Sustainable Investment Report
Annual Report 2018

Marketing material

Schroders

About Schroders

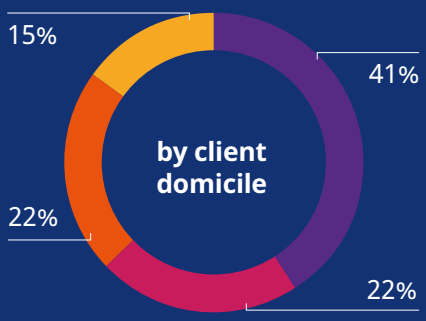
At Schroders, asset management is our only business and our goals are completely aligned with those of our clients: the creation of long-term value to assist them in meeting their future financial requirements. We have responsibility for £421.4 billion (€469.5 billion/$536.7 billion) on behalf of institutional and retail investors, financial institutions and high net worth clients from around the world, invested across equities, fixed income, multi-asset, alternatives and real estate.

As responsible investors and signatories to the UN's Principles for Responsible Investment (PRI) we consider the long-term risks and opportunities that will affect the resilience of the assets in which we invest. This approach is supported by our Environmental, Social and Governance (ESG) Policy for Listed Assets and our Schroder Real Estate Responsible Investment Policy.

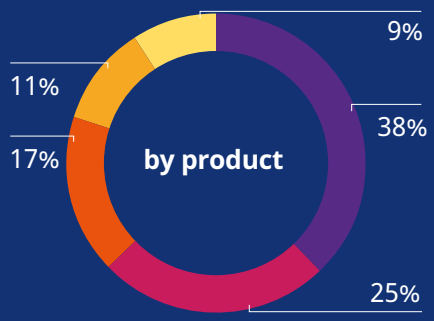
Presence in 32 countries

5,000+ employees

£421 billion assets under management and administration



- United Kingdom
- Asia Pacific
- Continental Europe, Middle East and Africa
- Americas



- Equities
- Fixed income
- Private assets and Alternatives
- Multi-asset
- Wealth management

Source: Schroders, as at 31 December 2018.

The value of investments and the income from them can go down as well as up and investors may not get back the amounts originally invested.

A message from our CEO

Sceptics have argued that the growing interest in sustainability would diminish as stock markets became more difficult. Yet, as I write to you after a challenging 2018 for markets, I can assure you that our commitment to sustainability as a firm and as an investor remains undimmed. If anything, the ebbing of the macro tide will demonstrate the importance of rigorous ESG analysis in separating out winners from losers.

I have long held the belief that companies, including our own, need to have a wider social purpose. They cannot be solely focused on making profit. There was abundant evidence in 2018 that the costs of companies maintaining their licence to operate is rising. Big tech, which previously seemed immune from such costs found out that this was no longer the case, with last year bringing intense scrutiny on their practices from data security, to who they work for, to warehouse conditions. Never has there been a greater need for business to articulate and live up to a clear purpose.

As ESG grows in importance to investors, so does the need for rigorous analysis. We are committed to developing proprietorial tools and frameworks that are evidence-driven, enable systematic analysis, and draw on the expertise of our financial and sustainability analysts. You will see one of these tools, SustainEx, explained more fully in this report. We are excited about how it harnesses data to quantify the externalities that are likely to impact companies in the future.

In 2018 we conducted over 2,200 ESG engagements, retained our A+ rating from the UN Principles for Responsible Investment (PRI) for our overall ESG approach, and continue to launch ground-breaking thought leadership in the space. This year the focus was on the physical risks of climate change, and given the record levels of hurricanes and typhoons around the world, few are immune.

Yet we know barriers remain to the widespread adoption of ESG considerations in our clients' portfolios. Our Global Investor Study examined some of the barriers in the retail market, it is clear that a lack of advice and understanding needs to be addressed.

Peter Harrison
Group Chief Executive,
Schroders plc

But equally important is the need for asset managers such as ourselves to clearly articulate our activities and their impacts at a firm and fund level. We hope that this report goes some way to achieving this.

Finally we have been working with policymakers around the world as they seek to develop and grow the markets for sustainable investment products and improve ESG disclosure from companies. While much of the focus has been at the European level, we are seeing increased action from other regions to embed ESG considerations in investment decision making which we have been excited to collaborate on.

Sustainability is mission critical to us at Schroders, both as an investor and as a company, and lies at the heart of our purpose and stakeholder relationships.

Schroders 2018 Sustainability Overview

Recognition

A+ UNPRI rating for overall approach to responsible investment

Active engagement

2,200+ engagements across 52 countries

Top five engagement sectors

Financials	21%
Industrials	18%
Consumer Discretionary	18%
Materials	10%
Consumer Staples	9%

Active governance

5,227 company meetings voted on

Instructed a vote against management at 48% of meetings

Source: UN PRI, Schroders as at 31 December 2018

ESG and INtelligent Investing

Schroders has been incorporating ESG considerations into its fundamental research and stock selection process for over 20 years. We published our first corporate governance policy in 1998, followed by our responsible investment policy in 2001. Since then, the information and tools available to us, our resources, the depth of our expertise and our approach to integrating responsible investment principles have evolved, but our commitment has remained the same: to be active owners of the companies in which we invest and to reflect ESG factors within our investment process.

Our world is changing faster than ever, environmental stresses are growing more acute and social pressures continue to surprise at every turn. Corporate fortunes rest on their ability to navigate that turbulent world. For investors, this changing picture creates challenges and opportunities. That's why we seek to put responsible investing at the heart of all we do. From choosing the right assets, to engaging with our investments, positive principles guide our actions. We believe this approach leads to better outcomes for clients and should be part of every investment process.

We call it INtelligent investing. The pillars of our discourse below are our core beliefs and how we conduct our approach.

INsight

To fully understand a company's potential you need to look beyond the annual report

INterpret

Knowing what to do with insights is the key that unlocks value for you

INfluence

We've always seen ourselves as owners, not renters of the companies we invest in

INtegrity

We're committed to managing your assets responsibly

Source: Schroders

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Integrated approach

At Schroders, we see ourselves as long-term stewards of our client's capital and this philosophy naturally leads us to focus on long-term prospects for companies in which we invest. That's why we seek to integrate ESG considerations into our research and overall investment decisions across investment desks and asset classes. We recognise that different asset classes, portfolio strategies and investment universes require different lenses to most effectively strengthen decision-making. Our integration approach spans the breadth of the investment process, from identifying trends, analysing securities and constructing portfolios, through to engagement, voting and reporting.

This section includes case studies to clearly show how ESG factors are being considered and integrated in different parts of our businesss.

Integration in Equities

Sustainability from a Small Cap equity perspective

The International Small Cap team's investment philosophy reflects our belief that the identification of mispriced companies exhibiting superior characteristics of visible growth and sustainable returns is the key driver of excess returns over the long term. In particular, we seek to identify sustainable competitive advantages, which necessarily requires the assessment of long-term risks and opportunities stemming from governance factors, as well as social and environmental change.

Good governance prioritised

While we do not seek to minimise the importance of social and environmental factors, we tend to place primary weight on the assessment of governance. In establishing a robust investment case, strong governance and focus on shareholder returns are important in themselves, not least in providing reassurance about capital allocation and strategic oversight. Governance also plays a critical part in determining a company's willingness and ability to prepare and respond to environmental and social changes which are key to the generation of sustainable returns.

There are certain governance factors we will always consider, such as how management are incentivised, which is fundamentally important when developing an understanding of the business and its objectives. Ultimately, our specialists want to ensure that management can be trusted and will efficiently allocate capital, that key stakeholders are identified, and ownership and interests can be determined.

Direct contact with management

Consequently, meeting management is a core part of the investment process and we will not hold a company in the portfolio unless we have met with management at an appropriate level and completed thorough due diligence concerning both financial and non-financial factors. Openness, quality of personnel and transparency are an important part of the decision to invest. The team expects management to demonstrate an ability to identify and mitigate key risks the business is exposed to. This is critical for the sustainability of the business and cannot be separated from the fundamentals.

We typically engage to seek improvement in sustainability performance and processes, to enhance and protect the value of our investments, to monitor developments in ESG practices, business strategy and financial performance within a company and to enhance our analysis of a company's risks and opportunities. For example, in Asia, sustainability issues take up around 25% of our conversations with companies. We also undertake reactive engagement as a result of any negative incident involving a company, in order to understand why it may have occurred, the actions the company is taking as a result, and what the current and future investment risks may be.

Sustainability accounts for 30% of a stock's risk factor score

Sustainability information will be collated and assessed by the specialist/analyst so they can form an opinion and score the stock. This will be included with an ESG summary as part of a research note. These scores also feed directly into the fair value and the risk factor assigned to the stock. In the case of the latter, governance accounts for a 20% weight, and the environmental/social score for 10%. With a combined weight of 30%, only liquidity at a 40% weight has a greater influence on the overall risk factor.

Companies with poor environmental, social or even governance scores may still have a role to play in the portfolio, especially in Asia where we are seeing rapid change in these areas; but this will directly affect the size of the holding. We will directly engage with investee companies where necessary to effect positive change. For example, we are very focused on engaging with investee companies on capital allocation and the maintenance of balance sheet efficiency, particularly in Japan, where there has been some encouraging evidence of more pro-active approaches being adopted by domestic institutions as well as the introduction of a corporate governance code. One of our holdings has a very cashflow generative business and a net cash balance sheet and we have been actively engaging with the Chief Financial Officer on the need to improve asset efficiency through increasing dividend pay-out in the future.

Close working relationship with Sustainable Investment team

The Sustainable Investment team provide a number of resources which are used by the small cap team to help inform and improve our knowledge of ESG issues and shape conversations with management. We have a dedicated ESG specialist embedded in the team who attends all team meetings and provides a point of contact with the Sustainability team. We therefore discuss ESG issues within the portfolio on a weekly basis.

We've collaborated with the Sustainable Investment team on engagements; however, more often we draw on sustainability research to develop our understanding of key risks and opportunities. We receive regular sector updates, which are then discussed in our team meeting. Although thematic pieces produced by the Sustainable Investment team do not always refer to specific small cap stocks, they provide a valuable insight into sustainability trends and the ESG context for our holdings.

Sustainability integral to process

It is our firm belief that non-financial factors such as sustainability considerations will directly impact a company's ability to generate future growth in a sustainable way and this, after all, is what we are trying to achieve for our investors. We are therefore explicit in factoring these issues into our stock assessment. As a result, sustainability in general and ESG in particular is, and implicitly always has been, a critical and integral part of our investment process.

Integration in Fixed Income

Infrastructure debt

The infrastructure debt team joined Schroders in 2015 and the 'buy and hold' approach to infrastructure investing make it imperative that any project or company we invest in is run sustainably and under strong governance for the long term. Sustainability is at the heart of our credit analysis and an inherent part of the investment process as infrastructure debt investors.

Responsible investment principles key to long-term success

Infrastructure projects and companies are core to the growth and prosperity of economies, creating jobs and delivering essential services to the communities that they serve. A study by the Economic Policy Institute estimates each $100 spent on infrastructure boosts private-sector output by $13 (median) and $17 (average) in the long run[1].

Certain segments of the infrastructure sector can also play a key role in building a greener future by supporting more energy efficient or environmentally friendly ways of producing energy. Infrastructure investments have become key to combat climate change through many areas, for example:

- The investment into, and development of, renewable energy projects;
- Carbon friendly transportation such as electric vehicle charging stations;
- Devices to measure and more efficiently use energy; and
- Public transportation facilities that reduce individual carbon footprint.

A multi-dimensional approach to fully integrate ESG in investment decisions

As part of our mission, we clearly consider our role as a lender to infrastructure projects and companies that engage in their activities in a sustainable manner. We operate with high ethical standards, in a socially responsible manner, with transparent governance, in keeping with the 48 investment criteria used to determine the credit quality of investments considered. We ensure that our borrowers understand these expectations and aim to make a positive impact for all stakeholders involved.

With regards to the investment process itself, sustainability is built in the process from the bottom-up and top-down. More specifically:

1. Exclusions

First and foremost, we may exclude investments due to the business model or sector; for example, we have rejected investments into coal-fired power plants, biomass power plants where biomass was supplied from non-sustainable sources, nuclear plants and shale gas projects based on ESG concerns.

2. Quantitative assessment

We analyse 48 micro criteria for each and every investment we make, 13 of which directly relate to ESG factors. Having these factors embedded into our scorecard means they form an integral part of the credit assessment and ultimately determine whether we will invest into a given asset.

3. Qualitative assessment and ongoing monitoring

In addition to the quantitative assessment, ESG factors are discussed and considered for each and every investment made. This analysis is included in our quarterly reports and lays the foundations from which we conduct ongoing monitoring. We monitor ESG performance throughout the lifecycle of the investment and report any findings in our quarterly reports.

1 'The potential macroeconomic benefits from increasing infrastructure investment', Economic Policy Institute, July 18, 2017

Case study: renewable energy

In 2018 the team provided a €30 million loan to the largest manager of Spanish solar farms and advised on a €55 million equity investment into a portfolio of French solar panels, assisting with providing clean energy in Europe. These investments contribute to meeting the UN Sustainable Development Goal 7 –affordable and clean energy.

Source: Schroders

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Case study: rail

In 2018 the team made a €55 million loan to a German rolling stock company. In the European Union, the transportation sector is the largest contributor to energy-related carbon emissions (28.3%). Importantly, the rail sector only accounts for c. 2% of this. In fact, rail generates close to four times lower carbon emissions than road per tonne-kilometre[2].

Case study: water

In 2018 the team provided a €40 million loan to a French water company servicing more than 6,700 municipalities through the production, treatment, supply and management of drinking water services. In addition, the company contributes to the provision of clean water via the collection and treatment of wastewater and treatment of by-products.

2 'The potential macroeconomic benefits from increasing infrastructure investment', Economic Policy Institute, July 18, 2017

Integration in Insurance Linked Securities (ILS)

ILS are primarily linked to the (re-) insurance of natural catastrophe, mortality and pandemic risk, extreme events that can cause severe disruption to individuals' lives and the communities they live in. The ILS universe brings a different responsible investment opportunity to capital markets participants.

Asset class inherently aligned with responsible investment

The societal benefits that ILS can offer to governments, businesses and individuals in the form of financial relief, should they be affected by an earthquake, hurricane, flood or other type of catastrophe, helps strengthen financial resilience and aids recovery. Given the scale of the global climate challenge, the necessity to mitigate the effects of the frequency or severity of natural disasters becomes a more prevalent concern.

Catastrophe (cat) bonds offer investors an attractive rate of return with a low correlation to all other asset classes. . Performance is primarily driven by the absence of natural catastrophes and in this way is aligned with responsible investment. In a benign year with no insurance losses arising from events, we generate a positive return for investors. In an active year with large insured losses arising from events, the capital we invest may be distributed to the underlying policyholders to cover insured losses, subject to the triggering of the bond's predetermined conditions, helping families, businesses and communities rebuild after a disaster.

Our ESG integration approach

To integrate the central ESG features of the asset class into our investment process, we make pre-investment examinations of the social and environmental trends we believe will emerge over our investment horizon and consider their potential impact on returns. Direct investments in transactions sponsored by companies which do not meet our ESG considerations would be filtered out from our investment universe, such as an oil company or other fossil fuel-related issuer. We also adjust the catastrophe risk models that we use to reflect our own views on the frequency and severity of extreme weather events and other natural catastrophes, for example flooding, where the primary weather phenomenon of rainfall is not the ultimate driver of the insured losses generated. Cat bonds are generally issued with 3-5 year maturities, so we can update our assumptions in the medium-term according to new conditions the bonds are issued under whilst observing longer trends.

Closing the gap between economic and insured losses

There is still a gulf between the economic losses and insured losses arising from natural catastrophe events, particularly when it comes to property and life losses. We saw this demonstrated acutely in 2018, with global economic losses estimated to have reached $160 billion; double the insured loss figure of $80 billion[3].

Events often occur in parts of the world with low or no insurance coverage. This creates a vicious cycle where those exposed to such events are unable to afford insurance.

3 Source: Munich Re, Natural Catastrophe Review 2018, 8 January 2019: https://www.munichre.com/en/media-relations/publications/press-releases/2019/2019-01-08-press-release/index.html

This lack of cover makes the implications of the economic and insured loss gap seem even starker, leaving some of the world's least-developed countries with the task of rebuilding in the wake of a disaster without the financial means to do so. However, this gap also signals potential for growth in the asset class, as the purchase of insurance increases globally and risks are passed onto the capital markets.

Case study: World Bank issues a sustainable development bond

International agencies have been instrumental in targeting the lack of insurance coverage in the developing world. The World Bank Group (WBG) has various initiatives aimed at improving resilience and disaster risk management including the Disaster Risk Financing and Insurance Program. The WBG, through the International Bank of Reconstruction and Development (IBRD), has partnered with capital markets to enhance governments' ability to manage the financial impact of disaster and climate shocks by sponsoring various bonds covering not only a variety of catastrophe risks, but also pandemia. We participated in the latest issue, a series of bonds covering earthquake risk in Chile, Colombia, Mexico and Peru. There was a strong appetite in the market for this issue and it became the largest sovereign risk insurance transaction ever placed, reaching $1.36 billion.

One important structural feature of the bonds are the use of parametric loss triggers to determine whether a bond is exposed to loss and the underlying beneficiary (usually a government entity) is given the financial support. Using this trigger type means that the investment's loss or partial loss is conditional upon the strength of an event (as measured by an objective criteria such as barometric pressure, moment magnitude or number of lives lost) and allows funds to reach those in need without delay if the bond is triggered. As the insurance penetration in developing economies is often quite low, such instruments allow governments and international aid donors to secure protection for countries or regions where the insurance mechanism is not in place.

Integration in securitised credit

Schroders' securitised credit strategies use a research-oriented, value-driven approach to seek return by investing in securitised assets such as asset-backed securities, mortgage-backed securities (commercial and residential) and related loans.

What is securitised credit?

Securitised credit goes by many names; for instance you may see terms such as structured products, asset-backed securities, and secured finance used interchangeably.

These terms all have the same meaning: securities that are secured by loans or financial contracts. The process of securitisation is to combine a large number of loans or collateral into a special purpose vehicle (SPV). Payments made by debtors to repay the principal and interest are then consolidated by a trustee or a paying agent that will pass those payments to the investors (bond holders).

Furthermore, securitised assets are secured by debt contracts and typically a first priority lien[4] on the asset / collateral. Additionally, these securities are further divided into "tranches" by level of seniority or priority, which can be selected based on an investor's risk appetite.

Securitised assets also offer diversification versus corporate credit, government bonds, and other asset classes like equities.

4 A lien is a essentially one party's claim on an asset should the other party default on a loan

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A loan's sustainability is dependent on more than just financial metrics

We believe an in-depth understanding of collateral cash flow and the impact of the securitised loan's structure is the foundation of generating returns in a market where size and complexity leads to exploitable inefficiency. The consideration of ESG factors provides a more holistic assessment of the quality of the collateral and the sustainability of the cash flows. Broadly speaking, ESG integration for securitised assets is at the nascent stage; however, we have developed a comprehensive sustainability assessment framework based on five principle pillars (see Figure 1). This framework includes both governance (principal/agency conflict) and underlying asset considerations (sustainability). Also, fundamentally embedded within our research is a review of governance, fair lending / predatory lending, and the health of the loan for the consumer. Counterparty considerations are a part of the asset consideration and governance. Additionally, the team has developed proprietary analytics consisting of asset specific models, surveillance and forecast/trend analysis to assist in assessing the sustainability of investment ideas.

Principle pillars

Our investment process begins with the identification of fundamental and technical factors that drive performance for both the overall securitised market and specific sectors. The fundamental framework incorporates the five principle pillars of our sustainability analysis; lawfulness, fairness, purposeful, contractual and sustainability.

Pillars in Practice

Potential material ESG risks and opportunities can have a significant impact on investment decisions and can result in negative screening for both deals and sectors. We take an inclusive approach to sustainable investing; just because an investment is negative in one pillar, does not mean it will be excluded from the portfolio. Our focus is on understanding the risks or opportunities and applying a discounting or premium to our model.

Figure 1: Principle pillars

Pillar	Principle	Practice
Lawfulness	Is the loan made in accordance with all consumer and other applicable laws? Are there rigorous standards to assure compliance?	Within the private debt space we encourage the loan to be structured accordance with state and local laws via annual state law survey.
Fairness	Is the loan sold to the "borrower" with fair disclosures by a disinterested party?	Results in excluding loans that do not meet this standard, typically marketplace lending.
Purposeful	Is the loan fit for purpose (i.e. positive for the borrower)?	Results in excluding loans that do not meet this standard. Typical examples include reverse mortgages and pay-day lending.
Contractual	Are any contracts abrogated or violated by the loan?	Avoidance of residential Property Assessed Clean Energy (PACE) loans create a financing structure that presents lien priority risk to lenders and investors.
Sustainability	To what degree is the underlying asset impacted by environmental, social and governance trends?	**Environmental:** – Commercial PACE – Aircraft deals **Social:** – Work force housing – Social regulatory/risk; i.e. firearms, dispensaries, pay-day lending **Governance:** – Sustainability of collection practices – ESG checks on tenants – Risk-score model of deals

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Holistic approach – spotlight on PACE

Clean energy doesn't always result in more "green" for the consumer

While we are supportive of climate change initiatives as well increasing energy efficiency, it is important for us to take a holistic approach to sustainable investing.

What is PACE?

The property assessed clean energy (PACE) model is a mechanism for financing energy efficiency and renewable energy improvements on private property. PACE programs exist for both residential properties (commonly referred to as Residential PACE or R-PACE) and commercial properties (commonly referred to as Commercial PACE or C-PACE).

While energy efficiency home improvements can be beneficial for both homeowners and the environment, we have significant concerns around the sustainability of residential PACE lending programme. The residential programme lacks consumer protections as the energy efficiencies gained by the homeowner do not have to be independently review by a third party. Also, these loans result in a financing structure that presents lien priority risk to lenders and investors.

Investing in Commercial PACE deal is much more attractive as the energy efficiency is reviewed by a third party engineers and it is a more favourable financing structure.

Program	Sustainability Assessment	
Commercial PACE	– Energy efficiency is reviewed by 3rd party engineers – Approved by underwriter	✓
Residential PACE	– Lacks consumer protection – No 3rd party verification of energy improvement – Create a financing structure that presents lien priority risk to lenders and investors	✗

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Integration in Real Estate

Schroder Real Estate has managed real estate funds since 1971. Our real estate business is headquartered in London with offices across Europe, Asia and North America, and currently has £15.6 billion (€17.3 billion / US$19.8 billion) of gross real estate assets under management (at 31 December 2018) across direct real estate, real estate securities and real estate capital partners.

It is our responsibility as real estate investors to understand the environmental, social and economic impacts and their value potential to our investments in order to deliver resilient, long-term returns and to manage exposure to material risks. Sustainability is therefore integral to all stages of our real estate investment process. We are evolving our investment philosophy to incorporate "positive impact" investing moving beyond ESG to proactively seek to improve situations.

Our "Real Estate With Impact" Sustainability Policy is embedded in our investment process. We believe this should deliver enhanced returns, contribute positively to tenants' business performance and create tangible positive impacts to communities, the environment and society for the long term.

We maintain an environmental management system aligned with ISO 14001, the internationally agreed standard for such systems, to manage the deliverable actions derived from our sustainability policy.

We participate in the Global Real Estate Sustainability Benchmark "GRESB" which is the global standard for assessing the ESG performance of real estate funds and companies. Our approach can be best demonstrated by looking at our activity over 2018.

Our Real Estate Capital Partners team manage separate accounts and pooled funds. We monitor the sustainability practices of investments on this platform by way of a comprehensive survey combined with regular meetings with managers. This sustainability information is fed into a proprietary model that objectively measures and scores a wide range of parameters across investments, including ESG, to inform investment thinking. The sustainability survey enables us to identify funds where ESG practices do not meet our expected requirements. We work closely with the managers of these funds with a view to improving their practices to be aligned with the principles of our Real Estate Sustainability policy.

Case study: Energy target achieved for the UK portfolio

Our sustainability programme involves driving continual improvement in building operations, which includes setting energy targets for each building. For the UK portfolio we targeted a 6% consumption reduction over two years to 2018. Over the period we implemented a number of initiatives including LED lighting, voltage optimisation and improving the efficiency of heating, ventilation and air conditioning systems supported by general improvements to building management. The programme achieved an 8.1% reduction which equates to 3.8 million kWh, £340,000 savings and 930 tonnes CO2-equivalent avoided. As a result of this achievement, we were named as finalists in the energy efficiency category of the 2019 Edie Sustainability Leaders Awards together with our sustainability consultants Evora Global.

Case study: LEED Gold renovation, Helsinki, Finland

In Helsinki, the renovation of an office held in one of our portfolios will see sustainability and wellbeing credentials improve; it is our ambition to achieve LEED (Leadership in Energy and Environmental Design) Gold, an internationally recognised green building certification. The refurbishment behind the listed facade will create 3,200 square metres of high quality space. The scheme provides for restaurants on the ground floor opening into a new glazed atrium shared with office tenants on six upper floors. The atrium will provide fluid, light, working, community and circulation spaces. New efficient electrical, heating and ventilation systems will further support internal environmental comfort for tenants. The renovations are scheduled for completion in late 2019.

Integration in Private Equity

The Schroder Adveq approach to ESG

Schroder Adveq is a leading global private equity asset manager. With $10 billion in assets under management, Schroder Adveq focuses on specialised investment solutions that provide our institutional clients access to select private market segments through primary, secondary and direct/co-investments. Based in Zurich, we have investment teams in Beijing, New York City and Zurich.

Among asset classes, private equity is well positioned to improve the adherence to ESG principles within a client's portfolio due to the long-term investment holding period, the opportunity to conduct deep due diligence on prospective investments and the ability to practice active ownership afforded through meaningful equity ownership.

Schroder Adveq was an early adopter of ESG principles in its investment practice and strives to stay at the forefront of responsible investing within the institutional private equity industry. In 2018, we committed $1.27 billion to new investments across venture capital, growth, buyout or turnaround investment strategies in North America, Europe and Asia. Each investment is assessed for its ESG risks and opportunities, and each private equity firm in which we make a commitment is examined for its adoption of responsible investing practices and ESG principles within the firm's overall operations and its investment process. Our approach to responsible investing and sustainability combines engagement, positive selection, and exclusion. The following are three case studies highlighting our approach to responsible investing and sustainability.

Engagement

Through Schroder Adveq's due diligence and post-investment monitoring, the firm actively encourages our private equity managers and portfolio companies to pursue positive ESG practices. These practices can take many forms, from a private equity manager increasing its adoption of responsible investing principles to being a catalyst for positive change within its portfolio companies.

Case Study: In 2018, we were offered the opportunity to co-invest alongside a private equity firm in a fast growing cosmetics company. A key differentiating factor and growth driver for the target company is the company's effective use of social media and influencer marketing to grow the brand identity and attract customers.

Influencer marketing is a fast emerging marketing strategy that has proven to be very effective in rapidly building brands to targeted interest groups. However, given the relative immaturity of influencer marketing through social media there has been limited regulatory or industry oversight into how this marketing strategy is executed. Our due diligence included an extensive review of influencer marketing which led us to raise concerns on some aspects of how the target company approached marketing its products via social media.

We engaged with the company and private equity sponsor to address the issues and to have them rectified before an investment could move forward.

The response to our engagement by the company and the private equity sponsor assured us of their commitment to ESG and sound business practices. Once the improvements were made by the company, we completed our investment.

Positive selection

Positive selection is applied by emphasising exposure to private equity fund managers and portfolio companies with positive ESG elements.

Case Study: Schroder Adveq is one of the most active investors in European private equity with a specific focus on specialised strategies and smaller transaction sizes. A hallmark of our success is an ability to source and establish relationships with emerging managers. One emerging manager, Summa Equity, was the focus of a primary fund commitment in 2018. Summa Equity is a young private equity firm based in Stockholm Sweden. It is led by a team of experienced and successful private equity professionals and is differentiated by its strong commitment to the adoption and implementation of ESG principles as a core component of its investment strategy and value creation. Schroder Adveq committed to Summa's first fund in 2016, thus the due diligence focus was to confirm Summa's ability to create value with its portfolio companies and advance the adoption of ESG principles to improve portfolio company risk management.

The conclusion of our due diligence for Summa Equity II was that the firm has rapidly established itself in the Nordic region as a leading private equity investor and has effectively implemented ESG principles into the firm's operations and value creation efforts for its portfolio companies. Its commitment to ESG has clearly created incremental portfolio value.

Exclusion

Exclusion arises from our efforts to avoid exposure to certain industries (e.g. tobacco, gambling and weapons) and to private equity managers and companies that pose meaningful ESG risk or an insufficient commitment to ESG principles. In the vast majority of cases, given our historical application of ESG principles to our investment process, investment exclusion due to ESG risk tends to be triggered early on in the assessment of an investment project.

Case Study: In 2018, we were presented with an opportunity to co-invest in a US-based company involved in the design and production military weapons systems. Although upon initial review the company appeared to be well managed, the investment fairly valued and the private equity sponsor's value creation plan seemed credible, Schroder Adveq declined the investment opportunity at the screening stage of our investment process solely based on the exposure to weapons.

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Integration within Wealth Management

A view from Cazenove Capital:

Cazenove Capital is the wealth management and charity investment business of Schroders plc in the UK and Channel Islands. We offer personalised, discretionary investment services and wider wealth management services to a broad range of clients.

At the end of 2018 c. £3 billion (c. 7%) of Cazenove Capital's assets under management have adopted a sustainability strategy. In particular, there has been a rise in demand from clients – many of which are considered millennials - wanting to go further than simple negative screens to adopt a more positive approach to sustainability within their portfolios.

New sustainability products

In 2018 we launched a suite of new sustainability products for clients including Sustainability Diversified, our best-ideas ethical model and Sustainability Core, a funded solution focused on Schroder funds. Pleasingly, our flagship ethical product has weathered what has been a volatile year for markets and outperformed its mainstream industry counterparts and benchmarks. The downturn in markets seen in Q4 has been an opportunity to demonstrate that investments managed sustainably are not just a feel-good for clients, but also act to preserve capital in difficult times. We have made a significant effort this year to raise awareness of our sustainability capabilities and our tailored ethical solutions.

Part of our core due diligence process when selecting fund managers now integrates ESG risks into decision-making. We assess both the firm-wide capabilities as well as the strategy specific level of ESG integration. This due diligence process is ongoing and reviewed on a yearly basis. Our sustainability specialist engages with those asset managers that score poorly in our sustainability assessment in an effort to reduce potential risks and increase the industry's overall performance in the area.

2019 will see us further develop our sustainability product offering as well as concentrate on further integrating ESG into our direct investment process.

Cazenove charities

At year end, Cazenove Charities looked after £9.1 billion on behalf of 916 charities. We provide a broad range of investment services to meet charities' financial and social objectives. We were delighted to launch the Charity Responsible Multi-Asset Fund during the year, a charity specific investment vehicle that incorporates a robust responsible investment policy. In addition to the investment management service, the team offer support to trustees in the form of advice and education.

Over the year we have run trustee training events reaching over 100 trustees. Partnering with chartered accountants Haysmacintyre and charity lawyers Farrer and Co., we have complemented our investment training with a series of events covering charity law, an introduction to charity finance and reporting, as well as full and half day sessions on "What every trustee should know". Our flagship events attracted over 300 attendees, with the fifth annual charity investment lecture featuring Sarah Williamson and our full day charity investment forum in November featuring a range of high quality presentations from investment experts and charity specialists.

The team's commitment to the sector includes partnerships and collaborations with sector bodies to provide research and influence policy where appropriate. Having successfully worked with the Charity Commission and Financial Conduct Authority (FCA) on the establishment of the new Charity Authorised Investment Fund (CAIF) structure, we were delighted to covert our charitable funds into CAIFs in 2018.

Philanthropy

Over £1.5 billion of assets are held within various philanthropic structures for over 450 of our private clients. During the year we worked with those clients to define their philanthropic ambitions and spending plans, and manage the assets of their philanthropic structure to deliver the income and capital they required. We created and implemented a number of new bespoke ethical investment mandates. More recently we have extended our investment services to offer impact funds via a number of social investment intermediaries who raise capital via limited partnerships, providing much needed capital to social enterprise and charities.

Our philanthropic specialist sits within our wealth planning division and provides guidance to private clients regarding the various ways to formally structure charitable giving, as well as advice around the most tax efficient way to fund their philanthropy making use of the very generous tax reliefs available in the UK. Our representative sits on the board of Philanthropy Impact, a charity aiming to up-skill professional advisers in the UK. We are also signatories to the UK government's Social Investment Implementation Task Force, committed to help grow and stimulate social investment in the UK.

Philanthropy is very important to the large families we work with and we also provide introductions to philanthropy and the responsibility of wealth via our next-generation investment days and events throughout the year.

We invite you to view our ESG Policy and Sustainable Investment brochure online for further information.

INsight

Better investment insights come from creative and innovative research. At Schroders, we strive to be at the very forefront of thinking on existing and emerging sustainability topics. Our thematic research aims to enhance our understanding of the material ESG risks and opportunities that may impact a company's valuation and risk profile.

To fully understand a company's potential you need to look beyond the annual report. Analysis of how companies deal with all their stakeholders – such as customers, clients, and employees - are all vital clues to a company's long-term ability to grow and deliver consistent returns.

Schroders' Sustainable Investment team produces insightful multi-sector and multi-region research on a range of ESG issues. During 2018, we examined the following topics:

- The AI revolution
- Industry response to antibiotic resistance
- Future value of water versus oil
- Short selling
- Cyber risk
- Physical risks of climate change
- Plastic phase-out
- Auto loans crisis
- Emissions in e-commerce

We also publish papers to help educate clients and the broader public. During 2018, we published the following papers:

- ESG and Emerging Markets: challenges and opportunities
- Index-based ESG strategies: key things to watch for
- SDGs – not a silver bullet for long-term investors

In the following section we highlight SustainEx, our proprietary measure of social impact, and discuss who might be the winners and losers from climate change.

SustainEx: measuring social and environmental impact

The role companies play in society is coming under more and more scrutiny. The Global Financial Crisis underlined the close relationship between Wall St and Main St – financial markets and the real economy. The fallout over the last decade has handed a mandate to governments to regulate companies more heavily. Most governments' budgets and balance sheets have anyway become too stretched to plug the costs corporate activity can create. Going forward, we expect companies will be forced to internalise more of the costs they impose on society as financial expenses, and demonstrating the value they provide to society will become more important to companies' licenses to operate.

We developed the SustainEx framework to quantify the positive contributions and negative impacts companies have on society. Viewing those costs and benefits through a hard economic lens provides a basis upon which to gauge companies' credit or deficit with society and the financial risks they face as social externalities crystallise as financial costs or benefits. It is designed to help our analysts, fund managers and clients measure and manage these social impacts and risks more effectively.

Companies have enjoyed unencumbered growth...

Companies do not operate in a vacuum. They are part of the societies from which they draw their employees, to which they sell their products and under whose laws they compete. For most of the last few decades, large companies have grown and thrived even as social and environmental challenges have intensified. Corporate tax contributions fell, real wages stagnated and environmental damage went unpenalised. Companies were largely able to focus on maximising current profits without too much concern for the costs their actions created elsewhere in societies or economies.

...the social impact of which is starting to be realised

In recent years, that strategy has started to unravel and will become more untenable going forward. Costs are growing and governments are less able to absorb them. As a result, social pressure and government intervention are forcing companies to take responsibility for the costs their actions create. Among other measures, minimum wage legislation, sugar taxes, gambling restrictions or carbon prices are all spreading, creating financial expenses in place of previously unaccounted social problems.

As a result, costs that were previously externalised to society will become internalised on companies' financial statements. As that transfer plays out, companies whose profitability has relied on avoiding the costs their products or operations impose on society will find their business models come under increasing pressure. The size and distribution of profit pools in many industries is at risk as winners and losers are reordered.

SustainEx quantifies a company's cost or benefit to society...

New approaches to investment analysis are needed to identify, measure and manage the risks those externalities impose on companies' profitability. SustainEx measures the costs companies would face if their negative externalities were priced, or the boost if benefits were recognised financially.

SustainEx is designed to help our analysts, fund managers and clients identify those risks, to help ensure they are reflected in investment decisions and valuations. It attributes previously unaccounted for social costs and benefits to individual companies, using economic logic to systematically combine robust academic analysis with company data. We examine 47 externalities, drawing on over 400 academic studies and applied to around 9,000 global companies.

...and how that cost or benefit might impact profitability

Our analysis highlights the growing costs listed companies create, and the rising importance of considering the risks those externalities pose to future earnings. The US$4.1 trillion earnings listed companies generate for shareholders would fall by 55% to US$1.9 trillion if all of the social impacts our research identifies crystallised as financial costs. One third of companies would become loss-making. The risk to profit pools and competitive positions is clear.

By quantifying social impact in economic terms, SustainEx provides our analysts, fund managers and clients with a measure that is comparable across companies, funds and indices. It can be assessed through ESG, SDG or other lenses for clients with impact priorities. It helps focus analysts' attention on companies facing the greatest risks and the sources of those risks. Finally, it yields a measure of corporate sustainability which we have integrated into systematic investment strategies.

SustainEx combines a wide range of sources and measures to examine companies' social impact

47 measure of social or environmental impact

Over 400
academic and industry studies of social impacts and externalities

70
reported data points for each company, estimated where not disclosed eg wages, txes

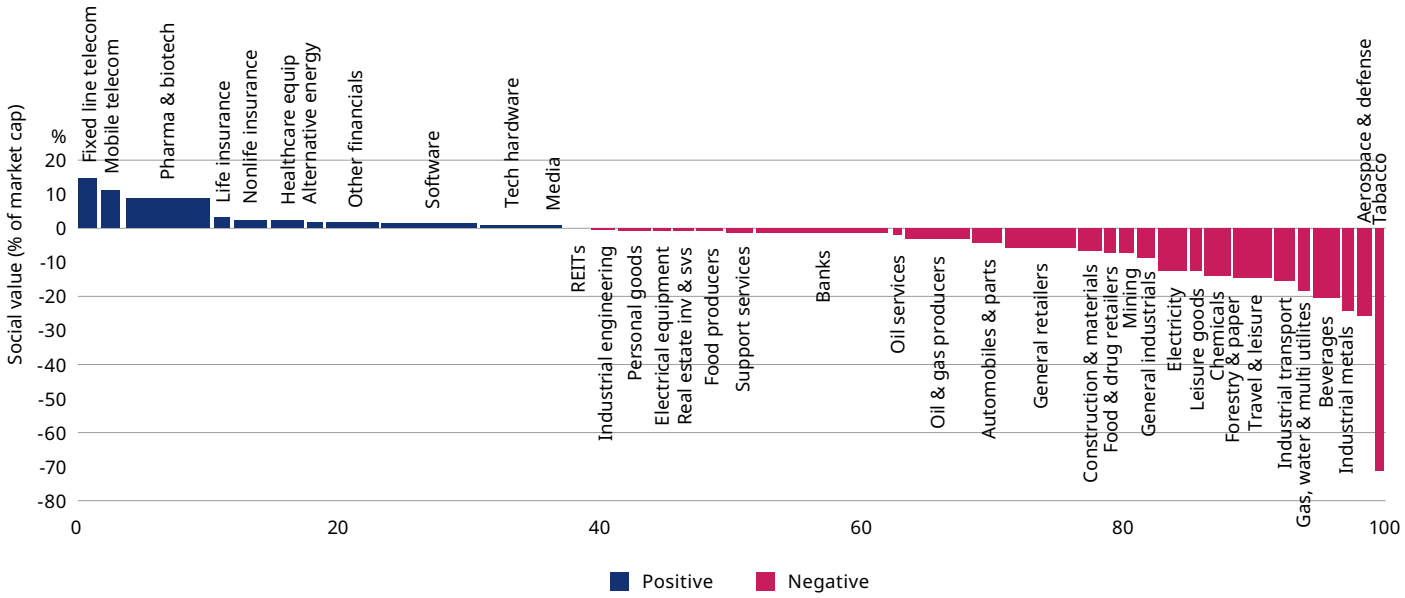
Unconventional data
from public sources eg patent registrations, stress perceptions

~9,000 large global companies examined

Source: Schroders

Bottom-up analysis of around 9,000 global companies using the SustainEx model demonstrates a wide range of impacts across companies and sectors.

Figure 2: Wide range of impacts across sectors



Source: Schroders

Measuring and managing those risks and social impacts in our investment decisions is important, but our commitment to holding companies to account after we have invested and using our voice and power as shareholders is equally important. Across Schroders, we undertook over 2,000 engagements on environmental, social or governance topics in 2018, as well engaging policy makers, industry organisations and other initiatives to help put the financial system on a more even keel.

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Climate change opportunities: looking beyond the obvious

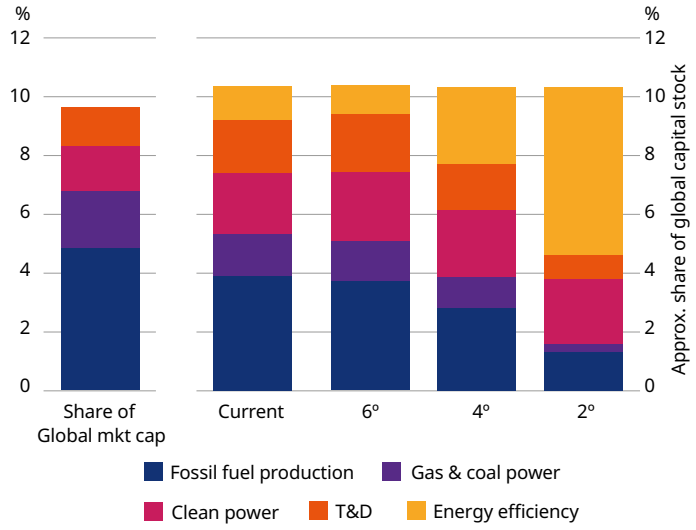
The global economy and today's major industries and companies have been built on an energy infrastructure that will look dramatically different if we are successful in limiting temperature rises to acceptable levels. That disruption will create winners as well as losers, many of which will come from outside the most obvious clean tech sectors the market focuses on.

Rising need for climate mitigation investment

Decarbonising the global economy requires an unprecedented reallocation of capital. Global output and development have grown in tandem with energy use for centuries, building a network of infrastructure to generate, store and move energy in all its forms. The climate challenge facing global societies is intrinsically linked to its reliance on fossil fuels, which provide over 80% of the world's energy[5]. Meeting the commitments global leaders have made to limit temperature rises to 2 degrees means rapidly replacing that fossil fuel reliance with clean alternatives.

That transition has already begun; renewables account for almost two-thirds of net new power capacity globally[6]. However, the scale of investment will nonetheless need to rise significantly. We estimate that meeting those targets will require an approximate three-fold rise in real annual investment in climate mitigation technologies and infrastructure by 2030.

Figure 3: The value of energy sectors could change significantly



Future capital stock is estimated by combining forecast investment in each category with assumed depreciation of existing assets (ranging from 15-50 years for useful lives).We assume energy infrastructure's share of economy-wide capital stock remains unchanged. Source: Datastream, IEA, Schroders. Based on latest IEA data available, typically 2016

5 IEA World Energy Statistics, 2017
6 IEA Renewables 2017

Wider implications than just clean energy

The impacts of a low carbon transition on wind turbine manufacturers or coal miners are clear but focusing on narrow implications misses the true impact of the disruption ahead. A look back in history reminds us that innovations in transport pushed railways from representing half the value of the US stockmarket at the end of the 19th century to less than 1% by the 1950s. Equally importantly, the decline of the rail industry and rise of road transport had effects that spread far beyond those specific industries. Road building overtook rail construction, petroleum demand accelerated past coal, out-of-town retail outlets boomed and leisure activities became accessible to mass markets. Focusing on road or rail industries in isolation would have missed the scale and breadth of that structural shift.

Similarly, the scale of capital reallocation needed to put the global economy on track for a two degree temperature rise will have indirect implications for every part of the economy and capital markets; every part of the economy and companies in all sectors rely on energy and all will be affected to some extent and in some way.

Assessing the transition's impact on growth and profitability

We have developed a framework combining top-down and bottom-up measures of the impacts of that transition on companies' growth prospects and the value they can create for investors outside of those industries most obviously affected:

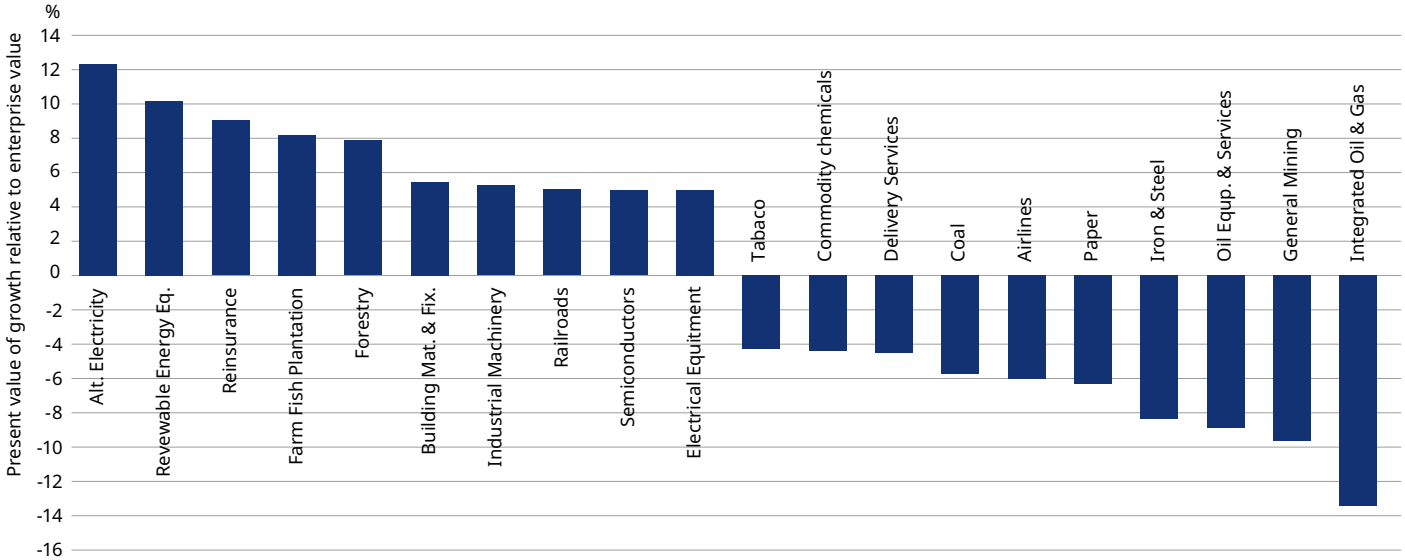
- Top-down analysis of how growth in every market would be affected by the transition to a low carbon global economy, drawing on our modelling of capital investment in different areas of the economy and our analysts' knowledge of each sector
- Bottom-up analysis of companies' views of the opportunities or risks they face, based on responses to CDP's annual survey (formerly the Carbon Disclosure Project)

Combining these measures provides us with a view of the growth prospects for each industry. Growth in isolation has limited value to investors if it doesn't translate into profitability; the solar industry over the last decade has provided a case study in low profit growth which has disappointed investors more often than not.

We address that challenge by combining growth projections with analysis of industry profitability, providing a measure of future earnings growth. From here we can estimate the value created by the growth needed in every industry to limit global temperature rises to two degrees.

Figure 4: Wide variation in sector impacts

Compare the present value of these earnings effects to the current enterprise value of each sector to gauge the scale of risk each faces



Source: Thomson Reuters, Schroders

Impact on growth a bright spot

The wide variation in results – from sizeable winners to significant losers – underlines both the importance of understanding the likely effects of climate change before they unfold and the need to look past the obvious winners or losers.

Climate change will be a key driver of the global economy in the coming years and decades, with effects across capital markets. There is no single, simple solution to assessing the investment implications; climate change is a complex challenge and requires a range of analyses to fully appreciate its impacts. We have previously outlined our analyses of the implications of higher carbon prices, physical damage and stranded fossil fuel resources (see our Climate Progress Dashboard). The impact on growth represents a bright spot in a field littered with references to risks and challenges.

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INterpret

Knowing what to do with insights is the key that unlocks value for clients. Our team of investors and analysts around the world have the experience and local knowledge to apply that understanding to specific situations.

In this section, we interpret ESG in passive funds, and discuss how well companies are doing at disclosing their climate-related financial risk.

ESG in passive: let the buyer beware

Are investors ignoring the small print in their rush to buy funds incorporating environmental, social and governance (ESG) principles?

There has certainly been no shortage of demand. From what was virtually a standing start 12 years ago, $2.9 billion flowed into these "sustainability" funds in 2017.

It will surprise no-one that at least half of those flows were into exchange traded funds (ETFs). Passive ETFs neatly tick two of the boxes high on investors' current list of priorities: low fees and meeting ESG concerns.

We worry, however, that many passive ETFs and open-ended funds are pitched to exploit investors' preference for simple, ow-cost solutions, rather than providing either the financial or the sustainability outcomes that those same investors expect.

Unlike the more objective measures that typically form the basis of passive ETF construction, such as market capitalisation, sector or domicile, ESG indicators are the result of a series of judgements and analyses that can vary significantly and lead to very different conclusions.

Undertaking such analysis is expensive, and often more than low-cost passive products can afford. A cheaper way for passive ETFs is to use the ESG ratings provided by one of a handful of data providers, such as MSCI, Sustainalytics and Thomson Reuters.

In arriving at an ESG score, each data provider synthesises their sustainability analysis into a single measure, akin to the stock recommendations investment banks or credit rating agencies produce.

Having several of these diverse views may be valuable for fund managers seeking to better understand a business.

However, it would make little sense for them to use a single analyst's research to form a definitive view of a stock's attractiveness. All the more so if they had no clear understanding of the analyst's research process, the basis for their conclusions or the outcomes the recommendations were designed to achieve.

We would argue that this is essentially what investors are signing up for when they buy a passive ESG fund.

Despite the perception of transparency, many passive products disclose surprisingly little about how they actually implement ESG factors.

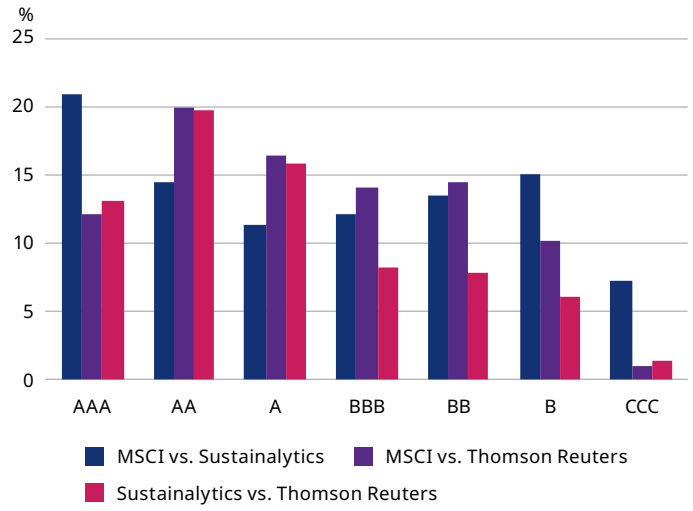
The majority of them rely on a single third party ESG rating provider. Their rating methodologies typically emphasise tick-the-box policies and disclosure levels, data points unrelated to investment performance and/or backward-looking negative events with little predictive power.

Most of the inputs to these scores relate to policies rather than more tangible measures of performance.

These shortcomings are reflected in the lack of consistency in ESG scores between the main data providers. Using all the MSCI ACWI constituents, we analysed the overlap of ESG scores for each of the three main data providers at the company level, as well as between the three ESG categories, environmental, social and governance.

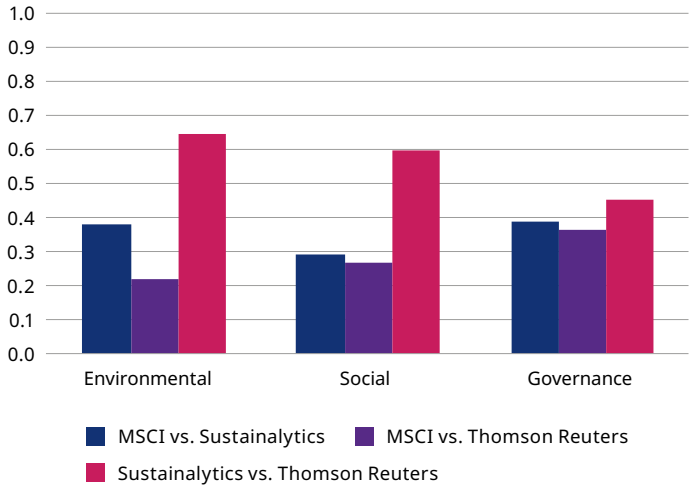
As can be seen from our first chart, the level of overlap between the scores given by the ratings providers is surprisingly low. It was a similar story when we calculated the correlations across the entire company dataset of E, S and G (second chart).

Figure 5: Probabilities of ESG scores being the same across providers



Source: Schroders, March 2018

Figure 6: Correlation between Scores



This lack of consistency is concerning. As the majority of passive processes eliminate companies with weak ESG scores, portfolios created using different scoring systems are likely to have radically different constituents.

By the same token, the widely varying assessments of how strong a company is on environmental, social or governance grounds means investors seeking to allocate to best-in-class companies on ESG grounds will come up with very different answers, depending on which rating provider they use.

Similar problems arise when it comes to stewardship. Many investors buy ESG funds on the basis that their managers will be better stewards of the companies they invest in.

Unfortunately, it is very hard to engage effectively with companies and bring about change using mechanical processes that lack the specialist knowledge of both the industry and how individual businesses are likely to be affected by ESG issues.

We would argue that this is less of an issue for an active management firm, where stewardship is an important element of its role and a responsibility of fund managers, analysts and sustainability experts alike.

We believe that oversight is made easier by an active investment philosophy, where regular management meetings can be complemented by targeted engagements on specific company, environmental and social issues.

These should be designed to address investment-relevant ESG issues, both at the company-specific level and at the portfolio construction level.

The manager of the portfolio should then be able use their expertise to undertake targeted engagements with companies throughout the life of the investment with the aim of improving both returns and capital stewardship for investors.

How well are companies disclosing their climate-related financial risks?

The Task Force on Climate-related Financial Disclosures (TCFD) developed a framework for companies to report climate-related financial information to investors and other stakeholders[7]. It aims to bridge the gap between growing concerns over the huge risks climate change presents for global societies, economies and industries and the relatively limited information available to evaluate companies' exposure to those risks.

That initiative helped galvanise a growing focus – by both investors and companies – on climate risk measurement and management. At Schroders, we have developed a range of tools to measure the risks climate change poses to the companies we invest in[8], but recognise that their value relies on the quality, depth and breadth of information available to us. As a result, we have been strong advocates of more robust climate disclosures for many years, through discussions with policy makers, standard setters and our engagements with companies. We were early and vocal supporters of the TCFD's recommendations[9].

In 2017, Schroders identified 125 companies we believed fell short in their disclosure of climate-related risks, in line with the TCFD recommendations. We wrote to these companies, asking them to improve their disclosure.

A year later, in late 2018, we reviewed those companies (as we do all of the companies we engage) to assess progress in the areas we'd highlighted. Analysing their public reports, an improvement in disclosure was evident, particularly in high emitting sectors, although plenty of work remains.

Climate-disclosure scores

Of the 125 companies, we found that 58% were integrating climate-related disclosure into their annual reports, as the TCFD suggests. 34% of companies disclosed the information in their ESG/CSR reports, and 3% reported it in both their annual reports and their ESG/CSR reports. A further 5% presented it as "other information" on their website.

To assess how well these companies were disclosing their climate-related risks, we categorised them as high emitters (companies in the energy and utilities sectors), strategic emitters (consumer discretionary and industrials sectors) and low emitters (technology and telecoms). We scored each on a scale of 1 to 5 across the following areas suggested by the TCFD, to arrive at a composite score out of 20:

- Governance
- Risk management
- Strategy
- Metrics and targets

It is worth noting that some of these scores reflect the combined product of the company's public information and their Carbon Disclosure Project (CDP) reporting. In addition, the source reflects where the bulk of the information comes from. Companies may well have included information in both their annual and ESG reports but if one was so dominant in its clarity and quantity of information, it was listed as the singular source.

Poor performance overall

On average, performance was poor. The average score across the 125 was 8. Most companies' disclosure was vague and generic, with many disclosing very little to nothing.

High-emitting sectors perform best

Our analysis showed that firms in sectors where climate-related risks are more obvious, such as energy and utilities, tend to be the leaders in terms of disclosure practice. At the other end of the scale, only one technology firm scored above 4 (20% of the maximum possible), underlining an apparent dissociation with climate-related risks in that industry. While oil, gas and electricity firms may lead the field in terms of the quality of their reporting, the consumer discretionary sector also scored relatively well, most likely given the importance of auto-manufacturers' planning for ever-tougher emission targets.

Americas ahead of other regions

Regional differences were less clear cut but results show Asia slipping behind. Asia Pacific (APAC) firms had a median score of 7 in comparison to EMEA's 9 and the Americas' 10.

CDP participation beneficial

The clearest factor in determining the likelihood of a high score is, perhaps unsurprisingly, participation in the CDP surveys. Those firms engaging with the CDP (c. 10% of the firms we engaged) had an average score of 15/20 in comparison to 7.65/20 for those that did not. The detail in the CDP's climate change surveys leads naturally into the framework outlined by the TCFD. While some sections are left blank by companies, the CDP framework generally leads to a high quality of information on risks and opportunities facing the firm from climate change along with metrics for emissions measurement and their targets.

7 https://www.fsb-tcfd.org
8 https://www.schroders.com/en/us/institutional/insights/climate-progress-dashboard/
9 https://www.fsb-tcfd.org/tcfd-supporters/

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Firm size doesn't matter

We found an insignificant relationship between market capitalisation and disclosure score. While large firms like BP scored highly, smaller companies like Vedanta Resources also reported their exposure to climate-related risks well. Any trend that could have appeared was masked by the lack of good quality disclosure by large firms in the technology sector like Alibaba and Tencent.

BP best practice

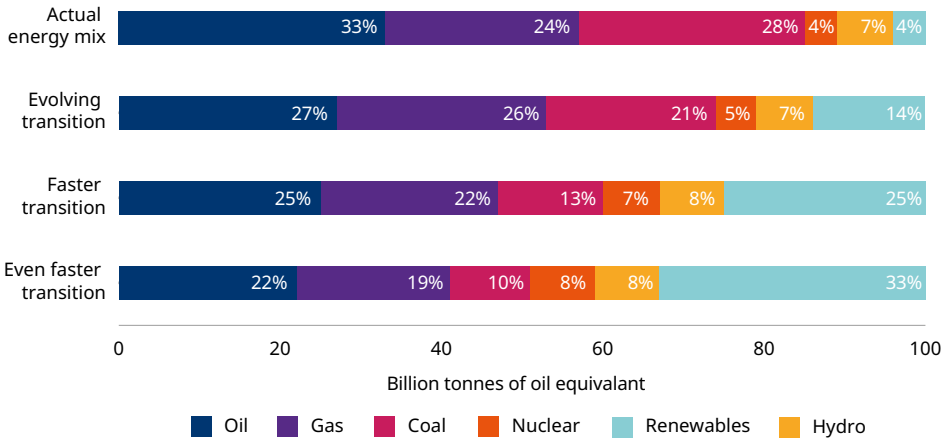
BP was one of the highest ranked firms on the list with a score of 18. The firm produces an ESG report, co-operates with the CDP and integrates some climate-related issues in its annual report. The firm goes beyond simply disclosing its current strategy by presenting the reader with multiple strategic and risk-based scenarios in order to more clearly guide an investor through BP's process if certain events unfold.

More progress needed

Overall, we are pleased to see that those firms with the most obvious and direct climate-related risks are taking TCFD recommendations into account and publically disclosing how climate change may affect the viability of their businesses. While we recognise the challenges associated with quantifying the possible effect of an uncertain future event like climate change, there is no doubt that climate-related issues and the shift to a lower-carbon economy will affect most sectors and industries. In our ongoing drive for greater transparency, we would like to see a greater focus on the issue from those companies operating in sectors where the impacts are less observable, like technology. We will continue to lend our support to policy and industry initiatives to promote more transparent disclosure and to engage companies directly and with peers to publish that information.

Figure 7: BP disclosure

Energy consumption – 2040 projections



Evolving transition

In this scenario, government policies, technology and social preferences evolve in a manner and speed seen in the recent past. The growing world economy requires more energy but consumption increases less quickly than in the past.

Faster transition

This scenario sees carbon prices rising faster than in the evolving transition scenario, with other policy interventions encouraging more rapid energy efficiency gains and fuel switching.

Even faster transition

This scenario matched carbon emission similar to the international energy agency's sustainable development scenario, which aims to limit the global temperature rise to well below 2°C.

Source: BP

Views on sustainability: results from our 2018 global investor studies

Climate change, shifting demographics and the technology revolution are reshaping our planet, our values and how we invest. Against this backdrop, sustainability continues to rise in importance for investors.

To gauge the latest investor views, we surveyed more than 22,000 people from 30 countries with a minimum of €10,000 (or equivalent) invested. We also conducted a survey of 650 institutional investors, comprising pension funds, foundations, endowments and sovereign wealth funds, across 15 countries. We asked them about their views and actions in relation to sustainable investing, as well as some of the barriers to investing more sustainably. In the following sections we highlight the key findings from both surveys.

Global Investor Study (individual investors)

Growing importance of sustainable investments

Encouragingly, sustainable investing is becoming more important to people around the globe. Compared to five years ago, more than three-quarters (76%) of retail investors feel sustainable investing is more important to them now. Almost two-thirds (64%) say they have increased their sustainable investments, but the results vary widely across countries, from 93% in Indonesia to 32% in Japan.

Our study found that people who feel they have higher levels of investment knowledge are both investing more of their total portfolio in sustainable investments and expecting higher returns on their entire portfolio. People who consider themselves expert/advanced investors said they were investing an average of 42% of their portfolio in sustainable investments and expected an annual return on their entire investment portfolio of 10.9%, on average. That compares with 32% and 8.8%, respectively, for those people who consider themselves beginner investors.

But what is preventing more rapid growth in sustainable investing?

There is a lack of information and understanding when it comes to sustainable investments, which makes it challenging for investors. 57% of people globally identified a lack of information as a reason why they don't invest in sustainable investments or do not invest more in them. More specifically, investors cited a lack of advice on sustainable investments, a limited number of sustainable investments available and a lack of information on how sustainable fund managers are engaging with companies as barriers. The problem is most prevalent in the UAE, India and Singapore. Encouragingly, only one in four investors cited performance concerns as a barrier to sustainable investing.

Sustainable behaviours not yet translating to sustainable investing

Many people don't see investing sustainably as a means to contribute to a more sustainable society. This is at odds with the values people demonstrate through other behaviours, such as avoiding controversial businesses, considering their carbon footprint and buying from companies with a good record of social responsibility. Over half of people globally often avoid businesses with a controversial track record in their day-to-day habits, but only two in five do so when they are investing. Those aged between 18 and 34 are significantly more likely to choose investments that consider sustainability factors compared to those ages 65 and over.

Local issues more important to investors

We asked investors to rank sustainability topics in order of importance and the results across the regions, while largely consistent, were also surprising. While policymakers are focused on global issues like climate change, investors seem to prioritise more local concerns like bribery and corruption and pollution from operations.

Institutional Investor Study

Strong outlook for sustainability

Sustainable investing continues to grow in prominence among institutional investors globally. Over the past five years, almost half say they have increased their sustainable investments. European investors continue to lead the way, while Asia remains a laggard. Three quarters of institutional investors believe sustainable investing will become more important in the next five years, compared to 67% in 2017.

Sustainability important across asset classes

Sustainability considerations have typically been more prevalent in equities, but increasingly investors view it as important across other asset classes too. 54% of investors believe it is important for infrastructure (49% in 2017); 48% believe fixed income investments should also factor in sustainability considerations (44% in 2017). Investors also indicated growing importance in real estate (44% in 2018; 40% in 2017) and alternatives (33% in 2018; 29% in 2017).

But challenges still remain

Only 27% of investors say sustainability has a significant influence on their investment decision-making, with another 41% saying it has a moderate influence. A third of investors say it has little to no influence currently. Globally, 77% of investors find sustainable investing challenging. Consistent with the 2017 results, performance concerns were cited as the main reason, with a lack of transparency and reported data also a key barrier. Investors say data on sustainable investing and evidence of better returns would help them increase allocations to sustainable investments. Greater transparency by companies on financial and non-financial performance reporting would also help.

Bridging the information gap key to unlocking growth

Sustainable investments offer investors the opportunity to apply the same social and environmental values to their investments as they do in their day-to-day lives, while also meeting their financial return objectives. People who claimed greater levels of investment knowledge appear to recognise this to a greater extent than those less confident in their knowledge.

The rising importance of sustainable investing globally is encouraging, however a lack of information and understanding are holding back both retail and institutional investors from investing more in this space. Countless people identified a lack of information and understanding as the primary barriers to investing more sustainably. Addressing this information gap is key to unlocking growth in sustainable investments.

INfluence

At Schroders, we believe that we are owners - rather than renters - of capital. Effective and responsible active ownership has long been part of our fundamental approach to investment.

We recognise that companies play a critical role in societies and the environment. It is essential to question and challenge companies about issues that we perceive may affect their value as appropriate. As such, we actively exercise voting powers and engage with companies on issues such as strategy, risk, performance and governance. Through our engagement, we can improve our understanding of the issues companies face, and influence improvements – and ultimately, protect or enhance the value of our investments.

The overriding principle governing our approach to voting is to act in the best interests of our clients. Where proposals are not consistent with the interests of shareholders and our clients, we are not afraid to vote against resolutions.

Engagement at Schroders does not occur in silos. Our engagement activities combine the perspectives of our portfolio managers, financial analysts and ESG specialists in order to form a rounded opinion of each company and the issues it faces. This section details our corporate engagement activities on ESG-specific issues and our proxy voting activities.

Engagement

Engagement approach

As an active manager, company engagement happens on a daily basis across Schroders. In 2018, our equities teams held over 9,200 meetings with companies, and our fixed income team held 800. While these meetings tend to focus primarily on financial performance, they also provide a platform to discuss ESG topics. We track ESG conversations across some of these meetings, and are currently developing tools to better capture the data across Schroders.

In addition, our ESG team undertook over 2,200 specialist ESG engagements with companies in 2018, interacting with a total of 878 companies (2017: 781) across 52 countries (2017: 50). Figure 8 below demonstrates the global outreach of our engagement.

Why do we engage?

The aim of our engagement is threefold:

1. To encourage companies to adopt longer-term approaches to their stakeholder relationships;
2. To improve investment insights on emerging risks and opportunities; and
3. To generate better returns.

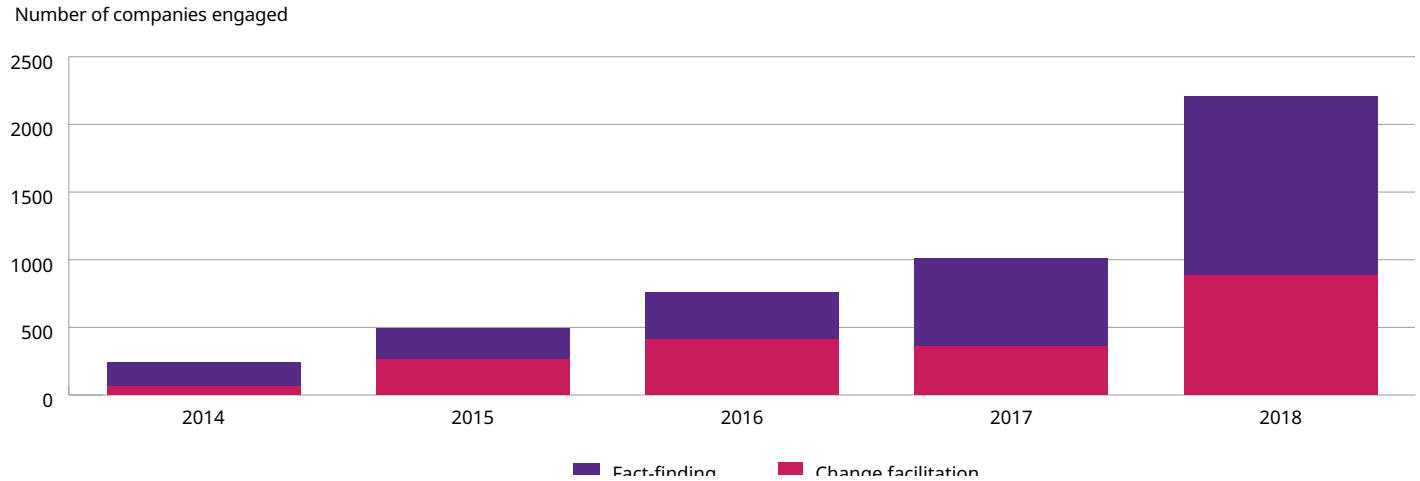
We divide our engagement into two categories: fact finding and change facilitation. Figure 9 below shows how this has been split over the past five years.

Figure 8: Company engagement by region

Source: Schroders as at 31 December 2018

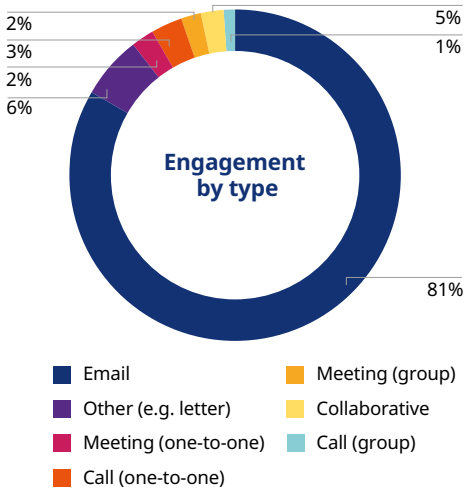
Given our decades of engagement experience, in 2018 our focus has been to better define the reasons behind why we engage, and importantly, the outcomes of our engagement.

Figure 9: Reasons for ESG engagement over the past five years



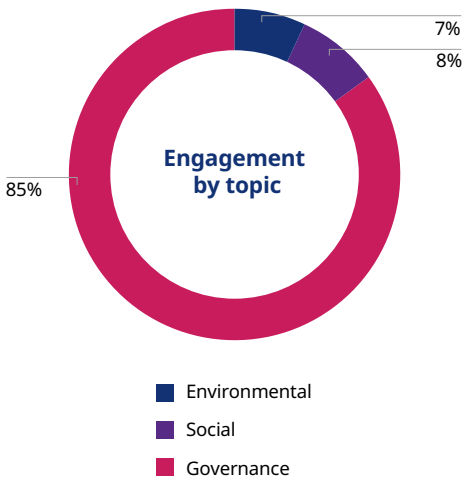
Source: Schroders as at 31 December 2018

Figure 10: Company engagement by type in 2018



Source: Schroders as at 31 December 2018

Figure 11: Company engagement by topic in 2018



Source: Schroders as at 31 December 2018

How do we engage?

Our mechanism for engagement with company representatives varies but typically involves one of the following methods:

- One-to-one meetings with company representatives
  - E.g. members of the board, senior executives, investor relations, specialist managers such as sustainability or environmental managers
  - These meetings are either undertaken collaboratively with our financial analysts and investors, or are focused ESG engagements undertaken by our ESG specialists;
- Written correspondence or phone calls;
- Discussions with company advisers and stakeholders;
- Joint engagement with other investors (further information on our collaborative approach can be found on p39).

Figure 10 illustrates the split of company engagement meetings by type during 2018.

How do we prioritise engagement?

Our engagement activities are prioritised based on several factors:

- The materiality of our exposure to the individual companies, either by the total size of assets invested on behalf of clients or by the percentage of shares held
- Whether there have been controversies or we know about poor stakeholder relationships
- Whether the firm is considered an ESG laggard

Our equity research, fixed income research, ESG and data teams frequently work together to identify areas that warrant discussion with companies. Engagement can be proactive or reactive.

What issues do we engage on?

Our engagement activity covers numerous companies, sectors and regions across a range of issues. Figure 11 breaks down our engagements by overall topic and Figure 12 provides an indicative list of the specific issues we engaged on during 2018, with the top ten issues in blue. During the year, we focused on a number of governance topics, with corporate access issues resulting from regulatory scrutiny featuring heavily in our work. We identified key governance issues such as diversity and pre-emptive rights across a number of our holdings and therefore engaged with all the holdings where the issues were applicable. We also engaged with a number of companies on climate change strategy and a range of social issues. The appendix on page 39 provides a full list of the companies we engaged with in 2018.

Figure 12: Indicative list of ESG topics engaged during 2018

Environmental	Social	Governance
Biodiversity	Customers	Accounting practices
Climate change	**Data security**	Auditors
Environmental policy / strategy	Health and safety	Board committees
Environmental products and services	**Human capital management**	**Board structure**
Environmental supply chain	Human rights	Business integrity
Forests	Labour standards	**Corporate strategy**
Pollution	Nutrition and obesity	ESG governance and sustainability strategy
Waste management	Product safety	**Governance oversight**
Water	Social policy / strategy	**Remuneration**
	Supply chain management	**Shareholder rights**
		Succession planning
		Transparency and disclosure
		Voting

Source: Schroders as at 31 December 2018

What are the outcomes of our engagement?

We log all instances where we have requested change at companies on ESG-specific issues. We review company progress on an annual basis (Figure 13). We categorise progress in five ways:

1. Achieved
2. Almost
3. Some change
4. No change;
5. No further change required[10].

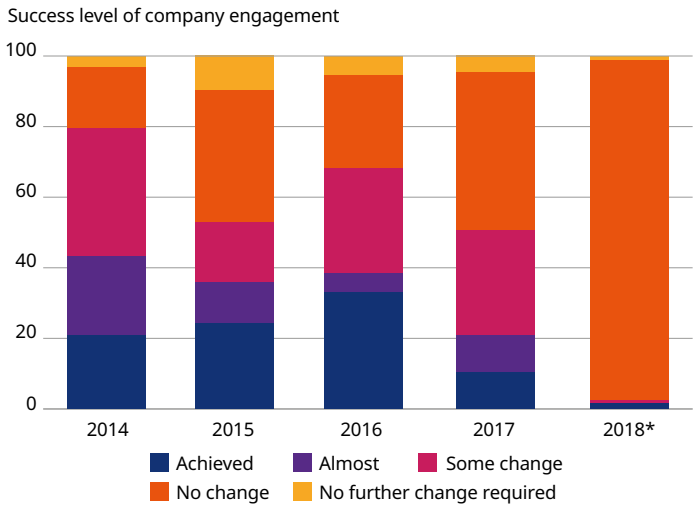
We recognise that these success factors may be subjective, and that Schroders' influence may not have been the sole driving force for this change. However, we believe it is important to track companies' progress and measure the outcomes of our engagement.

We review requests for change a year after they have been made, and subsequently on an ongoing basis, recognising that key strategic changes will take time to implement into a company's business process.

We realise that effective engagement requires continuous monitoring and ongoing dialogue. It is interesting to note that, of the companies we engaged with five years ago in 2013, 56% of our change requests to date have been "achieved" or "almost achieved", reflecting good progress. Due to this lengthy process and the inherent nature of these engagements, we anticipate more current engagements success to be of a higher percentage in the future.

10 This category is used if, for example, a company has divested the business in question, or if the company has provided a valid reason for not implementing the change requested

Figure 13: Effectiveness of requests for change (by company engaged)



Source: Schroders as at 31 December 2018. *In our experience it takes an average of 2 years for companies to effect the change requested.

Proxy voting

Why do we vote?

As stewards of our clients' capital, we believe that making full use of our voting rights is part of our fiduciary duty. It is about holding management and boards to account to ensure that they are managing the business for the long term. In order to create, sustain and protect the value of our investments, we encourage companies to follow corporate governance best practice. Put simply, as equity holders we have a responsibility to act like owners of companies.

Engagement with companies is also a critical part of our process. We ensure that there is an ongoing dialogue, and form long-term relationships that reflect an in-depth understanding of companies. Corporate governance best practice is an evolving area and we want to encourage rather than mandate improvements. We take a proactive approach in engaging with our significant holdings to convey our reasoning and policies prior to voting at general meetings.

It is our policy to vote on all resolutions at all AGMs/EGMs (extraordinary general meeting) globally except where there are restrictions that make it onerous or expensive to vote compared with the benefits of doing so. For example, shareblocking practice whereby restrictions are placed on the trading of shares which are to be voted upon.

Further information on our voting policy and monthly disclosure of our global voting can be found on our website. This includes a short reasoning behind situations where we have voted against management, which we hope provides helpful clarity.

In 2018, we voted on approximately 99% of total resolutions, and instructed a vote against management at 48% of meetings. In total, we voted on 5,227 meetings.

Where do we vote?

As a global investor, Schroders votes across all regions in which we invest. The majority of voting is conducted from our London office; however our offices in Australia, Japan, Taiwan and Indonesia make their own voting decisions. We try to ensure a consistent house view is given to companies, but in order to maintain the necessary flexibility to meet client needs, these local offices may determine a voting policy regarding the securities for which they are responsible. Japan and Australia have their own voting policy, both of which are publically available. Figure 15 represents our regional voting activity in 2018.

We submit electronic votes for all meetings, however, on occasion we may attend annual or extraordinary meetings to submit our vote in person.

What issues do we vote on?

Schroders will engage and vote on any issue affecting the long-term sustainable value of a company in which we are invested. To the right, Figure 16 shows the resolution breakdown of topics that we vote on. The majority are targeted around issues required by local stock exchange listing requirements (e.g. director elections, acceptance of reports and the allocation of income, approval of remuneration policies and reports). We also actively engage and vote on shareholder resolutions and have dedicated Sustainable Investment analysts who use their sector specific knowledge to make these voting decisions.

Why do we vote against company management?

As long-term, active investors we hope to support management on all resolutions, but our pragmatic approach means that we will oppose management if we believe that it is in the best interests of our clients to do so.

For example, we will vote against management if we believe a proposal diminishes shareholder rights or if remuneration incentives are not aligned with the company's long-term performance and creation of shareholder value. Such votes against will typically follow an engagement and we will inform management of our intention to vote against them before the meeting, along with our rationale.

In recent years we have been increasingly voting against individual directors. For example where we have had ongoing concerns about remuneration we may vote against the chair or other members of the remuneration committee. Also, where there have been ongoing and significant areas of concerns with a company's performance we have chosen to vote against individuals on the board who have served long tenures. We still support the principle of collective board responsibility, but believe that there should also be some individual accountability.

Figure 14: Voting Activity 2014-2018

Year	Meetings	Resolutions	% of resolutions with management	% of resolutions + abstentions against management
2018	5,227	56,510	86%	14%
2017	5,378	62,058	82%	18%
2016	5,168	61,114	84%	16%
2015	5,151	57,942	85%	15%
2014	5,616	60,330	91%	9%

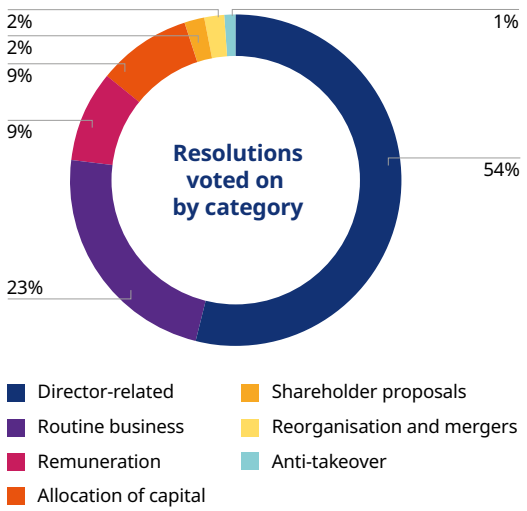
Source: Schroders as at 31 December 2018

Figure 15: Global voting

Europe (ex-UK)	28%
Asia Pacific	25%
UK	18%
North America	21%
Latin America	5%
Middle East and Africa	3%

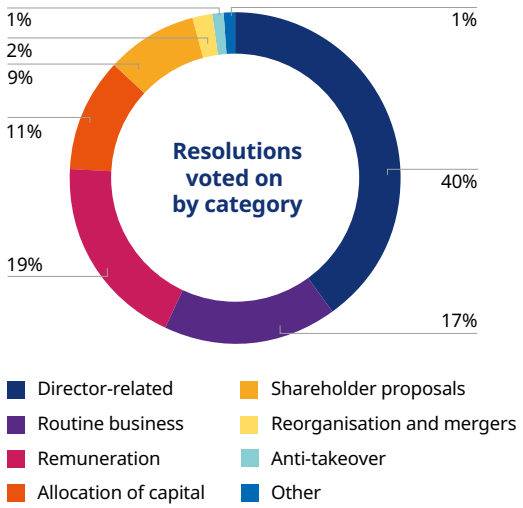
Source: Schroders as at 31 December 2018

Figure 16: 2018 breakdown of resolutions voted on by category



Source: Schroders as at 31 December 2018

Figure 17: Reason for "against" votes 2018



Source: Schroders as at 31 December 2018

2018 Stewardship review

Good stewardship is important to understanding the sustainable value of companies and provides a standard of behaviour to protect and enhance the value of our clients' investments. Our stewardship activity in 2018 saw us encouraging more engagement from European companies, particularly regarding the issue of pre-emptive rights, limiting over-boarding, promoting board diversity in the US and board independence in Asia.

Building up European engagement activity

Engagement is a key tool for investors to understand the issues faced by companies and to drive improvements. For the Sustainable Investment team, 2018 has been about building momentum in Europe, where we have undertaken over 100 individual engagements with our European holdings on a huge variety of topics. Some of these engagements were in response to controversial agenda items at 2018 annual general meetings (AGMs), whereas others included updates on succession plans or providing feedback to companies on their proposed new remuneration policies. Throughout the 2018 European proxy voting season, we consistently voted against certain resolutions such as large pension payments in Spain or a lack of disclosure around board members in Poland.

Mass engagement on pre-emptive rights

In addition to individual engagements, we also occasionally send out mass engagements, often as a response to particular trends we have spotted or to highlight a change to our voting policy. One topic that affected a large number of our European holdings was the issuance of capital without pre-emptive rights up to a level which presented high dilution concerns for shareholders. We have a strongly held view that in order to preserve shareholder rights, non pre-emptive issues should be limited to 10% globally. We can understand that companies like the flexibility of raising capital without extraordinary general meetings (EGMs), but still believe that 10% gives companies sufficient flexibility to do this.

Our Corporate Governance specialists meet regularly with fund managers, and both groups had concerns. Our stewardship responsibilities require us to escalate, where appropriate, issues we identify. Along with our investors, we agreed to engage with our European holdings to outline our expectations. Following a period of internal consultation, we wrote to our 614 European holdings; we received replies from 103 companies and many of them appreciated that we shared our views on this issue. Our engagement sparked further discussions with several companies, where we either discussed the topic in more depth or companies asked for our opinion on other matters such as remuneration or succession planning.

The discussions with companies that resulted from this engagement also gave us the opportunity to identify exceptions to our stated policy. For example, we held a call with Swiss Re who is permitted, under its Articles of Association, to issue an additional amount of shares in relation to stock settled financing instruments under strict conditions. In this instance the issuance of shares without pre-emption rights is capped at 10% in the normal course of business. There is also a 20% total limit which acts as a protection to ordinary shareholders in the event that more than 35 million shares are issued for contingent convertible capital securities settlement. We therefore confirmed that in this instance we are happy with the details surrounding this proposal.

Collective engagement

As outlined in our stewardship policy, we collaborate with other investors to engage on certain topics where we feel it is appropriate. For example, we are a member of Eumedion, a group of institutional investors with the objective of maintaining and further developing good corporate governance in the Netherlands. At the end of 2018 the group voted on the key topics which were to be included in the annual 'Focus Letter' that Eumedion sends to Dutch listed companies. The purpose of the focus letter is to highlight to companies topics that are of importance to their investors; these topics are often the basis of Eumedion's engagements ahead of the 2019 proxy season. For this year, the two topics selected relate to the long-term value creation model of companies, and the disclosure of board diversity and skills.

Currently, Eumedion members are working on a draft response to the Dutch government's draft bill on the introduction of a 250 day response time for Dutch listed companies that face shareholder activism or a hostile take-over. We spoke publically in 2017 expressing our concerns that these proposals would dilute shareholder rights. It is hoped that in these instances, a letter with the backing of a large number of institutional investors may be more effective than individual engagements.

Limiting over-boarding

Another key focus in 2018 was how board directors distribute their time and discharge their responsibilities against a backdrop of increasing expectations for board directors. Conversations with previously overstretched directors have highlighted to us just how quickly a busy board member can become overextended, especially in the face of a crisis. As a result, we raise concerns with companies where we see directors accumulating multiple seats on boards. While there isn't an exact number which is right, accumulated chairmanships and committee memberships require formal explanations. We support a comply or explain approach when it comes to over-boarding, and a holistic examination of all commitments across the public and non-public sphere.

We therefore engaged with both Sir Ian Cheshire, who chairs Debenhams and Barclays UK, as we wanted clarity on the time strain at these roles. We were concerned that a UK bank and underperforming high street store would require considerable time. Sir Ian stepped down from Debenhams in January 2019. Similarly, we believed Spire and Foxtons chairman, Garry Watts, who was also chairman at BTG and held a non-executive role at Coca-Cola Euro, was taking on too many demanding roles. We advised the company that he should step down from one of these chair roles and after a 23% vote against him at the July AGM, Garry announced his intention to step down in December.

Case study on collective engagement: Unilever

In November 2017 Unilever CEO Paul Polman stated that the board was looking to abandon its dual structure involving two headquarters in favour of a single legal corporation. This decision was made shortly after the company had defeated a $143 billion takeover bid from Kraft Heinz. In early 2018 they announced a move to restructure and effectively consolidate their business in the Netherlands. The company felt a more simplistic operation would have tangible benefits for shareholders, in particular giving them more flexibility for acquisitions and disposals.

We were disappointed by Unilever's lack of engagement ahead of its decision. We have been a long-standing and supportive shareholder of Unilever Plc for over 50 years. If the move went ahead, the company would have lost its premium listing and index inclusion in London, with the result that many clients would be forced sellers . In addition we have had long-standing concerns about the protectionist nature of the Dutch market, and possible moves by legislators to limit the results of shareholders in the event of a company receiving an approach from an activist or another company.

Unilever emphasised the size and liquidity of the Dutch share base, as the reason for incorporation in the Netherlands. Our own analysis found that the relative merits of the two markets (London and the Netherlands) varied depending on the time period taken. The board didn't appear to be considering the alternative simplification through UK incorporation and throughout discussions were very confident they would receive the 75% of UK votes needed to implement this move.

In line with our stewardship policy, after bilateral meetings we escalated the issue to act collectively, in this case via the Investor Forum. We monitored these discussions closely, but felt that the company was showing little sign of changing its approach. We engaged with the board one last time ahead of the vote, to give them the opportunity to provide a more compelling reason to support the EGM. The board acknowledged our position, but said that we were in the minority.

Consistent with our escalation policy, we went to the press with our decision. On 1 October we declared that we would vote against the company's plans to relocate its headquarters to the Netherlands. Within five days, and after additional dialogue with the Investor Forum, Unilever abandoned plans and scrapped the proposal in the "best long-term interests of shareholders".

We believe that through escalation, collective engagement, and using the press we have been able to preserve value for our investors by keeping Unilever premium listed in the UK.

Our engagements do not always end in an individual giving up a position. For example, we spoke to Weir chairman Charles Berry after it was announced he would also be stepping into the chairman's role at Centrica. We felt comfortable enough to support his appointment after various assurances.

Board diversity in the US: More women needed

We believe that diversity at board level is important for a company's long-term success, by encouraging debate and ensuring wider stakeholder representation. While we think of diversity broadly, we feel it is important that as a minimum, companies should have women on their board. We identified a number of our US holdings that still had all-male boards so we felt there was an opportunity for us to engage with these companies to encourage improvements.

We wrote to all our US holdings with all-male boards communicating our views. We explained that if we fail to see evidence of change by their next AGM, we will look to vote against the chair of the nominations committee. This has led to constructive dialogue with a number of these companies and we have started to see some change. As of January 2019, three of the companies we wrote to have appointed a woman to the board.

Going into the new year, we will look to expand the diversity conversation more globally and engage with holdings in other regions on the subject.

Stewardship in Asia: Encouraging independence

Establishing an ESG presence in Asia has enabled us to more proactively engage with our peers and the Asian Corporate Governance Association (ACGA). We are active members of the ACGA and regularly dial into their meetings. However, this year we were able to attend and participate in their annual conference as well as contribute to local strategy meetings where we set an agenda of priorities for the year ahead.

One of the key trends we have identified in Asia is the issue of independence and we find this a reason for consistently voting against companies at AGMs. Family-run companies are a common feature of the corporate landscape in Asia; with this in mind, we would expect a presence of strong independent directors on the board to represent minority shareholder interests. We initiated dialogue with one of these family-run companies in 2017, recognising the nature of the company's structure meant there was a strong family presence on the board but asking for the board to establish a formal nominations committee chaired by an independent director. We re-engaged last year, having not seen any change, and voted against members of the board for failure to follow best practice. While we would normally hope to support company management, we also recognise our responsibility to make considered use of our voting rights.

Ongoing focus on stewardship into 2019

Our stewardship activity in 2018 covered a range of topics across a number of regions and we believe 2019 will see us engage on an even more diverse range of issues across the world. We remain as committed as ever to protecting and enhancing the value of our clients' investments and will continue to engage with, and encourage best practice from, all our holdings in 2019.

INtegrity

We're committed to managing clients' assets responsibly. That's why we're dedicated to promoting sustainable business practices that help businesses reach their full potential.

Our responsible approach isn't a new attempt to follow market trends, nor is it separate from our mainstream investment processes. Responsible principles drive our investment decisions and the way we manage funds.

We see ourselves as long-term stewards of our clients' capital and this means looking beyond the numbers. Our approach involves engaging with companies about their activities and helping them manage risks to drive better performance. Our investment experience and academic research show that companies with good ESG management often perform better and deliver superior returns over time, both for investors and society

Screening and ethical exclusions

Ethical exclusions (or negative screening) refers to a strategy that involves the removal of specific companies or sectors from the investible universe of a portfolio based on a client's ethical criteria.

This remains an important area for our clients. We have continued to see a steady increase in the value of assets under management (AUM) to which some form of ethical exclusion is applied. As of 31 December 2018, Schroders managed £47.0 billion in ethically screened assets, representing almost 11.2% of our total AUM.

Figure 18: Group ethical assets under management (2014-2018)

Year	Ethical AUM (GBP billion)	% of Group AUM
2018	47.0	11.2
2017	46.6	10.7
2016	33.2	8.6
2015	29.9	9.6
2014	27.8	9.3

Source: Schroders as at 31 December 2018. Ethically screened AUM incorporates the AUM of all strategies with exclusions beyond those on the firm wide exclusion list.

Of the £47.0 billion of AUM with ethical constraints in 2018, approximately £3.0 billion was managed by Schroders' Wealth Management business (including charities).

These ethical mandates vary from excluding stocks on a single issue to incorporating a variety of ethical issues. In addition, they often define a degree of materiality (e.g. percentage of revenues) a stock derives from its exposure to a particular issue. Tobacco, gambling and alcohol remain the most commonly applied screens.

Cluster munitions

Schroders fully supports the international conventions on cluster munitions and anti-personnel mines (APM). Consistent with this support, and in line with our commitment to responsible investment, we will not knowingly hold any security that derives revenue from, or provides funding for, cluster munitions or APMs.

Schroders will apply this policy to all funds that we directly manage. On occasion, there may be additional securities recognised by clients or local governments; these will be added to the Schroders Group exclusion list for those relevant jurisdictions or specific mandates.

The following companies are on our Group exclusion list (Feb 2019):

- Anhui Great Wall Military Industry Co Ltd
- Aryt Industries
- Ashot Ashkelon Industries
- Avibras
- Bharat Dynamics Ltd
- China Aerospace Science and Technology
- China Aerospace Science and Industry
- China North Industries Group Corp (Norinco)
- Hanwha Corporation
- LIG Nex1
- Motovilikha Plants JSC
- Poongsan Corporation
- Poongsan Holdings Corp.
- Roketsan
- Sichuan Academy of Aerospace Technology
- Splav State Research

Terrorist financing

As a result of the Patriot Act and the Anti-Money Laundering and Counter Terrorism Financing law in the US, many US state pension funds request that their fund managers divest from any companies that could be undertaking business within countries that the US government considers terrorist states.

Schroders meets its US clients' requests to screen out these companies. As of 31 December 2018 we estimate that £5.2 billion of AUM was screened based on client-defined criteria.

Collaboration, industry involvement and public policy

We support, and collaborate with, several industry groups, organisations and initiatives. These are important in improving sustainability standards across sectors, establishing a consistent dialogue with companies, and in promoting the ongoing development and recognition of ESG within the investment industry. We also work with organisations that we are members of, and with national and regional trade associations, to develop their submissions on various regulatory issues around the world.

We believe that working with peers and policymakers on ESG issues is an important activity and regularly respond to public consultations both as a firm and working with investor groups.

Advocacy and public policy

European Insurance and Occupational Pensions Authority (EIOPA)

Schroders submitted an individual response and provided input to the IA and EFAMA's response to EIOPA's consultation paper on technical advice on the integration of sustainability risks and factors in the delegated acts under Solvency II and IDD (view here). Our responses reflect our general agreement with the proposed reference in relation to the risk management function. However we also mention our concern that the consultation paper fails to differentiate between who is bearing the investment risk, the insurance company or the policyholder.

EU Ecolabel for financial products

Schroders submitted a response on the EU Ecolabel for Financial products (view here). Given the specific "Ecolabel" name, we suggested that the scope of the label should extend to environmentally sustainable financial products, rather than trying to capture all the different sustainable investment options available.

European Securities and Markets Authority (ESMA)

Schroders submitted an individual response (view here) and provided input to the IA and EFAMA's response to ESMA's consultation paper on integrating sustainability risks and factors in MiFID II (view here). Overall we agree with the suggested approach and the proposed amendments to the MiFID II Delegated Directors Articles on 'product governance'. We promote having a flexible approach that is able to absorb system changes instead of having a specific approach which would be overly restrictive.

We also submitted an individual response (view here) and provided input to the IA and EFAMA's response to ESMA's consultation paper on integrating sustainability risks and factors in the UCITS Directive and AIFMD (view here). Overall we believe the high-level, principle-based approach is proportionate and adequate. We think that a more granular approach would be disproportionate and would single out sustainability risk above any other similar risk (credit risk, market risk, etc.), sending the wrong signal with regards to risk weighting.

Financial Conduct Authority (FCA) consultation on climate change and green finance

Schroders provided input to IA and EFAMA and an individual response to the discussion paper on climate change and green finance (view here). We summarise the idea that climate change has no precedent, so it is very difficult to assess what the future impacts to asset valuations will be. As a result, we find that many investors respond with broad "rules of thumb" to investment strategies, which do not reflect a considered understanding of the risks posed by climate change.

Independent review of the Financial Reporting Council

Schroders provided input to IA and an individual response to this review (view here) conducted by Sir John Kingman. We argued for a clear focus for the FRC towards quality reporting, the oversight of auditors and accounting. We called for more genuine engagement and willingness to listen to, and act upon, the views of a wider set of stakeholders, particularly users of accounts. We advocated the FRC's governance structure be reviewed and streamlined to enable this to happen.

DWP consultation on clarifying and strengthening trustees' investment duties

We feel that trustees will welcome the draft regulation, in particular the increased guidance around the process and behaviours that culminate in the preparation or maintenance of the Statement of Investment Principles ("the SIP"). The proposed approach appears to be pragmatic in both time line, the exemption of smaller schemes and recognising the differences between DC and DB schemes. We were concerned about the focus on social investment, given its nascent development.

CMA Statutory audit market study

We submitted a response which argued that audit firms can, and should, play a more significant role in minimising and ensuring that disclosures, including those within the audit reports themselves, concisely and unambiguously report the underlying business risks to shareholders. We pushed for stronger governance of the audit practices of firms. We are not in favour of joint audits, but can see the role that market caps could play in creating more competition in the audit market.

Commission Delegated Regulation of the European Parliament amending Regulation (EU) 2017/565

While we fully support the goal to promote sustainable investments, we identified two over-arching challenges. The current draft describes "ESG considerations" too narrowly. It emphasises environment, social and governance factors separately, rather than sustainability in an integrated manner. Further, the proposal defines "environmentally sustainable" or "social" investments based on specific economic activities. Many institutional investors and our clients recognise that environmental and social considerations can have important influences on investment decisions across all companies, and span analysis of companies' activities, their business models and our role as responsible stewards. Secondly, the proposal risks leading advisors to delineate investment advice into narrowly defined activities or funds, or mainstream funds in which ESG considerations do not feature.

Financial Services Authority (FSA)

We provided feedback on the draft of the Guidelines for Engagement between Investors and Companies published on the FSA website. We also gave feedback on the corporate disclosure on Corporate Governance information in Japan.

EU Fitness Check on the EU Framework for Public Reporting by Companies

We responded to the European Commission's consultation on whether the EU framework for public reporting by companies is fit for purpose.

Committees or initiatives promoting responsible investment

Trade Associations:

Investment Association (IA):

- Our CEO chairs the IA and our Co-Head of Equities Management sits on the Investment Committee
- Our Global Head of Stewardship Chairs the Stewardship Committee. The committee engages actively with policymakers and other stakeholders in the UK on how the investment management industry and capital markets can best serve their needs. In 2018 we helped form responses to the Kingman review of the FRC, the DWP's consultation on trustees investment duties, the CMA Statutory audit market study, and the BEIS Future of audit enquiry.
- Our Investment Director is a member of the IA's Sustainability and Responsible Investment Committee. At the start of 2018, the IA identified sustainability and responsible investment as a dedicated policy area in its own right to help firms in thinking about their wider role in society and to promote all forms of responsible investment. The IA's Sustainability and Responsible Investment Committee was established to provide strategic direction to this policy area and has a broad mandate to consider and lead on all issues affecting member firms in sustainability and responsible investment. In 2018 the committee has responded to various EU sustainable finance consultations.

European Funds and Asset Management Association (EFAMA):

- We serve on the board of EFAMA and on its Stewardship and Responsible Investment Committee. This is the representative association for the European investment management industry.
- We make ongoing contributions to EFAMA's responsible investment consultations and reports. In 2018 we helped shape the response on the European Commission Consultation on investor's sustainability duties, the EIOPA and EFAMA responses.
- We provided a practitioner's perspective and presented on our firm's approach to ESG integration and investor stewardship to a group of policymakers as part of EFAMA's Sustainable finance event. We also presented our views on the EU's sustainable finance taxonomy.
- EFAMA Stewardship Code In May 2018, we became endorsers of the EFAMA Stewardship Code. The Principles in the code are designed to enhance the quality of dialogue with companies in EU Member states, and help managers create value for their clients by dealing effectively with concerns over a company's performance.

The Investor Forum

We participated in an event to provide a deep-dive into supply chain trends with perspectives from a range of stakeholders including the British Retail Consortium, ShareActions's Workforce Disclosure Project and Tesco's Responsible Sourcing Team. We had also connected Oxfam with the Investor Forum to highlight the work they've been doing on supermarket supply chains.

The Investor Stewardship Group (ISG)

In March 2018, we became endorsers of the ISG, a collective of some of the largest US based institutional investors and global asset managers. The ISG was formed to bring all types of investors together to establish a framework of basic standards of investment stewardship and corporate governance for U.S. institutional investors and boardroom conduct. The result is the framework for U.S. Stewardship and Governance comprising of a set of stewardship principles for institutional investors and corporate governance principles for U.S. listed companies.

Sustainability Accounting Standards Board

In June 2018 we became members of the SASB Alliance. Established in 2011, SASB is an independent, private-sector standards setting organisation based in San Francisco, California. The organisation is dedicated to enhancing the efficiency of the capital markets by fostering high-quality disclosure of material sustainability information that meets investor needs. In the second quarter we hosted a webinar in which SASB presented their approach on ESG disclosures and discussed why they are relevant for investors.

Financial Reporting Council

We are members of the Financial Reporting Lab Advisory group. The group sets the agenda for the Financial Reporting Lab and the areas of corporate reporting that they should look to improve.

Clinical Trial Transparency Investor Roundtable

We participated in an investor roundtable discussing good practice on Clinical Trial Transparency, indicating our support for new research from Bioethics International, which ranks companies according to their transparency on Clinical Trials. This builds on our efforts to support improved transparency on both positive and negative trial results. A ranking system is useful for providing an external indicator of leaders and laggards.

PRI

Presented our work on plastics to PRI members and other interested parties as part of a panel discussion. We provided advice to other investors on quantifying impacts, and advised on the most suitable engagement questions to ask companies. Later in the year, we were invited to speak on a panel at the PRI's Climate conference to discuss our experiences engaging companies globally on climate change. The audience consisted of PRI members and other interested parties. We spoke about our involvement in Climate Action 100 and also the challenges of engaging Asian companies on climate change and how we have approached this.

We also joined the PRI plastics working group, which has used Schroders' value chain mode as a starting point for its own work. The group formed in September and we will have regular involvement in helping the group define metrics and engagement questions, drawing on our existing work.

Farm Animal Investment Risk & Return (FAIRR)

While we have been following the initiative closely since its launch, in 2018 we took the decision to become an investor member. We held a call with the initiative in February to better understand FAIRR's latest research and explore potential collaborative engagement opportunities. The initiative provides research and engagement opportunities around the material investment risks and opportunities connected with intensive livestock farming and poor animal welfare standards. In July we supported FAIRR's sustainable protein engagement focused on retailers and manufacturers.

Focusing Capital on the Long Term (FCLT)

We hosted an event with FCLT, a not-for-profit organisation that works to encourage a longer-term focus in business and investment decision-making for clients and companies, which led a discussion around what is the purpose of the equity markets. Among lively debate, strong stewardship and long-termism were two key features discussed.

EU Commission – Blue Economy Financing Principles

We reviewed the proposed principles and participated in the consultation on the second draft of the principles.

Oxfam - Investor Advisory Committee

We participated in Oxfam's first Investor Advisory Committee set up as part of a new three-year campaign looking at shared value in the supermarket sector. We joined several calls during the quarter and contributed our ideas around how investors may use the research, create an engagement strategy and provide feedback on an investor briefing document. We provided feedback on the proposed investor statement and investor briefing paper ahead of the launch of the new report on supply chain risk.

Blueprint for Better Businesses

We participated in a roundtable that has determined a set of questions that will be effective in discerning what role a company's purpose plays in setting their strategy and delivery.

CDP (formally know as Carbon Disclosure Project)

We presented our work on water risk and illustrated how we use CDP data to evaluate food and beverage companies at a CDP workshop. We have also run an event for non executive directors in which the CDP presented on climate change disclosure.

CFA UK

We joined a focused working group to develop the curriculum for an ESG qualification to be put in place by the CFA UK as part of the IMC program, and/or as a standalone certificate.

Collaborative engagement with companies on specific ESG issues

Climate Action 100+

In 2017, we became a founding signatory to the Climate Action 100+ initiative, a five-year collaborative engagement project to engage over 100 of the world's largest corporate greenhouse gas emitters to improve governance on climate change, curb emissions consistent with a 2 degree scenario and strengthen climate-related financial disclosures in line with TCFD recommendations. We are the lead investor for an Asian cement company, and commenced our engagement by conducting a global review of cement companies' carbon strategies, encouraging the company to move beyond air pollution targets towards carbon reduction targets. We have also joined four additional meetings and calls with other investors.

Workforce Disclosure Initiative (WDI)

Subsequent to the publishing of the 2018 WDI company results, we hosted the WDI investor forum at Schroders' head office in London. The topics discussed included plans for the public launch of the finds, scheduled to take place in March 2019; company engagement strategy for 2019; upcoming investor engagement stream on living wages in companies' supply chains; the introduction of a two tier approach to investor involvement in February's investor bulletin. We were involved in the planning of this investor forum and in discussions around the 2019 plans, particularly the format of the two tier investor approach. As part of this, we participated in a second investor roundtable event which focused on the pilot survey findings and discussions around how to promote a higher response rate for the 2018 survey.

Conference Board

We presented on effective stewardship to participating group of companies. The objective of this group is to help improve board effectiveness and investor dialogue.

Non-Executive Masterclass and Deloitte Women on Boards

Three engagements where we participated in training for non-executives. This builds on the work that we do to make boards more effective in their oversight. It also helps develop a diverse pipeline of candidates, helping build a future generation of boards within stronger governance oversight.

Investor Forum: food retailers

We participated in a collaborative engagement via the Investor Forum. The event provided a deep-dive into supply chain trends with perspectives from a range of stakeholders including the British Retail Consortium, ShareActions's Workforce Disclosure Project and Tesco's Responsible Sourcing Team. We had also connected Oxfam with the Investor Forum to highlight the work they've been doing on supermarket supply chains.

Compliance with UN PRI

This section demonstrates our compliance with the UN PRI, and highlights the relevant pages within this report where evidence of this compliance is demonstrated, in addition to other sources not included in this report.

UN PRI Principle	How we comply	Location in annual RI report
P1: We will incorporate ESG issues into investment analysis and decision-making processes	– We seek to integrate ESG considerations across investment desks and asset classes	pg 6, 55-56
	– Dedicated Sustainable Investment team comprising 16 ESG specialists	pg 6, 55-56
	– Long-standing ESG training programme for financial analysts and portfolio managers	pg 56
	– Sector focus allows close working relationship between ESG and financial analysts	pg 56
	– Joint company meetings between ESG, credit and equity analysts	pg 28-29
	– Multi-sector and multi-region thematic research produced on key sustainability trends to educate investors	pg 16
	– Proprietary investment-driven ESG analysis tools for our investors	pg 56
	– All research shared on our proprietary global research platform	pg 56
P2: We will be active owners and incorporate ESG issues into our ownership policies and practices	– Engaging with companies and actively voting at AGMs since 1998	pg 27-34
	– ESG policies for listed assets and real estate	pg 1, 13-14
	– Global voting strategy	pg 27, 31
	– Actively engage with company management and monitor our success	pg 28-29, 41-54
P3: We will seek appropriate disclosure on ESG issues by the entities in which we invest	– Active engagement with companies to encourage greater transparency	pg 28-29, 41-54
	– Participation in collaborative disclosure initiatives to improve disclosure standards	pg 33, 37-39
P4: We will promote acceptance and implementation of the principles within the investment industry	– Members, leaders and participants of various forums and networks	} pg 37-39
	– Collaboration with other investors to promote and develop responsible investment principles and practices, including the PRI, International Corporate Governance Network, Asian Corporate Governance Association, and CDP	
	– Sponsorship and support of responsible investment initiatives, including hosting conferences, seminars and workshops	
	– Submissions to regulators, trade associations, legislators and other bodies	
	– Working with clients who are considering becoming members of the PRI to help them understand the benefits and practicalities of membership	
	– Publicising responsible investment events to clients and encouraging attendance	
	– Trustee training and ongoing client education on responsible investment and ESG trends	
P5: We will work together to enhance our effectiveness in implementing the principles	– Collaboration with other investors, sharing information and exchanging our views	} pg 37-39
	– Active participation in industry networks such as the PRI, International Corporate Governance Network, Asian Corporate Governance Association, UK Sustainable Investment and Finance Association and CDP	
P6: We will each report on our activities and progress towards implementing the principles.	– Responsible investment activities detailed in our publicly available quarterly and annual reports	Throughout this report
	– Best practice case studies included in our reports and publications such as Schroders Investment Horizons	
	– Thematic and special ESG reports published on our website	

Appendix

Figure 19: Companies specifically engaged with on ESG topics during 2018

Company	E	S	G
Consumer Discretionary			
ABC-Mart			✓
AccorHotels	✓		
Aisin Seiki			✓
Alibaba Group	✓		
Amazon.com			✓
AMC Networks			✓
Aramark		✓	
Aristocrat Leisure		✓	
AT Group			✓
AutoLiv		✓	
Balta Group			✓
Bayerische Motoren Werke	✓		
Bed Bath and Beyond			✓
Bloomin' Brands		✓	
Brembo Spa			✓
Bridgestone			✓
Buckle			✓
Burberry Group			✓
Cairo Communication			✓
Cavco Industries, Inc.			✓
Cie Generale des Etablissements Michelin			✓
Coats Group	✓		
Compass Group		✓	
Continental	✓		
Crown Limited			✓
CyberAgent			✓
Daimler			✓
Dalata Hotel			✓
Darden Restaurants		✓	
Dicks Sporting Goods		✓	
Dillards			✓

Company	E	S	G
Dometic Group			✓
Domino's Pizza Group		✓	
Dongfeng Motor			✓
DP Eurasia			✓
Dufry			✓
Eutelsat			✓
Far East Hospitality Trust			✓
Faurecia			✓
Ferrari			✓
Fiat Chrysler			✓
Flight Centre		✓	
Fuji Media			✓
Fujibo Holdings			✓
Galaxy Entertainment Group			✓
Garmin			✓
Genting Bhd			✓
H2O Retailing Corporation			✓
Haier Electronics			✓
Haseko			✓
Hermes			✓
HI-LEX			✓
Honda Motor			✓
Husqvarna			✓
Hyundai Mobis			✓
Iida Group Holdings			✓
IMA			✓
Informa			✓
Intercontinental Hotels Group		✓	
Ipsos			✓
Isuzu Motors			✓
ITV	✓		
Izumi			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
J D Wetherspoon		✓	
JCDecaux			✓
Kering			✓
KOITO MANUFACTURING			✓
Lagardere		✓	
LVMH			✓
M6			✓
Marks and Spencer		✓	
Mattel			✓
McDonalds		✓	
Meredith			✓
Michaels			✓
Mitchells & Butlers		✓	
Modern Times Group			✓
Moncler			✓
Musashi Seimitsu Industry			✓
Namco Bandai Holdings			✓
Naspers			✓
Netflix			✓
Next plc			✓
NHK Spring			✓
Nien Made Enterprise	✓		
NIFCO			✓
Nike	✓		
NIPPON SEIKI			✓
Nissan Motor			✓
Nitori Holdings			✓
Nokian Tyres			✓
Omnicom Group			✓
OPAP			✓
OVS			✓
Pandora			✓
Pantaflix			✓

Company	E	S	G
Pearson		✓	✓
Persimmon			✓
Pets at Home	✓		
Peugeot			✓
Philippine Airlines			✓
Pirelli			✓
Prada			✓
Priceline Group			✓
Publicis Groupe			✓
Reach			✓
Regie Nationale des Usines Renault			✓
RELX			✓
Restaurant Group			✓
Ryohin Keikaku			✓
SACI Falabella			✓
Saint Marc Holdings			✓
Samsonite International			✓
Sands China			✓
Sekisui Chemical			✓
Shenzhou International			✓
Shimano			✓
SIIX			✓
SMCP			✓
Sports Direct			✓
Stanley Electric			✓
Starbucks		✓	
Starts Corporation			✓
Subaru			✓
Sumitomo Forestry			✓
Supergroup			✓
Suzuki Motor			✓
Taptica International			✓
Target		✓	

Source: Schroders, 31 December 2018

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Company	E	S	G
Tata Motors	✓		
Technogym			✓
Telenet			✓
Tesla Motors		✓	
Texwinca Holdings			✓
TF1			✓
Toyota Boshoku			✓
Toyota Industries			✓
Toyota Motor			✓
TPR			✓
Trade Me		✓	
TSUTSUMI JEWELRY			✓
Tupperware	✓		
Unipres Corporation			✓
Valeo			✓
Vivendi			✓
Volkswagen			✓
Whitbread		✓	
William Hill		✓	
Wolters Kluwer			✓
WPP	✓		
XING			✓
XXL Sport & Villmark		✓	
Yamada Denki			✓
Yondoshi Holdings			✓
Yum China Holdings		✓	
Consumer Staples			
Advan			✓
Aeon		✓	
Alicorp			✓
Anheuser Busch Inbev			✓
Archer Daniels Midland		✓	

Company	E	S	G
Associated British Foods		✓	
Beter Bed Holding			✓
British American Tobacco			✓
Britvic		✓	
Casino, Guichard-Perrachon et Cie		✓	
Charoen Pokphand Foods		✓	
China Resources Beer Holdings			✓
Clorox Company		✓	
Coca Cola			✓
Conagra		✓	
Costco Wholesale		✓	
Danone	✓		
Dean Foods		✓	
Dino Polska			✓
Estee Lauder			✓
General Mills	✓		
Greggs		✓	
Heineken			✓
HelloFresh			✓
Hershey Foods	✓		
Hormel Foods		✓	
Indofood	✓		
Inner Mongolia Yili Industrial Group			✓
Japan Tobacco			✓
Kimberly Clark			✓
Koninklijke Ahold Delhaize		✓	
Kraft Heinz Foods			✓
Kroger		✓	
L'Oreal			✓
Lancaster Colony	✓		
MARR			✓
MatsumotoKiyoshi Holdings			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
Migros		✓	
Mitsui Sugar			✓
Mondelez International		✓	
Nestle		✓	
Pernod Ricard			✓
Philip Morris		✓	
Plant Health Care	✓		
Prima Meat Packers			✓
PT Indofood Sukses Makmur			✓
Raia Drogasil		✓	
Reckitt Benckiser			✓
Sainsbury's		✓	
SAN-A CO			✓
Sanderson Farms		✓	
Sapporo Breweries			✓
Seven & I Holdings		✓	
Shiseido			✓
Sogo Medical			✓
SSP Group		✓	
Svenska Cellulosa Aktiebolaget			✓
Swedish Match			✓
Sysco		✓	
Tate & Lyle			✓
Tesco			✓
Thai Beverage			✓
Treasury Wine Estates		✓	
Tsuruha			✓
Tyson Foods Inc.		✓	
Unilever		✓	
Wal-Mart de Mexico SA de CV	✓		
Walgreens Boots Alliance			✓
Walmart		✓	

Company	E	S	G
Warpaint London	✓		
Wesfarmers	✓	✓	
WH Group		✓	
Wm. Morrison	✓		
Woolworths		✓	
Wuliangye			✓
X5			✓
Energy			
Borr Drilling			✓
BP	✓		
Caltex Australia		✓	
Chevron Texaco	✓		
CNOOC			✓
Devon Energy	✓		
Eni			✓
Enquest	✓		
Exxaro			✓
Exxon Mobil			✓
Galp			✓
Gaztransport et Technigaz			✓
Hargreaves Services			✓
Hunting	✓		
IHC Caland			✓
Inpex			✓
JXTG Holdings			✓
Kinder Morgan			✓
Lundin Petroleum			✓
Motor Oil			✓
Neste Oil			✓
New Hope Corp		✓	
Oil Search			✓
Origin Energy		✓	

Source: Schroders, 31 December 2018

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Company	E	S	G
PetroChina			✓
Petroleum Geo-Services			✓
PKN Orlen			✓
Precision Drilling			✓
Premier Oil	✓		
Repsol			✓
Romgaz			✓
Royal Dutch Shell			✓
Santos		✓	
Saras			✓
Sinopec			✓
SK Innovation			✓
Statoil	✓		
Total	✓		
Transocean			✓
Tupras			✓
Wood Group			✓
Woodside Petroleum		✓	
Financials			
3i Group	✓		
AA	✓		
ABN AMRO Group			✓
Abu Dhabi Commercial Bank			✓
Ageas			✓
AIA Group			✓
Alpha Bank			✓
American Express		✓	
AMP		✓	
Amundi			✓
Anima Holding			✓
Aozora Bank			✓
Aroundtown Property Holdings			✓
Assicurazioni Generali			✓

Company	E	S	G
ASX		✓	
Athens Exchange Group			✓
Aurelius			✓
Australia & New Zealand Banking Group		✓	
Aviva			✓
Banca Generali			✓
Banca IFIS			✓
Banca Sistema			✓
Banca Transilvania			✓
Banco Frances			✓
Banco Santander			✓
Bank Central Asia			✓
Bank of America	✓		
Bank of China			✓
Bankinter			✓
BB&T			✓
BBVA			✓
BFF Banking			✓
BM&F Bovespa		✓	
BMV			✓
BNP Paribas			✓
BPER Banca			✓
Catal Occidente			✓
Cerved Information Solutions			✓
Charles Schwab			✓
Charter Financial			✓
Cheung Kong Hutchison			✓
Chubb			✓
Close Brothers Group	✓		
CMC Markets			✓
Coface			✓
Commercial International Bank			✓
Commerzbank			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
Commonwealth Bank of Australia		✓	
Credit Agricole			✓
Credit Suisse Group			✓
Credito Emiliano			✓
DAIBIRU			✓
Daikyo			✓
Daiwa House Industry			✓
Danske Bank			✓
Deutsche Bank			✓
Deutsche Boerse			✓
Dexus		✓	
DiamondRock Hospitality			✓
Direct Line			✓
DNB			✓
Emaar Properties			✓
Emirates NBD			✓
Erste Bank			✓
Esure Group			✓
Eurazeo			✓
FinecoBank			✓
FirstRand Bank			✓
Fonciere des Regions			✓
Fondul Proprietatea			✓
Fukuoka Financial Group			✓
Gecina			✓
General Property Trust		✓	
Goodman Group		✓	
Grainger			✓
Grand City Properties			✓
Guaranty Trust Bank			✓
Habib Bank			✓
Hachijuni Bank			✓
Halkbank			✓

Company	E	S	G
Hang Lung Properties			✓
HDFC Bank			✓
Hispania Activos Inmobiliarios			✓
Hitachi Capital			✓
Hospitality Properties Trust			✓
HSBC		✓	
Icade Emgp			✓
ING Groep			✓
Intermediate Capital Group	✓		
Intesa Sanpaolo			✓
Investec			✓
Investor AB			✓
Iyo Bank			✓
Jefferies Financial Group			✓
Jupiter			✓
Just Retirement			✓
Kasikornbank PCL		✓	
Katitas			✓
KBC Groep			✓
Kenya Commercial Bank			✓
Kerry Properties			✓
KeyCorp		✓	
Kinnevik AB			✓
Klepierre			✓
Krung Thai Bank		✓	
LEG Immobilien			✓
Legal & General			✓
Link Group			✓
Link REIT	✓		
Liontrust Asset Management	✓		
Loomis			✓
Macquarie		✓	
Medibank		✓	

Source: Schroders, 31 December 2018

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Company	E	S	G
Mediobanca		✓	
Merlin Properties			✓
Metrovacesa			✓
Mirvac Group		✓	
MMI Holdings		✓	
Musashino Bank			✓
National Australia Bank		✓	
National Bank of Greece			✓
Natixis			✓
NEX Group			✓
Nexity			✓
Nishi-Nippon Financial			✓
Nisshin Fudosan			✓
Nomura			✓
Nomura Real Estate Holdings			✓
Nordea			✓
Open House			✓
Orix			✓
OTP			✓
PKO Bank			✓
Prudential			✓
QBE Insurance		✓	
Royal Bank of Scotland	✓		
Safestore			✓
Sampo Oyj			✓
Scentre Group		✓	
Senior Housing			✓
Seven Bank			✓
Seventy Seven Bank			✓
Shinsei Bank			✓
Skandinaviska Enskilda Banken			✓
Societe Generale			✓

Company	E	S	G
Spar Nord Bank		✓	
St James's Place Bank		✓	
Standard Chartered		✓	
Stockland		✓	
Storebrand			✓
Sumitomo Mitsui Financial			✓
Sumitomo Realty & Development			✓
Sun Hung Kai Properties			✓
Suncorp		✓	
Suruga Bank			✓
Swedbank			✓
Swire Pacific			✓
Swiss Re			✓
T&D Holdings			✓
Tai Cheung Holdings			✓
TBC Bank	✓		✓
The Wharf			✓
TIER REIT			✓
Tokai Tokyo Financial			✓
Tokio Marine Holdings			✓
Tokyo Century Corp			✓
Toronto Dominion Bank			✓
TP ICAP			✓
Turkiye Garanti Bankasi			✓
UBM Development			✓
UBS			✓
Unibail-Rodamco			✓
Unicaja Banco			✓
Unite Group			✓
United Overseas Bank			✓
Universal Insurance			✓
Van Lanschot			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
Vicinity Centres		✓	
Vienna Insurance Group			✓
Vonovia			✓
Waddell & Reed		✓	
Wells Fargo			✓
Wendel Investissem			✓
Westpac Banking		✓	
Zenith Bank			✓
Health Care			
Amerisource Bergen		✓	
Ansell		✓	
Apollo Hospitals			✓
Astellas Pharmaceutical			✓
AstraZeneca			✓
Bayer			✓
Boiron			✓
BTG			✓
Cigna			✓
CSL Limited		✓	
Danaher	✓		
Dechra Pharma			✓
DiaSorin			✓
Elekta			✓
Essilor		✓	
Fresenius Medical Care			✓
Fresenius SE			✓
GlaxoSmithKline	✓		
Hill-Rom			✓
Indivior			✓
Ipsen			✓
JCR Pharmaceuticals			✓
Kissei Pharmaceutical			✓

Company	E	S	G
Lonza Group			✓
Mallinckrodt			✓
Mitsubishi Tanabe Pharma			✓
MorphoSys			✓
Mylan			✓
N Field Co			✓
Naturhouse Health			✓
Nippon Shinyaku			✓
Novartis		✓	
Novo Nordisk			✓
Orpea			✓
Paltac			✓
Patterson Companies			✓
Ramsay Health Care		✓	
Sanofi-Aventis			✓
Santen Pharmaceutical			✓
Ship Healthcare			✓
Sino Biopharmaceutical			✓
Smith & Nephew	✓		
Sonic Healthcare		✓	
Tsukui			✓
UCB			✓
United Health		✓	
Vertex Pharmaceuticals			✓
Waters Corporation			✓
West Pharmaceutical Services		✓	
Zoetis		✓	
Industrials			
ABB	✓		
Acuity Brands			✓
Agility			✓
Ahlsell			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
AIA Engineering			✓
AICA Kogyo			✓
Air France-KLM			✓
Alstom			✓
AP Moller-Maersk	✓		
Arwana Citramulia			✓
Ashtead			✓
Assa Abloy			✓
Atlas Copco			✓
Aumann			✓
Autins Group	✓		
Avon Rubber			✓
BAe Systems			✓
Bodycote			✓
Bouygues			✓
Brambles		✓	
Bravida Holding			✓
Bufab			✓
Bureau Veritas			✓
Caterpillar	✓		
Central Japan Railway Company			✓
Chemring Group			✓
China Communications Construction			✓
Cie de Saint-Gobain			✓
Corporacion Moctezuma			✓
CSX Corp			✓
D/S Norden			✓
Daihatsu Diesel			✓
DaikyoNishikawa			✓
Dart Group			✓
Dassault Aviation			✓
DMCI Holdings	✓		

Company	E	S	G
DSV			✓
Elis Services			✓
Emerson Electric	✓		
ENAV			✓
Enka Insaat	✓		
Evergreen Marine	✓		
Experian Group		✓	
Fuji Machine			✓
Fukushima Industries			✓
Gamesa Corp Tecno			✓
GEA Group			✓
General Electric	✓		
GlobalTrans			✓
GLORY			✓
Grupo BTG Pactual			✓
Grupo Mexico Transportes			✓
Gujarat Pipavav Port			✓
Haitian			✓
Hamakyorex			✓
HANWA			✓
Hapag Lloyd	✓		
Hays			✓
Hitachi Transport System			✓
Honeywell	✓		
Hopewell Holdings			✓
Inabata & Co.			✓
Intage Holdings			✓
International Consolidated Airlines Group			✓
Intertek			✓
Intertrust			✓
Intrum Justitia			✓
Japan Airlines			✓

Source: Schroders, 31 December 2018

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Company	E	S	G
JCU			✓
JGC Corporation			✓
John Deere	✓		
Johnson Electric			✓
Kardex			✓
Kaufman & Broad			✓
Keller Group			✓
Keppel Corporation			✓
Keuhne + Nagel			✓
Kingspan	✓		
Kintetsu World Express			✓
KION Group			✓
Kone			✓
Koninklijke Philips			✓
Krones			✓
Kubota			✓
Kyokuto Kaihatsu Kogyo			✓
Kyowa Exeo Corporation			✓
Kyudenko Corporation			✓
Legrand			✓
Lendlease		✓	
Leonardo			✓
Leoni			✓
Loma Negra			✓
Mabuchi Motor			✓
McCarthy & Stone	✓		
Melrose Industries			✓
Mirai Industry			✓
Mitsubishi Electric			✓
Mitsui & Co			✓
Mitsui O.S.K	✓		
Morita Holdings			✓

Company	E	S	G
Munters			✓
Nabtesco			✓
Nidec	✓		
Nippon Densetsu Kogyo			✓
Nippon Thompson			✓
Nitta Corporation			✓
Northgate			✓
NWS Holdings			✓
Obara Group			✓
Odfjell Drilling			✓
Phison Electronics		✓	
Porr			✓
Prestige International			✓
Prysmian			✓
Qantas Airways		✓	
Recruit			✓
Rentokil Initial			✓
Rieter Holding			✓
Rockwell Automation	✓		
Rotork			✓
RPS Group	✓		
Ryanair Holdings			✓
Safran			✓
Sankyu			✓
Schneider Electric			✓
ShinMaywa			✓
Siemens	✓		
Sintokogio			✓
SKF			✓
SMC Corporation			✓
Smiths Group			✓
Societe BIC			✓

Source: Schroders, 31 December 2018

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Company	E	S	G
Speedy Hire			✓
SPIE			✓
Stabilus			✓
Stericycle			✓
Sydney Airport		✓	
Taikisha			✓
Takuma			✓
TECHNO ASSOCIE			✓
Teleperformance			✓
Token Corp			✓
Transurban Group		✓	
Trelleborg			✓
Trusco Nakayama			✓
Tsubakimoto Chain			✓
TT Electronics			✓
United Parcel Service			✓
VAT Group			✓
Vestas Wind Systems			✓
Vinci			✓
Volvo			✓
Wartsila	✓		
Weichai Power			✓
Yangzijiang Shipbuilding			✓
Yushin			✓
Zhejiang Expressway			✓
Zodiac Aerospace			✓
Information Technology			
AAC Technologies			✓
Adobe Systems		✓	
Advantest			✓
Ai Holdings			✓
Albert Technologies			✓

Company	E	S	G
Alphabet		✓	
ASM International			✓
ASML Holding			✓
Atos			✓
Atos Syntel			✓
Auto Trader			✓
Blancco Technology Group			✓
BluGlass			✓
Brother Industries			✓
Computershare		✓	
Dassault Systemes			✓
DeNA			✓
Digital Garage			✓
Disco Corporation			✓
eBay		✓	
ESI Group			✓
Facebook		✓	
Fujitsu			✓
GungHo Online Entertainment			✓
Hakuto			✓
Hexagon			✓
Indra Sistemas			✓
Infineon			✓
InnoTech			✓
Inside Secure			✓
Intel			✓
J2 Global		✓	
Keyence			✓
Marvelous			✓
MasterCard		✓	
MercadoLibre		✓	
Micron Technology	✓		

Source: Schroders, 31 December 2018

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Company	E	S	G
Mimasu Semiconductor Industry			✓
Motorola Solutions			✓
NEC Networks & System Integration			✓
NetApp			✓
Netease.com			✓
Nexon			✓
Nintendo			✓
Nokia			✓
Oracle			✓
Otsuka			✓
Red Hat			✓
Reply		✓	
RIB Software			✓
Sabre Corp			✓
Salesforce.com			✓
Samsung Electronics			✓
SAP			✓
Shimadzu			✓
Siltronic AG			✓
Sophos Group			✓
SRA Holdings			✓
TDK			✓
Tencent		✓	
Texas Instruments		✓	
TIS			✓
TKH Group			✓
Tokyo Seimitsu			✓
Toshiba TEC			✓
u-blox			✓
Ubisoft			✓
ULVAC			✓
United Internet			✓

Company	E	S	G
Universal Display Corporation	✓		
Visa		✓	
Vishay Intertechnology		✓	
Xerox			✓
Xilinx			✓
Materials			
Air Liquide			✓
Akzo Nobel			✓
Amcor		✓	
AMG Advanced Metallurgical Group			✓
Anglo American	✓		
Anhui Conch Cement	✓		
Arcelor Mittal			✓
BASF	✓		
Beadell Resources			✓
BHP			✓
BillerudKorsnas			✓
Buenaventura			✓
Cemex			✓
Cemex Philippines	✓		
Clariant	✓		
CRH	✓		
Daicel Corp			✓
Daido Metal			✓
Dainichiseika			✓
DIC Corp			✓
Dowa Holdings			✓
DS Smith	✓		
DSM			✓
DuluxGroup	✓		
Eramet			✓
Eregli Demir	✓		

Source: Schroders, 31 December 2018

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Company	E	S	G
Evonik Industries			✓
Formosa Chemical & Fibre	✓		
Fortescue Metals	✓		
Fujimori Kogo			✓
Glencore	✓		
Grupo Cementos de Chihuahua			✓
Hexpol			✓
Ibstock	✓		
Imerys			✓
James Hardie Industries		✓	
JSP Corporation			✓
K+S			✓
KGHM Polska Miedz			✓
Konishi Chemical Industry			✓
Kumiai Chemical Industry			✓
Kureha Corporation			✓
Lanxess			✓
Lenzing			✓
Louisiana-Pacific	✓		
LyondellBasell			✓
MEC			✓
Metsa Board			✓
Mitsuboshi Belting			✓
Newcrest Mining		✓	
Nihon Parkerizing			✓
Nippon Aqua			✓
Nippon Shokubai			✓
Nippon Soda			✓
Norbord	✓		
Norsk Hydro	✓		
Novozymes			✓
Orica		✓	

Company	E	S	G
OZ Minerals			✓
Petropavlovsk			✓
Philips Lighting			✓
Rayonier Advanced Materials			✓
Rio Tinto	✓		
RPC Group	✓		
Sakata Inx			✓
Sealed Air	✓		
Shikoku Chemicals			✓
Sk Kaken			✓
South32		✓	
Symrise			✓
T & K Toka			✓
Taiwan Cement			✓
Toagosei			✓
Tosoh			✓
Ube Industries			✓
Umicore		✓	
Vale	✓		
Vedanta Resources	✓		
Vicat			✓
Victrex			✓
West Fraser Timber	✓		
Yamato Kogyo Group			✓
Yara International			✓
Zotefoams			✓
Telecommunication Services			
AT&T	✓		
BT Group			✓
China Mobile			✓
China Unicom	✓		
Com Hem Group			✓

Source: Schroders, 31 December 2018

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Company	E	S	G
Deutsche Telekom			✓
France Telecom			✓
Hellenic Telecommunications			✓
Hrvatski Telekom			✓
Infrastrutture Wireless Italiane			✓
JPN			✓
KDDI			✓
NTT DoCoMo			✓
Okinawa Cellular Telephone			✓
Orange Belgium			✓
Orange Polska			✓
Safaricom			✓
Talktalk		✓	
Telecom Italia			✓
Telefonica			✓
Telstra			✓
Turk Telecom			✓
Vodafone			✓
Zain Group			✓
Utilities			
AGL Energy		✓	
Athen Water Supply			✓
Australian Pipeline Trust		✓	
Centrica			✓
CGN Power			✓
China Longyuan Power			✓
China Resources Power			✓
CLP Group			✓
CMS Energy	✓		
Drax	✓		
E.ON			✓
EDF			✓

Company	E	S	G
Edison International	✓		
EDP			✓
Electro Power Systems			✓
ENEL			✓
Entergy	✓		
Fortum Oyj		✓	
Gas Natural SDG			✓
Hera			✓
Iberdrola			✓
Infraestructura Energetica Nova			✓
Next Era Energy			✓
Ormat Technologies			✓
PGE			✓
Power Assets			✓
Red Electrica de Espana	✓		
Southern Company			✓
Tenaris			✓
Veolia Environnement			✓

Source: Schroders, 31 December 2018

The companies and sectors mentioned herein are for illustrative purposes only and are not to be considered a recommendation to buy or sell.

Our Sustainable Investment team profiles

Schroders has a long-serving and well-resourced Sustainable Investment team. It is comprised of ESG specialists who are responsible for analysis, engagement, voting and facilitating ESG integration into investment processes across teams and asset classes. We also employ dedicated product and client resources.

Jessica Ground
Global Head of Stewardship

- Head of team
- 21 years in investment.

Andrew Howard
Head of Sustainable Research

- Thought leadership and integration, climate change
- 21 years in investment.

Stephanie Chang
Integration Manager

- ESG Integration
- 14 years in investment.

Elly Irving
Sustainable Investment Analyst

- Consumer goods and services
- 11 years in investment.

Seema Suchak
Sustainable Investment Analyst

- Healthcare and materials
- 15 years in investment.

Ovidiu Patrascu
Sustainable Investment Analyst

- Industrials and IT
- 7 years in investment.

Marc Hassler
Sustainable Investment Anlyst

- Telecos and autos
- 2 years in investment.

Louise Wihlborn
Sustainable Investment Analyst

- Asia
- 1 year in investment.

Holly Turner
Sustainable Investment Analyst

- Climate change
- 1 year in investment.

Source: Schroders

The team provides ESG training to all existing and new investment analysts to ensure that all investment desks are aligned in their efforts to integrate ESG considerations into their analysis. The programme includes general ESG training as well as sector-specific and tailored training for individual investment teams. As a result of a collaborative effort with our ESG specialists, analysts and portfolio managers are also able to draw on a proprietary ESG guidance document which identifies the key ESG risks and opportunities, along with relevant data points and metrics, specific to more than 170 GICS[11] sub-industries. This ensures that our analysts and investors keep abreast of the latest ESG trends and how they can impact a company's valuation and risk profile.

The Sustainable Investment team has developed a proprietary investment-driven ESG tool, CONTEXT, that provides a systematic framework for analysing a company's relationship with its stakeholders and the sustainability of its business model. It is designed to support our investors' understanding of the sustainability of companies' business models and profitability, and provides structured, logical and wide-ranging data to support our analysts' views. This consistent structure makes information sharing easier and allows us to identify market wide trends and insights.

Our specialists also produce regular multi-sector and multi-region thematic research (please see the "Sustainability special topics" section on p16 for examples). This research is published on our centralised research platform, presented at investment team meetings and is easily accessible to all of our analysts and portfolio managers across all investment teams.

11 Global Industry Classification Standard

Daniel Veazey
Head of Corporate Governance Analysts

- Corporate Governance
- 17 years in investment.

Sophie Keatley
Corporate Governance Analyst

- Corporate Governance
- 3 years in investment.

Pippa O'Riley
Corporate Governance Analyst

- Corporate Governance
- 3 years in investment.

Megan Theobald
Corporate Governance Support

- Corporate Governance
- 1 year in investment.

Dominic Tonge
Data Analyst

- Data Management
- 4 years in investment.

Belinda Gan
Investment Director

- Product and client focus
- 14 years in investment.

Sarah Bratton
Investment Director

- Product and client focus
- 11 years in investment.

The team also works with Cleo Fitzsimmons (Wealth Management) and Charlotte Jacques (Real Estate).

Source: Schroders

EST. 1804

Schroder Investment Management Limited
1 London Wall Place, London EC2Y 5AU, United Kingdom
T +44 (0) 20 7658 6000

schroders.com
@schroders