Responsible Investment

Quarterly Report Q1 2016

Standard Life Investments

This document is intended for institutional investors and investment professionals only and should not be distributed to or relied upon by retail clients.

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Introduction

Standard Life Investments is committed to being a responsible investor. This quarterly report details engagements our responsible investment team has undertaken throughout the period with various companies specifically related to environmental, social and governance issues.*

While not an exhaustive list, this report is a comprehensive representation of the various steps taken by Standard Life Investments to help ensure it remains an active and responsible steward of our clients' assets. In addition to details of specific corporate engagement, we have included recent reports written by members of our responsible investment team.

Standard Life Investments is one of the world's leading investment companies, offering global coverage of a broad range of investment instruments and markets. With global assets under management of £253.2 billion (as at 31/12/2015), our capabilities span equities, fixed income, real estate, private equity, multi-asset and absolute return solutions.

Headquartered in Edinburgh, Standard Life Investments employs over 1,500 talented individuals. As a global investment manager, we maintain a presence in around 20 locations across Europe, North America, Asia and Australia.

*A separate governance and stewardship team report on its ESG activities will be produced in its end of year review.
See: http://www.standardlifeinvestments.com/governance_and_stewardship/index.html

Foreword

Amanda Young
Head of Responsible Investment

Volatility remained the watchword over the first quarter of 2016, as uncertainty about the global economy weighed on sentiment. Within the responsible investment (RI) world, however, there remained a strong focus and desire to maintain the momentum that was created following the United Nations Climate Conference in Paris (COP 21) agreement in Paris at the end of 2015. We believe that climate change considerations will remain an important factor as companies plan for the future.

We also think the 'Aiming for A' shareholder resolution movement will gain pace and we anticipate more shareholder resolutions will be put to companies at this year's AGMs. The RI team will continue to take ownership of voting on all resolutions relating to environmental and social issues at AGMs, with ongoing oversight from the governance & stewardship team.

Meanwhile, the 11th World Economic Forum's Global Risks Report was published. In it, the failure of climate change mitigation and adaption was identified as the greatest risk for 2016. This is the first time in the report's history that an environmental factor has topped the rankings.

The report also highlights the biggest global risks for doing business. These include profound social instability, cyber-attacks, data fraud, water crises, extreme weather events and natural catastrophes. These findings support our continued belief that companies cannot operate in isolation: what they do, the products they make, the services they offer and how they behave are all affected by these potential risks. It is also our view that environmental issues will only increase in importance in the coming years.

Meanwhile, it is my great pleasure to welcome Euan Stirling to his new role as Head of Stewardship and Environmental, Social and Governance Investment. Euan starts on 1 April and both the RI team and governance & stewardship team will report directly to him. Euan has provided a brief statement overleaf.

For the team, it was another busy quarter, with numerous company meetings and speaking engagements. We also continued to comment on the major RI issues of the day, from the evolution of electric vehicles and human rights in Qatar, to the Samarco dam tragedy and COP 21 agreement in Paris. Details of these and more can be found in this quarter's report.

Introducing Euan Stirling

Euan Stirling
Head of Stewardship and ESG Investment

New Head of Stewardship and Environmental, Social and Governance (ESG) Investment

I am excited to take on the challenge of a new role, Head of Stewardship and ESG Investment. I have been managing client portfolios for over 20 years, the last 15 of which have been at Standard Life Investments. During this time, I have worked extensively with my colleagues in the RI and governance & stewardship teams. I am therefore aware of the high-quality work they consistently produce and the importance of that output to our clients.

While there is already substantial interaction between the two teams, my ambition is to further integrate the excellent work they do. This will range from planning corporate engagement to co-operating on thematic projects in order to enhance productivity and deliver even greater benefit to our clients.

The perspective that I bring as an experienced investor will be important to the role. I firmly believe that we can improve the quality of our investment decision making by incorporating ESG considerations at every level. By doing this, we can better understand and value the risks inherent in the investments that we make, and also the opportunities afforded by investing in companies that have a positive impact on society as a whole.

I regard our work on such issues as stranded assets and workers' rights as being at the forefront of investment analysis. I am excited at the prospect of being able to help shape the output of future research projects to ensure that they reach all of our investment professionals and make maximum impact on our clients' portfolio returns.

The responsible investment team

Who are we?

The RI team is dedicated to research and analysis of environmental and social issues that have a bearing on Standard Life Investments' client portfolios. The team places specific focus on four key areas:

- employment issues
- human rights & community issues
- environmental matters
- anti-corruption.

The team works closely with our separate governance & stewardship team and seeks to ensure that ESG considerations are embedded throughout our investment process. Collectively, the team has over 30 years' experience in responsible finance. Further details on its approach and how it engages with investee companies can be found on our website.

The team

Alix Chosson
Analyst, Responsible Investment

Rebecca Maclean
Analyst, Responsible Investment

Andrew Mason
Analyst, Responsible Investment

Katharina Lindmeier
Graduate, Responsible Investment

Contact the responsible investment team at

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Thematic commentary

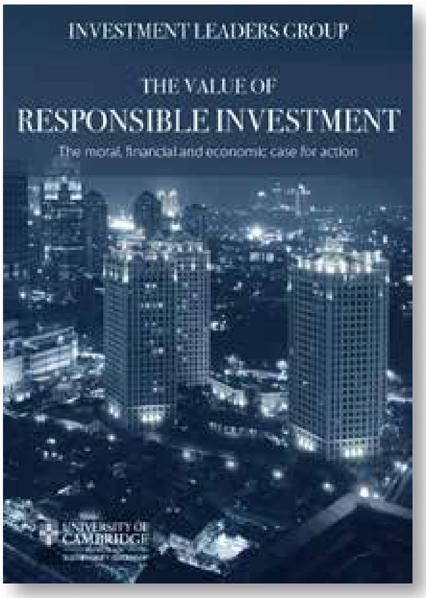
Investment Leadership Group

Under the sponsorship of our CIO Rod Paris, Standard Life Investments became a founding member of the Investment Leadership Group (ILG) in January 2013. The ILG is supported by the Prince of Wales, and the University of Cambridge acts as its secretariat. Its aim is to explore areas where long-term investment returns can be created in addition to economic, social and environmental sustainability.

The ILG is a voluntary initiative, driven by its members. These include a global network of pension funds, insurers and asset managers, with support provided by academics at the University of Cambridge. The work of the Group has been carried out in three key areas: vision, impact and risk. Standard Life Investments has played an integral part in the development of these three pillars.

The first job of the ILG was to develop an intellectual model to demonstrate how RI creates value in the real economy, with a view to strengthening its application within markets. Following extensive research, a report was produced highlighting key areas of RI; the definitions and purposes of RI; the moral and investment case for RI; and the potential actions that can bolster the application of RI. Further details can be found at:

http://www.cisl.cam.ac.uk/publications/publication-pdfs/ilg-the-value-of-responsible-investment.pdf



The next stage was to create mechanisms that would support the application and measurement of RI, based on these pillars.

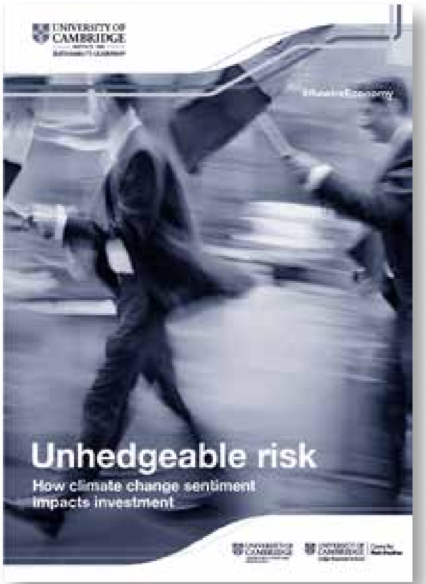
The ILG's work on fiduciary duty focused on the US and involved engagement with various industry specialists including investors, policymakers, trustees and beneficiaries. The goal was to detail how environmental and social issues can become a function of fiduciary responsibility. This work contributed to new guidance issued by the US Department of Labour on economically targeted investment practices and the benefits they create for society.

The ILG considered the impact investments have upon social and environmental structures. It is thought that understanding these impacts and encoding their characteristics into mandates could deliver investment opportunities that have positive social and environmental effects. However, this area is not fully understood at the moment. As such, Standard Life Investments and a number of other specialists in the industry are seeking to develop positive impact investment criteria and mechanisms to display these impacts. This includes how sustainable development goals can be applied to investment strategies and reporting. Two themes are currently being piloted – climate stability and working practices.

Finally, the ILG focused on social and environmental risk factors affecting financial markets. The first area of enquiry pertained to the future risks posed by climate change, notably in creating economic shocks. This project was conducted by three Cambridge research groups, in conjunction with various ILG members.

The findings were produced in a report "Unhedgeable risk" which details the potential economic shocks that could adversely affect investors and the annual growth rates that could be required to ensure long-term growth in the face of these risks.

http://www.cisl.cam.ac.uk/publications/sustainable-finance-publications/unhedgeable-risk



The ILG also considered the financial impact of climate regulation on investment portfolios. This was applied across three high-risk sectors, in five key countries. Breaking with tradition, the Group sought to measure the short-term impact of environmental change. This was because it recognised that while investors have access to top-down macroeconomic research on the likely impacts of climate change, there has been a lack of bottom-up company-level tools that could support improved stock picking.

The culmination of this work will be presented to senior leaders, portfolio managers and analysts at a forum on 17 May. The wider aim of which will be to explore the tangible and practical steps that investors can take to apply the techniques produced during the tenure of the working group. It will also seek to identify areas for development and improvement.

Update on Samarco tailing dam failure

On 2 March 2016, mine operator Samarco (a 50/50 joint venture between Vale and BHP Billiton) agreed to a long-term remediation and compensation plan in response to the Samarco dam failure, which occurred on 5 November 2015. Both companies will be responsible for funding the agreement.

The agreement was reached with the Federal Attorney General of Brazil, the states of Espirito Santo and Minas Gerais, as well as certain other Brazilian public authorities. It is subject to court approval but settles the civil public claim brought by Brazilian authorities in November 2015. The settlement reduces the uncertainty around legal obligations for the case and moves the project one step closer to obtaining permits to recommence operations.

Standard Life Investments recently engaged with BHP Billiton and Vale to gauge how the response effort at Samarco is progressing and to analyse the financial materiality of the tragedy to the equity owners.

The incident

On 5 November 2015, the Fundão tailings dam failed at an iron ore mine operated by Samarco in Minas Gerais, Brazil. The dam collapse caused a mudslide containing 32 million cubic meters of mining waste (a mixture of mud and waste water) that stretched over 416 miles, affecting several communities downstream from Bento Rodrigues. The tragedy killed at least 17 people and left over 700 people homeless. Two workers remain unaccounted for.

Tailing dams are ponds that store the by-products from mineral ore processing in order to extract valuable minerals.

Tailing (the materials) can be liquid or solid, toxic or non-toxic, depending on the type of ore.

Following the accident, the mining operations were stopped immediately and employees were sent on mandatory leave. The Brazilian government put in place an emergency response, including housing for affected communities. Samarco reports that all children were back to school in a week, victims were offered psychological counselling and individuals whose livelihoods were affected by the incident were given pre-paid debit cards as compensation for lost wages.

An external investigation has been launched to find out the cause, or causes, of the accident. BHP Billiton reports that water quality sampling and analysis by the Brazilian Geological Service (CPRM) and the National Water Agency (ANA) found that levels of arsenic, cadmium, mercury, lead, copper, zinc and other metals in the water after the tailing contamination were generally similar to those in 2010.

The agreement

In response to the dam failure, Samarco, Vale and BHP Billiton Brazil will establish a foundation to develop and deliver around 40 different environmental and socioeconomic programmes. These include reparatory programmes to restore the environment and social conditions of the affected communities, as well as compensatory programmes.

Samarco will contribute BRL4.4 billion (USD1.1billion) up to 2018, funded by BHP Billiton and Vale equally. Annual contributions for the following three years until 2021 will vary between BRL800million (USD200million) and BRL1.6billion (USD400million). Compensation payments will be BRL240million per year for 15 years (this is included in the BRL4.4billion).

The 2 March 2016 agreement provides investors with clarity on the remediation and compensation costs BHP Billiton will contribute to Samarco. The costs will be front-end loaded and BHP Billiton expects the majority of the 40 different projects to be carried out in five years. The agreement acts as a framework for processing civil claims and should defend Samarco against future claims. We note that the agreement does not cover criminal claims. That said, it is our view that this agreement moves Samarco one step closer to restarting operations.

Standard Life Investments' response

We spoke with various representatives at BHP Billiton about Samarco, including Ian Wood, Vice President for Community Relations, Baroness Shriti Vadera, Senior Independent Director, Carolyn Hewson, Remuneration Committee Chair, and Geof Stapledon, Vice President Governance. In addition, we had several calls with representatives from Vale as part of a Principles for Responsible Investment collaborative engagement.

Vale and BHP Billiton have responded proactively to the Samarco incident, both contributing resources and capabilities to the response effort and signing the agreement. The accident at Samarco calls into question the control companies have over non-operated joint ventures and questions the extent to which companies can ensure that health, safety and environmental standards are consistently applied across all operations to which they have financial exposure.

We will continue to monitor the response effort and assess the effectiveness of contributions from BHP Billiton, Vale and Samarco.

Human rights in Qatar: challenges for the construction sector

Qatar has been under sustained international criticism since it won the right to host the 2022 football World Cup. This condemnation has mostly related to the exploitation and maltreatment of the migrant labourers that are building the stadia and other infrastructure. At present, overseas workers account for 1.5 million of the country's total population of 2.2 million people.

The kafala system

Relationships between migrant workers and their employers are regulated through the kafala (sponsorship) system, which has been in place in the country since the 1950s. This system is also found in several other countries from the Gulf Cooperation Council (GCC), including Oman, the United Arab Emirates and Saudi Arabia (albeit in different forms, with more or fewer rights granted to migrant workers). Qatar is one of the countries where the kafala system is still in its most restrictive form.

Under the kafala system, a migrant worker's immigration status is legally bound to his sponsor or kafeel. This is usually his employer, for the duration of his contract. A migrant worker in Qatar cannot enter or leave the country, transfer money or change employment without first obtaining written permission from his sponsor. As a result, the kafeel has immense leverage and control over the worker. In addition, there is extremely limited legal and judicial supervision of the relationship. Human rights violations are therefore not uncommon, including forced labour and people trafficking.

Most common cases of human rights violations

One of the most prevalent breaches of human rights is passport retention. This is allegedly done to avoid theft, although in most cases it is to restrict the worker's mobility. Issues regarding pay are also widespread, including wages paid late or withheld entirely. Again, migrant workers have little recourse is such situations.

In addition, migrant workers are not allowed to form unions or to undertake collective bargaining/actions. Access to legal and judicial remedies is complex and labour disputes rarely results in employers being prosecuted.

There are also many issues with the actual recruitment process. Companies in Qatar often use labour supply agencies to hire migrant workers, mostly from the Indian peninsula. This involves numerous sub-agents and middle-men, stretching from Qatar to small villages in India and Nepal. Many of these intermediaries will take recruitment fees from candidate workers which, by most international standards, would be considered a bribe. Some migrant workers therefore arrive in the Gulf already heavily indebted.

What's changing on the ground? The reform of the labour law and kafala system

International organisations have long-sought to put an end to the kafala system or at least undertake fundamental reforms to better protect migrant workers' rights.

In response to the critics, Qatari authorities reformed the country's labour laws in 2015. The legislation was supposed to soften some of the most exploitative features of the kafala system. However, numerous NGOs (non-government organisations) have described the reforms as "very disappointing", highlighting that they brought little change to current working conditions. In particular, overseas workers must still obtain a 'No Objection Certificate' from their current employer and sponsor if they want to move to another job. They must also obtain an exit permit from their employer if they wish to leave the country. The new laws, though, did introduce a grievance committee, to which workers who fail to gain a permit can air their objections.

There have been additional improvements on the ground, led by a few international companies and organisations linked to the government. In 2013, the Qatar Foundation, a government-associated group, introduced a code of conduct relating to workers' conditions, which contractors and sub-contractors must now respect. Following this example, minimum health & safety and working conditions standards are now included in public contracts in certain sectors, notably transport.

For international corporations, the situation remains complex and they face the fundamental dilemma underlying the United Nations Guiding Principles on Business and Human Rights (also known as the Ruggie Principles): how to uphold their responsibility to respect human rights in their activities and supply chains when the state does not fulfil its duty to protect human rights. In addition, monitoring contractors' and subcontractors' long supply-chains can be expensive for international companies and increases the risk of human rights violations.

The Human Rights Watch Guidelines: a useful resource for investors and companies

In December 2015, the Human Rights Watch published its 'Guidelines for a better construction industry in the GCC'. This offers recommendations to help companies address human rights challenges in the Gulf, including Qatar. We believe the report constitutes a robust framework within which corporations can operate in the region. It also provides guidance by which investors can hold investee companies accountable.

A number of the report's recommendations are detailed below.

- Domestic contractors (including their own subcontractors) should be contractually obliged to abide by the company's own standards. In addition, corporations should conduct regular audits of construction sites and worker accommodation to ensure contractors and subcontractors comply with human rights guidelines.
- They should ensure that migrant workers are not made to pay any fees when they are recruited by labour supply agencies.
- Workers should be informed of their rights, including access to remedy for labour disputes. Training should also be conducted in the worker's native language.
- Workers should be paid in due course. Companies should also comply with national legal requirements when it comes to setting up workers' bank accounts and electronically paying their wages. Employers should also ensure that no wages are withheld to prevent workers from leaving the country.
- All workers should be allowed to keep their passports, property and other identity documents. Companies should make sure that workers have locked storage boxes in safe locations where they can keep passports and other valuables.
- Good health & safety practices should be in place, including the robust and transparent reporting of incidents.
- Companies should also ensure that workers have access to judicial and non-judicial grievance mechanisms and that they are properly instructed on their rights to lodge complaints without fear of reprisal.
- Lastly, companies should establish mechanisms to foster dialogue with employees, including committees to discuss and, if needed, conciliate on issues related to health & safety, working conditions and accommodation.

We have started engaging with several companies operating in the construction sector in Qatar to encourage the implementation of these main recommendations. You can find more information on the outcomes of these engagements in the company engagement section of this report.

Collaborative engagement and events

PRI podcast – Volkswagen scandal and the automotive industry

Head of Global Equities Mikhail Zverev and Responsible Investment Analyst Rebecca Maclean joined the Principles for Responsible Investment to discuss the implications of the Volkswagen emissions scandal for the automotive industry.

In April 2015, the RI team and members of Standard Life Investments' investment teams started to explore car manufacturers' emission testing procedures. This followed research that showed that the average diesel vehicle emitted seven times more NOx emissions under real driving conditions compared to the stated emissions (see Responsible Investment Quarterly Report Q2 2015). Regulators had woken up to this discrepancy, including the European Commission, which voted in favour of implementing 'real world' emission testing.

At that time, the RI team worked with Standard Life Investments' investment teams to understand what this change in testing procedures would mean for OEMs and companies in the automobile supply chain. They also considered the risks and opportunities that this trend might present for investors. For further details of the analysis conducted and how this work was integrated into the investment process, please use the podcast link below.

http://pripodcasts.libsyn.com/

University of Stirling speaking event

Responsible Investment Analyst Andrew Mason was a guest speaker at the University of Stirling, sharing his views on the role that 'soft law' plays within different sectors, how this informs our investment approach and the impacts of traditional law with extra-territorial application.

Soft law refers to various codes and standards applied by companies, typically on an international basis. Despite its name, it is not legally binding. However, soft law allows for the application of standards across geographies that do not have the same, or equivalent, legal standards. These include areas such as the various ISO standards and reporting frameworks. Standard Life Investments applies the soft law of the United Nations Global Compact, a set of 10 principles that guide company practice when assessing an investee company's performance.

Carbon Disclosure Project (CDP) seminar

Standard Life Investments welcomed the CDP to its offices in Edinburgh, where it hosted a seminar on behalf of the project. CDP spent some time outlining the changes that it is making as an organisation and its future strategy to deliver benefits to its members and signatories. CDP has evolved over the past few years from gathering data on corporate carbon information to collecting and assessing data on a number of environmental indicators.

From 2016, the CDP is introducing a voluntary investor signatory fee, which will become mandatory in 2017. Standard Life Investments supports this fee, believing this increased level of resource will allow CDP to develop its data reporting into a more useful resource. CDP is well positioned to develop further insights into the environmental themes impacting different companies within different sectors and to support investors as they engage on these themes.

VBDO conference

Standard Life Investments was delighted to sponsor the VBDO 20th anniversary celebration in the Netherlands. VBDO is a Dutch social investment forum that has been key in developing the nation's strong responsible investment movement. VBDO's activities help shape and improve sustainable investment and corporate sustainable responsibility. It works to bring together multi-stakeholder groups to ensure a responsible capital market system and encourages better responses from corporates on sustainability matters.

Amanda Young was invited to address the audience as a keynote speaker, where she shared her views on the next generation of investors – the so-called Millennials – and how they are increasingly important in shaping the investment products of the future. This coincided with the publication of the VBDO's report 'Impact Investing - From Niche to Mainstream', which highlighted the changing needs of the Millennials and the importance they place on businesses that seek to 'improve society'.

In keeping with this theme, Jan Peter Balkenende, the former Prime Minister of the Netherlands and Partner on Corporate Responsibility at EY, gave a speech illustrating the many benefits of impacting investing, both in terms of financial return and for the environment and society. This is certainly a topic that has entered the mainstream – and only looks set to grow in prominence.

Overall, the conference fitted neatly with the work we have done at Standard Life Investments to develop our own impact investing proposition. As part of this, we have published a white paper 'Rise of the Millennials and the Impact on Values-based Investment', which can be found on our website.

Sugar roundtable

An analyst from the Standard Life Investments' RI team attended an investor roundtable with representatives from the UK soft beverage industry to discuss its response to concerns about sugar and health. The meeting covered regulatory risk, particularly in the UK; actions taken by the industry to help consumers make healthier choices; and options for greater transparency on sugar. In addition, we spoke to representatives from the sugar and sweetener industry about health trends in the food and beverage sector, including innovations around sugar content.

In the last four years to end-2015, the soft drinks industry has reduced the sugar content in the average serving by 13.6%.[1] This is driven by changing consumer preferences for low or no calorie products, as well as the industry taking a proactive lead to improve health outcomes. We discussed the options available to the soft drinks industry to reformulate products to reduce the sugar content. In doing so, we acknowledged that growing preference for natural ingredients and 'clean labels' among consumers would makes this a challenge. Further, we discussed regulatory changes and the potential risks these present to the industry.

As investors, we look to understand how food and beverage companies are managing health and wellness through their business strategies. We consulted with the industry to identify the key indicators that would give the best insight into how companies are performing on nutrition and health. Our next step is to engage with the food and beverage companies in which we invest to promote best practice in reporting and performance.

[1] [Source: British Food Association]

Hong Kong SRI award

Standard Life Investments recently won the 'Mutual Fund – Socially Responsible Investment: Best- in-Class' award for the third year in a row at the Benchmark Fund of the Year Awards in Hong Kong.

Benchmark is an Asian monthly financial magazine which covers investments, managing money, wealth management and personal finance. It targets affluent readers, professional advisers and sophisticated investors.

Sector and asset class reports

Jeremy Lawson
Economist
Multi-Asset Investing

The United Nations Climate Conference in Paris

Last year was the hottest on record, with global temperatures at sea level averaging 0.85° Celsius (C) more than the 20th century average. Global greenhouse gas emissions probably fell slightly last year, due to large reductions in Chinese coal consumption, but the concentration of carbon dioxide in the atmosphere increased to 403 parts per million in February, 9% higher than in 2000 and 28% higher than in 1960. Meanwhile, there is evidence that extreme weather events are also on the rise.

This ongoing rapid climate change formed the backdrop to the United Nations Climate Conference in Paris (COP 21) in December last year, where representatives from 195 countries came together to thrash out a deal to minimise future global warming. The key elements of the so-called Paris Agreement are detailed below.

- Limiting the increase in the global average temperatures to below 2°C above pre-industrial levels, with the aim of limiting the increase to 1.5°C.
- Improving countries' ability to adapt to future climate change.
- Increasing the finance available to lower-income countries to assist their climate change mitigation and adaptation.

The agreement will come into effect once it is ratified by at least 55 countries, representing a minimum of 55% of global emissions.

A vital step forward

The Paris Agreement represents a vital step forward in a process that appeared to flounder in recent years. It recognises the fact that climate change is a global problem and can only be dealt with at the global level. Moreover, the targets are more ambitious than most policymakers and climate scientists had thought possible. In addition, the financing mechanism goes some way towards recognising the special needs of countries for which it will be more costly to mitigate climate change – many of which happen to be the most susceptible to its effects.

However, the scale of the challenge should not be underestimated. According to recent estimates on current emission trends, the world will exhaust the carbon budget that is available to keep temperature increases to 1.5°C within the next decade and the carbon budget for a 2°C target within 25 years. To achieve either target the world's largest emitters, including the US, China and India, will need to drastically cut their emissions with a view to eventually generating negative emissions.

Challenges ahead

This will be very difficult to do. Many signatories to the original Kyoto Protocol exceeded their emission targets and even if all the formal reduction targets currently in place were adhered to temperatures will probably rise by 3°C. Even more problematically, the Nationally Determined Contributions that signatories to the Paris Agreement will need to make are not binding in international law and there is no enforcement mechanism in place. The USD100 billion in finance countries jointly pledged to assist mitigation and adaption is not binding either.

Achieving radical cuts to greenhouse emissions requires a revolution in the way that countries meet their energy needs. The use of renewable and nuclear energy, not to mention carbon capture and storage technologies, will all need to increase dramatically, with traditional fossil fuel generation phased out altogether.

Are we willing to pay?

Voter concerns about the economic cost of such a transformation to what are currently more expensive technologies, and worries about free riding, have been important forces limiting action so far. However, the balance of evidence from economic modelling suggests that such costs can be kept to modest levels if countries jointly pursue least-cost mitigation strategies. That means that carbon pricing, either through the introduction of more emissions trading schemes or carbon taxes, will be necessary to incentivise emission reductions as well as the development of cheaper green energy. Governments will also need to commit to much greater funding for research into zero emissions technologies, dedicate more land to bioenergy and biocapture, and lift the minimum energy efficiency of building codes and energy emitting devices and vehicles.

None of this will be easy and the risk of failure is high. In the meantime, businesses and households alike should begin planning for a much warmer and more variable climate, as well as dramatic policy shifts as governments across the world deal with the consequences of their past failures.

Andres Allende
Investment Director
GEM Equities

Battery-powering ahead

Electricity powers our world, from the homes we live in to appliances we use. Despite this, there is one major area that has yet to fully embrace its power – the auto industry. Thanks to recent developments, though, all this could be set to change. For investors, this revolution presents a number of intriguing opportunities.

Electricity is pure energy and, as such, is difficult to harness and store. One of the longest running experiments in this field is the Clarendon Dry Pile at the University of Oxford. Launched in 1840, it involves two voltaic 'dry piles' or dry batteries, connected respectively to two bells. According to the Guinness Book of Records, these are the most durable batteries in the world.

While their composition is unknown, it is safe to assume the base technology is much the same as the batteries that power your smartphone or laptop. A battery consists of three main components: cathode (positive at discharge), anode (negative at discharge) and electrolyte. During the charging phase, electrical energy is indirectly stored as chemical energy within the battery. This is held until a device/appliance is attached, at which point an electrochemical reaction within the battery releases electrical energy.

The rewards of R&D

Over the decades, significant research and investment has gone into the advancement of battery technology. This includes measures to improve capacity, speed of charge, number of charging cycles, separator efficiency and reliability. We have also seen endless tweaking of the chemical composition of a battery's cathode, anode and electrolyte.

There have been numerous successes. For example, the capacity of a battery has been improved by raising the voltage for a given amount of charge or increasing the amount of charge contained by the chemicals. The volume of charge-containing chemicals has also been expanded by thinning out anything that isn't 'active material'. Much work has also been done to improve the cathode, the most expensive component of a battery. New materials, such as grapheme, are opening fresh frontiers for anode technology.

The electric vehicle revolution

Even with all this effort, however, battery technology has failed to match existing power sources for large-scale devices, notably automobiles. Compared to the internal combustion engine (ICE), batteries have had neither the capacity nor pricing power to compete. However, with the improvement of lithium battery technology, we could now be at an inflection point. Has the age of the competitive electric vehicle (EV) arrived?

Of course, given how long batteries have been in existence, the idea of the electric vehicle is not new. Indeed, the first EV dates back to 1834, the brain-child of Thomas Davenport. However, it took over 160 years and the arrival of the Toyota Prius hybrid in 1997 for the technology to fully enter the public's consciousness. The baton was subsequently taken by Elon Musk and his all-electric Tesla automobile. The company is still a low-volume operation (it sold around 25,000 of its Model S in the US last year and 50,000 globally, compared with 17.5 million ICE cars and light trucks) but rivals are taking notice.

Indeed, between the likes of General Motors (GM), BMW, Volkswagen, Mercedes and Hyundai Motors, around 35 new EV models are set to come to market over the next few years.

Recent breakthroughs in battery technology have created larger units (NCM or nickel cobalt manganese). This should allow the upcoming GM's Volt fleet of vehicles (range 300Km; cost $145/KWh or circa $5,000 for the battery) to penetrate the mass market.

Up until now, one of the major drawbacks for EVs has been cost. But the gap between electric and combustion is closing – and fast. Battery prices are expected to halve in the next five years. Servicing costs for EVs should also be lower. Favourable taxations and incentives are further tipping the balance towards EVs.

EVs also offer the opportunity to significantly reduce emission levels. This, though, is still largely determined by the type of energy mix used. A study by the US-based National Bureau of Economic Research found that EVs sourcing energy generated through coal produced more air pollution than ICE and hybrid cars; while those running on cleaner energy sources, such as natural gas or renewables, produced less. It is also important that we consider the social and environmental impacts within the supply chain of battery production. For example, the extraction of cobalt may present negative social and environmental impacts (see article on cobalt mining below for more information).

Battery types

There are three types of EV battery to highlight: NCM, NCA (nickel, cobalt and aluminium) and LFP (lithium, iron and phosphate).

NCM technology, which is still dominated by Korean companies, uses cobalt for capacity in the cathode. To reduce costs, nickel is added, while a manganese structure allows a faster discharge. The two main NCM companies are LG Chem and Samsung SDI. Both are constantly trying to reduce costs by optimising the NCM recipe. The goal is to increase density while maintaining volume. There is also an emphasis on quicker manufacturing.

BMW, Volkswagen, Porsche and many Chinese OEMs (original equipment manufacturers) are developing models based on NCM. To meet this demand, LG and SDI will increase their battery capacity ten-fold by 2020.

Tesla, meanwhile, is sticking to its NCA laptop-based battery. The cathode is constructed using cobalt for capacity, together with nickel for cost efficiency and aluminium for stability.

NCA packs more energy than NCM, which makes it cheaper on an output basis. However, potential cost improvements for NCA are more limited and safety remains a challenge. Despite this, Tesla recently built the Gigafactor in Nevada. Its goal is to produce half-a-million EVs per-year by 2020.

Drive safely

Then there is LFP, which is mostly adopted by Chinese firms. These are lower energy units, which were thought to be safer. However, a number of high-profile incidents in China have called this claim into question.

As such, our view is that NCM and NCA should remain the dominant technologies over the next 10 years. As for the next generation of batteries, we are seeing some promising improvements from solid batteries and lithium air. Both technologies are trying to close the energy density gap versus petroleum. If that is achieved, energy storage will become exponentially cheaper, meaning that renewables could become the dominant technology in the auto world.

What of investors?

As innovation accelerates within the battery/car industries, the key for investors will be to find those pockets in the value chain where disruption is less uncertain and where there are robust barriers to entry.

The evolution of anode and cathode composition is creating a number of interesting projects in the materials space. For example, Syrah Resources is developing a new graphite mine, which has the potential to deliver better quality graphite in a more cost-efficient manner. As we highlighted, Samsung SDI and LG Chem are the main players in NCM technology. This looks set to last, given their superior R&D

spend, manufacturing capabilities and safety records compared to many of their challengers.

Meanwhile, there is also potential in several niche auto-parts makers, including Worry, which makes heaters (among other components). Outside direct manufacturing, there could also be opportunities in infrastructure development (building and maintaining charging ports) and power transmission.

It is unclear, at this stage, how the rise of EVs will affect the wider car industry (traditional car maker, auto parts suppliers, dealers, etc.). What is known, though, is that this is a fast-evolving sector – and one that could offer numerous opportunities for vigilant investors.

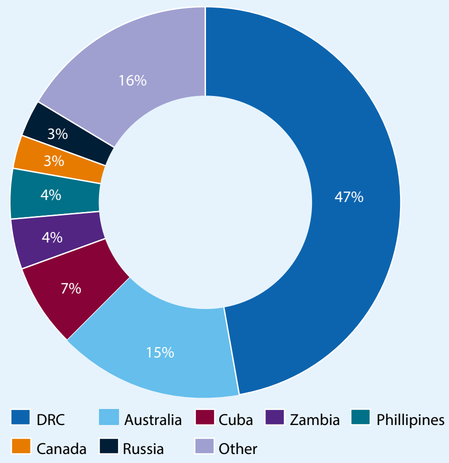
Andrew Mason
Analyst, Responsible Investment

Cobalt mining — supply chain risks linked to cobalt from the Democratic Republic of Congo (DRC)

As referenced in other articles in this report, the success of COP 21 will require a growth in renewable energy and energy storage technologies. This includes new battery technologies essential to promote the rise of electric vehicles. However, as part of our holistic approach, we have also identified a number of social impacts that could arise as a result of these technologies. One example is cobalt mining. This metallic element is used chiefly in the manufacturing of alloys and features predominantly in batteries, laptops and mobile phones.

There are a number of human rights issues pertaining to cobalt mining in the DRC, including the use of child labour, forced migration and poor working conditions. The DRC has nearly 50% of the world's cobalt, which is used in lithium-ion batteries. The range of uses of this material have been highlighted in a recent report by Amnesty International, which also details a number of companies it has approached regarding this matter, including Apple, Samsung and Volkswagen.

Cobalt sources around the world



Source: The US Geological Survey (USGS), Bloomberg Intelligence

The DRC situation is a typical example of the 'resource curse' – also known as the 'paradox of plenty' – whereby countries with an abundance of non-renewables, such as metals, tend to have weak economies and ineffective democratic institutions. This presents a number of risks for companies currently sourcing from DRC. These risks will continue to grow in correlation with the demand for cobalt which, on estimates, is increasing at 5% per year.

Some of the risks that sectors and companies face if they fail to tackle the issues surrounding cobalt are detailed below.

Regulatory risk: section 1502 of the Dodd Frank Act addresses conflict minerals. It dictates that companies sourcing 3ts&G (tin, tantalum, tungsten and gold) from the DRC must audit smelters and file these audits with the Securities and Exchange Commission. This piece of legislation was passed with considerable speed and is attached to a consumer protection act focused on finance. It is possible that the act could be extended to include cobalt.

Soft law: cobalt mining practices breach several internationally agreed standards, such as the articles of the UN Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and OECD Guidelines for Multinational Enterprises.

Operational risk: artisanal mining and a lack of government regulation creates an inefficient and unreliable cobalt source. Hazardous working conditions and unsecure mining structures increase this sourcing risk. Lack of ownership rights also leaves mines vulnerable to other players, including a number of militias that currently run other mining operations in the DRC.

Reputational risk: although this issue is not widely understood in the public domain, a number of civil society groups, including SOMO and Amnesty International, are beginning to highlight the negative impacts of cobalt mining. Companies linked to these practices could therefore face significant reputational damage. Their sales could also be hit, particularly among customer-facing, brand-aware businesses.

Companies are, to varying degrees, acting to address these risks. A number are responding to Amnesty's concerns, detailing the steps they are currently taking within their supply chains. Industry initiatives are also beginning to address potential human rights violations. This includes establishing industry bodies such a Sedex, a not-for-profit membership organisation that seeks to drive responsible business practices in global supply chains.

Key questions for companies

As we have seen, cobalt mining has the potential to lead to significant human rights abuses. For companies, there are also long-tailed supply chain risks that could influence the cost and stability of the supply of cobalt. Further, it is important to note that there could be shifts in the supply chain, creating additional diligence demands. The DRC does not currently have the capacity to process the minerals domestically; however, the government has tried to ban exports in order to encourage local industry to shift to production. To date, this has been unsuccessful – but the situation could change.

Annual Sustainable Real Estate Investment Report

We recently published our 2015 Annual Sustainable Real Estate Investment (SREI) report. It reflects our strong sustainability values and global commitment to responsible real estate investment. In 2015, sustainability challenges became ever more important. Indeed, throughout the year we continued to embed environmental, social and governance (ESG) factors into the investment process.

Continual improvement remains our aim and we performed well against our sustainability targets throughout 2015. For our ‘like for like’ portfolio (assets which have been landlord-managed continuously since our baseline year), we have continued to achieve improvements in energy and resource efficiency, as well as reductions in greenhouse gas emissions.

Looking ahead, alongside our focus on energy, water and resource efficiency we are pursuing new and innovative approaches to SREI that are aligned to our new mission and strategic priorities, presented in this year’s report (and summarised below). Our strategic priorities are grouped under three themes – occupier satisfaction, resource scarcity and climate change – and reflect our view on the existing and emerging ESG issues for real estate investment.

Last year, we turned our attention to a number of new opportunities, including the application of Cradle to Cradle® principles and the increasingly important imperative of ensuring our assets benefit the health, wellbeing and productivity of their occupants and users. These will remain key areas of focus in 2016 and beyond.

The 2015 report is published on the real estate section of the Standard Life Investments website.

SREI mission statement and strategic priorities

Standard Life Investments
Sustainable Real Estate Investment Mission

“We aim to be the industry leader in responsible investment, contributing to a sustainable world and a better financial future for our customers”

Sustainable Real Estate Investment – Strategic Priorities

Occupier Performance	Resource Scarcity	Climate Change
Health	Material efficiency	Resilience to climate impacts
Wellbeing	Water efficiency	Energy efficiency
Productivity	Recovery of value	Low-carbon energy generation

Sustainability engagement

During the first quarter of 2016, we engaged with a wide variety of companies regarding environmental and social issues. Below is a snapshot of this engagement.

Engagement snapshot

Company	Topics discussed
Anglo American	Restructuring plan and HSE implications
BHP Billiton	Samarco tailing dam disaster response
BP	New sustainability report/climate change risks
BT Group	Data protection, privacy and freedom of expression
Carillion	Human rights in Qatar
DS Smith	Packaging innovations and recycling operations
Kier	Application of the UK Social Value Act
LafargeHolcim	Impact on environment and local communities
Lloyds Banking Group	Company's "Helping Britain Prosper Plan"
Interserve	Human rights in Qatar and broader sustainable strategy

Further details of these interactions, in addition to a summary of all company meetings, can be found below. We use a matrix approach to identify the companies with which we engage. This approach considers a number of criteria, including: internal mandates, specific client mandates and company performance.
The key below offers details of the drivers for engagement with individual companies. Additionally, further information on our approach to engagement can be found at :

http://www.standardlifeinvestments.com/sustainable_and_responsible_investing/engagement.html

Key

- Internal mandate
- Client mandate
- Performance based engagement

Anglo American

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Environment

Anglo American is a diversified mining company with global operations. The RI team spoke to Anglo American in Q1 2015, specifically about stranded assets to learn about how the company considers environmental drivers in thermal coal demand forecasting. At that meeting, Anglo explained that 15% of thermal coal exports are to India and the company's commodity research team were in the process of investigating the impact of climate regulation on the portfolio. We encouraged the company to publish the results of this analysis because we believe it would add to the wider debate taking place in the industry about stranded assets. In addition, we encouraged Anglo to extend the analysis across its metals and minerals portfolio.

In late 2015, Anglo announced a significant restructuring programme to focus on De Beers, PGMs and copper. Non-core portfolios will be disposed of over three/four years or managed for cash. We asked the company what this means for its health, safety and environmental (HSE) risk profile.

Anglo plans to exit thermal coal and this will reduce both its embedded carbon operations and exposure to stranded assets. We note that Anglo is one of the largest coal producers listed on the FTSE 100 Index; in 2015, Anglo produced 73.7 million tonnes of thermal coal, representing 14% of its revenue.

The core portfolio will have fewer deep mines. In addition, Anglo is innovating in truck haulage and rail automation. Both of these factors will reduce the health & safety risk profile of the company. Water risk across the portfolio will not change in the restructure and remains a focus. Standard Life Investments encouraged the company to disclose how the restructure will change its ESG risks exposure. Following questioning, Anglo confirmed that HSE targets will be reviewed next year. Standard Life Investments will monitor the changes to the targets to reflect the restructure.

The restructure plan will reduce headcount from 128,000 (end 2015) to 50,000 by 2018. The majority of this is through disposals and the company confirmed that "all major announcements have been made".

Anglo's Minas-Rio iron ore operations in the Brazilian state of Minas Gerais are in ramp-up stage and it is obtaining the necessary operating licence with a view to sell in 2018. We questioned the company on the impact of the Samarco tailing dam failure on its Brazilian operations. Anglo confirmed that environmental scrutiny is heightened in Brazil. This can increase the regulatory burden and permitting process necessary for the ramp up. We questioned the company on actions taken to understand tailing dam risk following Samarco. In addition, we questioned Anglo on its position in relation to non-operated joint ventures.

Anglo American (continued)

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Environment

The Platinum Metals Group remains part of Anglo's core portfolio. We discussed the impact the shift away from diesel vehicles in Europe is having on platinum demand. Anglo has agreed to send internal scenario analysis work to Standard Life Investments. We note that the company is investing in fuel cell technology.

Following our engagement on stranded assets in 2015, we asked the company to provide an update on the scenario analysis work it is conducting on thermal coal demand relating to climate situations. We questioned whether the results of this work informed the announced restructuring in late 2015. Unfortunately, Anglo is not going to publish scenario analysis on thermal coal demand relating to climate and environmental themes. The company explained that a low carbon scenario will have "little impact" on the portfolio because such assets are low on the cost curve. That said, Anglo is supporting the "Aiming for A" resolution and this includes transparency on a portfolio's resilience to low carbon scenarios. We will review the resolution and will be voting at the AGM in 2016.

BHP Billiton

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Environment

BHP Billiton is a UK-listed metals and mining firm with operations around the world. The company's diversified minerals portfolio includes iron ore, copper, coal, nickel, gold and oil & gas.

The RI team spoke to BHP Billiton on two occasions last year. The company had five fatalities in 2015 (three in Australia, one in South America and one in Africa). We questioned the company in Q2 2015 about the reasons for this and on actions taken to reinforce its safety message. In 2015, the company announced a major restructure relating to the demerger with South32. Standard Life Investments spoke to BHP Billiton about the implications for the company's ESG profile. It explained that the new company will have no exposure to Africa and that this will reduce the incidents of communicable diseases, such as Malaria or HIV. We welcomed the news that occupational health & safety risks associated with smelting and refining (aluminium and manganese) will be reduced following the demerger. Finally, we encouraged BHP Billiton to publish work conducted to stress test its portfolio under low carbon scenarios.

We are pleased to update investors that later in the year BHP Billiton published the results of its internal low carbon scenario analysis. The findings show that the portfolio is resilient to a transition to a 2°C degree world "due to long-term demand, high-quality resources, low production costs and rapid payback periods of growth projects". We commend the company for applying the analysis across its whole portfolio. The results highlight that the transition to a low carbon economy presents growth opportunities for uranium, copper and gas assets.

In Q1 2016, Standard Life Investments' RI and governance & stewardship teams met with BHP Billiton on two occasions. Both meetings focused on the tragic incident at Samarco, Brazil, in which BHP Billiton has 50% non-operated equity stake. BHP Billiton has committed resources to Samarco to help with the clean-up effort, including providing 30 employees on the ground.

We also spoke to Ian Wood, VP Community Relations at BHP Billiton, about the Samarco response. The company has provided resources and skills to the response, which is being co-ordinated by the Brazilian government. An external investigation is being conducted to understand the cause of the incident and we welcome the news that Samarco, Vale and BHP Billiton have committed to publishing the results of the investigations.

We questioned the company on the extent to which it had control and oversight on the health, safety and environmental (HSE) performance of Samarco considering it is a non-operated joint venture. BHP Billiton gained its stake in the iron ore asset 30 years ago after buying a US mining company. BHP Billiton recognised Samarco as a leader in Brazilian mining industry for HSE, which was confirmed through a series of periodic audits. Ian Wood spoke of it as a "high-performing asset" and confirmed that Samarco had received BHP's HSE awards in the past.

BHP Billiton's community relations spokespersons explained that Samarco continues to have good relations with affected communities. We take this as a positive sign that the response is currently seen as productive and it should help with the company's future licence to operate.

Standard Life Investments engaged with several board members at BHP Billiton in March 2016, questioning them over their response to the Samarco tragedy. We commend the proactive response of BHP Billiton's board, which included forming a subcommittee that meets regularly to discuss Samarco. A board member explained that the company was in the process of reviewing its three existing non-operated joint ventures, a move which we welcome.

We will continue to monitor BHP Billiton's management, as well as the remediation and compensation programmes at Samarco. We will consider this in our shareholder voting later in the year.

BP

Engagement driver:

- Internal mandate
- Performance based engagement

Engagement topic:

- Human Rights
- Labour
- Environment

We met with BP last year and focused our discussions on the resilience to the oil price environment and a low carbon scenario. We also questioned BP on the deterioration of its health & safety results.

In 2015, BP's health & safety figures improved and it completed the Bly recommendations. We believe the company now has robust processes and personal safety management in place, including for contractors.

We discussed the geopolitical and security landscape with BP, especially in the Middle East and Russia. The company admitted that risks increased in 2015 and that it has created a geopolitical committee to help the board oversee these challenges.

Another major area of risk for BP and the rest of the sector is the monitoring of non-operated joint ventures (JV). BP was among the first companies to publish a group framework (albeit very high level) on the management of risks from participation in non-operated JV. We encouraged BP to develop a firmer stance on issues such as human rights and health & safety in the context of non-operated projects.

BP's main goal is to align its strategy to a carbon-constrained world and to shift its portfolio further towards gas and maintain low cost supply. This means that assets such as oil sands are no longer seen as strategic. The company is considering increasing its exposure to shale gas, although this will probably be outside the US.

BP has a new head of alternative energies and is currently considering several options for development. This person said the company could invest further in wind power and they did not rule out re-entering the solar business (although as project manager) in the future. Biofuels are still seen as strategic, although the company admitted wasting money on the development of second-generation facilities.

This was an encouraging meeting, although we would welcome more clarity on the monitoring of non-operated JV, BP's ambitions in Russia and the strategic outlook for the renewable segment. We will continue to engage with the company.

BT Group

Engagement driver:	
Internal mandate Performance based engagement Engagement topic: ► Human Rights ► Labour ► Ethics	BT provides telecommunications services, with its main operations in the UK. This includes fixed line and mobile communications, broadband services and IT services through six customer-facing lines of business: BT Global Services, BT Business, BT Consumer, EE, BT Wholesale and Open Reach. The company also has operations in 170 countries. We met with BT to discuss the challenges it faced while, on the one hand, collaborating with the UK government to implement surveillance programmes for national security purposes and, on the other, protecting customers' right to privacy and freedom of expression. The company is quite involved in current discussions around the new Investigatory Powers Bill. BT is pushing for more transparency and clearer processes when requesting lawful intercepts, which the company believes are necessary to maintain customers' trust. BT has had a chief privacy officer since 2011 and has developed a robust approach to keep customers' personal data secure and ensuring their privacy is protected. BT has been implementing most of the new features in the EU General Data Protection Regulation, including "privacy-by-design" in product development. The company also has a very advanced approach to cybersecurity, with a chief security officer reporting directly to the board and heading up a team of 2,500 people dedicated to this field, both internally and for clients. Cybersecurity solutions are indeed one of the fastest growing parts of the business. We were encouraged by our meeting with BT and its ability to turn privacy and cybersecurity challenges into business opportunities. We will arrange a call with the BT chief privacy officer in the next quarter to confirm our view.

Carillion

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Human Rights
- Labour relations

Carillion provides support and construction services in Europe, Canada, the Middle East, North Africa and the Caribbean. The company offers services in the areas of health, education and regeneration, road, rail, defence, and commercial property.

We met with Carillion to discuss the challenges related to human rights in Qatar. Carillion had been accused of human rights violations linked to some of its contractors in a BBC documentary released in December 2014.

The company emphasised that it implements the same health, safety and human rights standards across the world, including Qatar. Carillion recognised that most of the risks of human rights abuses lie with contractors/within supply chains and, as such, these are the areas on which it needed to focus. The company has invested a lot in improving accommodation conditions for its migrant workers and in monitoring contractors. Carillion conducted 200 audits on subcontractors, and terminated relationship with 22 contractors based on the findings. Carillion dismissed the accusations brought by the BBC. However, following the documentary it conducted an in-depth review of its operations and processes. As a result of its findings, it implemented several changes to its operations, including paying for all the fees associated with the recruitment process (in line with best practice). That said, Carillion admitted there were some challenges in tracking back through the recruitment chain. The company terminated agreements with two recruitment agencies.

We were encouraged by the level of transparency demonstrated by the company. We welcomed the efforts Carillion devoted to monitoring its subcontracting chain, where most of the human rights risks lie. We encouraged the company to provide clearer information on its policy around recruitment fees and how it is engaging with its workers on the ground.

We will continue to closely monitor the health & safety numbers and the implementation of the guidelines published by Human Rights Watch.

DS Smith

Engagement driver:

- Internal mandate
- Performance based engagement

Engagement topic:

- Environment

DS Smith is an international paper company, focused on packaging and office products. The group collects waste paper, manufactures paper, converts corrugated packaging and produces bag-in-box products, plastic corrugated and heavy duty corrugated packaging, as well as wholesale office supplies. Standard Life Investments has a big equity holding in DS Smith and it is our view that the company is positioned positively on several sustainability themes.

In March 2014, we spoke to DS Smith's Head of Sustainability and Group Communications Director to understand how sustainability fits into the business strategy. Customer demand is driving DS Smith's innovation and strategic thinking in developing environmentally friendly products, particularly through its closed loop recycling systems. We concluded that DS Smith demonstrates a strong strategy of managing environmental and social factors in its business model.

In January 2016, we had a follow up meeting with the company to explore the sustainability solutions it provides to customers. Further, as a candidate for Standard Life Investments' impact fund, the objective of the meeting included understanding the extent to which it is possible to quantify the carbon/material benefits of its products.

DS Smith points to a direction of travel whereby customers want access to packaging innovations around product quality, cost and sustainability. The company's consultancy and recycling segments are well placed to help consumers who are increasingly concerned about the source of raw material, packaging efficiency and a product's end of life. The consultancy business works with customers to innovate packaging design in ways to increase sales (through attractive displays), reduce transportation costs and manage risk. We welcome the work done to understand the value chain impact of packaging. It is encouraging to learn that a range of customers are interested in quantifying how packaging solutions can translate into carbon savings and avoid landfills.

Kier Group

Engagement driver	
Engagement driver: ● Performance based engagement Engagement topic: ► Environment ► Labour	Kier Group is a national and international construction company, which has operations in the UK and overseas. It conducts business through three divisions: construction, facilities management, and homes & property. The company has housebuilding operations in central, eastern and southern England, in addition to commercial property development.

Engagement driver:

- Performance based engagement

Engagement topic:

- Environment
- Labour

Kier Group is a national and international construction company, which has operations in the UK and overseas. It conducts business through three divisions: construction, facilities management, and homes & property. The company has housebuilding operations in central, eastern and southern England, in addition to commercial property development.

We last met with Kier Group in September 2015. We have a significant holding in the company and have engaged with it regarding its sustainability strategy.

During our last meeting, we discussed the direction of Kier's strategy. Kier outlined its business strategy, 'Vision 2020,' which seeks to avoid the risks and capitalise on the benefits relating to economic, environmental and social issues. The key themes the group is focusing on are: people & communities, environment, marketplace & governance.

Since the meeting, Kier detailed that it was now firmly embedding its strategy and KPIs across its different business units. It has established a leadership committee to oversee the processes, which is chaired by its Executive Director Claudio Veritiero. Some of the actions being taken are detailed below.

- Its positive environmental management is applied across the supply chain and considers community impacts. The ISO-14001 management system is applied across the group and it has taken significant steps to reduce waste to landfill. This, coupled with energy efficiency, will produce cost savings.
- Positive engagement with local communities is also helping cement Kier's licence to operate. These include job creation for local suppliers and subcontractors, apprenticeships and philanthropic activities in the local community.

We believe that Kier has continued to make good progress since our last meeting. Its strategy is closely linked to what is financially material to its business, is reflective of the UK Social Value Act, and will help the company secure business with local authorities that apply the Act.

We will continue to engage with the company regarding the development of its strategy.

LafargeHolcim

Engagement driver: ● Performance based engagement Engagement topic: ► Environment ► Human Rights	LafargeHolcim produces and markets building materials, including ready-mixed concrete, cement, clinker, and ad-mixtures. The company also provides consulting and engineering services in all areas of the cement manufacturing process. LafargeHolcim, through its subsidiaries, operates in 90 countries and has 115,000 employees. The company is the result of a merger between Lafarge and Holcim in 2015. This was our first meeting with the company since its merger. The key driver for this meeting was to raise the abuse of land rights in India and environmental impacts in Jordan. LafargeHolcim was transparent on these topics, highlighting that they are largely legacy issues and detailing how they are being addressed. These steps include the application of FPIC (free, prior and informed consent) principles and reducing its environmental impacts. We were encouraged by the level of work that the company has taken to establish targets post-merger and to develop the best practices from both companies. By 2030, LafargeHolcim aims to have a third of its turnover come from enhanced sustainability performance. This will be achieved via a focus on climate change, the circular economy and producing sustainable products. To support this work, the company has produced an integrated profit & loss statement. This is a tool to measure the impact the company has on the environment and society, as well as to track its progress towards its 2030 targets. In addition to measuring impacts, the tool may also be used to develop positive practices. We believe that LafargeHolcim's integrated profit & loss statement is one of the more advanced 'triple bottom line' reporting tools and we will closely follow its progression and that of LafargeHolcim's 2030 targets.

Lloyds Banking Group

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Labour
- Ethics

Lloyds Banking Group, through subsidiaries and associated companies, offers a range of banking and financial services in the UK. The company provides retail banking, mortgages, pensions, asset management, insurance services, corporate banking and treasury services.

We last met with Lloyds in 2015 to discuss the development and application of its 'Making Britain Prosper Plan'. This focuses on social and economic issues, as well as the steps the bank can take to support positive outcomes. It is divided into three key areas: people, business and communities. Each of these areas has key metrics and targets, set for completion in 2017.

The focus of our discussion with Lloyds was the business aspect of the plan, particularly support to SMEs, assistance to customers who are financially excluded, support to the green economy and the culture and conduct of the company's employees.

Despite difficulties within the market, the bank has increased lending to SMEs by 5% (year-on-year to end-September 2015). It has achieved this through a combination of competitive rates and, more importantly, local support to its SME customers.

Lloyds is one of the leading banks supporting customers facing financial exclusion. It has links to civil society groups, such as the Money Advice Trust, and numerous credit unions to which it provides financial, voluntary and technical support. Lloyds seeks to refer to these agencies any customers in difficulty that it cannot help.

The bank has launched a £1 billion fund to support and offer preferential rates to green building projects and retrofitting. This project is currently in its pilot stage, but offers the potential to achieve more sustainable operations across a number of sectors through targeted lending practices.

Finally, Lloyds highlighted that its remuneration policy is focused on the level of service its staff provide, not volume of sales. It was heavily exposed to the mis-selling of payment protection insurance (PPI) products; however, we believe it has taken positive steps to address the culture that created this conduct.

The banking sector, post-2008, continues to face numerous conduct costs and questions about the culture promoted within financial institutions. We believe the sector can act as the engine of sustainable economic growth if managed correctly and needs to demonstrate its social utility. Lloyds is taking positive steps in this direction. We have engaged with the company for some time regarding its 'Making Britain Prosper Plan' and are encouraged by its continuing progress.

Interserve

Engagement driver:

- Internal mandate
- Client mandate
- Performance based engagement

Engagement topic:

- Human Rights
- Labour relations

Interserve is a services, maintenance and building group operating in the public and private sectors in the UK and internationally. At end of 2015, the company had 61.2% of its revenues in support services, 32% in construction and 6.5% in equipment services.

We met with Interserve to discuss the challenges related to human rights in Qatar.

Interserve has operated in Qatar for decades and has employees on the ground, mostly blue-collar workers. The company recruits migrant workers, primarily from the Indian peninsula and increasingly from Africa (Kenya). It contracts out 30-40% of its working hours (less than some peers), which reduces the risk exposure to health & safety or human rights issues.

Interserve insisted that health & safety and human rights practices are commercially important as they impact operational performance. The Qatari government gives increasing scrutiny to these aspects.

Interserve applies the same health & safety standards and human rights approach everywhere. Health & safety numbers in Qatar are quite good (better than peers) and similar to UK numbers.

The company applies best human rights standards, including paying all recruitment fees for migrant workers, although it admitted it was sometimes difficult to track down the fees. It has also put in place dedicated committees to address these issues and holds regular meetings with employees (collective bargaining is forbidden in Qatar).

The company is pushing for better standards in Qatar, as it believes it should foster fairer competition. There have been positive steps on this issue in recent months (minimum health & safety standards in government contracts, small reform of the Kafala), although the company recognises there is still a long way to go.

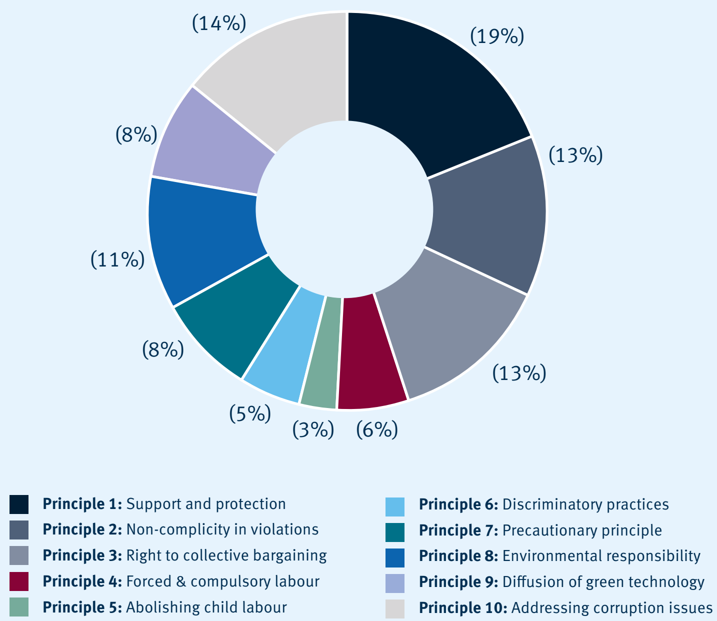
We believe Interserve has put in place most of the best practices in dealing with human rights risks in Qatar. We were extremely encouraged by the level of transparency demonstrated by the company. We set up a follow-up meeting to discuss its broader sustainability approach.

Sustainability engagement summary

	Human Rights		Labour				Environment			Corruption
Company	**Principle 1: Support and protection**	**Principle 2: Non-complicity in violations**	**Principle 3: Right to collective bargaining**	**Principle 4: Forced & compulsory labour**	**Principle 5: Abolishing child labour**	**Principle 6: Discriminatory practices**	**Principle 7: Precautionary principle**	**Principle 8: Environmental responsibility**	**Principle 9: Diffusion of green technology**	**Principle 10: Addressing corruption issues**
Anadarko	•	•		•						
Anglo American	•		•				•			•
BHP Billiton										
BP	•	•					•	•	•	•
BT	•	•								
Carillion	•	•		•						
DS Smith							•	•		
HSBC			•							•
International Personal Finance			•			•				•
Interserve	•	•		•						
IP Group	•									•
Jeronimo			•	•		•				
Johnson and Johnson	•									•
Kier Group	•		•				•	•	•	•
LafargeHolcim	•	•	•	•	•	•		•	•	•
Lloyds	•		•						•	•
National Express	•	•	•			•				
National Grid		•								
Rio Tinto	•		•				•	•		
Rolls Royce			•						•	•
Smurfit Kappa		•			•			•		
Total*							•	•	•	
Vale	•	•						•		
Volkswagen	•							•		•
Total	**15**	**10**	**10**	**5**	**2**	**4**	**6**	**9**	**6**	**11**

*Letter to company

Engagement summary Q1 2016



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Important Information

All information, opinions and estimates in this document are those of Standard Life Investments, and constitute our best judgement as of the date indicated and may be superseded by subsequent market events or other reasons.

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