

**Impact Annual Report 2022** 



# 2022 highlights

Using our proprietary Federated Hermes Impact Database, we are able to estimate the total impact of the companies in which we are invested.<sup>1</sup> We present highlights below:

50.4 million MT of CO<sub>2</sub> avoided, with only **6.6 million MT** released

80.1 million MWH of clean energy generated

billion metres³ of water saved, vs. **202 million metres³** consumed

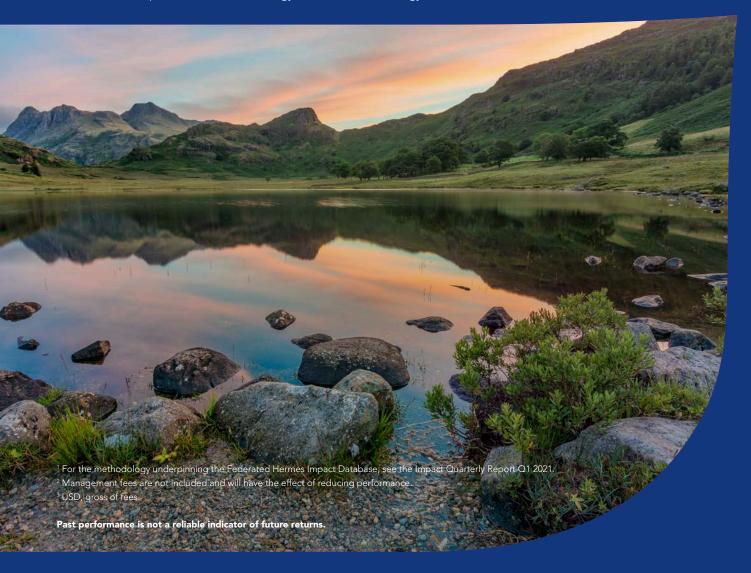
168 million patients treated, and 2 million lives extended

12 thousand tons of waste recycled (through product solutions) plus a further 496k through recycling programmes in operations.

Source: Net Purpose, Federated Hermes Impact calculations. As at September 2023.

#### Performance, 2022

The Federated Hermes Impact Opportunities strategy returned -28.05% in 2022 is USD terms, underperforming the MSCI All Country World index which returned -18.4%. The underperformance was primarily due to the macro-driven market that had adopted a more short-term outlook; an environment not suited to a strategy that has a long-term fundamental focus. The only sector which had positive returns was energy which is on the strategy's exclusion list.





# Strategy philosophy

We aim to outperform the broad global equity market by:



**Investing in** companies that provide solutions that have a positive impact on people and the planet



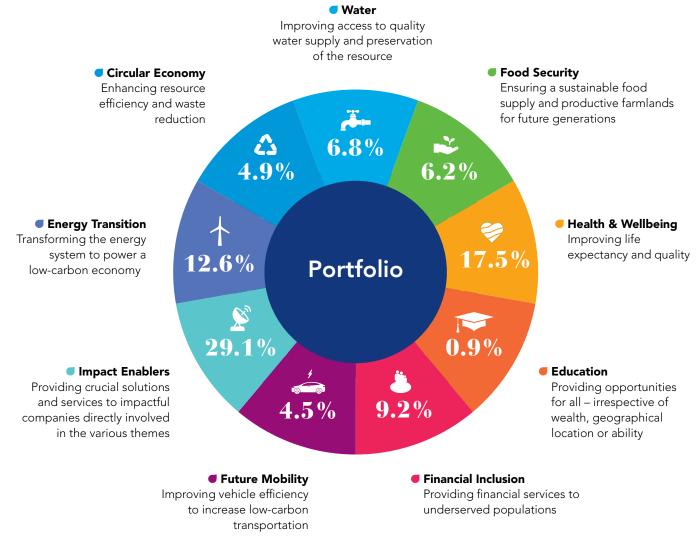
**Identifying** emerging growth opportunities that meet a structural, underserved need



**Taking advantage** of market inefficiencies in pricing long-term change



**A thematic approach:** our holdings fit into one or more of the nine themes that are aligned with the UN Sustainable Development Goals (SDGs).



Source: Federated Hermes Limited, as at 31 December 2022.

This document does not constitute a solicitation or offer to any person to buy or sell any related securities or financial instruments. The value of investments and income from them may go down as well as up, and you may not get back the original amount invested. Any investments overseas may be affected by currency exchange rates. Past performance is not a reliable indicator of future results and targets are not guaranteed.

### Impact performance, 2022

#### Total company level impact of stocks held, 2022

(Harmonized for calendar year Impact, and backdated to 2018)

Using our proprietary Federated Hermes Impact Database, we are able to present our impact data on an aggregated, crosscompany basis. Drawing on data from company, sector and impact industry reports, it depicts our estimation of the total impact that the companies in which we are invested have delivered in 2022.

of CO<sub>2</sub> avoided, with only



Average female manager and board representation

respectively

people given

financial access



(excluding Healthcare)



SDG enabling R&D funded

MW installed renewable capacity



Metric T waste generated



of clean energy

of water saved vs

generated

lives extended



Healthcare R&D funded



Employee Turnover (%)



# incidents (accidents)/ one million hours worked



of waste recycled



(through product solutions) plus a further

through recycling programs in operations

labs enabled



of food waste avoided



Hectares forest or land restored or conserved

\$m New Donation Capital Enabled

10,683



Biodiversity Footprint Avoided (BII Adj. Hectares)



**Biodiversity Species Loss** Avoided (Species \* Yr)



#### Total owned impact of stocks held, 2022

(Harmonized for calendar year impact, adjusted based on ownership at end of Q4 2022)

As well as producing company-level impact, our database allows us to report on the impact of our strategy's assets under management. Put simply, we scale the metrics to demonstrate the impact accomplished through the capital we deploy on behalf of our clients, thereby reflecting our ownership of each company held in our strategy.

33k M7

CO<sub>2</sub> avoided, with only

3.8k released



Average female manager and board representation

respectively\*





SDG enabling R&D funded



(excluding Healthcare)

MW installed MW installed renewable capacity 27

Metric T waste generated





of water saved vs

consumed

192.7k

patients treated and

lives extended



Healthcare R&D funded

Employee Turnover (%)

# incidents (accidents)/ one million hours worked



of waste recycled (through product solutions) plus a further

through recycling programs in operations

labs enabled



of food waste avoided



Hectares forest or land restored or conserved

\$m New Donation Capital Enabled

Biodiversity Footprint Avoided (BII Adj. Hectares)

**Biodiversity Species Loss** Avoided (Species \* Yr)



# Market performance

2022 was one of the most challenging years on record for global markets, reflected in the -18.4% return of the MSCI ACWI Index<sup>1</sup>. Inflationary pressures, which had been starting to build at the end of 2021, came to a head at the start of 2022 when the minutes of the US Federal Reserve meeting were released, raising expectations that rates would rise at a faster pace than previously anticipated.



This led to the biggest rotation to value since the global financial crisis (GFC), which proved to be a significant headwind for the strategy in January. The backdrop of rising inflation and interest rate expectations, which were amplified by the Russia-Ukraine war, set the tone for much of the rest of the year. Markets were dominated by short-term macro factors rather than long-term fundamentals as the preference for value continued.

This preference was best reflected in the stellar returns of the energy sector. It also highlighted an issue for strategies, such as ours, in that value was typically being driven by areas of the market which are part of our exclusions such as fossil fuels. and as such uninvestable. Indeed, the energy sector was the only sector that had positive returns while all the other sectors fell. However, in the brief periods when fundamentals took centre stage, the strategy performed relatively well and, judging by the consistently high proportion of the portfolio that beats earnings expectations, the portfolio continues to look attractive from a fundamental perspective.

#### Performance review<sup>2</sup>

The strategy returned -28.05% in 2022 in USD terms<sup>3</sup>. The underperformance was primarily due to the macro-driven market that had adopted a more short-term outlook; an environment not suited to a strategy that has a long-term fundamental focus.

In attribution terms, stock selection was the main driver for the strategy's relative performance in the period. The largest detractors from relative performance came from stock selection in healthcare, materials, industrials and financials. Sector allocation contributed to relative performance in the period. The strategy's overweight in healthcare was supportive of relative returns, as were the underweights in communication services and information technology. However, the strategy's zero weight in energy detracted.

Top 3 contributors	Primary Impact theme	
Novo Nordisk		Benefited from accelerating uptake of its diabetes and obesity treatments. More recently, supply constraints of its obesity drug, Wegovy, have eased, while the international launches of the drug have boosted sentiment.
AECOM	<b>†</b>	Benefited from solid underlying demand, reflected in a healthy order backlog and pipeline, as infrastructure investment, energy transition and sustainability projects increase.
Bank Rakyat Indonesia		The Indonesian economy is performing strongly, aided by higher commodity prices, and the company has seen higher lending activity and reported strong earnings ahead of expectations.

<sup>&</sup>lt;sup>1</sup> MSCI ACWI Index, as at 31 December 2022.

 $<sup>^{\</sup>rm 2}$  Management fees are not included and will have the effect of reducing performance.

<sup>&</sup>lt;sup>3</sup> Source: Federated Hermes as at 31 December 2022. Performance shown is the Federated Hermes Int'l Impact Opportunities Strategy Hedged to US\$ Strategy. In US\$, gross of fees. Inception date: 21 December 2017. Benchmark: MSCI All Country World IMI Index hedged to US\$. Past performance is not a reliable indicator of future returns.

Top 3 detractors	Primary Impact theme	
Kingspan	<b>†</b>	Declined due to concerns over inflation and an expected slowing of the housing and construction market, which the company subsequently warned of.
TCS		The company saw significant share price weakness following Russia's invasion of Ukraine, at which point we sold our entire holding.
Tomra Systems	4	Impacted at the start of the year during the value rotation. It then reported earnings that were weaker than expected, driven by cost inflation.

This document does not constitute a solicitation or offer to any person to buy or sell any related securities or financial instruments. The value of investments and income from them may go down as well as up, and you may not get back the original amount invested. Any investments overseas may be affected by currency exchange rates. Past performance is not a reliable indicator of future results and targets are not guaranteed.



# Activity highlights

The strategy remains a high conviction portfolio focused on bottom-up stock selection of truly impactful companies. Market volatility provided opportunities to buy several new holdings at attractive valuations, including Maximus, Iqvia, and Experian.



Trading - Purchases	Impact theme	
Maximus	Impact enablers	Provides solutions for citizens to successfully engage with their governments across a variety of health and human services programs around the globe. It delivers innovative business process management and technology that contribute to improved outcomes, such as access to healthcare, welfare-to work and disability benefits, to name just a few.
Iqvia	Impact enablers	The company's technology helps to speed drug development, ensure product quality and safety, improve commercial effectiveness, improve access to and delivery of healthcare, and ultimately drive better health outcomes.
Experian	Financial Inclusion	Experian is the world's largest credit bureau. The company provides enhanced credit scoring analytics that enable previously 'un-scorable' people to access financing, thus bringing them into the financial ecosystem.
Grocery Outlet	Food Security	The company sells packaged and fresh food at a significant discount to traditional grocers and help avoid food waste. With inflationary pressures rising and recession increasingly likely, the company should benefit from the trading down effect.
STMicroelectronics	Future Mobility	Analogue semiconductor producer that is an attractively valued leader in several high structural growth areas. It is directly exposed to the electrification of our world and is leading innovation in fields such as Silicone Carbide (SiC), which are generating substantial efficiency improvements that promise to significantly reduce global carbon emissions.
Workiva	Impact Enablers	The company is a leading US financial reporting cloud-based software as a service (SaaS) vendor with global ambitions. It also has the potential to be a leader in the nascent ESG/sustainability reporting market that is being driven by regulation.
Tetra Tech	Water	The company is a high-quality business with strong defensive qualities. It is a major beneficiary of increasing US environmental regulation (particularly around waste, water treatment and freshwater provision), through its governmental and non-governmental consultancy business.

Trading - Sales	Impact theme	
Umicore	Circular Economy	Concerns over increased competition for its battery materials business.
TCS	Financial Inclusion	Following Russia's invasion of Ukraine with the political uncertainty outweighing any positive outlook we had for the company.
Teladoc	Health and Wellbeing	Management had lost focus on the core business with a push into mental health services. This resulted in material cost increases, due to increasing competition in this area and marketing spend required to compete effectively.
Installed Building Products	Energy Transition	Concerns over the outlook for the US housing market driven by higher mortgage rates.
Strategic Education	Education	Concerns around affordability levels for higher education given the economic cycle.
Chegg	Education	The relatively strong US labour market (negatively affecting higher education enrolment), coupled with growing execution concerns with respect to international expansion.
The RealReal	Circular Economy	The management of the company failed to reach some milestones we had expected, coupled with tighter financial conditions and lower cash generation due to the macro environment.

#### **Outlook**

The recent UN SDG progress report has highlighted that there has been a distinct lack of progress on the majority of the UN SDGs since their launch in 2016. Only this will inevitably increase focus on mobilising capital towards the achievement of the 2030 goals. The challenges are huge and require sweeping change and investment on a scale never seen before, given that only 15% of targets have been reached so far.

However, just as the impact of crises is compounded when they are linked, so are solutions. When we take action to strengthen social protection systems, improve public services and invest in clean energy, we address the root causes of increasing inequality due to the healthcare crisis, environmental degradation and climate change.

Our strategy seeks to identify companies which provide solutions to world's most critical needs, be it of the environment or society. These companies should benefit from enduring sources of demand for their products that address these unmet needs, while at the same time helping people and the planet.



This document does not constitute a solicitation or offer to any person to buy or sell any related securities or financial instruments. The value of investments and income from them may go down as well as up, and you may not get back the original amount invested. Any investments overseas may be affected by currency exchange rates. Past performance is not a reliable indicator of future results and targets are not guaranteed.

#### THEMATIC FOCUS:

# Clean water and sanitation for all

Water is life. Access to clean water is vital for health, sanitation and hygiene. Without it, crops fail and preventable diseases take hold. In developed countries, getting water is as simple as turning on the tap. Yet what should be a basic human right is out of reach for millions.

That's why SDG6 is to 'ensure clean water and sanitation for all'.

The global population is growing rapidly. In November 2022, it was predicted to have hit eight billion<sup>4</sup>. That undoubtedly puts pressure on water supplies. As well as domestic needs, demand for water continues to increase across agriculture, industry and the energy sector.

The UN estimates that currently,

73m people live in countries with high and critical levels of water stress.

The UN estimates that currently, 73 million people live in countries with high and critical levels of water stress. And by 2030, billions will lack access to safe drinking water, toilets and handwashing facilities – unless the pace of progress increases fourfold.

Meeting **drinking water, sanitation** and **hygiene** targets by 2030 requires a **4x** increase in the pace of progress

At current rates, in 20305



**1.6bn** 

people will lack safely managed drinking water



**2.8bn** 

people will lack safely managed sanitation



- <sup>4</sup> <u>United Nations</u>, as at 15 November 2022.
- $^{\rm 5}$  Source: SDG Report 2022 Goal 6 infographic, as at 2022.
- <sup>6</sup> The Sustainable Development Goals Report 2022

#### What's the problem?

Water is a natural resource, so why is it so hard to come by?

As well as the demands of a growing, increasingly urban and industrialised population, there are several big-picture issues that have exacerbated the situation, including:

- Decades of misuse and poor supply management
- Overextraction of groundwater and contamination of freshwater
- Degraded water-related ecosystems
- Underinvestment in water and sanitation
- Lack of cooperation on transboundary waters

We can also point to climate change as a key contributor, as rising global temperatures increase the incidence of extreme weather and drought.

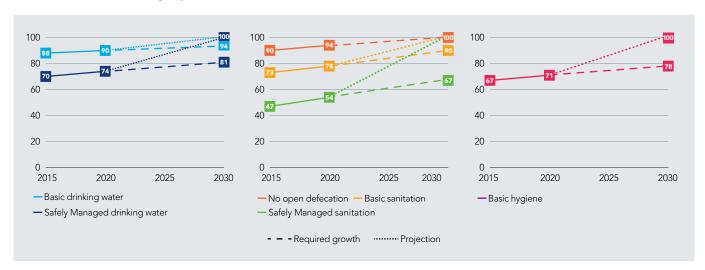
As an investor that aims to generate positive and sustainable change, we see poor water practices as a material risk. We believe investing in businesses that manage water responsibly is not only the right thing to do but will deliver more sustainable long-term value.

#### **Targets for life**

In its <u>Sustainable Development Goals Report 2022</u>6, the UN set out the targets the world must work towards on drinking water, sanitation and basic hygiene. Achieving these by 2030 will require significant investment and accelerated action but would save 829,000 lives a year by reducing diseases linked to dirty water and poor hygiene.



Figure 2: Global coverage of drinking water, sanitation and hygiene services, 2015-2020 (percentage), and acceleration required to achieve universal coverage by 2030



Source: The Sustainable Development Goals Report, 2022.

#### The water gap

The water gap is the difference between the supply and demand of water resources. It's widening every day due to a number of factors.

Figure 3: Why is the water gap widening?

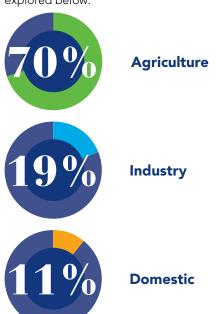
# Water infrastructure Lack of investment Inadequate policies Poor maintenance in agriculture The water gap Water pollution Agricultural run-off Industrial pollution

These influences are interconnected – for example, poor policy and regulation typically lead to poor infrastructure, which in turn creates more pollution. The Covid-19 pandemic also impaired access to clean water, just when it was needed most.

A holistic approach – with significant investment – is required to make supply more efficient. In agriculture, better education and policies could help address the inefficient 'build-neglectrehabilitate-neglect' cycle in irrigation and drainage systems.

#### Where does the water go?

There are three broad areas of water usage<sup>7</sup>, which are explored below:



<sup>7</sup> UNESCO, 'Groundwater: Making the invisible visible', 2022.





#### **Agriculture**

Feeding our ever-growing population is an ongoing challenge that has an impact on water supplies. Popular crops such as rice, soybeans and cotton are among the 'thirstiest', while raising animals for meat is one of our most water-intensive activities.

Irrigated land is much more productive than rain-fed land. The World Bank estimates that 40% of all global food production comes from irrigated land, while agriculture accounts for 70%8 of all freshwater withdrawals.

Agricultural water use must become more efficient and sustainable. To increase food production and save water, we need to improve water delivery, irrigation and drainage systems. Advanced technologies (such as soil moisture sensors and satellite evapotranspiration measurements) can also improve productivity.

Water saved from agriculture can be allocated to other areas, including homes, industry and energy, as well as to preserve the environment.

of the world's natural wetlands have been lost in the past 300 years



#### Industry

Industrial production currently makes up around 19% of water usage<sup>9</sup>, and there are opportunities to reduce that through behavioural, operational and technological change.

More efficient technology (pipes, smart dosage systems, timers, cleaning systems and water monitoring systems) and better detection and repair of leaks could make significant improvements.

Better regulation would also help, with tariffs to promote more efficient use of water.

On an individual level, increasing awareness among workers can make a difference by encouraging them to change their behaviours to reduce consumption.

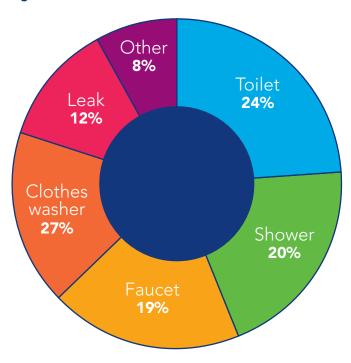
As well as reducing consumption, we also need to look at ways to reuse and recycle water from industrial sources. This creates a new water source without extraction or transportation, helping to conserve freshwater sources and reduce energy and cost.



#### **Domestic**

There may be eight billion of us<sup>10</sup>, but, at just 11%, the water consumption of individuals is low compared with agriculture and industry.

Figure 4: How much water do we use?



Source: Water Research Foundation, Residential End Uses of Water, 2016.

Nevertheless, we can take small, practical steps to cut our usage and make savings.

For example, we can choose more water-efficient taps, showers, toilets and appliances to save water and money. A water-efficiency labelling and standards scheme, like that in Australia, can help consumers make more informed decisions.

of wastewater in the world flows back into the ecosystem untreated<sup>11</sup>

Water meters can also be helpful in making people more aware of consumption and cutting waste from leaks or overuse.

Recycling also comes into play: 'grey' water (discharged from bathroom appliances, for example) can be processed and treated before being reused, mainly for flushing toilets.

#### Time to close the gap

Closing the water gap is one of the major challenges for society and the planet. But allowing this gap to grow is not an option: achieving SDG6 is vital for saving lives.

We urgently need to accelerate progress, taking a joined-up approach that brings together policymakers, public and private investment, infrastructure

#### Clean water and sanitation

The United Nations (UN) considers access to clean water and sanitation an essential human right. However over two billion people around the world face obstacles in enjoying this right. The statistics shown here are taken from the UN Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation.<sup>12</sup>

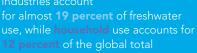
#### Water

About **844 million** people lack basic water services, while **2.1 billion** people lack clean, safe water available on their living premises.



About **159 million** people around the world collect their drinking water directly from surface water sources such as **rivers, dams,** or **lakes.** 

Agriculture accounts for about 69 percent of all freshwater use around the world. The industry employs about 30 percent of the global workforce, and more than 60 percent of the of the workforce in sub-Saharan Africa. Other industries account







#### Sanitation and hygiene

In 2022, about **1.5 billion** people lacked basic sanitation services, while **3.5 billion** lacked a managed sanitation service involving safe treatment or disposal of sewage.

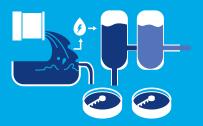
Nearly 419 million still practiced open defecation<sup>13</sup>.





In the world's least developed countries, only about **27 percent** of the population has access to soap and water for hand washing on premises.

The UN estimates that the amount of energy contained within wastewater in the form of biofuel is about 5 to 10 times greater than the energy required to treat the wastewater, which provides incentive to invest in innovative wastewater treatment





According to the UN every \$1 US invested in WASH (WAter, Sanitation, and Hygiene) yields \$5 US in social and economic benefits.

Source: Water Research Foundation, Residential End Uses of Water, 2016.

Source: National Geographic. Clean Water and Sanitation: A Global Report Card. 2022

<sup>&</sup>lt;sup>12</sup> https://www.unwater.org/publications/sdg-6-synthesis-report-2018-water-and-sanitation.

<sup>13</sup> https://data.unicef.org/topic/water-and-sanitation/sanitation/



Ecolab is a global leader in water, hygiene and infection prevention solutions and services that help protect people, the planet and business health.

#### Impact theme:

Water

Health & Wellbeing





It delivers comprehensive science-based solutions, datadriven insights and world-class service to advance food safety, help maintain clean and safe environments, optimise water and energy use, and improve operational efficiencies and sustainability for customers throughout the world.

Ecolab exists to find solutions to the world's biggest challenges. It's particularly focused on water stewardship and reducing the use of other natural resources, which supports the UN's Sustainable Development Goal around clean water and sanitation.

Working at over one million locations, Ecolab helps companies to do things differently, identifying ways of reducing their energy use and greenhouse gas emissions. It has found that more efficient production processes can result in big savings for companies and the planet:



f 1 Up to f 22% less energy usage

Up to 12% fewer greenhouse gas emissions

And with 28% of revenues linked to products to improve efficiency throughout the water processing chain, we believe there's a potential opportunity for investors here.

#### Supporting good health and wellbeing

In line with the UN's health and wellbeing goal, Ecolab's healthcare division is working to reduce the risk of healthcare-associated infections. These, it says, kill more people each year than breast cancer and prostate cancer combined.

35% of revenues are linked to cleaner food, saving lives by preventing the spread of contaminants.

#### Clear targets with measurable impacts

Ecolab has developed a proprietary methodology to measure the economic, operational and environmental impact of its solutions. Its Water Risk Monetizer, launched with Trucost in 2014, is a financial modelling tool that helps businesses understand their water-related risks.

It also sets clear, quantitative targets to reduce its own environmental footprint and that of its customers.

By providing high-quality, environmentally friendly cleaning products and superior customer service, it helps customers to reduce water and energy consumption and cut waste.

In 2021, Ecolab reports conserving

**215** billion gallons of water — enough drinking water for

734 million people — and avoiding

million metric tons of greenhouse gas emissions.

(Source: Ecolab)

These results were achieved without adding to net cost. These businesses used proven, tangible solutions to operate more efficiently, reduce water and energy use, and accelerate growth.

#### Impact goals for 2030

Ecolab has set itself the following targets for 2030:



reduction in water impact per unit production across its enterprise, from its 2018 base year of its absolute water withdrawal volume to be restored at high-risk sites



AWS (Alliance for Water Stewardship) certification to be achieved in high-risk watersheds

Addressing our environmental challenges is not easy, but companies like Ecolab show how, with a clear focus and new ways of working, we can move towards a more sustainable world.



AECOM is the largest global environment engineering firm as ranked by Engineering News Record (ENR), and a leader in several key water and water-related markets. It leads the way in green buildings and design, and is advancing next-generation transportation and renewable-energy infrastructure.

Impact theme: Water

AECOM provides planning, consulting, architectural and engineering design. It also offers construction and programme management services, and investment and development services to commercial and government clients worldwide. It operates in markets including transportation, facilities, environment, energy, water and government.

O

Clients are increasingly turning to AECOM to shape solutions to achieve their environmental, social and governance objectives. As well as architectural solutions, AECOM provides professional services in the water, wastewater, environmental management and water resources end markets.

AECOM's expertise has positioned it as an industry leader; in 2022, it was ranked second in ENR's list of top-200 environmental firms and featured in their top 10 for professional services.<sup>11</sup>

Pollution caused by human activity is a key risk to biodiversity, which AECOM seeks to materially avoid. By consulting on and managing projects to clean up or mitigate land and sea pollution, AECOM helps to protect plants, animals and habitats. This includes cleaning up and other remediation to repurpose land following industrial accidents, chemical leakages and contamination.

AECOM's services are closely aligned with US and global priorities on infrastructure, water and the environment, including clean water, coastal restoration, building efficiency and zero-emission public transit.

#### Water innovation in action

AECOM helped develop a plant in Singapore that can switch between desalinating seawater and treating reservoir water. By treating up to 137,000 cubic metres of water a day, the plant helps Singapore become more self-sufficient.

More frequent dry seasons with low rainfall are increasing reliance on seawater desalination, an energyintensive treatment process.

More frequent dry seasons with low rainfall are increasing reliance on seawater desalination, an energy-intensive treatment process. Even during seasons of heavy rainfall, the amount of rainwater and stormwater that can be collected and treated to provide drinking water is limited by the availability of containments in Singapore.

During wet periods, therefore, the plant switches to treating reservoir water. This is not only a more efficient use of water, but uses less energy than desalination, reducing the environmental impact and resulting in operational cost savings.

#### **Goals and targets**



**50%** 

target reduction of carbon impact on projects



84m

tonnes CO<sub>2</sub> that AECOM estimates could be cut from the environment annually



#### Net zero

achieved in its own operations in 2021, with a commitment to maintain it



90%

target reduction in total emissions by 2040

The above does not represent all of the securities held in the portfolio and it should not be assumed that the above securities were or will be profitable. This information does not constitute a solicitation or offer to any person to buy or sell any related securities or financial instruments

#### THEMATIC FOCUS:

## Future Mobility: Navigating the road ahead for electric vehicles

The poster children of the energy transition, electric vehicles (EVs), are reaching adolescence. While some short-term growing pains are inevitable, the future of electric transportation looks healthy. By ensuring exposure to suppliers involved in the electric revolution, we aim to deliver maximum impact and return at minimum risk.

#### Fast reading:

Short-term challenges including the energy crisis in Europe, the end of Chinese subsidies and global recession fears may slow the momentum behind electric vehicle sales in 2023. However, we expect the EV market to experience huge growth over the

Currently, EV start-ups are battling to scale, capture market share and reach profitability, while legacy automakers are largely cannibalising their own traditional internal combustion engine vehicle sales. We therefore see exposure through suppliers as the best way to invest in this theme.

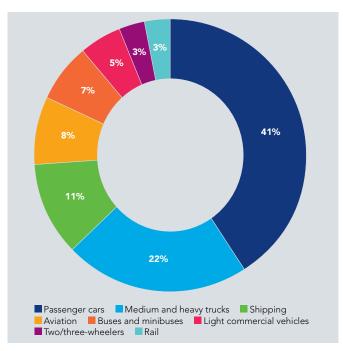
#### The case for EVs

According to the International Energy Agency (IEA), transport has the highest reliance on fossil fuels of any sector, and accounted for 37% of global carbon dioxide emissions from end-use sectors in 2021.<sup>12</sup> Passenger cars produced 41% of CO<sub>2</sub> emissions from transportation; while vans, trucks, buses and motorcycles together made up a further 37%.<sup>13</sup>

#### Transport accounted for

37% of global carbon dioxide emissions from end-use sectors in 2021.14

Figure 5: Carbon dioxide emissions produced by transportation worldwide in 2020, by subsector



Source: Statista, as at 2023.

The replacement of traditional internal combustion engine (ICE) powered vehicles with electric vehicles is therefore a core component of the transition to a more sustainable future. EV rollout aligns closely with a number of United Nations Sustainable Development Goals, most obviously SDG 7 (Affordable and Clean Energy) and SDG13 (Climate Action). EV uptake can also influence SDG 3 (Good Health and Wellbeing) and SDG 11 (Sustainable Cities and Communities).











## Changing gear: Is the EV market at an inflection point?

According to S&P Global Mobility, EV sales grew by about 36% year-on-year from 2021-2022. 15 There are, however, some short-term challenges for the market to negotiate, as a result of which many industry observers expect sales growth to slow down in 2023:

- The energy crisis in Europe has driven up electricity prices, making EVs temporarily less attractive to buyers in this key region.
- China is withdrawing longstanding subsidies for EVs, while European countries are also looking to scale back financial incentives as EVs become more established.
- Fears of a global recession are driving down new vehicle sales generally.

Beyond this short-term friction, however, the evidence indicates that future demand is likely to be high:

- The direction of travel of policy and regulation globally is highly positive for the energy transition in general and EVs in particular.
- The US Inflation Reduction Act and Europe's REPowerEU initiative will provide an economic boost that will help scale the necessary infrastructure and develop key technology.
- The scaling of battery production in 'gigafactories' will result in a rapid fall in costs (while EVs are currently more expensive than ICE vehicles, this is because the lithium-ion batteries they use are expensive to produce – they are otherwise simpler and therefore cheaper to build).
- Better battery technology will reduce charging times and improve vehicle range, while the charging network will grow; this will resolve the issue of 'range anxiety'.<sup>17</sup>

Our view is that EV uptake will reach a 'tipping point' as better battery and charging technology improves useability and prices come down. As a result, despite some short-term headwinds, we expect the EV market to grow significantly in the medium-to-long term.

This expectation is supported by research by BloombergNEF, which predicts that in the wake of the Inflation Reduction Act (IRA) more than half of car sales in the US – a market where EV uptake has been relatively slow – are now expected to be electric by  $2030.^{18}$ 

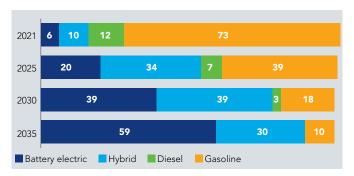
Overall, the bigger picture means that the industry will need to plan for significantly increased volumes. Eliminating supply chain bottlenecks and ensuring adequate growth in the production of the metals and minerals essential for EV power trains – which take energy stored n a vehicle's battery system and supply it to the motors – will be critical.

EV sales grew by about

36%

year-on-year from 2021-2022.16

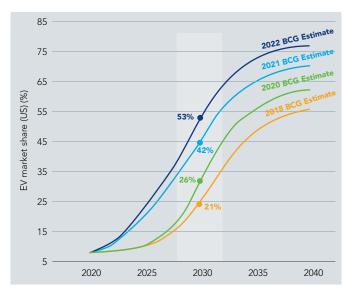
**Figure 6:** Battery electric vehicles (BEVs) could make up majority of new cars sold globally by 2035



Note: Less than 1% of vehicles sold are projected to be fuel cell electric

Source: Boston Consulting Group (BCG), as at 2022.

Figure 7: Projected US EV adoption is accelerating



Source: Boston Consulting Group (BCG), as at 2022.

Our view is that EV uptake will reach a 'tipping point' as better battery and charging technology improves useability and prices come down.

<sup>&</sup>lt;sup>15</sup> https://www.spglobal.com/commodityinsights/en/market-insights/blogs/metals/013123-ev-sales-momentum-to-face-challenges-in-2023-but-long-term-expectationsunaffected.

<sup>16</sup> https://www.spglobal.com/commodityinsights/en/market-insights/blogs/metals/013123-ev-sales-momentum-to-face-challenges-in-2023-but-long-term-expectationsunaffected.

<sup>&</sup>lt;sup>17</sup> 'Range anxiety' describes the issue of consumers not wanting to buy an EV because of the lower distance between refuelling and slower refuelling times compared to ICE vehicles

<sup>18</sup> https://www.bloomberg.com/news/articles/2022-09-20/more-than-half-of-us-car-sales-will-be-electric-by-2030.

## Sparks and transformers: A challenging environment for EV manufacturers

While there's plenty of open road ahead, it's still early in the race to be predicting individual winners. As a relatively new, high growth market with excellent long-term prospects, the EV industry is full of young, dynamic companies. However, vehicle research and development is extremely costly, and production at scale even more so – most pure EV manufacturers have therefore yet to turn a profit, and their success in a highly competitive market is far from assured.

Major legacy automakers such as Ford and Toyota (which recently revamped its strategy towards an 'EV-first mindset') are also focusing on an electric future. However, so far, they are mainly cannibalising their own sales rather than seeing dramatic growth.

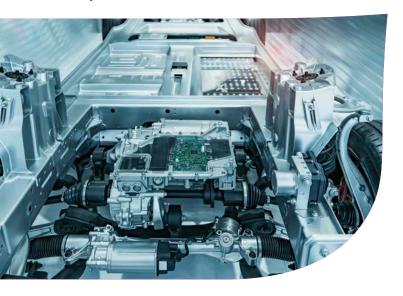
Even Tesla, whose first truly affordable car (expected to cost less than £20,000) is due by the end of the year, has its problems. As well as a recent major recall<sup>19</sup>, the company has been hit by labour shortages<sup>20</sup>, particularly in Europe, and has dropped the price of its models in China to stimulate demand.<sup>21</sup>

As such, although the long-term prospects for the overall market are excellent, the investment potential of any single manufacturer is difficult to guarantee.

# Indirect current: Why suppliers are the most interesting EV market play right now

As a high-conviction, impact-focused strategy, we are looking for companies with the potential for long-term outperformance both in terms of financial returns and driving sustainable change. From an investment standpoint, the EV market has the potential to deliver strong growth and outperformance. It also aligns well with our Future Mobility and Energy Transition impact themes.

However, we prefer companies with strong market share. As already noted, unlike many tech subsectors, the existence of incumbents and the brand-led nature of the automotive industry makes it highly competitive and hard to dominate. Given the difficulties in predicting clear winners, we think there are better ways to play the EV theme than investing directly in vehicle manufacturers.



#### Given the difficulties in predicting clear winners, we think there are better ways to play the EV theme than investing directly in vehicle manufacturers.

Auto suppliers that provide key parts to the automotive industry are an excellent way of gaining indirect exposure to the market. In particular, we prefer to focus on those suppliers developing products essential for the electrically powered, self-driving vehicles of the future.

One example of a key technology is the silicon carbide (SiC) wafer. SiC has great potential in the automotive industry – in fact it's likely that all electric vehicles will eventually use SiC chips. The significant expected growth in the EV market is therefore a major potential driver for the SiC market.

The significant expected growth in the EV market is a major potential driver for the Silicon Carbide (SiC) wafer market.

The strategy has exposure to SiC and other leading edge automotive technologies through holdings including multinational semiconductor producer. Read the case study that follows to learn more.

#### What is SiC and what are its advantages?

- Silicon carbide (SiC) is a hard, crystalline compound of silicone and carbide, also referred to as 'carborundum'; it is the world's third-hardest composite material, and, crucially, is able to withstand higher electrical fields.
- Using SiC wafers in EV power electronics means chips can run at higher voltages and higher temperatures, improving power density. This also improves the power losses in the inverter, meaning better overall system efficiency of around 99% can be achieved vs. ~95% with silicon insulated-gate bipolar transistors (IGBTs). This translates to increased vehicle range of up to 10%.
- Improved battery efficiency enables the use of smaller, lighter battery packs and cooling systems; this also means the weight of the vehicle's supporting structure can be reduced. SiC also allows a simplified circuit design, resulting in a reduction in the size, weight and cost of the control system. Overall weight savings per car can be 150-200kg.
- As a result, SiC devices are increasingly preferred in high-voltage power converters over traditional siliconbased designs; however, SiC wafers are tricky, timeconsuming and costly to make, creating high barriers to entry and giving sector leaders a strong advantage.

 $<sup>^{19}\,</sup>https://www.forbes.com/sites/qai/2023/02/20/tesla-recall-hits-nearly-363000-cars-with-full-self-driving-software/.$ 

<sup>&</sup>lt;sup>20</sup> https://www.wired.com/story/tesla-vacancies-staff-shortage-berlin/.

<sup>&</sup>lt;sup>21</sup> https://insideevs.com/news/630106/tesla-model3-modely-priceschina-january2023/.=



STMicroelectronics is a global Integrated Device Manufacturer (IDM) that provides proprietary technologies for industrial, consumer electronics, communications, computer equipment and automotive applications, including EVs.

#### Impact themes:

**Future Mobility Energy Transition** 

French-Italian multinational STMicroelectronics ('ST') produces analogue semiconductors for the global market. With annual revenues of over US\$13bn, it is one of the top five players in this space. The company has 14 manufacturing sites globally, including both wafer processing and assembly.

ST is attractively valued and is a leader in several areas of high structural growth. It is directly exposed to the electrification of our world and is leading innovation in fields that promise to significantly reduce global emissions. The firm's products are sold predominantly into the Asian electronics value chain, but in terms of end use are employed across a balanced regional profile (41% Americas, 34% APAC, 25% EMEA).

#### Why we're invested

Sustainability has been integral to ST's business model for over a quarter of a century. The company first established an environmental policy in 1993 and published its first environmental report in 1997.

Arguably the firm's products have always been a 'net good' for society, enabling wider technological innovations and helping improve energy efficiency. Today, ST is leading the charge on silicon carbide (SiC) power electronics, a technology that promises to save millions of tonnes of CO<sub>2</sub>. Wolfspeed estimate that the lifetime GHG emissions reduced by using SiC in a single EV sedan is approx. 690kg CO<sub>2</sub> eq over its nearest alternative.

Wolfspeed estimate that the lifetime GHG emissions reduced by using SiC is a single EV sedan is approx.

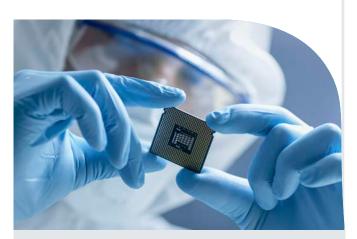


#### ST is leading the charge on silicon carbide (SiC) power electronics, a technology that promises to save millions of tonnes of CO<sub>2</sub>.

SiC has enormous potential for use in electric vehicles (EVs) to drive improved efficiency and enhance vehicle performance. These improvements are helping to accelerate EV adoption by overcoming hurdles such as range anxiety, resulting in a growing positive downstream impact.

ST also has a class-leading portfolio of products in Advanced Driver Assistance Systems (ADAS). These are an increasingly common set of automotive technologies that include blind spot detection, lane departure warning, collision warning, adaptive cruise control and park assist.

Given its strong position in these leading-edge technologies, ST is well-placed to benefit strongly from the evolution of the automotive sector, even if the overall market is flat in terms of sales growth. We estimate the company could reach around \$2bn in revenues from SiC alone by 2025.



#### **Goals and targets**

25 years reporting in 1997.

ST started sustainability

**20%** 

Reduction of energy consumption per wafer by 2025 vs. 2016.

2027

Year by which ST is committed to being carbon neutral.

Percentage of the company's 100% Percentage of the company direct energy to be met by renewables by 2027.

The above does not represent all of the securities held in the portfolio and it should not be assumed that the above securities were or will be profitable. This information does not constitute a solicitation or offer to any person to buy or sell any related securities or financial instruments.

The value of investments and income from them may go down as well as up, and you may not get back the original amount invested. Any investments overseas may be affected by currency exchange rates. Past performance is not a reliable indicator of future results and targets are not guaranteed.

For professional investors only. This is a marketing communication. It does not constitute a solicitation or offer to any person to buy or sell any related securities, financial instruments or financial products. No action should be taken or omitted to be taken based on this document. Tax treatment depends on personal circumstances and may change. This document is not advice on legal, taxation or investment matters so investors must rely on their own examination of such matters or seek advice. Before making any investment (new or continuous), please consult a professional and/or investment adviser as to its suitability. Any opinions expressed may change. All figures, unless otherwise indicated, are sourced from Federated Hermes. Whilst Federated Hermes has attempted to ensure the accuracy of the data it is reporting, it makes no representations or warranties, expressed or implied, as to the accuracy or completeness of the information reported. The data contained in this document is for informational purposes only, and should not be relied upon to make investment decisions. Federated Hermes shall not be liable for any loss or damage resulting from the use of any information contained on these pages. All performance includes reinvestment of dividends and other earnings. Please consider all strategy characteristics when investing and not just ESG characteristics.

Federated Hermes refers to Federated Hermes Limited ("Federated Hermes"). The main entities operating under Federated Hermes are: Hermes Investment Management Limited ("HMML"); Hermes Fund Managers Ireland Limited ("HFMIL"); Hermes Alternative Investment Management Limited ("HARIML"); Hermes Real Estate Investment Management Limited ("HREIML"); Hermes Equity Ownership Services Limited ("EOS"); Hermes Stewardship North America Inc. ("HSNA"); Hermes GPE LLD ("Hermes GPE"); Hermes GPE (USA) Inc. ("Hermes GPE USA"), Hermes GPE (Singapore) Pte. Ltd ("HGPE Singapore"), Federated Investors Australia Services Pty Ltd. ("FIAS") and Federated Hermes Japan Ltd ("FHJL"). HIML, HAIML and Hermes GPE are each authorised and regulated by the Financial Conduct Authority. HAIML and HIML carry out regulated activities associated with HREIML. HIML, Hermes GPE and Hermes GPE USA are each a registered investment adviser with the United States Securities and Exchange Commission ("SEC") and HAIML and HFMIL are each an exempt reporting adviser. HGPE Singapore is regulated by the Monetary Authority of Singapore. FHJL is regulated by Japan Financial Services Agency. FIAS holds an Australian Financial Services Licence. HFMIL is authorised and regulated by the Central Bank of Ireland. HREIML, EOS and HSNA are unregulated and do not engage in regulated activity.

In the European Economic Area ("EAA") this document is distributed by HFMIL. Contracts with potential investors based in the EEA for a segregated account will be contracted with HFMIL.

Issued and approved by Hermes Investment Management Limited which is authorised and regulated by the Financial Conduct Authority. Registered address: Sixth Floor, 150 Cheapside, London EC2V 6ET. Telephone calls may be recorded for training and monitoring purposes. Potential investors in the United Kingdom are advised that compensation may not be available under the United Kingdom Financial Services Compensation Scheme.

The strategy has environmental and/or social characteristics and so may perform differently to other strategies, as its exposures reflect its sustainability criteria.

In Argentina: These materials and the information contained herein does not constitute and is not intended to constitute an offer and accordingly should not be construed as such. The products or services referenced in these materials may not be licensed in all jurisdictions, and unless otherwise indicated, no regulator or government authority has reviewed these materials, or the merits of the products and services referenced herein. These materials and the information contained herein has been made available in accordance with the restrictions and/or limitations implemented by any applicable laws and regulations. These materials are directed at and intended for institutional investors (as such term is defined in each jurisdiction in which these materials are being marketed). These materials are provided on a confidential basis for informational purposes only and may not be reproduced in any form. Before acting on any information in these materials, prospective investors should inform themselves of and observe all applicable laws, rules and regulations of any relevant jurisdictions and obtain independent advice if required. These materials are for the addressee only and should not be given, forwarded or shown to any other person (other than employees, agents or consultants in connection with the addressee's consideration thereof).

In Australia: This Strategy Document relates to potential offer of financial products or investment opportunities in Australia (Investment opportunities). Both Hermes Investment Management Ltd (HIML) and Federated Investors Australia Services Ltd. ACN 161 230 637 (FIAS) are the distributors of the Investment opportunities. HIML does not hold an Australian financial services licence (AFS licence) under the Corporations Act 2001 (Cth) ("Corporations Act"). HIML operates under the relevant class order relief from the Australian Securities and Investments Commission (ASIC) while FIAS holds an AFS licence (Licence Number - 433831).

The offer of Investment opportunities only made in circumstances under which no disclosure is required under Chapter 6D and Part 7.9 of the Corporations Act. Nothing in this Strategy Document is, or purports to be, an offer to a person to whom disclosure would be required under Chapter 6D or Part 7.9 of the Corporations Act. This Strategy Document is not a disclosure document under Chapter 6D of the Corporations Act or a product disclosure statement for the purposes of Part 7.9 of the Corporations Act. This Strategy Document has not been and will not be lodged with ASIC and does not contain all the information that a disclosure document or a product disclosure statement is required to contain. The distribution of this Strategy Document in Australia has not been authorised by ASIC or any other regulatory authority in Australia. In addition, the Strategy is not a registered managed investment scheme, as defined in the Corporations Act.

This Strategy Document is provided for general information purposes only and is not intended to constitute, and does not constitute, the provision of any financial product advice or recommendation and must not be relied upon as such. This Strategy Document is not intended to influence a person in making a decision in relation to a particular financial product or class of financial products, or an interest in a particular financial product or class of financial products.

This Strategy Document has been prepared without taking account of your objectives, financial situation or needs and you should obtain independent professional financial advice that considers your circumstances before making any financial or investment decisions.

In Bahrain: This document has not been approved by the Central Bank of Bahrain which takes no responsibility for its contents. No offer to the public to purchase the strategies will be made in the Kingdom of Bahrain and this document is intended to be read by the addressee only and must not be passed to, issued to, or shown to the public generally.

In Brazil: The strategies may not be offered or sold to the public in Brazil. Accordingly, the strategies have not been nor will be registered with the Brazilian Securities Commission – CVM nor have they been submitted to the foregoing agency for approval. Documents relating to the strategies, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of strategies is not a public offering of securities in Brazil, nor used in connection with any offer for subscription or sale of securities to the public in Brazil.

**In Brunei:** This document is intended for distribution only to specific classes of investors as specified in the Order and must not, therefore, be delivered to, or relied on by, a retail client. The Autoriti Monetari Brunei Darussalam is not responsible for reviewing any documents in connection with these strategies. Prospective purchasers of the strategy should conduct their own due diligence.

In Chile: Federated Hermes is not registered or licensed in Chile to provide managed account services and is not subject to the supervision of the Comisión para el Mercado Financiero of Chile ("CMF"). The managed account services may not be publicly offered or sold in Chile.

In China: This document does not constitute a public offer of the strategies in the People's Republic of China (the "PRC"). The strategies are not being offered or sold directly or indirectly in the PRC to or for the benefit of, legal or natural persons of the PRC. Further, no legal or natural persons of the PRC may directly or indirectly purchase any of the strategies or any beneficial interest therein without obtaining all prior PRC's governmental approvals that are required, whether statutorily or otherwise. Persons who come into possession of this document are required by the issuer and its representatives to observe these restrictions.

In Colombia: This document does not have the purpose or the effect of initiating, directly or indirectly, the purchase of a product or the rendering of a service by Federated Hermes ("investment adviser") to Colombian residents. The investment adviser's products and/or services may not be promoted or marketed in Colombia or to Colombian residents unless such promotion and marketing is made in compliance with decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign financial and/or securities related products or services in Colombia. The investment adviser has not received authorisation of licensing from the Financial Superintendency of Colombia or any other governmental authority in Colombia to market or sell its financial products or services in Colombia this document, each recipient resident in Colombia acknowledges and agrees that such recipient has contacted the investment adviser at its own initiative and not as a result of any promotion or publicity by the investment adviser or any of its representatives. Colombian residents acknowledge and represent that (1) the receipt of this presentation does not constitute a solicitation from the investment adviser for its financial products and/or services, and (2) they are not receiving from the investment adviser any direct or indirect promotion or marketing of financial products and/or services.

In Hong Kong: The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. The strategies are not authorised under Section 104 of the Securities and Futures Ordinance of Hong Kong by the Securities and Futures Commission of Hong Kong. Accordingly, the distribution of this document, and the placement of interests in Hong Kong, is restricted. This document may only be distributed, circulated or issued to persons who are professional investors under the Securities and Futures Ordinance and any rules made under that Ordinance or as otherwise permitted by the Securities and Futures Ordinance.

In Israel: This document has not been approved by the Israel Securities Authority and will only be distributed to Israeli residents in a manner that will not constitute "an offer to the public" under sections 15 and 15a of the Israel Securities Law, 5728-1968 ("the Securities Law") or section 25 of the Joint Investment Trusts Law, 5754-1994 ("the Joint Investment Trusts Law"), as applicable. The strategies are being offered to a limited number of investors (35 investors or fewer during any given 12 month period) and/or those categories of investors listed in the First Addendum ("the Addendum") to the Securities Law, ("Sophisticated Investors") namely joint investment funds or mutual trust funds, provident funds, insurance companies, banking corporations (purchasing strategies for themselves or for clients who are Sophisticated Investors), portfolio managers (purchasing strategies for themselves or for clients who are Sophisticated Investors), investment advisors or investment marketers (purchasing strategies for themselves), members of the Tel-Aviv Stock Exchange (purchasing strategies for themselves or for clients who are Sophisticated Investors), underwriters (purchasing strategies for themselves), venture capital funds engaging mainly in the capital market, an entity which is wholly-owned by Sophisticated Investors, corporations, (other than formed for the specific purpose of an acquisition pursuant to an offer), with a shareholder's equity in excess of NIS 50 million, and individuals in respect of whom the terms of item 9 in the Schedule to the Investment Advice Law hold true investing for their own account, each as defined in the said Addendum, as amended from time to time, and who in each case have provided written confirmation that they qualify as Sophisticated Investors, and that they are aware of the consequences of such designation and agree thereto; in all cases under circumstances that will fall within the private placement or other exemptions of the Joint Investment Trusts Law, the Securities Law and any applicable guidelines, pronouncements or rulings issued from time to time by the Israel Securities Authority. This document may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Any offeree who purchases strategies is purchasing such strategies for its own benefit and account and not with the aim or intention of distributing or offering such strategies to other parties (other than, in the case of an offeree which is a Sophisticated Investor by virtue of it being a banking corporation, portfolio manager or member of the Tel-Aviv Stock Exchange, as defined in the Addendum, where such offeree is purchasing strategies for another party which is a Sophisticated Investor). Nothing in this document should be considered investment advice or investment marketing as defined in the Regulation of Investment Counselling, Investment Marketing and Portfolio Management Law, 5755-1995. Investors are encouraged to seek competent investment counselling from a locally licensed investment counsel prior to making the investment. As a prerequisite to the receipt of a copy of this document a recipient may be required by the Issuer to provide confirmation that it is a Sophisticated Investor purchasing strategies for its own account or, where applicable, for other Sophisticated Investors. This document does not constitute an offer to sell or solicitation of an offer to buy any securities other than the strategies offered hereby, nor does it constitute an offer to sell to or solicitation of an offer to buy from any person or persons in any state or other jurisdiction in which such offer or solicitation would be unlawful, or in which the person making such offer or solicitation is not qualified to do so, or to a person or persons to whom it is unlawful to make such offer or solicitation.

In Japan: Federated Hermes Japan Ltd is registered as a Financial Instruments Business Operator in Japan (Registration Number: Director General of the Kanto Local Finance Bureau (Kinsho) No. 3327), and conducting the Investment Advisory and Agency Business as defined in Article 28 (3) of the Financial Instruments and Exchange Act (FIEA). Federated Hermes Japan Ltd is acting as agent or intermediary for the conclusion of investment advisory contracts or discretionary investment contracts between affiliated companies within the Federated Hermes group and Japanese licensed discretionary investment managers, trust banks and other Japanese financial institutions. Federated Hermes Japan Ltd is a member of Japan Investment Advisers Association (JIAA). Reference to Federated Hermes in this material is not limited to Federated Hermes Japan Ltd, but includes group affiliates.

In Kuwait: This document is not for general circulation to the public in Kuwait. The strategies have not been licensed for offering in Kuwait by the Kuwait Capital Markets Authority or any other relevant Kuwaiti government agency. The offering of the strategies in Kuwait on the basis of a private placement or public offering is, therefore, restricted in accordance with Law No. 7 of 2010 and the bylaws thereto (as amended). No private or public offering of the strategies is being made in Kuwait, and no agreement relating to the sale of the strategies will be concluded in Kuwait. No marketing or solicitation or inducement activities are being used to offer or market the strategies in Kuwait.

In The Sultanate of Oman: The information contained in this document neither constitutes a public offer of securities in the Sultanate of Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy Non-Omani securities in the Sultanate of Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued by Decision No.1/2009). Additionally, this document is not intended to lead to the conclusion of any contract of whatsoever nature within the territory of the Sultanate of Oman.

In Peru: All content in this presentation is for information or general use only. The information contained in this presentation is referential and may not be construed as an offer, invitation or recommendation, nor should be taken as a basis to take (or stop taking) any decision. This presentation has been prepared on the basis of public information that is subject to change. This information may not be construed as services provided by Federated Hermes, Inc. within Peru without having the corresponding banking or similar license according to the applicable regulation.

In South Africa: This document is not intended and does not constitute an offer, invitation, or solicitation by any person to members of the public to invest. This document is not an offer in terms of Chapter 4 of the Companies Act, 2008. Accordingly this document does not, nor is it intended to, constitute a prospectus prepared and registered under the Companies Act.

In South Korea: Hermes Investment Management Limited is not making any representation with respect to the eligibility of any recipients of this document to acquire the strategies therein under the laws of Korea, including but without limitation the Foreign Exchange Transaction Act and Regulations thereunder. The strategies have not been registered under the Financial Investment Services and Capital Markets Act of Korea, and none of the strategies may be offered, sold or delivered, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to applicable laws and regulations of Korea.

In Spain: This document is issued by Hermes Fund Managers Ireland Limited, Branch in Spain, with Fiscal Identity Number W0074815B, registered in the Mercantile Registry of Madrid, - Volume 40448, Book 0, Sheet 16, Section 8, Page M-718259, first registration, with domicile at Paseo de la Castellana 18, 7° planta, 28046 Madrid - Spain, and registered in the Comisión Nacional del Mercado de Valores with official registration number 36.

In Thailand: The document has not been approved by the Securities and Exchange Commission which takes no responsibility for its contents. No offer to the public to purchase the strategies will be made in Thailand and this document is intended to be read by the addressee only and must not be passed to, issued to, or shown to the public generally.

In United Arab Emirates (Excluding Dubai International Financial Centre and Abu Dhabi Global Market): This document, and the information contained herein, does not constitute, and is not intended to constitute, a public offer of securities in the United Arab Emirates and accordingly should not be construed as such. The strategies are only being offered to a limited number of sophisticated investors in the UAE who (a) are willing and able to conduct an independent investigation of the risks involved in an investment in such strategies, and (b) upon their specific request. The strategies have not been approved by or licensed or registered with the UAE Central Bank, the Securities and Commodities Authority or any other relevant licensing authorities or governmental agencies in the UAE. The document is for the use of the named addressee only and should not be given or shown to any other person (other than employees, agents or consultants in connection with the addressee's consideration thereof). No transaction will be concluded in the UAE and any enquiries regarding the strategies should be made to Hermes Investment Management Limited in London.

In Uruguay: These materials and the information contained herein does not constitute and is not intended to constitute an offer and accordingly should not be construed as such. The products or services referenced in these materials may not be licensed in all jurisdictions, and unless otherwise indicated, no regulator or government authority has reviewed these materials, or the merits of the products and services referenced herein. These materials and the information contained herein has been made available in accordance with the restrictions and/or limitations implemented by any applicable laws and regulations. These materials are directed at and intended for institutional investors (as such term is defined in each jurisdiction in which these materials are being marketed). These materials are provided on a confidential basis for informational purposes only and may not be reproduced in any form. Before acting on any information in these materials, prospective investors should inform themselves of and observe all applicable laws, rules and regulations of any relevant jurisdictions and obtain independent advice if required. These materials are for the use of the named addressee only and should not be given, forwarded or shown to any other person (other than employees, agents or consultants in connection with the addressee's consideration thereof).



#### **Federated Hermes**

Federated Hermes is a global leader in active, responsible investing.

Guided by our conviction that responsible investing is the best way to create long-term wealth, we provide specialised capabilities across equity, fixed income and private markets, multi-asset and liquidity management strategies, and world-leading stewardship.

Our goals are to help people invest and retire better, to help clients achieve better risk-adjusted returns, and to contribute to positive outcomes that benefit the wider world.

All activities previously carried out by Hermes now form the international business of Federated Hermes. Our brand has evolved, but we still offer the same distinct investment propositions and pioneering responsible investment and stewardship services for which we are renowned – in addition to important new strategies from the entire group.

#### Our investment and stewardship capabilities:

- Active equities: global and regional
- Fixed income: across regions, sectors and the yield curve
- Liquidity: solutions driven by four decades of experience
- Private markets: real estate, infrastructure, private equity and debt
- Stewardship: corporate engagement, proxy voting, policy advocacy

For more information, visit www.hermes-investment.com or connect with us on social media: in



