a long tail of revenues as it will likely take decades to clean up these spills.

ESG performance

Having gone public in 2020, its environmental and social disclosures have improved significantly. They now include disclosure of the company's Scope 1 and 2 emissions, quantitative details of the company's positive impact and data on its safety performance which hadn't historically been disclosed.

On corporate governance, there is room for improvement; the company retains a classified board and independence is low, with most of the directors having served together elsewhere. Executive compensation is 'novel' and increasingly generous. This was a focal point of our discussions with the company over the course of 2022.



Country	US
SDG alignment	9
Product impact score	4
Sales growth FY1	+3.9%
Sales growth FY2	+7.3%
Gross margin	35.8%
Portfolio weight	2.45%

Theme: Unsung eco warriors

HEADLINE IMPACT STATISTIC

Over 2 billion gallons of water contaminated with PFAs treated. [46]

[46] Source: Montrose Environmental 'EPA's New PFAS Health Advisories Set the Stage for Lower Regulatory Exposure Limits'. "To date, the Montrose family has successfully treated more than 2 billion gallons of PFAS water while consistently meeting 99%+ PFAS waste reduction."

Nibe Industrier

Positive impact thesis

Emissions of greenhouse gases from housing remain high. Any incremental gains in the efficiency of traditional heating systems have been offset by the growing footprint of the built environment. In Europe, buildings currently account for 40% of our final energy consumption and 36% of our greenhouse gas emissions[47]. So decarbonising housing is urgent and heat pumps are the solution; given their low penetration and their improving economics, the technology has the potential to be transformational. The IEA estimates that they have the potential to reduce global CO2 emissions by at least 500 million tonnes in 2030, equivalent to the annual CO2 emissions of every car on the road in Europe today.

Nibe makes and sells heat pumps (which account for around 40% of its sales) and other climate-friendly solutions like district heating products and climate control systems.

Investment thesis

The climate crisis, heightened awareness of energy security and improving economics are creating a structural shift in the way we will heat our homes. Russia's invasion of Ukraine accelerated the deployment of heat pumps and created unprecedented demand which manufacturers like Nibe have been struggling to meet; we are at an inflection point for heat-pump sales. The IEA recently called for a tripling of heat-pump use by 2030[48]. To hit that target, 15% of heating equipment sales need to be heat pumps by 2025 and 22% by 2030. Targets set by the EU are even more aggressive.

Nibe is a well-established business with a strong brand. It has long been vocal about the sustainability benefits of heat pumps and the world is coming around to its way of thinking. Its Climate Solutions (60% of sales) division is the fastest-growing component of Nibe's business and has the strongest margins. We expect it will continue to outgrow the rest of Nibe's business, pushing aggregate margins and cashflow higher over the long term.

Historically, growth has driven through M&A, something Nibe has been very successful at, but which the market doesn't give it full credit for. Subsidiaries are 100%-owned yet given full autonomy to run themselves.

ESG performance

Nibe makes high-quality financial disclosures which include integrated ESG reporting. There is good transparency around environmental performance although its targets for climate emissions are currently intensity-based. The only question mark is regarding the 10% of sales that come from stoves (which can have a disproportionately negative impact on local air quality).

Nibe isn't founder run, but it is founder-like with control resting with a number of current and former insiders. As with many Swedish businesses, there is a genuine focus on the long-term and sustainability is implicit in decision-making. Most aspects of corporate governance are typically conservative and uncontroversial. CEO, Gerteric Lindquist, age 70, has been at the helm since 1989. The board is mostly composed of Swedish engineers.

Country	Sweden
SDG alignment	7
Product impact score	4
Sales growth FY1	+9.0%
Sales growth FY2	+12.6%
Gross margin	31.6%
Portfolio weight	3.62%

Theme: Electric shock

HEADLINE IMPACT STATISTIC

320,000 tonnes CO2 emissions saved by Nibe's heat pumps.[49]

[47] In focus: Energy efficiency in buildings. European Commission, Feb 2020.
[48] Source IEA: The Future of Heat Pumps.
[49] Source: NIBE Annual Report 2021.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Oxford Instruments

Positive impact thesis

Oxford Instruments' history dates back to 1959, when Sir Martin Francis Wood developed superconducting magnets in his garage that were subsequently used in scientific equipment including MRI scanners. Today, the company's global end-markets include 5G telecoms, nanomaterials and quantum computing. These transformative technologies touch upon a wide range of sustainability challenges and their successful commercialisation could be transformational.

- Nanomaterials have applications in medicine, electronics, pollution control, energy generation and storage;
- Compound semiconductors offer higher speed processing at lower voltages (greater power efficiency) and optical properties versus traditional silicon-only semiconductors;
- Quantum computing is a multifaceted tool for engineers and scientists and could – potentially – help to solve an array of sustainability challenges.

Currently, semiconductors, healthcare and advanced materials are the largest end-markets for its products.

Investment thesis

Historically, Oxford Instruments' challenge has been to balance its cutting-edge research against demands for commercial success, but its new management team appears to be striking the right balance: re-focusing the business while maintaining its corporate culture.

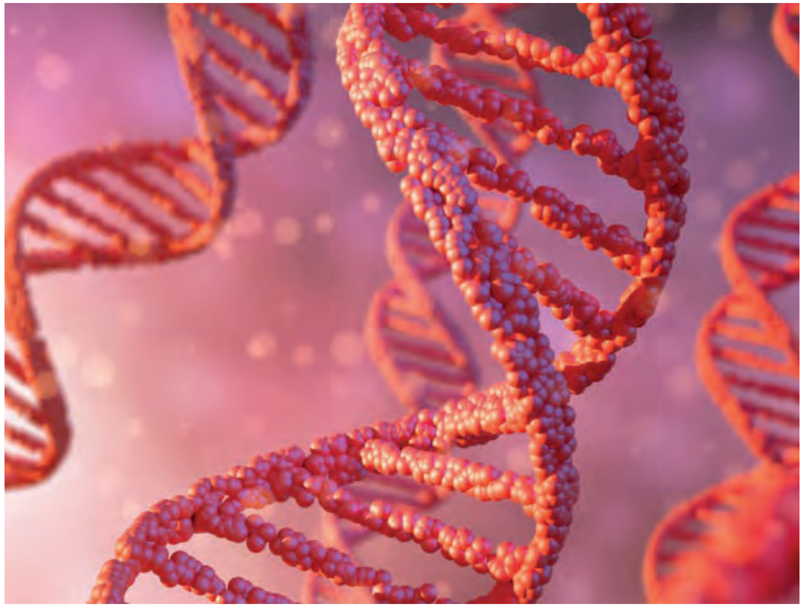
As an innovation-focussed conglomerate, estimating the value of the individual markets that it is exposed to is challenging. But it is clear many of its markets are growing strongly: both the global atomic spectroscopy and battery segments are expected to grow exponentially. Quantum computing has experienced many false dawns but could yet catch the market by surprise. Oxford Instruments is well-placed to capture these opportunities.

Years of building precision instruments like cameras, microscopes and scanners have required it to develop strong manufacturing and production capabilities that can be leveraged further.

ESG performance

A relatively new management team has brought a fresh focus on sustainability: the company published its first stand-alone sustainability report in August 2022. Great progress has been made in reducing operational emissions and waste products from manufacturing. The company has also committed to net zero targets which will be validated by the Science Based Targets initiative (SBTi).

Corporate governance is good, with historically high levels of shareholder support. Executive compensation policies are appropriate and uncontroversial. For a science- and engineering-focused business, diversity is always challenging (25% of its workforce is female) but the company seems to take this seriously and is making good progress. The experience of its board appears appropriate, with qualifications in physics albeit with a commercial focus. The significant scientific content ('learning') on the company's website and the support for science prizes etc. suggest that its science focus endures. This is critical to retaining the company's highly qualified, scientific staff (the company was the first to be spun out from a British university).



[50] Source: Oxford Instruments, Report & financial statements 2022.

Country	UK
SDG alignment	9
Product impact score	6
Sales growth FY1	+5.8%
Sales growth FY2	+3.1%
Gross margin	51.0%
Portfolio weight	2.86%

Theme: Unsung eco warriors

HEADLINE IMPACT STATISTIC

Providing a single figure for Oxford Instruments' impact is challenging. But in FY2022, 34% of its revenue came from products launched in the last three years- something it measures as part of its 'Inventing the Future' key performance indicator.[50]

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Penumbra

Positive impact thesis

A stroke occurs when one of the blood vessels that carries oxygen and nutrients to the brain is blocked by a clot or bursts. It is one of the most common causes of death and disability worldwide. The costs can be enormous because of how debilitating the condition can be for survivors, the majority of whom require rehabilitation after losing their motor skills.

Penumbra pioneered the use of mechanical catheter suction devices to remove blood clots and treat the aneurysms that cause strokes, deep vein thrombosis (DVT) and pulmonary embolisms (PE). The company has consistently had a strong vision to drive better healthcare outcomes for thrombectomy patients of all types through developing new products. Its pace of innovation has been high. As it continues to innovate, Penumbra has begun to offer virtual reality rehabilitation solutions for patients.

Investment thesis

Strokes and peripheral clotting are a global problem. Technologies that can meaningfully improve outcomes have a material impact by saving lives, avoiding disability and reducing costs for healthcare systems. As a result, the market opportunity is huge, although competition is increasing, Penumbra has the leading technology in this area. It has already seen rapid adoption and we believe its revenues could grow to five or even 10 times their current size.

Although this area of the healthcare market is traditionally dominated by large incumbents, Penumbra's culture of innovation has enabled it to establish a niche and maintain its competitive advantage. Increasingly there is evidence that it is achieving scale economies, particularly in its distribution and R&D efficiency.

ESG performance

Penumbra has had a consistently strong vision of delivering better healthcare outcomes to thrombectomy patients of all types through innovation. Under the leadership and vision of its co-founder, CEO and chairman, Adam Elsesser, Penumbra has become a business defined by its research and development-focused culture and business model. Manufacturing is undertaken in California; diversity is high and Penumbra often cites its culture as being a critical differentiator and a driver of innovation. At the same time, however, its environmental and social disclosures are limited; it currently makes no climate disclosures.

Corporate governance is fair and its executive compensation policies are uncontroversial. The chief executive hasn't taken a bonus or long-term incentive plan for the last five years (although he is the largest shareholder). Staff aren't awarded bonuses, the rationale being that they can be a deterrent to teamwork.

Country	US
SDG alignment	3
Product impact score	7
Sales growth FY1	+14.3%
Sales growth FY2	+18.8%
Gross margin	63.3%
Portfolio weight	2.22%

Theme: Healthy healthcare

Headline impact statistic

Cardiovascular disease (CVD) is the leading cause of death globally, taking an estimated 17.9 million lives (WHO). For survivors (and their relatives) the economic costs of a stroke, a debilitating form of CVD, can be enormous.

Planet Fitness

Positive impact thesis

Whatever your age, evidence shows that being physically active can help you to lead a healthier, happier life. People who exercise regularly have a lower risk of developing many long-term (chronic) conditions, such as:

- heart disease
- type 2 diabetes
- stroke
- some types of cancer (including bowel cancer and breast cancer).

Research also shows that physical activity improves self-esteem, mood, sleep quality and energy levels as well as lowering stress, reducing the risk of clinical depression, dementia and Alzheimer's disease[51]. 32% of adults in the US are obese (2018), with highest rates typically amongst non-whites[52].

Planet Fitness is a low-cost, no-frills US gym franchise founded in 1992. It deliberately targets demographics that typically don't use gyms. To help make its facilities more attractive to first-time gymgoers and women (more than half of its members are female), it provides a 'judgement-free zone' where there is no 'gymtimidation'. With over 17 million members, it is now the largest gym group in the US (Planet Fitness 2022 ESG Report).

Investment thesis

Planet Fitness's deliberate counter-positioning and focus on inclusivity dramatically expanded the addressable market for gyms by encouraging lower-income, female and anxious users. As the company has grown, scale economics have become more important as their location identification process, operating efficiencies, store density synergies and lower cost of capital relative to smaller chains and traditional gyms can all be leveraged to help drive its market-leading growth.

Unlike traditional gyms and other retail concepts (like restaurants), Planet Fitness has very attractive store economics, with over 25% cash-on-cash returns. It now has 60% more gyms than its next 17-largest competitors combined and it expanded through Covid even as its competitors closed gyms. It is also relatively resilient in the face of a recessionary environment. We expect it to double its store base globally from here whilst earning persistently high returns on capital.

ESG performance

Planet Fitness's disclosures on environmental and social factors have been slowly improving since it completed its first ESG materiality assessment in 2018. It established Scope 1 & 2 emissions data in 2020 for its own operations – including for its centrally managed clubs. However, the company openly recognises that it is still in the early stages of its climate journey and currently has no emission-reduction targets in place. More recently, high energy prices have provided an opportunity to push some of the improvements made on energy and water reduction out into franchisee operations.

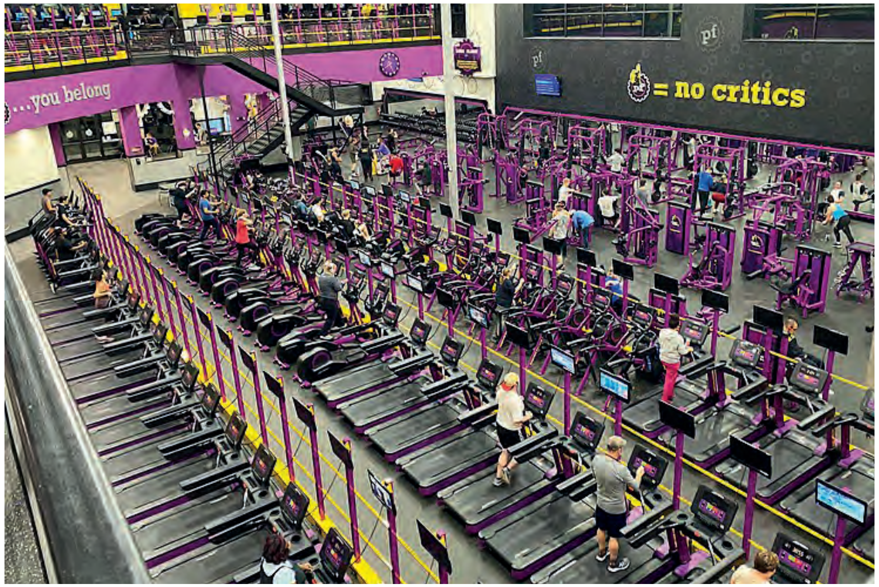
Corporate governance is mixed. Although there have been improvements in its formal governance mechanisms, it retains a classified board and supermajority voting requirements. There are other wrinkles too, such as related-party transactions and the fact that it retains umbrella partnership corporation ('Up-C') tax arrangements despite having IPO'd in 2015. To express our concerns on these matters, we have abstained in votes to re-elect its non-executive directors.

Country	US
SDG alignment	3
Product impact score	7
Sales growth FY1	+58.9%
Sales growth FY2	+15.5%
Gross margin	83.0%
Portfolio weight	3.73%

Theme: Witness the fitness

HEADLINE IMPACT STATISTIC

17 million members. [53]



[51] www.nhs.uk/live-well/exercise/exercise-health-benefits
[52] Statista
[53] Source: Planet Fitness, Inc. Announces Fourth Quarter and Year-End 2022 Results.

PowerSchool

PowerSchool Holdings

Positive impact thesis

PowerSchool provides software to so-called 'K-12' schools, which educate children from kindergarten through to the 12th grade. Its vision is to reduce the administrative burden on teachers and enable them to spend more time teaching, giving them access to new tools to improve student outcomes. This is a positive and intentional effort which aligns with its long-term strategy.

As the number one provider in its market, PowerSchool touches the lives of around 70% of all K-12 students in the US and Canada. It provides unified technology to help schools efficiently manage:

- learning;
- grading and assessment;
- student registration and attendance;
- analytics;
- reporting;
- finance; and
- human resources.

PowerSchool cites the following positive outcomes from its technology:

- making learning more active and engaging;
- giving teachers better insights into their students' learning needs;
- facilitating personalized learning;
- supporting teacher collaboration; and
- helping to foster parent engagement.

Investment thesis

PowerSchool has two core products:

- School Information Systems (SIS) serves as a system of record for all student data, enrolment, grades and transcripts.
- Learning Management Systems (LMS) is used within the classroom, enabling the digitisation of teacher and student workflows.

PowerSchool offers a 'single source of truth' to teachers, parents, pupils and administrators, removing the need for them to navigate multiple systems, each with its own login and /or add-in. Its open architecture is content-agnostic. SIS and LMS are combined with additional products to enhance the appeal of the platform, resulting in high levels of customer retention and recurring revenues.

Because of its scale and reach within the education market, its customer acquisition costs are low, resulting in strong growth in free cashflows and Ebitda margins of over 30% *(Ebitda is a measure of a company's cash earnings)*.

We believe that PowerSchool's addressable market is large:

- Despite its relative size relative to its competitors, it currently reaches less than 5% of the market globally;
- Among its existing customers, many only currently use four of its 15 products;
- Technology spending currently accounts for only 1.5% of school budgets so has plenty of headroom to grow.

ESG performance

The company published its first ESG report in the first quarter of 2022. This included disclosure of its Scope 1 to 3 emissions and a commitment to net zero as part of majority shareholder, Vista Equity Partners, commitment to the Net Zero Asset Management Initiative.

Corporate governance is mixed. PowerSchool only listed in 2021 and continues to be classified as an emerging growth company. As such, it retains flexibility to make more basic financial and executive-compensation disclosures. It has a classified board and supermajority requirements but of greatest concern is that it used an umbrella partnership corporation ("Up-C") structure for its Initial Public Offering. This adds complexity and additional internal accounting risk. The current CEO, Hardeep Gulati, has been with the company since 2015 and has been working within the K-12 educational technology sector for most of his career. The rest of the management team also have significant relevant experience.

[54] Source: PowerSchool.

Country	US
SDG alignment	4
Product impact score	4
Sales growth FY1	+14.2%
Sales growth FY2	+10.3%
Gross margin	67.4%
Portfolio weight	3.01%

Theme: Mission inclusion

HEADLINE IMPACT STATISTIC

PowerSchool supports over 45 million students worldwide. [54]

Shopify

Positive impact thesis

Entrepreneurs are good for the economy and good for society. Shopify provides a range of software tools to help them start, grow, market and manage a retail business. This is a particularly powerful tool for growth in lower-income countries, where small companies and the self-employed typically account for a larger share of employment.

Shopify was established to level the playing field, remove barriers and friction for independent business owners and 'arm the rebels' against the creeping dominance of physical aggregators (such as Walmart) and online aggregators (such as Amazon). Unlike Amazon, however, Shopify doesn't compete against the merchants who use its site.

Investment thesis

Competing online – reaching consumers and providing them with a competitive shopping experience – increasingly demands technological sophistication. Shopify's platform gives entrepreneurs the tools to compete, freeing its merchants to focus on developing their product and brands.

Shopify's business model exhibits significant network effects: the more merchants use its platform and tools, the more it can invest in delivering additional services to attract new users. The scale economics of its software-based business model are strong as its existing cost base is leveraged to generate greater revenues. We received a vivid illustration of this during the pandemic: online sales grew abnormally rapidly (if unsustainably) during lockdown, driving Shopify's margins sharply higher.

We expect Shopify's market share will continue to increase and the money it earns on each transaction will expand as the company adds further services and incorporates other service providers into its ecosystem.

ESG performance

"Shopify is building a 100-year company with our ecosystem of merchants and partners, our people, our communities, and the world."

Shopify's E&S disclosures are comprehensive and thoughtful. A sustainability narrative runs through its corporate disclosures and through its website. A progressive employer, Shopify provides detailed disclosures on diversity and has taken significant strides to reduce its own emissions; all of its own operations are carbon neutral. Shopify is one of a small handful of companies that have helped to fund permanent carbon-reduction technologies that might otherwise struggle to receive funding. It is the largest corporate purchaser of direct air capture (DAC) carbon removal and recently published guidance on how others can support this activity too.

The corporate integrity of this founder-run business is very high, its culture is strong, and decisions are clearly made with a long-term perspective which creates a creditable organisation that stakeholders can put their trust in. Set against, that, however, we are of the view that its corporate governance deteriorated in 2022, with respect to the proposal at its AGM to create a 'founder share class' (we voted against). Although we continue to believe that its founder, chief executive and chairman Tobias 'Tobi' Lütke is authentic and a significant asset, we also believe a founder should have more 'skin in the game'. In other respects, however, Shopify's corporate governance is better than that of many other US technology companies.

Country	US
SDG alignment	8
Product impact score	5
Sales growth FY1	+20.6%
Sales growth FY2	+20.7%
Gross margin	50.0%
Portfolio weight	1.49%

Theme: Entrepreneurial enablers

HEADLINE IMPACT STATISTIC

5 million full-time jobs worldwide supported by businesses who use Shopify's platform.[55]

[55] Source: Shopify 2021 Sustainability Report.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

SolarEdge Technologies

Positive impact thesis

With the energy industry currently responsible for around three-quarters of greenhouse-gas emissions, a worldwide transition to clean energy is essential to limit global warming. Historically, the high cost of clean energy has given governments, businesses and individuals a reason to postpone the investment necessary to bring about change. But this is changing rapidly. With costs having fallen exponentially for several decades, utility-scale solar photovoltaic (PV) power is now one of the cheapest forms of energy we have.

SolarEdge-designed inverters optimize solar panel output and allow panel-level monitoring and diagnostics. Its equipment is used in both the residential and commercial solar PV markets to improve safety and increase the efficiency of solar panels. Without an inverter, solar PV operates at the output of the least efficient panel (which might be in a shaded area). More recently the company has made acquisitions in the battery storage/e-mobility market.

Investment thesis

The installation of solar panels has grown exponentially as costs have fallen. The US Department of Energy's Solar Futures Study suggests that the world is currently installing enough solar power each year to meet the equivalent of almost 10% of US electricity demand[56].

Inverters are a critical component in solar PV installation, maximising panel efficiency and reliability. SolarEdge's innovation has been a key differentiator. Each generation of its inverters has expanded the addressable market by offering:

- larger capacity;
- improved power throughput; and
- easier installation (and so lower labour costs) by reducing additional components.

SolarEdge has grown its market share significantly in the recent past and is now the No.1 supplier to the residential market[57]. It also benefits from a more globally diversified customer base than many of its peers. The brand is trusted by installers and it leads on innovation, with a best-of-breed product and unique IP protected by a burgeoning patent portfolio.

SolarEdge's strategy of optimising each panel and using a central inverter has broader applications than its nearest competitor's solution. It also makes it easier to attach battery storage to home energy systems. It is now ramping up battery production to sell in conjunction with its solar projects. Higher power variants of its inverters are creating opportunities for it in the larger commercial and utility-scale PV markets. This market is expected to continue to grow for decades to come.

ESG performance

SolarEdge's stated vision is to shape the future of sustainable energy production and storage. It has built a strong culture around this objective. Current chief executive Zvi Lando has been with the business since joining as head of sales in 2009 and took over from the former CEO, the late Guy Sella.

SolarEdge makes significant ESG disclosures that are consistent with its vision. Its own operations are managed to international environmental and safety-management standards. While most of its manufacturing is outsourced to established electronics manufacturers, these companies are themselves well-regarded from an ESG perspective and subject to oversight from some of the world's largest consumer electronics brands.

The company's 2021 Sustainability Report highlighted its progress in reducing emissions, improving safety performance and managing its supply chain. Corporate governance is slowly improving although it retains various provisions (such as a classified board), that arguably should have been removed by now (we have voted against non-executive appointments on this basis). In response to shareholder feedback, concerns regarding its executive compensation – both the scale of awards and the lack of performance conditions to determine whether share options vest – have been addressed.

Country	US
SDG alignment	7
Product impact score	9
Sales growth FY1	+58.1%
Sales growth FY2	+29.2%
Gross margin	26.9%
Portfolio weight	4.10%

Theme: Electric shock

HEADLINE IMPACT STATISTIC

Emissions of 23 million tonnes of greenhouse gases avoided annually through the use of SolarEdge systems.[58]

[56] US Dept of Energy, Solar Futures Study, 2021.
[57] https://www.greentechmedia.com/articles/read/solaredge-technologies-and-enphase-control-80-of-us-residential-solar-marke
[58] Source: SolarEdge 2021 Sustainability Report.

STAARSURGICAL

Staar Surgical

Positive impact thesis

Myopia (short-sightedness) is a growing problem globally caused by increased screen time, more time spent studying and less time spent outdoors. Estimates suggest that half the population will suffer from the condition by 2050. Earlier onset of myopia leads to greater risks in later life (at worst, blindness). Myopia is a particular problem in Asia, where rates amongst young people are very high.

Staar developed the first foldable intraocular lenses (IOL) for cataract sufferers. These have subsequently become the standard of care. However, implantable collamer lenses (ICL) for myopia remain expensive relative to more established solutions such as glasses, contact lenses and Lasik. Treatment costs are typically not yet re-imbursed by insurers or national healthcare systems.

Investment thesis

We believe the power of this business and the size of its addressable market is underappreciated by the market.

- An estimated 3.8 billion people suffer with myopia and presbyopia. [59]
- Four million refractive surgeries are performed each year. [59]
- $70 billion is currently spent on correcting eyesight problems each year: [59]
  - -$48bn on glasses;
  - -$16bn on contacts; and
  - -$6bn on Lasik surgery.

By way of comparison, Staar Surgical's current revenues are c.$300 million per year.

Staar has a cornered resource in the form of its proprietary 'collamer'. It delivers a 'quiet in the eye' performance that has not been replicated by any competitors. There are no other implantable lenses that are approved for sale globally. The chemistry behind this unique formulation is a trade secret; it cannot be reverse engineered.

Relatively cheap to manufacture, Staar's ICL lenses provide the company with high gross margins. This has enabled it to reinvest in growth and scale up its business. There is further opportunity for it to leverage scale economies in a number of areas:

- sales and marketing;
- building relationships with surgeons and regulators; and
- manufacturing capacity utilisation (currently low).

We therefore expect it to generate high returns on invested capital and free cashflow growth over the next few years.

ESG performance

Staar's environmental and social disclosures have improved significantly, and it seems to be appraising how it can reduce the environmental impact of every aspect of its operations including energy use, travel and packaging. Its manufacturing operations are powered by renewables but having only just established baseline emissions for its operations, it has yet to commit to emission-reduction targets. These operational ESG improvements are reflected in third-party ESG ratings.

Corporate governance is good, with high levels of support at the AGM. Board diversity (and independence) has improved significantly and it has significant relevant experience (the incoming CEO has a background in the ophthalmic industry). Executive compensation receives high levels of shareholder support but, counter to best practice, vesting of its long-term incentive plan isn't determined by the company's financial performance.

[59] Staar Surgical investor presentation, June 2022.
[60] Source: Artemis estimate based on average selling price and 2021 revenues.

Country	US
SDG alignment	3
Product impact score	4
Sales growth FY1	+23.4%
Sales growth FY2	+24.7%
Gross margin	79.1%
Portfolio weight	1.32%

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

179,000 patients treated in 2021. [60]

Teradyne

Positive impact thesis

In its own words, Teradyne helps "to automate two of manufacturing's most critical elements: repetitive manual tasks and electronic testing."

In electronic testing, Teradyne's equipment is used to test around 50% of the world's semiconductors. Semiconductors and digitalization underpin many green technologies as well as technological progress in communication, transport, healthcare and education. Teradyne's tests allow chipmakers to verify chip quality and to detect manufacturing anomalies, leading to higher production yields. Its devices are also used in semiconductor manufacturing to improve device performance.

Task automation means providing automation solutions in the form of collaborative robots ('cobots'). Teradyne acquired Universal Robots, an industrial automation business, in 2015. Tasks such as recycling, harvesting and distribution are often allocated to the least fortunate in society. Cobots provide an opportunity to automate repetitive, dangerous and toxic tasks. They therefore have the potential to improve the quality of life for millions of workers.

Investment thesis

Semiconductor testing has matured into an oligopoly. Because testing machines are highly specialised and optimised around the technology of the day, market shares in this sector tend to be stable. Typically, companies only win market share when the customer landscape changes or when there is a technological shift. This stability gives Teradyne a great degree of pricing power, resulting in a stable and strongly cash-generative core business. Furthermore, a number of dynamics suggest that demand for the company's semiconductor testing business should continue to grow:

- Moore's law (the observation that the number of transistors crowded into a dense integrated circuit doubles every two years) tends to lead to increased testing intensity over time;
- The growth of cloud and edge computing also leads to increased semiconductor testing intensity;
- The growth in demand for 'power semiconductors' (driven by demand for electrification, EVs and renewables) should be a third driver for demand for system testing.

Although Universal Robots currently accounts for only 10-15% of its revenues, Teradyne believes that cobots could eventually become its largest division. Cobots are simpler and safer than traditional heavy industry robotics. This, combined with their lower cost to deploy (they can work alongside human employees) creates a strong opportunity for Teradyne to take share from the existing robotics industry, where margins are high, and grow the robotics market beyond just those industries that are already heavily automated (such as auto manufacturing). A number of inter-related dynamics suggest that investment in automation could grow rapidly:

- near-shoring;
- a desire for greater supply-chain resiliency;
- labour shortages; and
- inflationary pressures.

ESG performance

Teradyne's ESG disclosures and performance have both improved significantly in a short time. Although it has made environmental disclosures since 2017, the most recent set (published in 2022) were aligned with Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) standards and include disclosures of the company's greenhouse gas, energy, water and waste emissions.

The company has also established targets for reducing its environmental impact, including using 100% renewable energy by 2025. Teradyne has a strong egalitarian culture with high levels of employee engagement and low staff turnover. Diversity and inclusion seem to be receiving serious consideration throughout the company.

Corporate governance is good. It has a high-quality board (although the tenure of some of the non-executive directors is now quite long) and it typically receives high levels of shareholder support at its AGMs.

[61] Source: International Society of Automation/ Travelers Insurance.

Country	US
SDG alignment	9
Product impact score	4
Sales growth FY1	-15.0%
Sales growth FY2	-1.6%
Gross margin	59.0%
Portfolio weight	2.05%

Theme: Efficiency kings

Headline impact statistic

Manufacturing automation can help reduce or eliminate three out of the five leading causes of workplace injuries. [61]

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Tesla

Positive impact thesis

Tesla is a founder-run, global leader in designing, making and selling electric vehicles (EVs). Its explicit mission is to "accelerate the world's transition to sustainable energy".

Air pollution kills an estimated 10.2 million people globally each year (Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem, April 2021), and transportation (mostly passenger cars) is responsible for 14% of the world's emissions of greenhouse gases[62]. Electric vehicles have demonstrably lower greenhouse-gas emissions over their lifecycles (versus internal combustion engines) and those emissions are falling as the proportion of electricity generated by renewables grows.

Tesla is the poster child for a radical, disruptive and transformational business. Over the last 10 years, it has battled incumbency and the lobbying power of 'big auto' and 'big oil' to push forward the development and adoption of electric vehicles, solar energy and lithium-ion battery storage. It has overcome the design, styling and performance issues that had historically limited broad adoption of EVs. It has also pressed incumbent auto manufacturers to invest heavily in developing their own EVs, accelerating their adoption.

Investment thesis

The potential market for electric vehicles is large (worldwide 2022 electric vehicles sales were worth US$347Bn - Source: Statista) and in its exponential growth phase. Tesla is the clear leader in this market by units sold, revenues and cashflow. We believe that the market underappreciates the sustainability of its competitive advantage relative to its peer group, which is a motley crew of sub-scale pure play start-ups and structurally challenged incumbents.

Tesla exhibits five of the seven powers from the framework that we use for assessing a company's competitive advantage. This gives us confidence that it can continue to generate high returns and high rates of free cashflow growth for the foreseeable future.

1. Tesla is counter-positioned versus incumbent car manufacturers. It has forced them to invest heavily in new (loss-making) technology and devalued their existing combustion engine-based businesses.
2. To the extent that Elon Musk is an asset (we accept he can also be a liability) he is a 'cornered resource' that cannot be poached by the competition.
3. Driven by cumulative production advantages, Tesla is the only car manufacturer that is making electric vehicles profitably. It is leveraging its scale across all elements of its income statement.
4. We believe that Tesla is a full innovation cycle ahead of the competition and is producing a highly complex device at a significantly greater scale and profitability than the competition. Its vehicles continue to lead on range (addressing 'range anxiety'), recharging flexibility, handling and safety characteristics, infotainment features, electric powertrain systems and software.
5. Brand power. Tesla is one of the best-known brands in the world without having paid a cent for advertising, either on TV or online.

ESG performance

In the past, Tesla's ESG disclosures have been mixed and some aspects of its operational performance have been controversial. In part, this was a consequence of developing a new value chain and pursuing aggressive growth. Meanwhile, its 'first principles' approach, while a differentiator in an engineering context, hasn't always delivered better results in a health and safety context. That said, in the longer-run, Tesla's vertical integration (a key differentiator versus its peers) should enhance operational efficiency and reduce operational ESG risks versus those peers. Manufacturing safety, a high-profile issue in the past, is now much improved.

The company's 2021 Impact Report provided significantly more detail on the progress it is making on its operational, environmental and social performance. It also recognised that it has further to go. It marked the first time that Tesla had reported Scope 1 and 2 emissions (significantly lower than had been estimated) and 'use-phase' emissions for its vehicles. Tesla has committed to Science Based Targets within 24 months.

Mapping the greenhouse gas emissions in its upstream supply chain is a priority. Every electric vehicle battery will require a 'passport' in the EU by 2026 and Tesla is one of two manufacturers to have completed a 'battery passport' proof-of-concept.

Country	US
SDG alignment	7
Product impact score	8
Sales growth FY1	+56.1%
Sales growth FY2	+34.1%
Gross margin	26.4%
Portfolio weight	1.22%

Theme: Electric shock

HEADLINE IMPACT STATISTIC

8.4 million tonnes CO_2e saved in 2021. [63]

[62] IPCC, 2014
[63] Source: Tesla 2021 Impact Report.

Corporate governance remains controversial and we have discussed it in our meetings with the company. Elon Musk is simultaneously the most controversial and most visionary CEO of the last 20 years having been a founder of PayPal, SpaceX, Tesla, Neuralink and the Boring Company. Few founders have risked their own capital and reputations to the same extent and his compensation needs to be viewed through this lens. Its supermajority requirements, classified board and the extent of insider (Musk's) ownership have (seemingly) enabled the long-term and unconventional thinking that have been critical to success. That said, we are very aware that the founder's recent behaviour is potentially damaging to the Tesla brand, which is a concern.

His cross ownership with his other companies, his management style, his hubris and his ultimate control over the company create a constant question mark over his position and his authenticity. However, we view his 'all-in' approach to investing in Tesla and achieving its mission – to accelerate the world's transition to sustainable energy – as evidence that he remains aligned and authentic.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Tetra Tech

Positive impact thesis

Tetra Tech is a global engineering and consulting firm. It supports projects that:

- provide millions of megalitres of clean water;
- reduce or avoid tonnes of greenhouse-gas emissions; and
- generate multiple megawatts of renewable energy.

Its multi-disciplinary teams provide expertise in:

- water treatment and supply;
- environmental management and environmental science;
- waste treatment;
- site assessment;
- permitting for renewable energy projects;
- designing green buildings; and
- international development.

In 2021, Tetra Tech set a target to be carbon-negative in its own operations by 2030. It also initiated the One Billion People Challenge. Its aim is to improve the lives of a billion people worldwide by supporting projects that reduce emissions, treat, save or reduce water, generate renewable energy and protect, manage and restore natural habitats. It now has the interest rate of its debt facilities linked to it achieving the One Billion People Challenge.

Investment thesis

The company will be a beneficiary of the increase in funding available for environmental and clean energy programmes:

- The Infrastructure Investment and Jobs Act makes $1.2 trillion available over 10 years for infrastructure spending, including on water infrastructure and a new green grid;
- The $280 billion Chips Act promotes the domestic manufacture of semiconductors in US;
- The Inflation Reduction Act, a $369 billion package of climate and clean energy programmes.

Similar initiatives in Europe will support state and local spending on green projects.

Tetra Tech earns a high-teens return on capital and this has been increasing for several years. This makes it a strong and stable compounder of free cashflow. The recent acquisition of RPS adds new revenue opportunities in Europe and we are confident that Tetra Tech will be able to improve the profitability of this business over the next two-to-three years.

As a consulting business, its biggest asset is its employees, who tend to be postgraduate qualified engineers and scientists. Because it offers its employees diverse and high-quality work in their chosen fields of expertise, staff turnover is low (less than 1% per annum). This, in turn, feeds Tetra Tech's expertise and helps it build relationships to successfully win bids.

ESG performance

As a company that helps other businesses to improve their ESG performance, Tetra Tech needs to be bold in its own operations. And it is. It has long published regular ESG reports and has established comprehensive targets for improvement. Having significantly reduced its operational emissions per employee since 2009, it has most recently committed to be carbon negative in its own operations by 2030.

Tetra Tech has an experienced and authentic senior management team and corporate governance is good, with historically high levels of shareholder support.

[64] Source: Tetra Tech 2022 Sustainability Report.

Country	US
SDG alignment	9
Product impact score	7
Sales growth FY1	+7.1%
Sales growth FY2	+5.4%
Gross margin	20.6%
Portfolio weight	3.41%

Theme: Unsung eco warriors

Headline impact statistic

20.6 million tonnes CO2e emissions per year avoided or captured. [64]

Tomra Systems

Positive impact thesis

Plastic packaging is ubiquitous. Most of that packaging is only used once. That there is too much plastic in our oceans (and in the digestive tracts of the organisms that live there) is not news. Less well appreciated is the extent to which plastic manufacture contributes to the climate crisis. Most plastics are manufactured from fossil fuels: each tonne of plastic manufactured results in around two tonnes of greenhouse gases being released into the atmosphere (that figure can more than double once final disposal is taken into account)[65].

Tomra is the market leader in the design, manufacturing and sale of sensor-based technology for automating the recovery and recycling of valuable resources. It sells sorting and recovery technology to three markets

1. Collection
2. Recycling
3. Food

Since the industrial revolution, the linear economy model (take – make – dispose) has been dominant: goods have been manufactured, used and then discarded. While this model has been responsible for the majority of the environmental externalities that we experience, it is incredibly difficult to unpick. Which means that even in the context of the type of companies we invest in, companies like Tomra, which are enabling a more circular economy, stand out as hugely transformational.

Investment thesis

Tomra has over 40 years of experience in reverse-vending, expanding into complementary materials sorting in the 1980s. It helped to pioneer reverse-vending, an industry that received a huge boost in 2006, when Germany introduced the first major deposit return scheme. It sold 9,000 machines in Germany that year.

Having had a significant head start on the competition and built a strong reputation, Tomra is now the global leader in reverse vending machines (RVM) with 85,000 machines in use and a market share of around 70%. Deposit return schemes are being rolled out in Germany, Lithuania, Canada and Ireland. The big driver is the EU's Directive on Single-Use Plastics, which requires member states to have a 90% collection rate for the materials by 2029-30. Deposit return schemes are the only viable option to meet these targets as there are no other available waste-recovery technologies with the proven recovery rates needed. Australia, the US and the UK all have aspirations to improve in this area. China, which formerly disposed of much of the West's plastic waste, has woken up to the resulting pollution problems and banned the importation of unsorted contaminated waste. However, waste exporters in the West who use Tomra's advanced sensor-based sorting technology to offer the lowest contamination and highest purity levels can continue trading with China - and so gain a competitive advantage.

There is a tremendous runway for growth over the long-term. The company recently increased its revenue guidance quite aggressively. If those goals are met, we believe there is valuation support to Tomra's share price, with potential unappreciated upside from its food safety business; there is an enhanced desire for food safety and traceability post-Covid.

ESG performance

Tomra's disclosure of its operational environmental impacts – emissions, energy, waste, water – is good. It has been reducing the emissions-intensity of its business although no formal targets have yet been set. It refocused its sustainability strategy in 2020 following a materiality analysis and recently committed to:

- Reaching net zero by 2050;
- Using 100% renewable energy by 2030;
- Reducing its Scope 1 emissions by at least 80% by 2030; and
- Publishing SBTi-aligned targets by 2024

Corporate governance is fair. The reappointment of its board is bundled, an approach that runs counter to the Norwegian Code of Practice for Corporate Governance. Historically we have had concerns regarding the potential 'overboarding' (having too many directorships) of the company's chairman although this has improved a little. Tomra's board exhibits the requisite levels of independence and there are two employee representatives on the board. Executive compensation policies are uncontroversial.

Country	Norway
SDG alignment	12
Product impact score	9
Sales growth FY1	-1.2%
Sales growth FY2	+13.6%
Gross margin	41.4%
Portfolio weight	4.40%

Theme: Circular economies

HEADLINE IMPACT STATISTIC

Tomra's reverse vending machines (RVM) collect more than 40 billion empty cans and bottles every year. [66]

[65] Carbon Tracker - The Futures Not in Plastics, Sept 2020
[66] Source: Tomra.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Universal Display

Positive impact thesis

In the face of unwavering consumer demand for electrical devices, increasing their efficiency is critical. PHOLED (phosphorescent organic light-emitting diode) technology can be used to make better, more efficient screens for electronic devices.

PHOLED screens:[67]

- are 40% more energy efficient than their LCD equivalents;
- are significantly lighter (they contain far less plastic);
- don't use hazardous substances like cadmium or indium phosphide;
- offer advantages in terms of form factor (folding screens); and
- provide higher image quality.

Universal Display is an intellectual property company that researches, markets and licenses PHOLED technologies.

Investment thesis

Universal Display captures value by developing its patents and building partnerships with electronics manufacturers. Its experienced management team has been focused on driving the growth of PHOLED technology over multiple decades. By investing in process technologies such as encapsulation and OLED structures it has pushed the adoption of its core IP, the phosphorescent emitter. The investments it has made are now paying off as PHOLED sees greater adoption.

Its future success will be driven by further increases to the efficiency of OLED displays driven by phosphorescent blue OLED emitters, which promise to greatly enhance the prospects for OLED displays by allowing for improved brightness efficiency and lower costs. This should increase royalty revenues and drive significant growth in 2024.

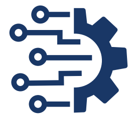
Longer term, the development of organic vapour jet printing (OVJP) will allow OLED displays to be 'printed'. This could both increase the number of applications for and dramatically reduce the costs of, OLED displays, which in turn would drive further demand.

ESG performance

Universal Display's disclosures are good for a company of its size and it regularly wins awards for its ESG performance. It has published two CSR reports and reports in a quantitative manner on most relevant ESG issues, including the Principal Adverse Impacts (PAIs) set down by Sustainable Finance Disclosure Regulation (SFDR). It established baseline emissions in 2021. These are relatively low (although manufacturing is outsourced) and it has committed to setting climate targets. Meanwhile PPG Industries, to whom manufacturing is outsourced, has good ESG performance (AA-rated by MSCI).

Corporate governance is mixed. Shareholder rights are well-respected and the board is experienced. But the average tenure of board members is 17 years and their average age is 71. The CEO is 70 and the CFO is 74, so succession is a serious question. The audit committee isn't independent. Following a significant vote against executive compensation policies in 2021, its reward structure has improved. Even after this, the executive remains well paid and receives very generous legacy pension arrangements. Insider ownership is generally diminishing and two of its non-execs have pledged stock in the past (there is no anti-pledging policy).

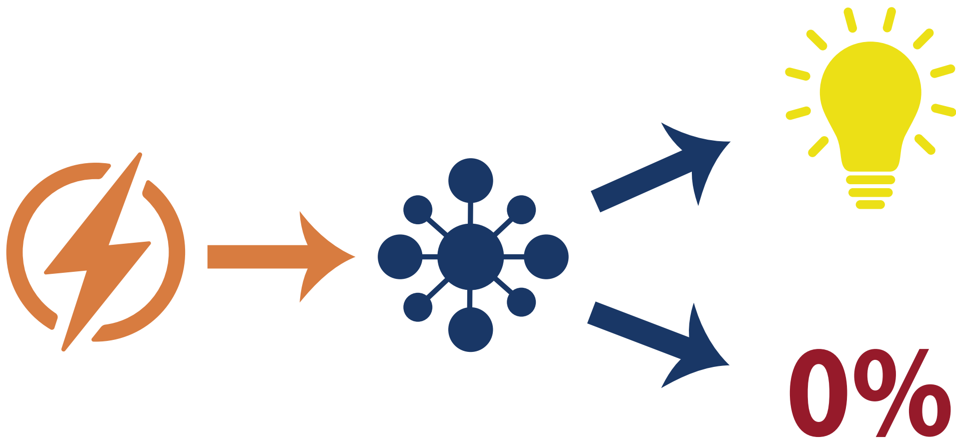
Country	US
SDG alignment	9
Product impact score	3
Sales growth FY1	+8.1%
Sales growth FY2	+6.1%
Gross margin	77.8%
Portfolio weight	1.75%



Theme: Efficiency kings

HEADLINE IMPACT STATISTIC

PHOLED emitters reduce energy consumption by >50% compared to LCDs in smartphones and TVs.[68]



[67] Universal Display investor presentation, Nov 2022.
[68] Source: Universal Display Corporate Social Responsibility Report 2021.

Veeva Systems

Positive impact thesis

As a Public Benefit Corporation (PBC), Veeva has two explicit objectives:

1. "To help make the industries it serves more productive…" enabling faster, cheaper clinical trials that are less burdensome and more accessible to patients and removing competitive barriers from the industry.
2. And "to create high-quality employment opportunities" it is targeting 10,000 employees by 2025, up from around 5,000 in 2022.

Notably, it is one of relatively few listed companies to be incorporated as a Public Benefit Corporation (PBC). PBC status aligns a company's core values with its legal charter.

The cost of developing new drugs has doubled in the last 30 years due to a combination of factors:

- Increasing complexity of clinical trials;
- Larger trial sizes;
- More data sources to integrate;
- Greater focus on targeting chronic and degenerative diseases; and
- Higher failure rates for drugs tested in earlier-phase clinical studies.

Veeva's software improves the management and regulatory compliance of clinical trials. By digitizing complex clinical trials, it reduces the burden on patients, clinicians and investigators.

Investment thesis

Veeva has dedicated itself to helping life science companies innovate and deliver new medicines and therapies in one of the most complex, inefficient and heavily regulated industries in the world. A positive disrupter in the life sciences industry, it is modernising the product development journey of drugs that improve lives and cure illnesses.

Founder and CEO Peter Gassner pioneered the 'vertical software' cloud category when he founded Veeva in 2007. His belief was that vertical cloud software could improve productivity and efficiency in niche industries such as pharma and biotech, which were poorly served by generic solutions. He is a passionate anti-non-compete and employee-rights advocate and owns 12% of the company's outstanding shares.

The company focuses its efforts on building best-in-class solutions and benefiting from a virtuous cycle of customer referrals. It has captured scale economies within its industry by leveraging its reputation and relationships. Once signed, customer retention is high because the solutions work and switching providers is painful. This generates a long tail of high-margin recurring revenues. Veeva has constantly delivered high returns on invested capital.

The market seems to fear that Veeva's commercial business is approaching saturation point and may be underestimating the strength of its offering in the research and development business, the number of new products it is launching and the size of the market opportunity this will present.

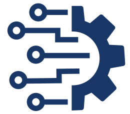
ESG performance

Veeva's incorporation as a Public Benefit Corporation means that its 'mission' is aligned with its legal charter. It currently makes only limited formal E&S disclosures although anecdotal evidence on employee practices is favourable and Veeva is currently tracking Scope 1, 2 and 3 emissions with a view to reporting on them publicly in the second half of 2023.

Corporate governance is fair. It recently declassified its board and improved shareholder rights. The board is large and experienced in tech and life sciences. Co-founder, Peter Gasser is CEO (and the majority shareholder), and co-founder Matthew Wallach remains as a non-exec. The company's dual share-class structure, through which Gasser has controlled the company, is set to expire in 2023. Executive compensation is unconventional. Its executives all have similar base salaries, with the rest of their compensation coming in the form of equity grants although none have performance conditions attached.

[69] Source: Veeva.

Country	US
SDG alignment	9
Product impact score	6
Sales growth FY1	+16.2%
Sales growth FY2	+13.1%
Gross margin	74.6%
Portfolio weight	2.19%



Theme: Efficiency kings

HEADLINE IMPACT STATISTIC

Veeva's goal is to reduce clinical trial time and lower costs by 25%.[69]

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Veracyte

Positive impact thesis

Veracyte's stated mission is 'to improve the lives of patients by resolving diagnostic uncertainty and reducing risky, costly and often unnecessary surgeries.' Its tests allow patients to be risk-assessed and treated at lower cost and without the need for painful invasive biopsies.

Areas of treatment currently include:

- thyroid cancer;
- prostate cancer;
- breast cancer;
- lung cancer;
- interstitial lung disease;
- bladder cancer; and
- colon cancer.

Its technology combines RNA sequencing and machine-learning algorithms to produce genomic tests that can estimate the risk of diseases in a zero or minimally invasive way.

Investment thesis

Veracyte leverages a combination of various technologies and advances such as genomics, big data and machine learning to improve diagnostic insights at an earlier stage of the patient pathway. This carries a triple benefit:

1. improved outcomes via early detection, speed of care and reduced waiting lists;
2. reduced need for painful biopsy surgery; and
3. significantly lower costs (unnecessary biopsy surgery, late diagnosis etc.)

Its products exhibit significant counter-positioning versus traditional procedures (by removing the need for them). Ultimately, it is re-writing the standards of care in cancer diagnostics.

The vast store of genomic information it has amassed, combined with iterative machine learning, has created a unique cornered resource from which it is developing new products. It continues to innovate and to move diagnostics to an earlier phase of the patient pathway, with nasal swabs for early identification of lung cancer being a potential screening tool in an area of oncology that currently has poor diagnostics and therefore terrible survival rates.

We believe Veracyte is approaching scale economics and – given the characteristics of its business model – we believe it has the potential to deliver operating margins of 20% (versus approximately breakeven today).

ESG performance

Veracyte is a relatively small company, with four laboratories in the US and fewer than 800 employees. As such, its E&S disclosures are relatively limited although diversity is very good and something the company is rightly proud of.

Corporate governance is fair in the context of its closest peers. Its classified board arrangement is due to expire in 2022. Compensation is not excessive although long-term incentives mostly lack performance conditions (instead, they are 'time-based' and begin to vest after one year; an arrangement we don't support). Nonetheless, the company has historically received high levels of shareholder support at its AGMs. The board is highly experienced in pharmaceuticals, biotech, med-tech and clinical trials.

Country	US
SDG alignment	3
Product impact score	8
Sales growth FY1	+35.6%
Sales growth FY2	+13.4%
Gross margin	65.5%
Portfolio weight	0.68%

Theme: Healthy healthcare

HEADLINE IMPACT STATISTIC

Over 100,000 patients benefited from Veracyte's diagnostic tests in 2022. [70]

[70] Source: Veracyte.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Vitasoy

Positive impact thesis

Changing what we eat is critical to tackling climate change. It is also fundamental to reducing water stress and to increasing biodiversity. In addition, studies suggest plant-based diets provide a range of health benefits. We therefore believe that successfully investing in low-carbon food providers is arguably one of the most impactful investments we can make on behalf of our clients.

Vitasoy is a Hong Kong-based manufacturer of plant-based protein foodstuffs (principally soya milk). It was established to provide a protein-rich, plant-based meat substitute for the people of Hong Kong following World War II. It has retained this health and sustainability focus and it now forms an important part of its brand.

Vitasoy has been in the vanguard of plant-based protein for decades. It is one of Asia's leading producers of plant-based food and beverages. China's love affair with meat is a relatively new phenomenon but the environmental implications are global. The ripple effect of China embracing more plant-based protein would therefore be enormous.

Investment thesis

The global plant-based milk market is worth around $25 billion and growing quickly[71]. Less well-appreciated is the size of the total dairy market, which currently sits at $720 billion. Milk accounts for $500 billion of this spending[72].

Vitasoy sells its products in around 40 markets, with manufacturing facilities in Hong Kong, China, Singapore, Australia and the Philippines. The real engine behind its growth is China, where rates of penetration compared to Hong Kong, where it is well established, are still relatively low. The Chinese government has indicated that because of environmental concerns and health benefits, it wishes to halve meat consumption. Soya-based protein is ideally placed to capitalise on this trend. Vitasoy continues to develop new products based on soy and other plant-based proteins. Its strong brand, sustainability and supply-chain credentials support a much larger opportunity, particularly in ethically sourced soya.

We therefore believe there is a long runway for plant-based milk and food products to continue to disrupt food sales in China and worldwide. In China, the pandemic resulted in a leap in online sales, a market in which Vitasoy has increased its market share. Impressive cost controls have led to materially higher profits and increased cashflows.

ESG performance

Vitasoy has been thinking about sustainability since it was established in 1940 and continues to set and incorporate new objectives for its products and its operational practices. It has published eight, independently verified annual sustainability reports to international standards. Recent progress includes defining new policies for reducing waste, water usage and deforestation. It also completed its first Scope 3 inventory of its greenhouse gas emissions and has set comprehensive targets relating to:

- energy use;
- water;
- packaging; and
- recycling.

While it missed targets for energy efficiency, this was due to test runs at a new factory and changes in production due to the pandemic. External recognition for these efforts is high and the company is well-regarded by third-party ESG rating agencies.

Established in 1940 by Dr K.S. Lo, the company's long-term focus on sustainability has been enabled by the ongoing and significant presence of the Lo family on its board. Set against this, that also means that corporate governance is mixed (albeit not atypical for a Hong-Kong listed company). Unlike many companies in Hong Kong, Vitasoy isn't a controlled company (there is no majority shareholder), but the board composition suggests otherwise. That said, corporate governance seems to be taken very seriously as evidenced by the extent of its disclosures on director training etc.

Country	Hong Kong
SDG alignment	12
Product impact score	7
Sales growth FY1	+3.8%
Sales growth FY2	+10.9%
Gross margin	47.3%
Portfolio weight	1.72%

Theme: Low-carbon food

HEADLINE IMPACT STATISTIC

Soy milk has c.70% less greenhouse-gas emissions per kg than cows milk.[73]

[71] Strategic Market Research.
[72] Statista.
[73] Source - Joseph Poore and Thomas Nemecek, 2018.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

INDEPENDENT QUANTIFICATION OF THE FUND'S *NET* IMPACT

As we outline in the *'How we measure impact'* section of this report, we undertake a detailed impact assessment for every company in our portfolio. This includes an appraisal of any negative or controversial aspects of its products or practices. In our experience, this bottom-up assessment is the best way to capture the idiosyncratic nuances of the companies we consider investing in.

At the same time, however, we are also open to alternative forms of analysis and to other opinions; we are willing to challenge the assumptions we have made. So, for this year's report, we sought to increase transparency by providing an alternative perspective of the portfolio's aggregate impact. To do this, we used the Upright Project model, an information-integration algorithm that consolidates data from scientific research and public statistical databases. It shows what resources companies use and what they achieve by using them; every company has a positive impact of some form or another, but there are always inherent costs.

Upright therefore calculates a net impact ratio for each company:

$$\frac{\textit{positive impacts} - \textit{negative impacts}}{\textit{positive impacts}} = \textit{net impact ratio}$$

The maximum score is 100% (for a theoretical company with no negative impacts); there is no minimum value. By reporting our net impact in this way, we are providing a further degree of granularity.

The results for the Artemis Positive Future portfolio are shown opposite.

As we (and you, the reader) would hope, the aggregate net impact of the portfolio is clearly positive. It shows a net impact ratio of +58% versus +8% for the fund's benchmark, the MSCI AC World Index.

According to Upright's analysis, the highest-scoring, most impactful holdings in our portfolio were our investments in 'resource-light' educational and healthcare businesses. These included:

- Coursera (online university courses);
- Dexcom (blood glucose monitors);
- Insulet (glucose delivery devices); and
- IDP Education (English language testing and university placement services).

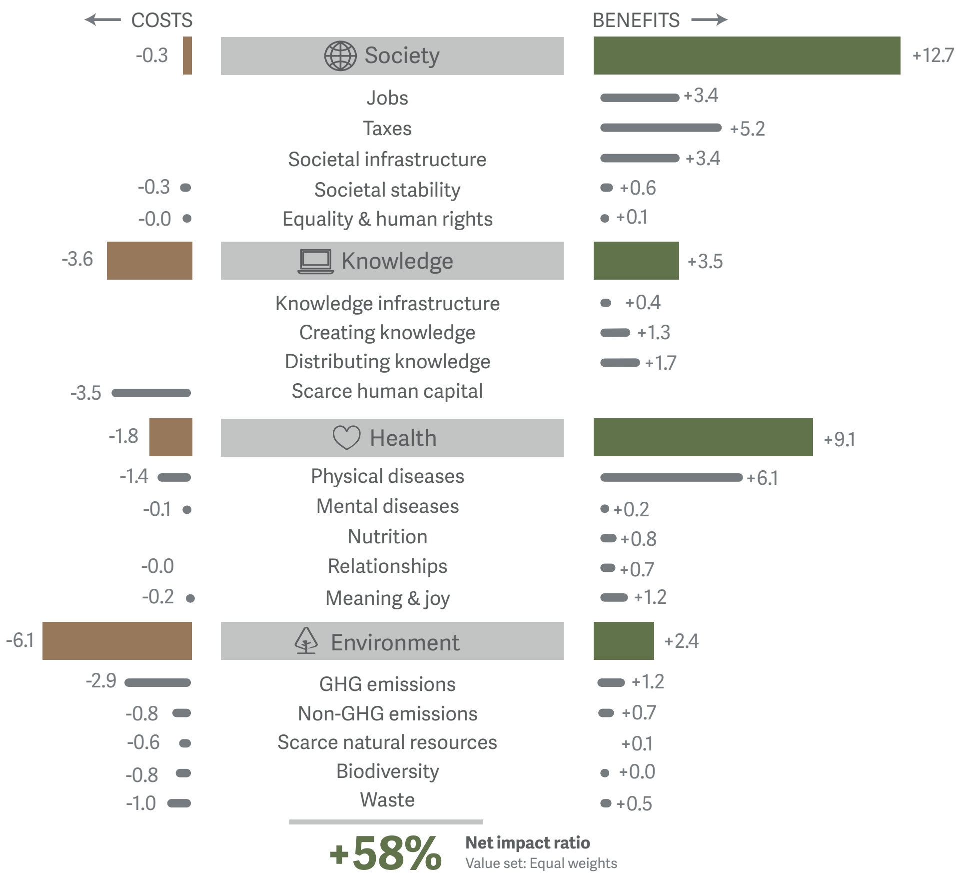
The lowest-scoring holdings, meanwhile, tended to be resource-intensive manufacturing businesses:

- Tesla (electric vehicles, battery storage and solar PV);
- Teradyne (semi-conductor testing equipment and automation); and
- Nibe (heat pumps).

Yet while Upright's model identifies that these businesses are more resource-intensive than some of our other holdings, it does recognise that they create value for society on net basis.

That Upright's views diverge from ours in some instances is to be welcomed. Authentic impact investing requires a high degree of transparency, and negative impacts need to be as well-reported and considered as positive impacts. Impact investing is a rapidly evolving area and Upright's analysis allows us to look at our portfolio's impact through a new lens, helping us to consider what type of impact is being generated and – where it is potentially insufficient – what remediation is needed (whether that be engagement or divestment). As ever, we would welcome your feedback on this process and on the individual company assessments.

Artemis Positive Future strategy: net impact



Source: Upright, 31 December 2022.

The EU taxonomy for sustainable activities

Designed to drive investment towards genuinely sustainable activities, the taxonomy is "a tool to help investors, companies, issuers and project promoters navigate the transition to a low-carbon, resilient and resource-efficient economy".

It sets down detailed standards (referred to as 'technical screening criteria') for benchmarking companies and industries which, through their products and services, make a substantive contribution to six environmental objectives. In addition, compliance with the EU taxonomy requires that a company must 'do no significant harm' (DNSH) and meet minimum safeguards in areas such as corruption and human rights.

The six environmental objectives of the EU Taxonomy are outlined below, although to date, technical screening criteria have only been published for the climate change objectives.

Climate change mitigation

Climate change adaptation

Sustainable and protection of water and marine resources

Transition to a circular economy

Pollution prevention and control

Protection and restoration of biodiversity and ecosystems

Our approach to the EU taxonomy

With its focus on environmental objectives, the EU taxonomy currently has a narrower focus than the Artemis Positive Future strategy, which invests in companies addressing environmental *and* societal problems. Although we would naturally expect meaningful alignment with the Taxonomy, the wider sustainability objectives of the fund mean we don't aim for a minimum level of compliance, nor does it drive our investment process.

One well-documented challenge is that companies' disclosure regarding their compliance with the EU taxonomy is still limited; at this point, few companies disclose what proportion of their revenues, capital expenditure or operational expenditure is aligned with the taxonomy.

That said, the companies that interest us tend to have a clear focus, with a narrow range of products and services. This makes determining their alignment with the taxonomy a little easier. One of the reasons we tend not to invest in very large companies is that increased scale often (although not always) means compromising on delivering impact. To a lesser extent than many investors, we therefore don't face the challenge of trying to determine what proportion (if any) of a conglomerate-type business is taxonomy-aligned.

The EU taxonomy therefore provides a useful framework to use as part of our assessment of positive (environmental) impact. All of the companies we consider for investment are mapped against the appropriate technical screening criteria and based on our own analysis, corporate disclosures and our discussions with companies, as at the end of FY2022, 16.3% of the portfolio was EU taxonomy-compliant (based on taxonomy-aligned revenues).

Holdings that align with the EU taxonomy

Alfen Beheer – 100%* of revenue

Sustainable activities: 4.10 'Storage of electricity'; 4.9 'Transmission & distribution of electricity'; and 6.4 'Infrastructure for low carbon transport (land transport)'.

ChargePoint – 100%* of revenue

Sustainable activity 6.4 'Infrastructure for low carbon transport (land transport)'.

Deme – 28%* of revenue

Sustainable activity 4.3 'Production of electricity from wind power'

First Solar – 100%* of revenue

Sustainable activity 3.1 'Manufacture of low-carbon technologies'.

Nibe – 49%* of revenue

Sustainable activity 4.16 'Installation and operation of electric heat pumps'

SolarEdge – 100%* of revenue

Sustainable activity 3.1 'Manufacture of low-carbon technologies'.

Tesla – 100%* revenue

Sustainable activities 3.1 'Manufacture of low carbon technology'; and 6.5 'Passenger cars and commercial vehicles'.

Tomra – 60%* of revenue

Sustainable activity 5.7 'Material recovery from non-hazardous waste'.

We believe the portfolio has a number of other holdings that are making a substantial contribution towards the EU's six environmental objectives but which do not currently fit within the framework provided by its taxonomy (although it is possible that they may do so in the future). These include: Aehr Test Systems, Energy Recovery, Montrose Environmental Group, Oxford Instruments and Tetra Tech. These companies made up approximately 11.2% of the portfolio at the end of 2022.

* Source: Artemis estimates based on company disclosures and analysis vs. the EU Taxonomy Technical Screening Criteria.

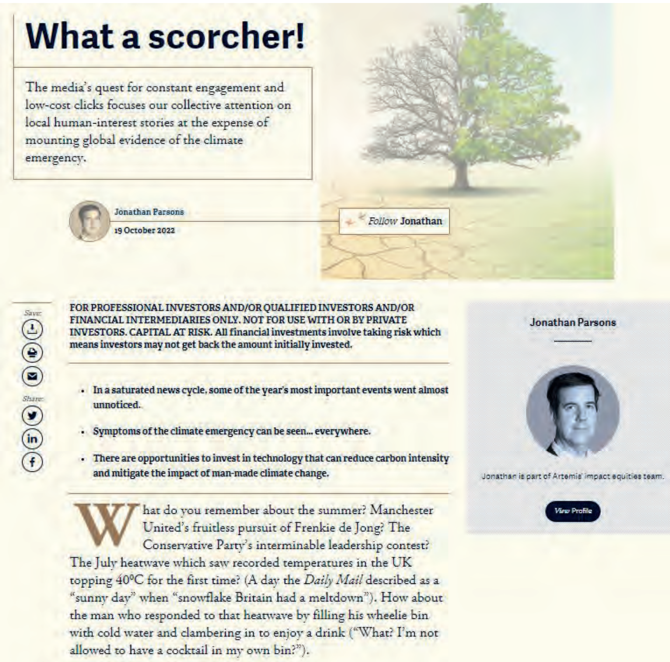
Climate change: Measuring corporate progress on the path to 'net zero'

'We are headed in the wrong direction'

World Meteorological Organization (WMO), Sept 2022.

In the Paris Agreement of 2015, the world's nations agreed that averting the worst impact of climate change meant limiting the rise in global temperatures to 1.5°C above their pre-industrial levels. This meant cutting greenhouse-gas emissions in half by 2030 and reaching net zero by 2050.

Unfortunately, the pace of climate change since 2015 has been even faster than had been anticipated. According to the most recent Intergovernmental Panel on Climate Change (IPCC) report, the scientific evidence that humans have warmed the planet is 'unequivocal' and 'indisputable' and the impact that long-term climate change is having on our day-to-day weather is already visible. What once seemed like an abstract problem of the future has become front-page news – albeit in a busy year marked by war, inflation and turmoil in financial markets, it's easy to become desensitised and to overlook the news that really matters.



What a scorcher!

The media's quest for constant engagement and low-cost clicks focuses our collective attention on local human-interest stories at the expense of mounting global evidence of the climate emergency.

Jonathan Parsons
19 October 2022

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FOR PROFESSIONAL INVESTORS AND/OR QUALIFIED INVESTORS AND/OR FINANCIAL INTERMEDIARIES ONLY. NOT FOR USE WITH OR BY PRIVATE INVESTORS. CAPITAL AT RISK. All financial investments involve taking risk which means investors may not get back the amount initially invested.

- **In a saturated news cycle, some of the year's most important events went almost unnoticed.**
- **Symptoms of the climate emergency can be seen... everywhere.**
- **There are opportunities to invest in technology that can reduce carbon intensity and mitigate the impact of man-made climate change.**

What do you remember about the summer? Manchester United's fruitless pursuit of Frenkie de Jong? The Conservative Party's interminable leadership contest? The July heatwave which saw recorded temperatures in the UK topping 40°C for the first time? (A day the *Daily Mail* described as a "sunny day" when "snowflake Britain had a meltdown"). How about the man who responded to that heatwave by filling his wheelie bin with cold water and clambering in to enjoy a drink ("What? I'm not allowed to have a cocktail in my own bin?").

Jonathan Parsons

Jonathan is part of Artemis' impact equities team.

View Profile

For more on 2022's extreme weather events, see our Positive Sum blog: What a scorcher!

The US now leads the world in addressing climate change

Not a great deal of progress was made at COP 27, the global climate change conference held in November 2022. The theme of the conference 'Together for implementation', hinted that implementing the high-level, non-binding pledges made at COP 26 in Glasgow the year previous year was already proving to be a challenge.

One thing, however, was of huge significance: the change in position of the US climate delegation. A year ago, we wouldn't have expected to be writing that the United States now leads the world in addressing climate change. But – empowered by the passage of the Inflation Reduction Act – it does. As the chief executive of NextEra, the world's biggest developer of renewable energy recently commented:

"The IRA provides decades of visibility to low-cost renewables... we could not be more excited about the future."

As significant investors in clean technologies, we share that excitement.

US Inflation Reduction Act

The world's largest and most emissions-intensive economy has set itself on a new course with the Inflation Reduction Act, a landmark law that will authorise c. $400 billion in spending on climate mitigation. It represents the largest single investment in clean energy in US history.

Amongst its 725 pages, the key provisions from a climate perspective include:

- $30 billion of tax credits to boost domestic US production of solar panels, wind turbines, batteries and 'critical minerals' such as lithium, nickel, cobalt and rare earth elements used in clean energy technologies. This will help expand domestic capacity to produce the clean technologies needed to decarbonize the US economy.
- $30 billion in grants and loans to help utility companies transition to clean energy.
- Tax credits to incentivise sales of 'clean' vehicles (including hybrids and hydrogen fuel-cell cars as well as battery electric vehicles) of $7,500 per new vehicle and $4000 per used vehicle.
- $27 billion to fund a green bank to invest in zero-emission technologies.
- $20 billion of investment in climate-smart agricultural practices including grants to restore coasts and support healthy forests.
- $10 billion in investment tax credits to build clean energy manufacturing facilities.
- $9 billion of credits to low-income households to help electrify their homes using heat pumps, solar panels and electric heaters.

The final amounts committed to green-technology development could be even higher if demand is greater than expected. With its requirement for local manufacturing, the Act builds goodwill for clean technologies across all US states regardless of their political allegiance. It will also likely lead to huge economic multiplier effects.

The Act provides renewed certainty for clean tech companies and additional financial benefits, mostly in the form of tax incentives, for growth and investment for the future. It should be hugely supportive for many of the companies that we consider for investment – such as EV manufacturers and battery, solar, wind and hydrogen companies.

The US is firmly signalling its transition away from carbon and we are already seeing it prompting other countries to respond in order to remain competitive in the growth industries of the future.

In the final quarter of 2022, we added to the portfolio's investments in clean-tech and other companies that we believe will be beneficiaries of the Inflation Reduction Act (and follow-on legislation elsewhere). Currently this includes companies involved in:

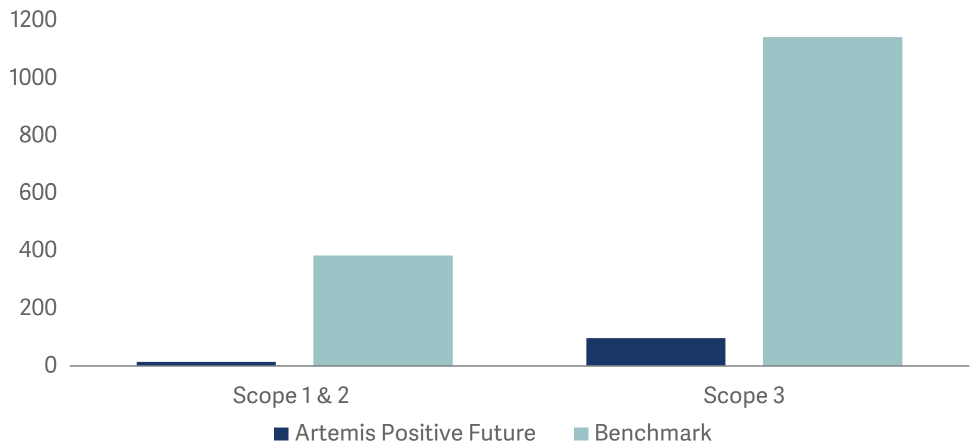
- solar PV (First Solar and SolarEdge);
- offshore wind (Deme Group);
- electric vehicles and charging infrastructure (Aehr Test Systems, Tesla, Alfen, ChargePoint);
- environmental consulting, monitoring and clean up (Montrose Environmental, Tetra Tech); and
- heat pumps (Nibe).

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

MEASURING THE PORTFOLIO'S CARBON FOOTPRINT

Because the climate crisis impacts everyone, it is relevant to every company that we invest in, regardless of sector. Measuring and reducing emissions is the right thing to do – but it also helps companies to future-proof their operations and provides investors with evidence that they are operationally efficient. Disclosure also provides us, as potential shareholders, with an indication of the sort of progressive management philosophy that we seek to invest in.

As you would hope, the portfolio's carbon footprint (Scope 1 & 2 emissions) is significantly smaller than its benchmark, the MSCI AC World Index. To be specific, the portfolio's carbon footprint (Scope 1 & 2 emissions, tonnes CO2 equivalent) is estimated to be 96% smaller.



Source: MSCI ESG Carbon Footprint Calculator, December 2022.

Of our holdings, Deme has the largest operational carbon footprint

Our investment in Deme in late 2022, is the principal reason why portfolio Scope 1 and 2 emissions have increased marginally since last year. It installs offshore wind turbines. It estimates that its Scope 1 & 2 emissions were equivalent to 833,000 tonnes of carbon dioxide in FY2021. This was more than double the operational emissions of Tesla, the next largest emitter in our portfolio.

So why invest in it? The context is vital. Installing tall, heavy, offshore wind turbines means using large, specialist ships, which have traditionally been fossil-fuelled. The emissions that result from installing these wind turbines must be considered alongside the greenhouse gases displaced during the turbine's operational lifetime, which is typically around 25 years. The estimated 'carbon payback' period for an offshore wind turbine is typically less than a year.

Other companies in the portfolio whose products and services are directly contributing to lowering emissions are:

- Aehr Test Systems
- Alfen
- ChargePoint
- Energy Recovery
- First Solar
- Montrose Environmental Group
- Nibe
- SolarEdge Technologies,
- Tesla
- Tetra Tech
- Tomra
- Universal Display Corp
- Vitasoy

Portfolio companies' climate disclosure status

This year, we are reporting the climate disclosure status of the companies in our portfolio in accordance with the Institutional Investors Group on Climate Change (IIGCC)'s Net Zero Investment Framework. This is designed to provide a basis on which a broad range of investors can make commitments to achieving net zero emissions and define strategies, measure alignment on a like-for-like basis and transition their portfolios.

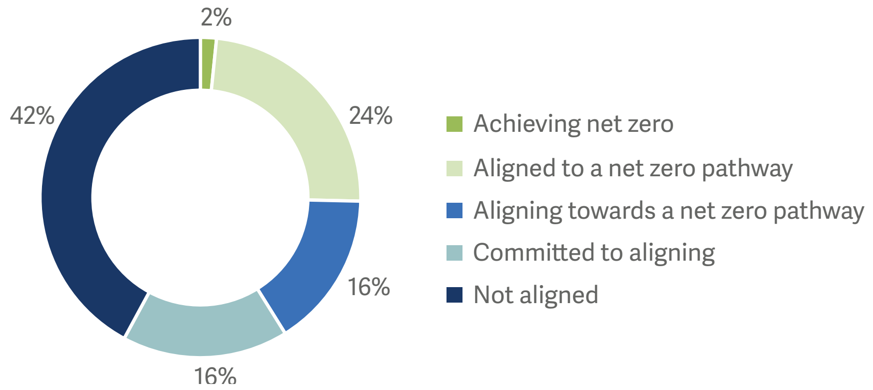
For listed equities and corporate bonds, the IIGCC's Framework

1. classifies companies as either 'high impact' or 'low impact' (according to the scale of their Scope 1, 2 and 3 greenhouse gas emissions); and
2. provides criteria allowing investors to assign companies to one of five categories:
   - Achieving net zero
   - Aligned to a net zero pathway
   - Aligning towards a net zero pathway
   - Committed to aligning to a net zero pathway
   - Not aligned

According to the IIGCC's Framework, all Artemis Positive Future portfolio companies are 'lower impact' from an emissions perspective (the fund does not make any investments in companies on the Climate Action 100+ Focus List, which collectively account for 80% of corporate greenhouse gas emissions). So, we have assessed our companies on the basis of their stated net zero ambition, emission targets, performance and disclosure.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

Using this framework, the portfolio can be split as follows:



Source: Artemis estimates based on portfolio assessment against the Institutional Investors Group on Climate Change (IIGCC)'s Net Zero Investment Framework.

(Readers should note that the IIGCC's Framework is focused on a company's operational emissions and does not consider the extent to which its products and services are reducing greenhouse-gas emissions.)

The proportion of the portfolio that is currently 'not aligned' to a net zero pathway consists of:

- Aehr Test Systems
- Amplifon
- Badger Infrastructure
- ChargePoint Holdings
- Chegg
- Coursera
- Dexcom
- DiaSorin
- Energy Recovery
- Everbridge
- IDP Education
- Montrose
- Penumbra
- Planet Fitness
- Staar Surgical
- Universal Display
- Veeva
- Veracyte
- Vitasoy

Of these holdings, plant-based milk producer Vitasoy is the biggest emitter. These emissions largely relate to its sourcing of agricultural supplies (Scope 3) and it has prioritised reducing emissions in this area.

Reference to specific stocks or companies should not be taken as advice or a recommendation to invest in them.

ENGAGEMENT AND VOTING

Engaging with the companies that we invest in forms an important part of our investment process as active impact investors. Our engagement with companies targets their enterprise impact (the impact they have on the world around them through their conduct and footprint) as well as their products and services. We expect the companies we invest in to set ambitious goals and to seek continuous improvement.

Engaging with the companies in our portfolio also allows us to identify and monitor strategic and operational change – and to ensure that they are continuing to exhibit the progressive management philosophy we seek.

Climate

Alongside engaging with companies on all the traditional (financial) factors that investors would expect, we have a particular focus on climate disclosure. Because the climate crisis impacts everyone, we believe it is relevant to all the companies that we invest in, regardless of sector. The direction of travel – towards net zero – is clear, so measuring and reducing their emissions helps companies to future-proof their operations. It also provides investors with evidence that they are operationally efficient. Further details on portfolio companies' climate disclosure are provided in 'Measuring the portfolio's carbon footprint'.

Voting

Voting is one mechanism through which we can seek to effect positive change. During 2022, we voted at 35 company meetings as follows:

Category		Percentage of total votable meetings
Number of votable meetings	36	
Number of meetings we voted at	35*	97%
Number of meetings where we placed at least one vote against management	10	29%
Number of meetings at which we abstained or withheld vote at least once	8	23%
Number of meetings at which we abstained or voted against management at least once	17	49%

**We didn't vote at Tomra's AGM; Norway is a market in which 'share-blocking' continues to be exercised (the share-blocking system requires investors who intend to vote to surrender the right to dispose of their shares for at least two weeks).*

Most significant votes

1. Montrose Environmental Group

Annual general meeting (AGM), March 2022. Voted against: 'Advisory Vote to Ratify Named Executive Officers' Compensation'.

As a relatively recently listed public company, there had not previously been a 'say-on-pay' opportunity for shareholders. Prior to the 2022 AGM, we had had some concerns regarding Montrose's executive compensation practices, including annual bonuses partly determined by 'acquired Ebitda' targets which may have incentivised executives to make acquisitions for their own sake. These concerns were compounded by a 'one-time' grant to the executive team in December 2021. We viewed this grant as (potentially) overly generous and also dilutive to existing shareholders. For these reasons, we voted against an advisory vote to ratify named executive officers' compensation. This is an ongoing topic of discussion in our meetings with Montrose's management team.

2. Shopify

Annual/Special, April 2022. Voted against: 'Authorize New Class of Common Stock and Issuance of Such Founder Share to the Founder and Chief Executive Officer'.

We have historically voted against executive compensation at Shopify due to the lack of performance conditions attached to its grants of equity, which begin to vest after one year. In 2022, Shopify proposed that its CEO and founder, Tobias 'Tobi' Lütke, should receive a special 'founder share award'. We were concerned that the proposal would take Tobi's control of Shopify's voting shares to 40%, even as his shareholding fell. Our view remains that Mr Lütke is an authentic leader and a significant asset to the business. But we were unwilling to support an arrangement that provides enhanced control with a minimum shareholding; a founder should have more economic skin in the game.

3. Tesla

AGM, June 2022. Voted against: 'Elect Director Ira Ehrenpreis and Kathleen Wilson-Thompson'

Tesla typically sees a number of shareholder resolutions tabled at its AGM each year. This year, our concerns related to its compensation structures, specifically the scale of the equity Elon Musk is currently able to pledge. This potentially exposes Tesla's shareholders to Mr Musk's other ventures. There is also the broader issue that pledging offers tax benefits and credit terms only available to wealthy elites in the US. As we had the previous year, we voted against those directors up for re-election; both sit on the company's compensation committee.

4. IDP Education

AGM, October 2022. Voted against: 'Elect Peter Polson as a director'

We voted against the re-election of Peter Polson, IDP's chairman. Our concerns followed two years of significant shareholder votes against executive remuneration. In part, this was driven by the board's decisions on compensation during the pandemic. Mr Polson has served 15 years on IDP's board and also sits on the audit committee, potentially compromising its independence. Shareholders also have relatively infrequent opportunity to vote on director re-election at IDP, because directors serve three-year terms.

5. Kornit Digital

Special, November 2022. Voted against: 'Approve Amended Employment Terms of Ronen Samuel, CEO'

We voted against the proposed changes to the chief executive's employment terms. Historically, we haven't considered executive compensation at Kornit controversial, and we didn't necessarily disagree with the company's view that its chief executive's total compensation lagged those of its peers. The proposal, however, sought to double the size of the equity award he would receive which, given that Kornit's share price had fallen sharply, had the potential to be extremely generous; voting in favour would have potentially set a dangerous precedent. That 50% of the proposed award was for Total Shareholder Return (TSR) versus the S&P500 and the remainder of the award lacked any performance conditions was also a concern. Given recent weakness in Kornit's share-price performance, our view was that its chief executive should share in the pain its shareholders have felt.

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Concentration risk: The fund may have investments concentrated in a limited number of holdings. This can be more risky than holding a wider range of investments.

Smaller companies risk: Investing in small and medium-sized companies can involve more risk than investing in larger, more established companies. Shares in smaller companies may not be as easy to sell, which can cause difficulty in valuing those shares.

Specialist investment objective risk: The fund will only invest in companies which have a positive environmental and/or social impact. It is also prevented from investing in companies which conduct certain types of activities. The universe of potential investments available to the fund will therefore be smaller than if no such restrictions were applied. If a company in which the fund invests no longer meets the criteria for investment and/or is not making sufficient progress on improving its operational performance, the manager will seek to sell the investment. The price which may be obtained for selling an investment in these circumstances might be lower than that which could have been obtained had the sale not been required.

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Investment in a fund concerns the acquisition of units/shares in the fund and not in the underlying assets of the fund.

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