

Climate Change

Our Approach for Investments



May 2019

Contents

Introduction	03
Our beliefs	04
Our approach	06
Our actions	07
<i>Research & data</i>	07
<i>Investment integration</i>	09
<i>Client solutions</i>	11
<i>Investee engagement and voting</i>	13
<i>Collaboration and influence</i>	13
<i>Disclosure</i>	14
Our structure	16
What's next	17
<i>Appendix A – Climate change working group</i>	18
<i>Appendix B – Climate change associations and initiatives</i>	19

Author



Eva Cairns
ESG Investment Analyst

Who we are

Aberdeen Standard Investments is a leading global asset manager dedicated to helping investors around the world reach their desired investment goals and broaden their financial horizons. The investment needs of our clients are at the heart of what we do. We offer a comprehensive range of investment solutions, as well as the very highest level of service and support.



Introduction

A warming planet and the energy transition to a low-carbon economy are changing the risk profile for many of the companies and economies in which we invest.

Greenhouse gas emissions hit a record high in 2018, increasing by 1.7%. This was a result of energy demand growth, which was primarily met by fossil fuels. At the same time, we have seen an increase in costly, extreme weather events, such as storms, wildfires and floods.

The 2018 Intergovernmental Panel on Climate Change (IPCC) special report on 1.5°C warming highlights the damages we can expect if we don't take more ambitious action to reach the goals of the Paris agreement – keeping warming to well below 2°C.

As emissions continue to increase in many regions, the scale of the challenge is immense and the urgency of action is unprecedented.

As investors, we have a critical role to play in financing the transition to a low-carbon economy, and the adaptation to climate change impacts through our products and investment decisions. The transition will require a large amount of capital allocation from the private sector, which provides us with a substantial investment opportunity.

In addition, we have a responsibility to all our clients to consider how climate change will impact the value of their investments. Assessing the risks and opportunities of climate change is therefore a core part of our Environmental, Social or Governance integration approach. Regular engagement with high-emitting investee companies is essential in order to obtain a good understanding of their climate risk exposure, challenge them and promote industry best practice in climate-risk management.

We take this seriously and have developed a climate-change approach across six areas of focus. This document provides transparency on our approach and the actions we are taking to deliver on our responsibilities as investors.

“We have a responsibility to all our clients to consider how climate change will impact the value of their investments.”



Rod Paris
Chief investment officer

Our beliefs

Our climate-change approach and role as investors is underpinned by four core beliefs.



Climate change is a significant challenge for society. Stronger global policy action is necessary to help limit global warming to well below 2°C, as laid out in the Paris agreement.



The transition to a low-carbon economy cannot happen without substantial capital allocation from the private sector. This provides investment opportunities for asset managers to play a critical role in supporting the transition.

Climate policy

The Paris Agreement states that warming should be limited to well below 2°C of temperature increases compared with pre-industrial levels. We are already at 1°C warming and current policies are expected to take us to over 3°C warming world. A radical policy response will be necessary for global emissions to peak by 2020 and get onto a trajectory below 2°C warming.

The 2018 IPCC special report on the implications of 1.5 °C warming highlights the additional damages that 0.5°C of warming will cause to our planet. This includes increased levels of water stress, sea level rises and extreme heat. The consequences for people, economies and ecosystems will be severe. The financial implications for many of the assets we manage are likely to be considerable.

In our view, governments need to strengthen policies further, send clear carbon-pricing signals and provide increased incentives for low-carbon solutions to help minimise these damages. The longer action is delayed, the higher the cost of mitigation and adaptation will be.

Stronger climate-related policies will also help accelerate private-sector investment for the energy transition and improve climate-related reporting.

Capital allocation

The transition to a low-carbon economy requires a large amount of capital (estimated at \$3 trillion per annum by the International Energy Agency) to finance new power generation, energy efficiency and new transport infrastructure. This is mostly expected to come from the private sector.

This provides a substantial long-term commercial opportunity for asset managers to channel capital flows from clients to projects and businesses that will drive the transition to a low-carbon economy.

We currently provide capital to support the transition directly through our private infrastructure investments. We also provide it indirectly, through investments in infrastructure funds and provision of equity and debt capital to companies that provide solutions for the energy transition. This includes renewable energy developers, utilities and providers of energy efficient technology.

To grow our role in supporting the financing of the transition, we are continuously exploring opportunities. This includes energy efficiency and energy storage.

Our beliefs in practice



We have signed the 2018 Global Investor statement to Governments on Climate Action and also reflect this belief in our policy advocacy activities.



We offer a range of climate-related solutions and explore opportunities for allocating capital to support the energy transition continuously. This can be achieved through our direct and indirect investments.



To achieve desired outcomes for our clients, consideration of climate-change risks and opportunities is an integral part of the investment process.



Corporate engagement is essential to ensure investee companies manage climate-related risks and support a 'just' energy transition. This is an important part of our role as active investors.

Risks and opportunities

When making investment decisions, asset managers have a duty to consider all factors that may have a financially material impact on returns. Climate change is such a key factor.

The related physical and transition risks are vast and are becoming increasingly financially material for many of our investments. Not only in the obvious high-emitting sectors, such as energy, utilities and transportation, but also along the supply chain, providers of finance and in those reliant on agricultural outputs and water.

In our view, companies that successfully manage climate-change risks will perform better in the long term. It is important that we assess the financial implications of material climate-change risks across all asset classes, including our real assets, and make our portfolios more resilient to climate risk. Adaptation measures are essential to help limit damages from the physical impacts of climate change. This is a particularly important consideration for the real assets in which we invest, such as real estate and infrastructure.

Comparable climate-related data is necessary to enable effective decision making, and is something we actively source and incorporate into our process. We are supportive of the Task Force on Climate-related Financial Disclosures (TCFD) framework to strengthen climate reporting globally.

Corporate engagement

Regular engagement with high-emitting investee companies allows us to better understand their exposure and management of climate change risks and opportunities. In our actively managed investments, ownership provides us with a strong ability to challenge companies where appropriate. We can also influence corporate behaviour positively in relation to climate-risk management.

We believe that this is more powerful for an effective energy transition than a generic fossil fuel divestment approach. Through active engagement we can steer investee companies towards ambitious targets and more sustainable low-carbon solutions. If we find that there is limited progress in response to our engagement, we will consider the ultimate option of selling our holdings.

We strongly encourage companies to consider the social dimension of the energy transition to ensure it is inclusive and 'just'. This means worker and community needs are considered on the path to a low-carbon economy so they are not left stranded. Other social aspects, such as affordability and reliability of energy supply are also important.

Influencing through engagement has worked particularly well in collaboration with other asset managers and asset owners as part of our involvement in Climate Action 100+. This is a five-year initiative to engage and influence high-emitting companies collaboratively.



We provide climate change insights through research and data to investment decision makers. This helps assess the financial materiality of climate change risks and opportunities.



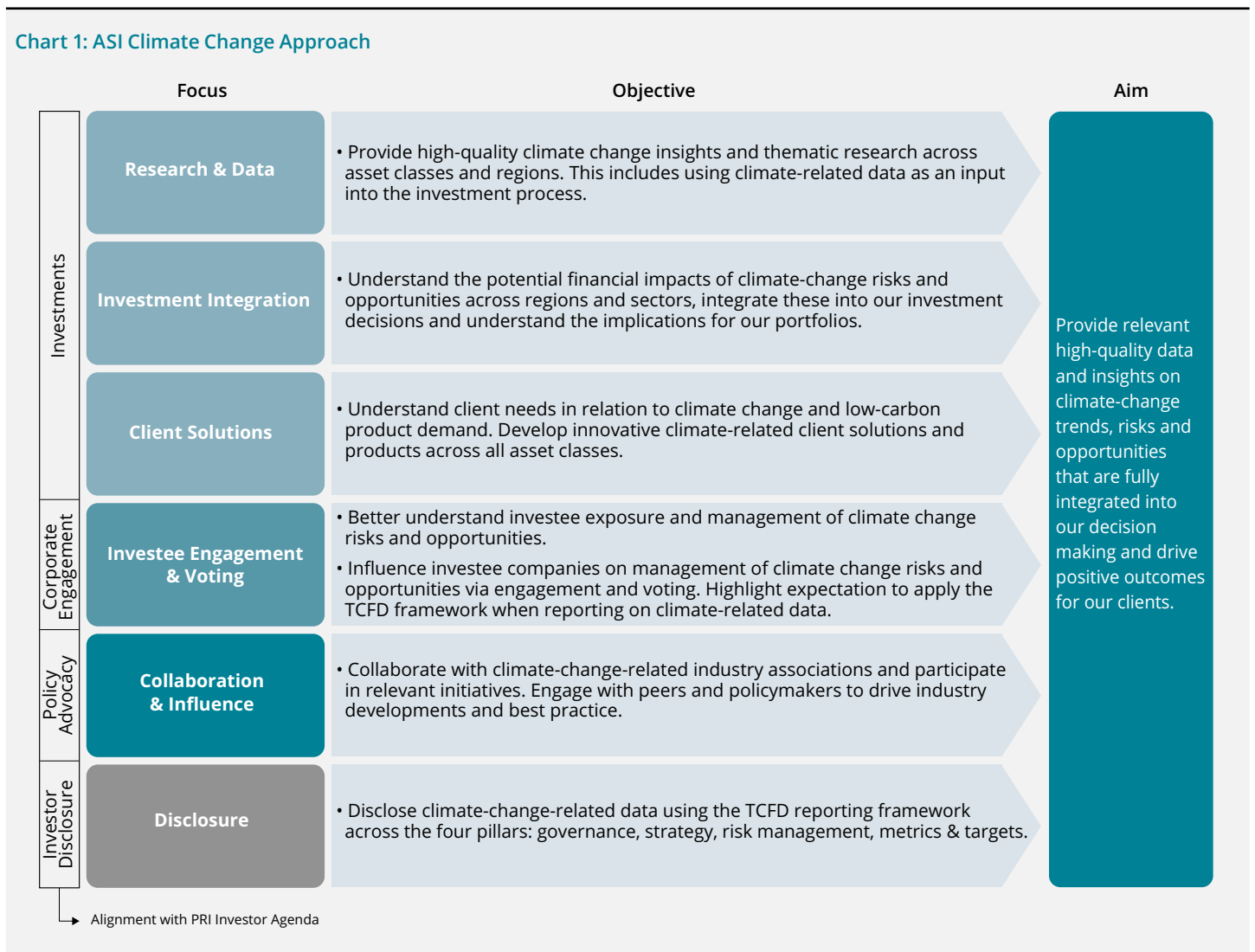
We influence management of climate-related risks through engagement and voting. We are part of Climate Action 100+ and have signed the 2018 Just Transition statement.

Our approach

As investors, our focus on climate change provides high-quality data and insights on climate-change trends, risks and opportunities. This is integrated into our decision making, drives positive outcomes for our clients and supports the transition to a low-carbon economy.

Our Climate-Change Approach for Investments¹ is built around six areas of focus. High-level objectives for each area are provided below (Chart 1). Our approach to climate change is closely aligned with the PRI Investor Agenda. This is an initiative for investors to demonstrate their contribution to transitioning the world’s financial capital to low-carbon opportunities. It encourages investors to demonstrate action across four areas: investments, corporate engagement, investor disclosure and policy advocacy.

Chart 1: ASI Climate Change Approach



¹ Note: this approach is focused on our Investments only; our Group operational climate change approach, including our own emissions, is covered in our [Group Sustainability report](#).

Our actions

Here, we detail the actions that we take to deliver against our objectives across the six areas of focus for climate change.

1. Research & data

Climate-change research – thematic & sector

High-quality research that drives investment decisions and positive outcomes is a core component of our investment strategy. This includes climate-change research, which is undertaken by investment analysts and portfolio managers across asset classes. We also have a dedicated climate-change analyst within our ESG Investment Research team. They provide insights on key regulatory and industry trends across regions and research specific climate-related risks and opportunities. This is done in collaboration with the ASI Research Institute and our Global Strategy team.

The ESG Investment team regularly produces thematic notes that discuss the implications of ESG trends across asset classes. Climate change represents one of our five thematic research pillars (Chart 3).

Climate-change-related topics we have researched over recent years include important climate-change considerations for companies and investors, such as stranded assets and policy developments. Some of these topics are incorporated within externally published white papers, available on our website. In addition, our quarterly ESG report highlights the ESG-related research and engagement undertaken across ASI, including regular articles on climate change.

We also publish internal insight notes. For example, on the outcomes of events such as COP24, climate-focused deep dives into sectors and guidance for asset managers on topics such as TCFD. Climate-change research priorities are guided by the Climate Change Working Group (see Appendix A). These are driven by industry developments, regulation and client demand.

Chart 2: Global ESG Investment Research Focus



Carbon-data analysis

The availability of reliable and robust climate-related data is critical to enable effective investment decisions. We currently provide a carbon footprint for a number of our portfolios. We have developed the capability to expand this and aim to provide carbon-footprinting reports for a wide range of our strategies across asset classes in line with TCFD requirements.

Carbon footprinting is a good starting point for understanding exposure to climate risks and the impact of a company or a portfolio on the energy transition. It can help identify relatively carbon-intensive companies and drive corporate engagement. It can also facilitate decision making to decarbonise a portfolio. Emissions are measured in CO₂e (carbon dioxide equivalent) which measures the impact of the different greenhouse gases in terms of level of CO₂ that would create the equivalent degree of warming.

Our carbon-footprinting analysis is detailed below.

- **Total emissions in tonnes of CO₂e (apportioned)** – to reflect the amount of greenhouse-gas emissions that are ‘financed’ by the portfolio. This is ultimately what countries and companies are under pressure to reduce.
- **Relative emissions (in relation to revenue or AUM) in tCO₂e/USD** – to reflect the carbon intensity of the company/portfolio. This can be compared against a benchmark, other portfolios and peers.
- **Attribution analysis** – to demonstrate which sectors and companies contribute the most to the portfolio’s carbon footprint.
- **Trend analysis** – to reflect how emissions change over time and provide a baseline for comparison. This is important, as high emitters with a positive trend can be supportive of the energy transition.

Carbon footprinting has its shortcomings. It is a backward-looking measure and data comparability across peers can be a concern. Lack of disclosure can be a challenge, as some smaller and private companies that we invest in do not disclose emissions data. At portfolio level, we apply a 75% coverage threshold to decide whether data disclosure is good enough for meaningful portfolio carbon-footprint analysis.

The scope of emissions included in analysis is an important consideration. While Scope 1* (direct emission) and Scope 2 (indirect emissions from consumption of purchased energy) are generally reported on by a company, Scope 3 emissions (taking account of upstream and downstream emissions along the value chain) are more difficult to obtain. However, they are critical for understanding the true impact a company has on emission levels. In fact, in many cases, Scope 3 emissions make up the majority of a company’s total emissions.

Our current approach is to consider Scope 1, 2 and 3 emissions at company and sector level. We limit emissions to Scope 1 and 2 for portfolio carbon footprinting to avoid double counting and data inconsistencies.

In addition to emissions data, we consider other climate-related indicators for the companies we invest in. This includes the quality of climate-risk management, climate-change strategies and targets, scenario analysis outcomes, emission forecasts and potentially avoided emissions by making certain investment choices.

Scenario Analysis:

Scenario analysis is an important topic for us as investors. It is a core part of the TCFD recommendations and it helps understand the impact of different climate-related scenarios on our investments. We currently undertake scenario analysis for certain companies and portfolios to assess alignment against a 2 °C warming scenario using publicly available tools. Our aim is to continue to expand the scope of this. We are involved in Institutional Investors Group on Climate Change (IIGCC) round tables on scenario analysis to engage on best practice with peers and refine our approach further.

* Scope 1, 2 and 3 emissions are defined by the GHG Protocol, the global standard for measuring emissions.

Portfolio carbon-footprinting example – model portfolio

Total emissions reflect the apportioned physical emissions ‘owned’ by the portfolio based on % invested and market cap

TOTAL EMISSIONS (tCO ₂ e)	Apportioned Emissions Scope 1 + 2	Scope 1 (direct)	Scope 2 (indirect)	Scope 3 (value chain)
Portfolio	5,800	5,300	500	5,200
Benchmark	8,300	7,100	1,200	8,250
Relative to Benchmark	69.8%	75.54%	36.96%	62.96%
Avoided Emissions	2,500	1,800	700	3,050

CARBON INTENSITY (tCO ₂ e/ USD revenue)	Weighted Average Carbon Intensity Scope 1 + 2	Scope 1	Scope 2	Scope 3
Portfolio	125	109	16	165
Benchmark	152	118	34	210
Relative Carbon Efficiency	17.86%	7.77%	53.40%	21.35%
Difference to Benchmark	-27	-9	-18	-45

The closer the portfolio carbon efficiency to 100%, the better. A 100% carbon efficient portfolio is one with zero CO₂ emissions.



Around 29,000 trees needed to offset the portfolio emissions

2. Investment integration

We assess risks and opportunities in relation to many environmental, social and governance (ESG) factors as an integral part of our investment process across all asset classes. This includes understanding the risks and opportunities related to climate change.

The first step is to clearly identify the climate-change risks and opportunities that a country, sector, company or real asset is facing and assess their financial materiality. The TCFD framework provides a useful guide for this (see chart 3).

Transition risks arise due to the transition to a low-carbon economy. These include higher carbon prices, emission-reducing regulation and shifts in technology and demand. High-carbon emitting industries and countries are predominantly affected by these types of risks.

Physical risks arise due to the continued increase in temperatures and extreme weather events. The negative implications of physical risks include damages to infrastructure, poor harvests, rising cost of assets and commodities, migration of climate-change refugees and operational risks in the supply chain. These can affect anyone and depend on the regions of operation. In addition, adaptation costs (e.g., infrastructure required to protect from physical damages) and the risk of rising insurance costs must be considered with an increase in physical risks materialising.

A high-level summary of key climate-change risks by sector is provided in the table opposite (chart 4). Note: the categorisation into higher- and lower-risk sectors is only indicative as the whole supply chain needs to be considered for a sector.

Opportunities - there is also considerable upside as the transition to a low-carbon economy provides attractive capital allocation opportunities. Whether or not we achieve the Paris target of warming below 2°C depends on whether the world is able to quickly deploy large amounts of private capital to construct renewable energy infrastructure, low-carbon transport and to improve energy efficiency. A move away from coal, as well as rapid deployment and falling costs of clean energy technologies, are clearly visible trends. However, a lot more is needed.

It is estimated that \$3 trillion investment a year is required for the energy transition, of which around 60% needs to happen in emerging markets. As one of the most experienced global investors in emerging markets, we are well positioned for this opportunity.

Examples of specific opportunities to consider for investors are:

- Construction of renewable-energy infrastructure and upgrading of electricity network. Renewable energy is particularly capital intensive compared to gas and coal.
- Energy efficiency improvements – particularly in upgrading existing buildings, constructing new ones and improving efficiency in industrial processes and transportation.
- Transitioning to low-carbon transport infrastructure, by electrifying vehicles and building the necessary charging infrastructure; also building better rail and mass-transit systems.
- Use of negative emission technologies, e.g., carbon capture and storage.
- Access to new markets, assets and public sector incentives.
- Adaptation, such as improving agricultural resilience, improving flood prevention infrastructure, and developing cooling equipment.

Chart 3: TCFD Risks & Opportunities

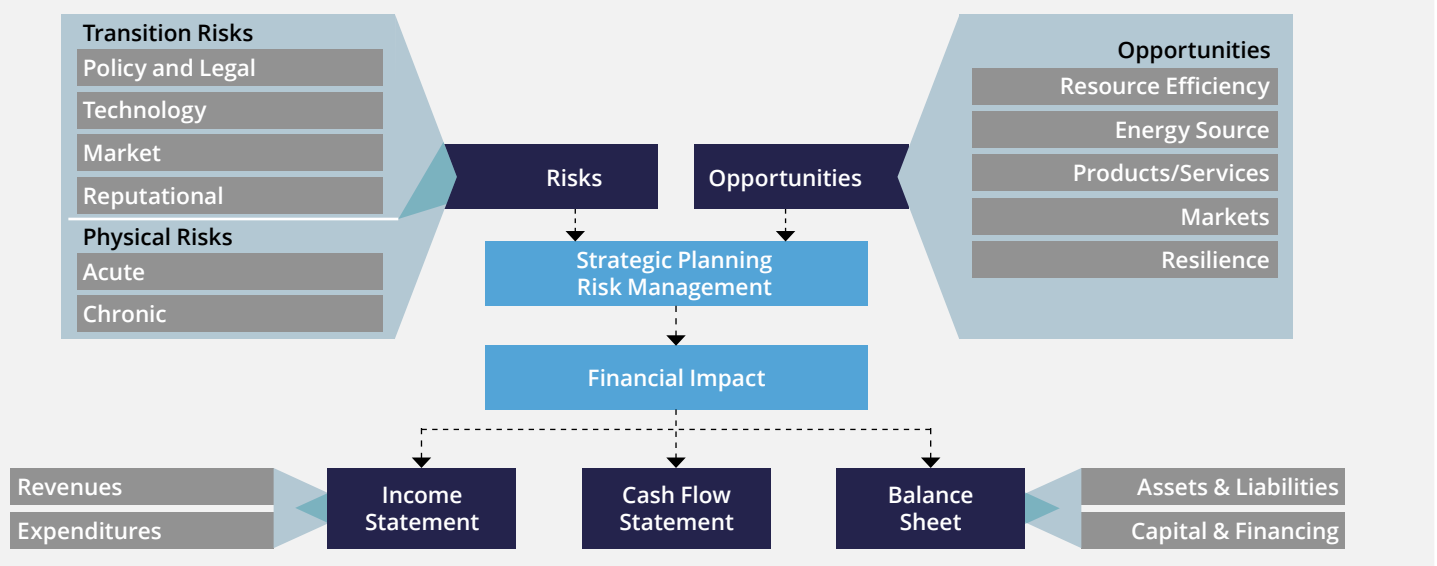
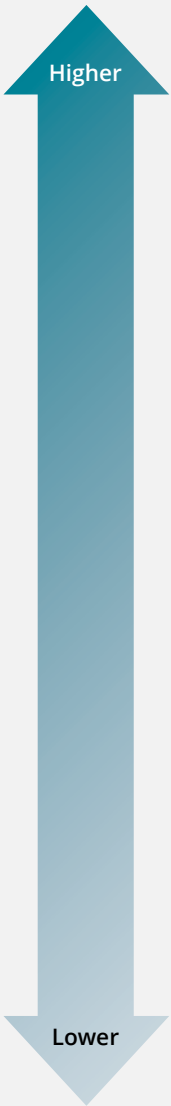


Chart 4

Risk Materiality	Sectors	Key Climate Change Risks	Financial Implications
 <p>Higher</p> <p>Lower</p>	<p>Mining & Metals Oil & Gas Utilities Heavy Industry Autos Transportation Construction Chemicals Airlines</p>	<p>Generally high carbon emitters and highly exposed to transition risks, for example</p> <ul style="list-style-type: none"> a. Regulatory changes, e.g., efficiency standards in buildings and automobiles b. Reduction in fossil-fuel demand, stranded assets, lower fossil fuel prices c. Increasing carbon prices d. Shift in transport choices e. Decarbonisation activities/technologies f. Carbon-data disclosure requirements g. Litigation risk <p>Also exposed to physical risks and necessary adaptation activities, materiality depending on location of operations.</p>	<ul style="list-style-type: none"> a. Cost of meeting regulatory demands b. Drop in revenue from fossil fuels c. Higher costs for high-carbon emitters d. Revenue drop for fossil-fuelled transportation, increase for EVs e. Cost of decarbonisation/new products f. Cost of data collection & disclosure g. Cost of legal fines
	<p>Agriculture Food Insurance</p>	<p>Highly exposed to physical risks, for example extreme weather events & temperatures leading to</p> <ul style="list-style-type: none"> a. Damaged crops b. Damaged infrastructure c. Adaptation activities d. Increased risk of catastrophic events 	<ul style="list-style-type: none"> a. Increased commodity prices b. Cost of repair and insurance payouts c. Cost of adaptation d. Reduced returns in insurance sector
	<p>IT Financials Telecoms Healthcare</p>	<p>Generally lower carbon emitters, but still required to consider exposure to transition and physical risks:</p> <ul style="list-style-type: none"> a. Disrupted infrastructure and operations due to physical damage b. Impact on data centres which are energy and water intensive c. Lending criteria and failure of repayment d. Failure of investee companies e. Increase in decarbonisation activities f. Carbon-data disclosure requirements 	<ul style="list-style-type: none"> a. Cost of infrastructure repair b. Cost of energy and water stress c. Lending limitations and failed repayments d. Reduction in investment value e. Cost of energy and decarbonisation f. Cost of meeting disclosure demands

3. Client solutions

A number of products enable our clients to transition away from carbon-intensive industries across public and private markets.

Our offerings include:

- Impact investing focused on companies that provide clean energy and energy-efficient products and services
- Screening based on climate-related criteria, such as power generation and revenue from fossil fuels
- Carbon-performance-driven investing
- Investment in low-carbon assets, e.g., renewables and real estate that is highly energy efficient.

Examples across asset classes are detailed below.

Credit

We manage a low-carbon fixed-income portfolio that focuses on identifying companies that are well positioned for the energy transition based on a backward and forward-looking view. We also include low-carbon considerations in our ethical credit portfolio or strategy and our SRI products.

Equity

Our Impact investing solution aims to support the delivery of measurable, positive environmental and social impact, aligned with the UN sustainable Development Goals (SDGs), while generating strong financial returns. Our approach is based on identifying impact and allocating capital across eight pillars aligned with the SDGs. Companies in the sustainable-energy pillar are those that provide positive impact solutions in relation to clean energy, energy efficiency and access to energy. In addition, our ethical strategy or portfolio screen out companies that have significant carbon-intensive operations, such as coal mining.

Real estate

Making all our real estate investments more climate resilient is a key area of focus within that asset class. This includes improving energy efficiency and sourcing renewable energy where possible. We have made a firm pledge that all the real estate managed by ASI in the UK will be powered by 100% renewable electricity by 2020 (where we have direct control of energy supplies). In addition, we will increase the amount of renewable electricity we procure for real estate investments globally.

Infrastructure

Our infrastructure portfolio or strategy provide finance to build and operate renewable-energy projects, predominantly in Europe. Many of our multi-asset portfolio or strategy also invest in infrastructure indirectly through our own infrastructure portfolio or strategy and external infrastructure portfolio or strategy.

Strategic asset allocation

Climate change is an important consideration for our Strategic Asset Allocation (SAA) team. The team advises clients about the optimal allocation of portfolios across a wide range of asset classes including equities, rates, credit, property and infrastructure. The change in climate policies and increasing physical impacts of climate change have affected the risk and return outlook for a number of asset classes. This has consequently affected the SAA's decision making, for example, improved technology and the availability of subsidies has dramatically improved the risk-return profile of renewable energy infrastructure. We have incorporated this into our analysis and, as a result, have substantially increased our allocation to renewable-energy infrastructure assets.

“Climate change is at the top of our agenda in 2019. We have an important role to play in supporting the energy transition through our capital-allocation decisions and developing solutions that meet the changing needs of our clients.”

Euan Stirling,

Global Head of Stewardship and ESG Investing



4. Investee engagement and voting

Regular engagement with investee companies is essential to understand management of climate-related risks and opportunities. It allows us to communicate our expectations to stakeholders.

Specifically, we expect investee companies to:

- Apply TCFD recommendations to their climate-data reporting
- Identify material risks and opportunities from climate change and assess their potential financial impact along the company value chain
- Integrate these risks and opportunities into longer-term business planning
- Develop climate policies, report on carbon performance, set targets in line with the Paris Agreement and undertake scenario analysis where relevant
- Invest adequately in programmes and technologies to improve operational efficiency and reduce carbon emissions
- Be supportive of public policies that are aligned with the Paris Agreement goals.

High-carbon emitting companies need to take these requirements seriously. As large investors, our active engagement and capital-allocation decisions provide a strong incentive for our investee companies to re-channel their own investments from carbon-intensive to low-carbon activities, assets and technologies. If we find that our engagement efforts are not effective, we will consider the ultimate option of selling our holdings.

We use company assessment undertaken by the Transition Pathway Initiative's (TPI) company as part of our own climate-related engagements. The TPI assesses companies based on two criteria.

1. **Management quality** – the quality of companies' management of their greenhouse-gas emissions and of risks and opportunities related to the low-carbon transition.
2. **Carbon performance** – how companies' carbon performance now and in the future might compare to the international targets and national pledges made as part of the Paris Agreement.

Increasingly, companies have to face climate-change-related shareholder resolutions at their annual or extraordinary general meetings. We have supported a number of resolutions on climate change and our voting records are publicly available on our website. Our policy is to encourage disclosure in line with the TCFD requirements and to promote the transparency of actions taken to reduce carbon risk at investee companies.

5. Collaboration and influence

Industry associations & statements

Providing support and actively engaging with a range of climate change associations and initiatives helps progress towards a low-carbon economy. We collaborate with industry associations on a number of initiatives to encourage action and transparency of data for the companies in which we invest.

We are members of the Institutional Investors Group on Climate Change (IIGCC), Principles for Responsible Investment (PRI) and Climate Action 100+. We have also pledged our support for TCFD, have signed the Global Investor Statement on Climate Change 2018 and the Just Transition statement.

A full, detailed list is provided in Appendix B.

Policy advocacy

Policy advocacy is important because helping to accelerate the low-carbon transition through capital-allocation opportunities is reliant on the development of government policies to remove barriers and provide incentives. It is clear that stronger policies would result in additional costs for certain sectors, but also create significant opportunities. We believe that a strong policy response is ultimately inevitable, as pressure on governments increases with rising temperatures and more frequent physical impacts.

We engage with policy makers and regulators on numerous climate-related topics.

- Meeting European Union members of parliament to discuss the High-Level Expert Group on Sustainable Finance plan, particularly disclosure requirements for asset managers.
- Responding to the Financial Conduct Authority discussion paper on climate change and green finance.
- Participating in the Financial Reporting Council – Climate Change Lab.
- Taking part in the IIGCC policy programme to influence climate-related policy developments.

It is our expectation that climate-related reporting requirements for asset managers will strengthen in line with the proposals of the EU Sustainable Finance Plan and the FCA discussion paper on climate change and green finance. This will help increase transparency, consistency and quality of data across the industry.

6. Disclosure

In December 2017, we publicly expressed our commitment to disclosing climate related data in line with the TCFD⁴.

The central objective of the Task Force’s recommendations is to encourage organisations to evaluate and disclose the material climate-related risks and opportunities that are most pertinent to their business activities. This is expected to increase climate-related data transparency and make the financial system more resilient to climate-related risks.

Working towards reporting in line with TCFD is a joint effort as it requires reporting on two levels.

1. **Operational** – our climate-change-related activities, processes and emissions at plc level are reflected in the recommended disclosures made for all sectors. This is led by our Group Sustainability team and will be covered in our sustainability report.
2. **Investments** – focused on the impact of climate-change risks and opportunities on our investments, as highlighted in the additional disclosure requirements for asset managers. This is led by the Investments Climate Change Working Group.

Recommendations and Supporting Recommended Disclosures

Governance

Disclose the organisation's governance around climate-related risks and opportunities.

Recommended Disclosures

- a) Describe the board's oversight of climate-related risks and opportunities.
- b) Describe management's role in assessing and managing climate-related risks and opportunities.

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material

Recommended Disclosures

- a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.
- b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.
- c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Risk Management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

Recommended Disclosures

- a) Describe the organisation's processes for identifying and assessing climate-related risks.
- b) Describe the organisation's processes for managing climate-related risks.
- c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

Recommended Disclosures

- a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.
- c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

⁴The Taskforce for Climate-related Financial Disclosures (TCFD) was established by the G20 Financial Stability Board (FSB) in 2016 to develop a framework for consistent company disclosures on the financial implications of climate change risks.

“Standard Life Aberdeen plc supports the recommendations of the TCFD, as we believe they will contribute to improving the quality and usefulness of climate change disclosures. As an investor, a systematic assessment by companies of the impact of climate change on their business model will help us to determine the nature, scale and management of this factor. As a company ourselves, we will follow the recommendations to demonstrate to markets why climate change analysis is relevant and how it informs our approach to strategy, governance and risk management.”

Keith Skeoch
 Chief Executive Officer,
 Standard Life Aberdeen plc

Below is a summary of our progress against each of the columns.

- **Governance** – any material climate-change-related risks will be discussed at board level. Senior members of staff are involved in considering key climate-change risks and opportunities. This can be done through the Climate Change Working Group. Such considerations are also part of investment decision-making for current strategies and client solutions.
- **Strategy** – at an operational level, risks and their impacts are identified and managed in the climate-change risk register. As an organisation, we are working towards obtaining a better understanding of the financial impacts and our resilience with regards to different scenarios. This includes the impact of different climate scenarios on our products and investment strategies. We believe this is an important area of focus.
- **Risk management** – we have a process for identifying risks and opportunities for our business. We also have an in-depth risk register covering each of the requirements in the TCFD framework. This outlines the likelihood and impact of risks, as well as timeframe and mitigation actions. The risks are assessed from an operational and investment perspective. This is conducted by the ESG Investment team, working in conjunction with group sustainability. Our engagement with investee companies is supported by a TCFD engagement tool to encourage better climate-related disclosures.
- **Metrics & targets** – we publish our own GHG emissions (Scope 1, 2 and 3) and are keen to have clear emission reduction targets. Due to the recent merger, however, previous targets have to be re-established for a new baseline. We have published our 2018 emissions baseline in our sustainability report and are in the process of setting appropriate targets for the merged company. From an investments perspective, we aim to provide a weighted average carbon intensity for our products where data coverage is above 75%.



Our structure

The importance of climate-change considerations is reflected in our structure. This provides support to investment managers and analysts who need to consider climate change in their daily investment decision making.

Climate change is a core pillar for our ESG Investment Research team. This includes a dedicated ESG climate-change specialist who leads on our six areas of focus for climate change. This is done in collaboration with many areas across the business.



Climate Change Working Group

In addition, we created the Climate Change Working Group for Investments with senior representatives from a wide range of business areas and asset classes. The goal is to provide direction and validation of our climate change strategy and action plans. Further details on the responsibilities of the group is provided in the Group's Terms of Reference in Appendix A.

Complementary to our focus in Investments, we have an Operational Climate Change Working Group. It focuses on our own company emissions and climate actions at an operational level, including TCFD implementation. This is led by our Group Sustainability team and further information is provided in our Group Sustainability report.



What's next?

We are moving things forward across all six areas of focus. Our current climate change priorities are detailed below.

1. **In-depth research** into the financial impact of key risks and opportunities relevant to specific sectors and regions. Our aim is to clearly demonstrate the impact of certain climate-related risks on the investment case via examples and case studies.
2. **Provide carbon data** for our portfolios and investee companies as standard across asset classes. This will therefore be a core part of our investment decision-making process.
3. **Continue to engage** with investee companies on climate-related matters, individually and via Climate Action 100+. The goal is to influence the just energy transition positively and encourage disclosure in line with TCFD recommendations. Reflect our view through voting and shareholder resolutions in relation to climate change.
4. **Reporting in line with TCFD** with a particular focus on:
 - a. scenario analysis for our investment products and strategies
 - b. providing a weighted average carbon intensity for our strategies or portfolios where data coverage is sufficient.
5. **Capital allocation** – Develop a clearer understanding of:
 - a. how Aberdeen Standard Investments' asset allocation currently deploys capital to support the transition
 - b. how Aberdeen Standard Investments and its clients can improve their strategic asset allocation approach to more effectively support the climate transition.
6. **Develop new climate-related client solutions** to meet growing client demand.
7. **Continuous collaboration** – with the climate-related associations of which we are members. In particular, the different work programmes of the IIGCC, including investor practices, corporate engagement and policy advocacy.

This document will be updated regularly to demonstrate the progress and decisions we are making in relation to climate change.



Appendix A

Climate Change Working Group

Climate Change Working Group - terms of reference

Objectives

The group consists of cross asset-class representatives from the business. They all have a common interest in climate change from an investments perspective. The objective is to provide guidance and direction for climate-change-related investments matters.

More specifically, the aim is to:

- highlight the relevance of climate change on investments decisions
- share and discuss latest industry developments on climate change
- discuss priorities and concerns in relation to climate change risks and opportunities, focused on different sectors and asset classes
- agree on a strategy and approach for integrating climate change into our investments decision-making process. This can then be used for our ESG house view on climate change and internal and external communications.

Responsibilities

- **Input** – provide relevant climate-change-related input to represent risks, opportunities and impacts
- **Understand** – the impact of climate change on the investment process and raise awareness
- **Challenge** – current state and proposed initiatives to help create a robust climate change strategy and approach
- **Future View** – provide a view on future developments and expectations within the business area in relation to climate change
- **Prioritisation** – provide a view on recommended initiatives and research to help focus resources
- **Review and Validate** – review and validate internal climate change related documentation to ensure they reflect our wider business view
- **Outputs** – Aberdeen Standard Investments Climate Change – Our Approach for investments: a clear articulation of integration of climate change risks and opportunities in the investment process, products, carbon data usage and disclosure.

Format and frequency

- The CCWG will meet every six to eight weeks to discuss climate-change developments, emerging risks & opportunities, make decisions and agree on prioritisation of next steps
- Inputs and supporting documents for the meeting will be distributed at least one day in advance by the chair
- The minutes, decisions and the actions from the meeting will be circulated within three days of the meeting by the chair
- The forum will consist of the stakeholders mentioned below but other key representatives may be invited to attend on an ad-hoc basis as required.

Key roles and stakeholders

The chair of the meeting will be the ESG Investment Climate Change specialist.

Members from the following business areas are represented:

- Equities
- Credit
- Emerging market debt
- Real estate
- Private equities
- Infrastructure
- Global equities research
- Global strategy
- Strategic asset allocation
- ASI research institute
- ESG investment team
- Group sustainability

Each of the business areas should be represented at the meeting and delegate appropriately if needed.

Appendix B

Climate Change Associations & Initiatives

We support and actively engage with a range of climate change associations and initiatives to help lead progress towards a low-carbon economy. Examples include.

- **PRI** – as signatory of the Principles of Responsible Investment (PRI), we regularly engage on climate-related matters. We align ourselves with the Investor Agenda which was developed for the global investor community to accelerate and scale up the actions that are critical to tackling climate change and achieving the goals of the Paris Agreement.
- **IIGCC** – we are members of the Institutional Investors Group on Climate Change (IIGCC). This is a network of nearly 150 asset managers and owners in Europe. It takes a pro-active approach to managing climate change risks and opportunities. The IIGCC also provides a collaborative platform to encourage public policies, investment practices and corporate behaviour that address long-term risks and opportunities associated with climate change.
- **Paris Pledge for Action** – by signing the Paris Pledge for Action we have demonstrated our support for the vital goals of the Paris Agreement.
- **Taskforce for Climate-related Financial Disclosures (TCFD)** – in 2017, we formally expressed our support for TCFD. We are actively working towards implementing the TCFD recommendations and encouraging our investee companies to do the same. One key area of focus is to provide a weighted average of carbon intensity for our strategies or portfolios.
- **Global Investor Statement to Governments on Climate Change 2018** – we are a signatory of the Global Investor Statement on Climate Change, which calls for governments to take action and strengthen their climate related policies in order to:
 - Achieve the Paris Agreement’s goals – update and strengthen nationally determined contributions to meet the emissions reduction goal of the Paris Agreement. The process started in 2018 and will be completed no later than 2020.
 - Accelerate private-sector investment into the low-carbon transition - Incorporate Paris-aligned climate scenarios into all relevant policy frameworks and energy transition pathways. Put a meaningful price on carbon. Phase out fossil-fuel subsidies by set deadlines. Phase out thermal coal power worldwide by set deadlines.
 - Commit to improve climate-related financial reporting – Publicly support the TCFD recommendations and the extension of its term. Commit to implement the TCFD recommendations in their jurisdictions, no later than 2020. Request the FSB and international standard-setting bodies incorporate the TCFD recommendations into their guidelines and standards.
- **Transition Pathway Initiative (TPI)** – we are proud to be an early supporter and research funding partner of the TPI. This assesses companies' readiness for the transition to a low-carbon economy and is aligned with the requirements of the TCFD.
- **ClimateAction 100+** – as members of this collaborative initiative between asset managers and asset owners, we engage with high-carbon emitters, influence disclosure and encourage positive behaviour in relation to climate risk management and energy transition strategies in line with TCFD.
- **Just Transition Statement** – we are a signatory of the 2018 Statement of Investor Commitment to support a Just Transition to a low-carbon economy by integrating the workforce and social dimension into our climate practices. We have committed to take action in one or more of the following:
 - investment strategy - integrate workplace and community issues into climate-change policies and investment beliefs, dialogue with stakeholders and mandates
 - corporate engagement - include workforce and community issues in climate-related engagement on corporate practices, scenarios and disclosures
 - capital allocation decisions - design investment mandates across asset classes that link decarbonisation, climate resilience, decent work, and inclusive growth
 - policy advocacy and partnerships - support the inclusion of the just transition in regional, national and international policies, contribute to place-based partnerships
 - learning and transparency - develop systems to review and communicate progress
- **CDP** – as signatory of CDP, we have access to its extensive research and database on climate change, water and forestry. We also submit our own emissions data to CDP.
- **ShareAction** – we regularly engage with ShareAction to support its activities and provide input on shareholder resolutions.

Important Information

This content is available in the following countries/regions and issued by the respective entities detailed below:

Europe, Middle East and Africa

United Kingdom: Aberdeen Asset Managers Limited, registered in Scotland (SC108419) at 10 Queen's Terrace, Aberdeen, AB10 1XL. Standard Life Investments Limited registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL. Both companies are authorised and regulated in the UK by the Financial Conduct Authority.

EU, Norway, Iceland: Aberdeen Standard Investments Ireland Limited. Registered in Republic of Ireland (Company No.621721) at 2-4 Merrion Row, Dublin D02 WP23. Regulated by the Central Bank of Ireland. Aberdeen Asset Managers Limited. Registered in Scotland (SC108419) at 10 Queen's Terrace, Aberdeen, AB10 1XL. Standard Life Investments Limited. Registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL. Both companies are authorised and regulated in the UK by the Financial Conduct Authority.

Switzerland: Aberdeen Standard Investments (Switzerland) AG ("ASIS"). Registered in Switzerland under company no. CHE-114.943.983. Registered Office: Schweizergasse 14, 8001 Zurich. ASIS holds a distribution licence from FINMA.

Abu Dhabi Global Market ("ADGM"): Aberdeen Asset Middle East Limited. Regulated by the ADGM Financial Services Regulatory Authority. Aberdeen Asset Middle East Limited, 6th floor, Al Khatem Tower, Abu Dhabi Global Market Square, Al Maryah Island, PO Box 5100737, Abu Dhabi, United Arab Emirates.

South Africa: Aberdeen Asset Managers Limited ("AAML"). Registered in Scotland (SC108419) at 10 Queen's Terrace, Aberdeen, AB10 1XL. AAML holds a Category I financial services provider (FSP) licence in terms of the Financial Advisory and Intermediary Services Act, 2002, (FAIS) under licence 43675 and also holds professional Indemnity Insurance. The FSP licence entitles AAML to provide "intermediary services" (as defined in FAIS) to South African clients in relation to shares; money market instruments; debentures and securitised debt; warrants, certificates and other instruments; bonds; derivative instruments; participatory interests in Collective Investment Schemes; foreign currency denominated investment instruments; long-term deposits; short-term deposits and participatory interest in a hedge fund.

Asia-Pacific

Australia and New Zealand: Aberdeen Standard Investments Australia Limited ABN 59 002 123 364, AFSL No. 240263. In New Zealand to wholesale investors only as defined in the Financial Markets Conduct Act 2013 (New Zealand).

Hong Kong: Aberdeen Standard Investments (Hong Kong) Limited. This document has not been reviewed by the Securities and Futures Commission.

Japan: Aberdeen Standard Investments (Japan) Limited.

Malaysia: Aberdeen Standard Investments (Malaysia) Sdn Bhd, Company Number: 690313-D.

The People's Republic of China ("PRC"): Aberdeen Standard Asset Management (Shanghai) Co., Ltd in the PRC only.

Thailand: Aberdeen Standard Asset Management (Thailand) Limited.

Singapore: Aberdeen Standard Investments (Asia) Limited, Registration Number 199105448E.

Americas

Brazil: Aberdeen Standard Investments is the marketing name in Brazil for Aberdeen do Brasil Gestão de Recursos Ltda. Aberdeen do Brasil Gestão de Recursos Ltda. is an entity duly registered with the Comissão de Valores Mobiliários (CVM) as an investment manager.

Canada: Aberdeen Standard Investments is the marketing name for the following affiliated entities: Aberdeen Standard Investments Inc. and Aberdeen Standard Investments (Canada) Limited. Aberdeen Standard Investments (Canada) Limited, is registered as a Portfolio

Manager and Exempt Market Dealer in all provinces and territories of Canada as well as an Investment Fund Manager in the provinces of Ontario, Quebec, and Newfoundland and Labrador. Aberdeen Standard Investments Inc. is registered as a Portfolio Manager in the Canadian provinces of Ontario, New Brunswick, and Nova Scotia and as an Investment Fund Manager in the provinces of Ontario, Quebec, and Newfoundland and Labrador. Both entities are indirect wholly owned subsidiaries of Standard Life Aberdeen plc.

United States: Aberdeen Standard Investments is the marketing name for the following affiliated, registered investment advisers: Aberdeen Standard Investments Inc., Aberdeen Asset Managers Ltd., Aberdeen Standard Investments Australia Ltd., Aberdeen Standard Investments (Asia) Ltd., Aberdeen Capital Management LLC, Aberdeen Standard Investments ETFs Advisors LLC and Standard Life Investments (Corporate Funds) Ltd.

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

Aberdeen Standard Investments is a brand of the investment businesses of Aberdeen Asset Management and Standard Life Investments.

The information herein should not be considered an offer, investment recommendation, or solicitation to deal in any financial instruments or engage in any investment service or activity. The information is provided on a general basis for information purposes only, and is not to be relied on as advice, as it does not take into account the investment objectives, financial situation or particular needs of any specific investor.

Alternative investments involve specific risks that may be greater than those associated with traditional investments; are not suitable for all clients; and intended for experienced and sophisticated investors who meet specific suitability requirements and are willing to bear the high economic risks of the investment. Investments of this type may engage in speculative investment practices; carry additional risk of loss, including possibility of partial or total loss of invested capital, due to the nature and volatility of the underlying investments; and are generally considered to be illiquid due to restrictive repurchase procedures. These investments may also involve different regulatory and reporting requirements, complex tax structures, and delays in distributing important tax information.

Property investments may carry additional risk of loss due to the nature and volatility of the underlying investments and may not be available for investment by investors unless the investor meets certain regulatory requirements. In considering the prior performance information contained herein, potential investors should bear in mind that past performance is not necessarily indicative of future results, and there can be no assurance that such investments will achieve comparable results.

The information herein is protected by copyright, however it may be quoted, provided the source is acknowledged. It may not be reproduced, copied or made available to others for commercial purposes without our permission. ASI reserves the right to make changes and corrections to the information, including any opinions or forecasts expressed herein at any time, without notice.

For further information, please speak to your usual contact or visit our website www.aberdeenstandard.com

Aberdeen Asset Managers Limited, registered in Scotland (SC108419) at 10 Queen's Terrace, Aberdeen, AB10 1XL. Standard Life Investments Limited registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL. Both companies are authorised and regulated in the UK by the Financial Conduct Authority.