RESPONSIBLE INVESTMENT QUARTERLY

Q3 2019

COLUMBIA THREADNEEDLE INVESTMENTS

Your success. Our priority.

CONTENTS

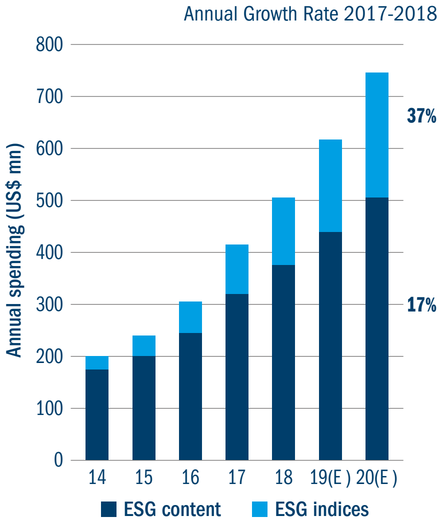
01 Foreword

Iain Richards
Head of Responsible Investment

There can be no doubt now that RI is moving into the mainstream. Whilst much of this growth is reflective of the natural evolution of our clients' interests, a good part is indicative of the widespread concern to understand and stay ahead of the broad regulatory landslide that is approaching the investment industry.

In the context of funds marketed and investors located within Europe, the European Commission's developing Sustainable Finance package represents the centre piece of the legal and regulatory changes being rolled out. Moves by other regulators will also extensively reshape responsible investment and stewardship. As I mentioned last quarter, we are treating this as being "as big as MiFID" and work continues to prepare and put in place appropriate arrangements across all the many dimensions of the package.

Spending on ESG data is growing rapidly, particularly on ESG indices



One implication is that ESG data budgets will need to continue to expand, exacerbating concerns over benchmark costs. This is painstaking work, requiring the co-ordination of a full business-wide response, and we are fortunate to have effective support from our General Counsel's Office. Work on reviewing the legislation, assessing the implications and communicating these across our business will remain a focus over the next few quarters. With clarity now beginning to emerge on the requirements that will be imposed on asset managers, much of our work in this quarter has been directed to refining the 'scoping out' of flexible options to help ensure we are able to offer our clients the best outcomes and solutions going forwards.

Beyond regulatory issues, wider aspects of responsible investment in practice have also been hotly debated in recent months perhaps most notably in the context of illiquid assets held in supposedly liquid funds. In addition, we have seen good growth in client interest for engagement and training, a very welcome trend in a field where understanding about practice, data and approaches often remains low. For us, the goal is clear; collaborating and partnering with clients ensures approaches are developed appropriately, are well understood and are transparent. Meanwhile, the continued growth in assets under management of our social bond franchise shows that there remains a clear interest on the part of investors to see alignment in the delivery of financial and social goals. With our UK social bond strategy having recently celebrated its fifth anniversary, we continue to believe that the experience our Responsible Investment team has in supporting specialist solutions provides us with a strong platform to support our clients in adapting to the growing demand and expectations in our field.

A major development for us in the quarter worth highlighting reflects a re-organisation of our business, as a result of which our proxy voting specialists, led by Troy Sawyer, have now formally been integrated into our Responsible Investment team. Whilst our two teams have necessarily worked very closely together in the past, this move brings all our business' specialists on proxy voting and corporate governance under one management structure. This will further enhance our future stewardship activities and their coordination across the investment department.

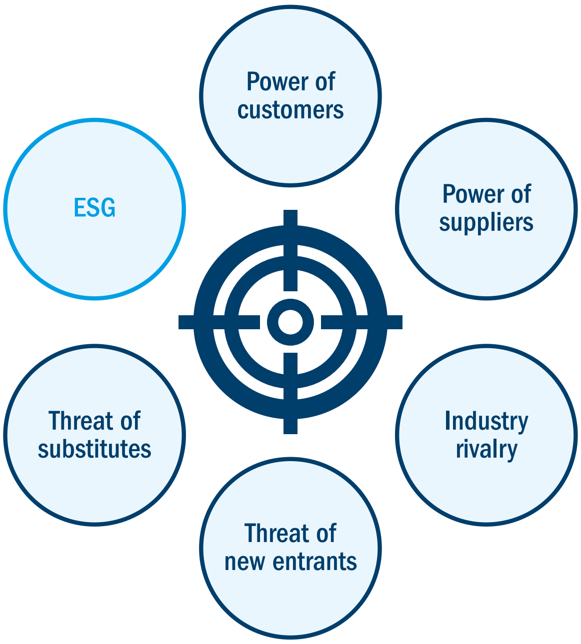
At the same time, we continue to support wider efforts to enhance both the quality of our RI research effort and the scope of research coverage to support integration within investment processes across the business. Whilst it was pleasing over the summer to have received a top rating from the PRI for the fifth year in a row for our overall approach to strategy and governance, we know we cannot rest on our laurels. I am quite certain that the PRI do not intend to give fund managers an easy ride going forwards and we will have to continue to develop and enhance our contribution to investment research as well as wider aspects of integration and reporting in future if we are to maintain our A+ rating. With this in mind, it's heartening to know that we have been assessed as being very much in the vanguard when it comes to preparing for the advent of the European sustainable finance package.

02 Portfolio Manager Viewpoint

Scott Woods
Portfolio Manager,
Global Equities

Jess Williams
Portfolio Analyst,
Responsible Investment

The investment philosophy of our Global Smaller Companies strategy is to invest in the 70-90 businesses with the most sustainable competitive advantages at the right prices on a global basis. We look for businesses that can sustain their returns above their cost of capital for longer than the market anticipates as, traditionally, it assumes that competition will erode those returns away. However, some companies have sustainable competitive advantages that prevent that competition from challenging them. We identify these companies by assessing the fundamentals of the business and the structure of



the industry in which the company operates. Porter's 'Five Forces', devised by Harvard professor Michael Porter, is a toolbox for assessing how sustainable a company's competitive advantage is. The 'Five Forces' are: power of customers; power of suppliers; industry rivalry; threat of new entrants; and threat of substitutes. A company that has a monopoly with structural barriers to entry, plus a fragmented supplier and customer base, has a good chance of having a sustainable competitive advantage.

Over time, people have spoken about technology becoming Porter's 'Sixth Force', but ESG has increasingly come to be viewed as a key extension of the Five Forces framework. Consider how consumer preferences are changing in response to environmental concerns; this clearly acts to increase the bargaining power of buyers or could potentially see an increase in substitute products. ESG considerations are relevant to each one of the Forces. If a company continues to score poorly for its management of material ESG risk factors, the prospects of that company maintaining a competitive advantage are weaker. Take, for example, a company where there is little independence on the board. The CEO would be free to allocate capital as he pleased, potentially making acquisitions which are dilutive to returns and may not be in the best interests of shareholders. Or, for a company that rates poorly for the management of environmental factors, there could be an increased risk of fines. This is a direct cash cost that again could damage the returns of the business.

Columbia Threadneedle has a strong responsible investment pedigree dating back to 1998. The Global Equities team works closely with the RI team to understand the risks typically associated with companies and sectors. All research notes have a section covering ESG analysis, which incorporates the RI team's proprietary ratings, to help build an holistic assessment of risk. Where companies are considered to display a high level of risk (potentially putting future cash flows in jeopardy), we may apply a higher cost of equity to a company's cash flows in our discounted cash flow models.

As active, long term owners, engagement with the companies that we own is hugely important for us. Where companies score poorly in our RI Ratings or are otherwise unrated, we engage with them to understand why; sometimes it's simply a case of lack of disclosure. Take for example WD-40, held since 2013 in the strategy. Poor disclosure of chemical safety and carbon emissions targets had resulted in the company receiving a low RI rating. We spoke with management and came away comforted that they were addressing related issues comprehensively despite their lack of disclosure. Management also informed us that they have a focus group working on improving disclosures in their annual reports which we welcomed.

Even so, in some cases, we may decide to sell a company – or refrain from starting a new holding – due to concerns around ESG risk management in practice. For instance, we recently sold out of a company owing to the controversial views that had been expressed by its founder, which we felt could lead to the loss of the company's biggest customer.

On a more positive note, we are very often able to find opportunities in companies that score well from the RI perspective. With awareness and media coverage around the materiality of environment, social and governance risk factors ever-increasing, it is reasonable to expect that related risk management will form an increasingly important component of competitive advantage and industry dynamics in the future. As a result, companies embracing these factors can make themselves more attractive as investment opportunities. Take for example Trex, a manufacturer of composite decking in the United States. The company employs a proprietary plastic recycling technique where it sources various grades of waste plastic, such as plastic bags and milk cartons. Using this unique process, the company creates uniform plastic pellets. These plastic pellets are then extruded with wood to create composite decking. Competitors are required to purchase virgin plastic which can be ten times more expensive than the recycled products that Trex sources. The business model is protected by intellectual property, and the know-how around the process is difficult to replicate. This is a great example of a company which is enforcing sustainable initiatives to maintain a wide economic moat around its business.

As we continue to search for businesses with the most sustainable competitive advantages and attractive industry structures, we will be incorporating ESG analysis every step of the way, treating it as an extension of Michael Porter's 'Five Forces'.

03 Governance Diligence in US High Yield

Chris Eckhardt
Analyst,
Responsible Investment

It's relatively safe to say that the We Company, if it hasn't already, is well on its way to solidifying its place in business school case studies for years to come. The highly-publicized, capital-fueled explosion of the company has already provided many important lessons, and the turnaround effort from Softbank, successful or not, will likely do the same. However, for those who follow the high yield markets, these lessons are not new. While not as public, governance blowups occur with some frequency in these markets, and with them, potential alpha opportunities.

WeWork has had the common hallmarks of a poorly-governed company: a complex ownership structure, conflicts of interest, related-party transactions, non-core projects, family and friend privileges, and opaque disclosure.

Many of these types of governance issue point to a dislocation of responsibility and accountability. CEOs and management teams have responsibility for managing tremendous resources, yet companies with poor governance practices lack the integrity to hold management accountable for the structural and capital allocation decisions they make.

Sometimes this dislocation of responsibility and accountability is held together by a management team or owners who hold themselves accountable. However, more likely this dislocation represents a significant risk to investors in both equity and credit. Complex ownership structures not only create opportunities for self-serving transactions, but can serve as distractions to the management of the core business.

Exela Technologies serves as an example of a complex ownership structure, questionable equity dealings, and material weaknesses. While the hedge funds that control Exela have shuffled around equity and debt for their own benefit, the core business has failed to stabilize. In 2019, Exela was downgraded twice by S&P, and, as of October 2019, its 2023 bonds trade around 50-55 cents on the dollar.[1]

Another dislocation occurred in Sanchez Energy, where the publicly listed company was simply a collection of assets managed by an outside company owned by the Sanchez family. Despite outside investors owning 90% of the public entity, the Sanchez family dominated the management team and controlled the company through its outside management entity. The public entity filed for bankruptcy in August 2019, and the company has faced intense scrutiny for its golden parachutes for the Sanchez family, potential self-dealing by the family, and a highly complex capital structure.

Even if bonds aren't trading for pennies on the dollar, governance risks can still impact investors. One need only look at the lawsuits against Solera Holdings, Inc. from its former CEO Tony Aquila and former director Kurt Lauk. During the litigation process, as serious allegations go back and forth, "it creates uncertainty [for investors] because you don't know who's telling the truth," says Rich Gross, one of our senior US high yield analysts. Now in arbitration, Aquila claims Solera owes him almost $100 million in stock options. Lauk accuses owner Vista Equity Partners of attempting to use Solera to hide losses generated by its other investments. Whether these claims are true or not, investors are left wrestling with uncertainty, and Solera must dedicate significant focus and resources to resolving these disputes that would have otherwise gone to running the business.

These examples, along with scores of others, highlight the need for careful due diligence of an issuer's corporate governance. Only upon careful issuer-level examination can one assess whether governance risks are fairly compensated by the market or if they are worth taking at all.

Source:
1 Bloomberg, 2019.

04 ESG risk management within Real Estate investment

James Allum
Client Director, Real Estate

We believe investing in real estate responsibly is complementary to our core objective of delivering strong risk-adjusted investment returns for our clients. Here, we outline our approach to managing real estate assets responsibly and demonstrate how we apply these principles to our activities.

Buildings are on the front line of the fight against climate change, as real estate consumes around 40% of the world's energy and contributes up to 30% of its annual greenhouse gas emissions.[1] With the UK committed to cutting its carbon emissions by 80% by 2050,[2] our country's real estate owners have an important part to play in achieving this reduction.

At Columbia Threadneedle Investments, we are alert to our responsibility and are committed to a responsible investment approach that creates sustainable long-term value.

Just as for our colleagues investing in other asset classes, we in the real estate team strive to be responsible stewards of our clients' assets within a framework of good governance and transparency. Being a responsible investor helps to generate better investment decisions and outcomes for our clients. It is integral to our business proposition and defines how we act in the marketplace.

Underpinning our approach, we have a Responsible Property Investment Policy Statement which applies directly to all our real estate assets. We also have an established ESG Working Group – comprised of members of the Real Estate team and our Responsible Investment team and which reports to the Property Committee – that ensures we apply a responsible management approach in practice across our business.

Managing real estate assets responsibly

Key to our approach is an understanding of the environmental and social risks posed by real estate assets. We focus on mitigating those risks and seeking continuous improvement by assessing the evolving environmental and social impacts throughout the lifecycle of the assets in which we invest. This approach is ingrained within the day-to-day activities of our investment business.

As a founder signatory to the UN Principles for Responsible Investment (PRI), we are assessed annually on how we incorporate ESG issues into our investment practice. Earlier this year, we were particularly pleased to see our property investment approach receive an A rating (vs B rated last year) against an industry average of B.[3]

The five main aspects of our investment approach are shown below:

1. Property investment (asset acquisition)
Our fund managers undertake forensic due diligence and comprehensively survey all properties under consideration for acquisition against a range of factors including energy performance/MEES, environmental risks/impact (including flood risk), and areas for potential improvement in terms of sustainability performance.

2. Strategic Asset Management
Managers of our assets develop unique strategies to add value to every building we manage. They consider areas including environmental, energy and water efficiency, waste

management and sustainability best practices. They also look at ways to promote health and wellbeing and community engagement. Finally, our asset managers seek opportunities to promote information sharing and co-operation with tenants, to enable sustainability strategies to be jointly implemented by the occupier and the management team.

3. Refurbishment & Building Improvement
Refurbishments undertaken by our asset managers offer the greatest potential to improve the environmental and social impact of our buildings. Our Refurbishment Guide promotes high sustainability standards, and construction projects incorporate a set of minimum requirements relating to: environmental management; building quality and flexibility; health and well-being; energy efficiency; transport; water; building materials; waste management; ecology & pollution.

4. Risk & Governance
Our Property team benefits from rigorous Risk and Governance controls. We have an integrated Property

Governance team providing 'first line' risk and governance oversight. The team also provides a liaison function with Group Investment and Operations Risk and Compliance ('second line' functions), and with Audit ('third line') as required. Our investment and management process controls are also independently audited on an annual basis as part of our company's ISAE reporting obligations.

5. Property Management

We are active managers, seeking to continually improve the day-to-day environmental and social impacts of our buildings, whilst maintaining high levels of occupier satisfaction and engagement. This is achieved by use of dedicated Oversight Managers who collaborate with third party managing agents, to deliver objectives against clearly defined targets which are set out in our Sustainability Road Map (see below).

Our sustainability road map targets:

- **Energy management & reduction:** target a 10% reduction in energy use by 2024
- **Greenhouse gas reduction:** target a 15% reduction in GHG use by 2024
- **Energy procurement:** target 95% of directly managed property to have green energy tariffs by end 2019
- **Waste management:** target 95% of directly managed property to have zero waste to landfill by end 2019
- **Community:** identify opportunities to positively impact communities and stakeholders (e.g. supporting and hosting charity groups, monitoring 'walkability' to properties, etc.)
- **Tenant engagement:** undertake regular occupier engagement and satisfaction surveys

To benchmark our ESG performance, we entered six funds into the Global Real Estate Sustainability Benchmark (GRESB) survey in 2019.

All six funds were 'Green Star' rated, meaning that they scored higher than 50 on both the Management & Policy and the Implementation & Measurement sections. All Funds also scored higher than their respective peer group average. Detail on the results is shown in the panel below.

Sources:

1 Sustainable real estate investment: Implementing the Paris climate agreement – an action framework, PRI, 2016.
2 UK Climate Change Act, 2008.
3 PRI Assessment Report, 2019.

05 Shifting trustee mindsets: why ESG integration and risk management are two sides of the same coin

Chris Wagstaff
Head of Pensions and Investment Education

Chris Anker
Lead Analyst (EMEA), Responsible Investment

As all trustees of UK occupational pension schemes are aware, from 1 October they will have to set out in their scheme's Statement of Investment Principles (SIP), and publish on a publicly available website, how they take account of financially material risks. Additionally, DC trustees must update their default investment strategy to take account of financial considerations. Crucially, financially material risks include environmental, social and governance (ESG) factors, with the Department for Work and Pensions' forthcoming regulations making explicit reference to managing what is prospectively the most material and systemic ESG risk – climate change.

Not that this should come as any great surprise, given the Bank of England has recently highlighted climate change as posing significant risks to the global economy and financial stability. Indeed, investment consultancy Mercer recently modelled the potential financial impacts of climate change under different scenarios and found that sudden sizeable return impacts are likely to dominate pension portfolios that fail to build in sustainability themes.

Indeed, policymakers, financial regulators, NGOs and professional bodies all have the management of financially material ESG factors firmly in their sights, given the recent plethora of recommendations, directives and guidance issued to strengthen ESG integration by almost all asset owners, whether pension schemes or other institutional investors.

And for good reason. A company that is not managing financially material ESG risks may well maximise short-term profits, but in so doing could severely compromise its ability to successfully compete in the future.

By contrast, better governed companies with strong ESG risk management credentials should deliver more sustainable returns by not being so materially exposed to operational, regulatory and reputational risk.

Ultimately, then, ESG analytics are an integral and increasingly mainstream component of a trustee's ever-expanding risk management toolbox.

Confusion still reigns

However, while the consideration of ESG factors is increasingly seen as a way to proactively assess portfolio risk and return characteristics, many trustees still lack an understanding of the extent to which their portfolios have ESG-related vulnerabilities, which ESG factors are financially relevant and material, and how ESG risk manifestly affects different asset classes and strategies. This isn't necessarily surprising given that ESG comprises myriad factors from resource depletion and climate change to diversity, employee relations and compensation, and executive pay, with no universally accepted overarching definition of ESG, what each category comprises and the degree of overlap between the three. Needless to say, ESG isn't a single factor and ESG risks take on a variety of forms.

[Continued]

[The full article is available on our website at https://www.columbiathreadneedle.co.uk/en/Investment-Themes/ESG-integration/]

06 Sustainable infrastructure: it's not just about clean energy

Ingrid Edmund
Senior Portfolio Manager,
Infrastructure Investments

Dr Ben Kelly
Senior Thematic Analyst & Behavioural
Economist, Responsible Investment

Decarbonising existing infrastructure will reduce greenhouse gas emissions and reinforce investment returns

Policymakers, financial regulators, NGOs and professional bodies all have Environmental, Social and Governance (ESG) benefits and risks firmly in their sights. A plethora of recommendations, directives and guidance has been issued recently with the aim of strengthening ESG integration in the investment processes of all asset owners – and for good reason. Well-governed companies with strong ESG risk management credentials should deliver more sustainable returns by not being so materially exposed to operational, regulatory and reputational risk.

However, the perception that responsible investment means compromising on financial return and diversification still prevails among some institutional investors. Alongside the growing bank of evidence that sustainable investing can boost risk-adjusted returns, the consensus among all stakeholders in society is, in fact, shifting firmly in favour of the maxim that a company or institution that is not investing responsibly is investing irresponsibly.

Consequently, the spotlight is on institutional investors, whose financial muscle and discretion over asset allocation can make a real difference to society and the environment.

Infrastructure may be best known for stable long-term returns, low volatility and inflation protection, but the most lasting impact from investing in this asset class could yet come from its huge potential to generate environmental and social benefits.

The United Nations Sustainable Development Goals (UN SDGs) provides a salient guide for investing towards a more sustainable world, for investors and governments alike. The 17 Development Goals signpost global development priorities and if these are to be met, significant investment in sustainable infrastructure will be required.

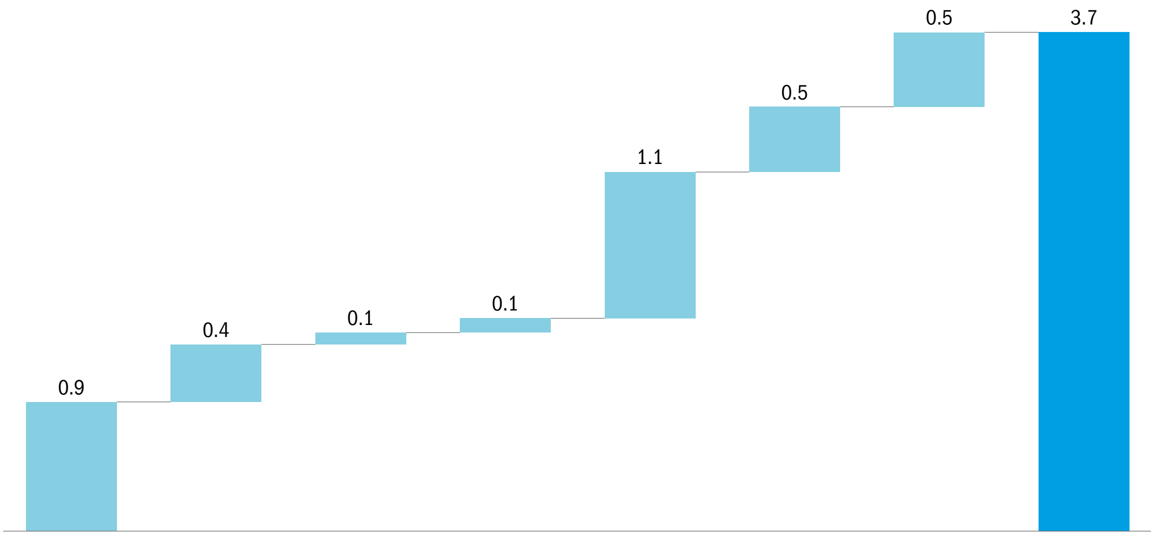
The concept of a social license to operate is starting to be recognised and adopted by infrastructure market participants. Infrastructure investment has tremendous potential to help mitigate greenhouse gas emissions while enhancing countries' resilience to climate change. It therefore represents a key element of the climate change agenda and has the power to help create a more sustainable future.

Clean energy can't do it all

Clean energy immediately springs to mind as an obvious solution, but it's not the be all and end all. No one doubts the pressing need to redirect capital to activities that can significantly contribute to the transition to a net-zero economy. But the headline-grabbing technology of renewable energy generation risks masking the reality that clean power alone is not going to address climate change. If climate risks are recognised as investment risks and factored into all infrastructure investment decisions, cleaner transport and buildings, more efficient water systems, and smarter, more resilient infrastructure will emerge as sources of more sustainable returns for investors over the long term.

Since 2012, renewable energy generation has grown by 8.6%[1] per year (excluding hydro and nuclear). However, this added capacity has not been enough to offset growth in fossil fuel energy consumption. Clean power generation, thanks in large part to its youth and low base, may be increasing exponentially. But at a global level, industry, transport and the heating of buildings still rely for the most part on fossil fuels, whose combustion collectively produce more than enough CO_2 emissions to jeopardise the Paris climate targets.

Figure 1: Average annual need, 2016-30



	Roads	Rail	Ports	Airports	Power	Water	Telecom	**Total**
Annual spending % of GDP	1.0	0.4	0.1	0.1	1.3	0.5	0.6	**4.1**
Aggregate spending, 2017–35 $ trillion	18.0	7.9	1.6	2.1	20.2	9.1	10.4	**69.4**

NOTE: Numbers may not sum due to rounding.

Source: IHS Global Insight; ITF; GWI, National Statistics; McKinsey Global Institute analysis. Chart figures in $ trillion, constant 2015 dollars.

Indeed, decarbonising existing infrastructure and other industry sectors is an absolute necessity if we are to achieve the SDGs by 2030. We believe decarbonisation will not only reduce the assets' or companies' environmental impacts, but will also deliver the long-term resilient investment returns that the infrastructure asset class is known for.

From clean energy to clean transport: targeting sustainability

Consider the built environment and how it is heated and cooled. In Europe, buildings account for approximately 40% of all carbon dioxide emissions.[2] Globally, fossil fuel-based equipment makes up more than 50%[3] of sales related to heating and cooling buildings, while less-efficient and more conventional electric heating equipment adds another 30%.[4] Energy efficient devices such as heat pumps and more sustainable building practices are promising to transform this. Gold-certified buildings under the Leadership in Energy and Environmental Design (LEED) programme can generate up to 34%[5] fewer greenhouse gas emissions than the average commercial building. The investment case is compelling, too: in a 20-year building lifecycle, savings outweigh costs from between 12 and 17 times.[6]

Transport is another vital sustainable infrastructure investment. Globally, the sector is responsible for nearly a quarter[7] of emissions from energy-related fossil fuel use and nearly 16% of the overall total from human activities. Oil is the fuel feedstock for the vast majority (92%[8]) of the transport energy mix, while 61% of global oil supply is consumed by the sector.

Perhaps counter-intuitively, some of the biggest available impacts for transport lie not in the zeitgeist applications, such as self-driving electric cars, but in the traditional spheres of airports (including aviation generally) and ports. Aviation currently contributes between 2% and 2.5%[9] of total global CO2 emissions and 12%[10] of the total from the entire transport sector.

Developing airports will have a crucial impact on reducing greenhouse gas emissions through the use of

tariffs to promote more efficient jet combustion. Sustainable aviation fuel offers an 80%[11] reduction in $CO2$ emissions compared with current standard fuel. Reducing airports' environmental impacts elsewhere provides additional financial and social benefits. Examples include supporting the development of electric transport to and from the airport, including passenger buses with electric models between the aircraft and the gate; making energy efficiency improvements such as LED lighting replacements; better metering, monitoring and controlling systems; and improving heating/cooling systems and introducing power factor correction. Airports also have the potential to generate their own renewable energy to power their own waste and water recovery and management.
With international air traffic doubling every 15 years,[12] the financial returns available from such sustainable investments are considerable.

Ports provide another important area of opportunity for responsible infrastructure investors. Maritime transport accounts for approximately 90%[13] of world trade. While this dominance means that emissions from ships are high in absolute terms, the sea remains an extremely efficient means of transport in terms of energy and emissions. But requirements for energy efficiency – including those limiting sulphur content in a ship's fuel – are increasing fast. Some ships limit their emissions by installing exhaust gas cleaning systems or scrubbers, which must be fitted and maintained at ports. Many ships are moving to Liquid Natural Gas for power, for which large-scale infrastructure projects are required to convert existing ports or fit out new ones.

Sustainable infrastructure has more than environmental benefits

We shouldn't forget about the huge social benefits infrastructure can have. MGI estimates that for every pound invested in infrastructure, 20p is produced in socioeconomic benefits. In large- scale infrastructure projects, investing also means working closely with local governments and communities to maximise the social dimension of an investment such as job creation. Without sustainable infrastructure investments the absence of these projects will have huge social and economic costs: failing to expand Europe's airports to meet growing demand, for example, will cost €96.7 billion in foregone economic impact.[14]

How all this translates into portfolios

We believe that infrastructure investing must be structured in a way that allows for the flexible deployment of capital into portfolio companies over time. Major sustainability projects such as electrification or vessel replacement, for example, involve long timescales that closed-ended funds, with a target date at which to return capital to investors, may struggle to match.

Drawing upon this belief we have built Europe's first evergreen infrastructure strategy focused on unlisted European mid-size infrastructure assets where sustainability considerations are central to investment decision making.
We have designed the strategy so that it can acquire, hold and manage a portfolio of core infrastructure assets over the long term, matching the natural duration of infrastructure assets with investors' investment horizons.

We take a systematic approach to assessing and integrating sustainability across all stages of the infrastructure investment process, from the initial asset sourcing and selection to the long- term ownership and active asset management. The underlying objective is to develop our assets through a process of improving operating practices and to enhance sustainable outcomes. These outcomes are mapped to the 17 UN SDGs and the underlying 169 targets.

We also explicitly consider the financial impacts of any ESG risks on financial returns through targeted sensitivity and scenario financial analysis.
One often overlooked example of climate- related investment risk is that of physical damage or destruction stemming from climate change and extreme weather events, which may impact financial returns negatively if not properly assessed and considered. Even renewable energy production is sensitive to extreme weather such as droughts and heatwaves – eg, a decrease in cooling system efficiency, and water availability for cleaning. Roads and railways may suffer from buckling of rails or melting of asphalt or flooding damage. Such examples that have a direct impact on the maintenance costs and effectively on the financial returns exist across all infrastructure sectors.

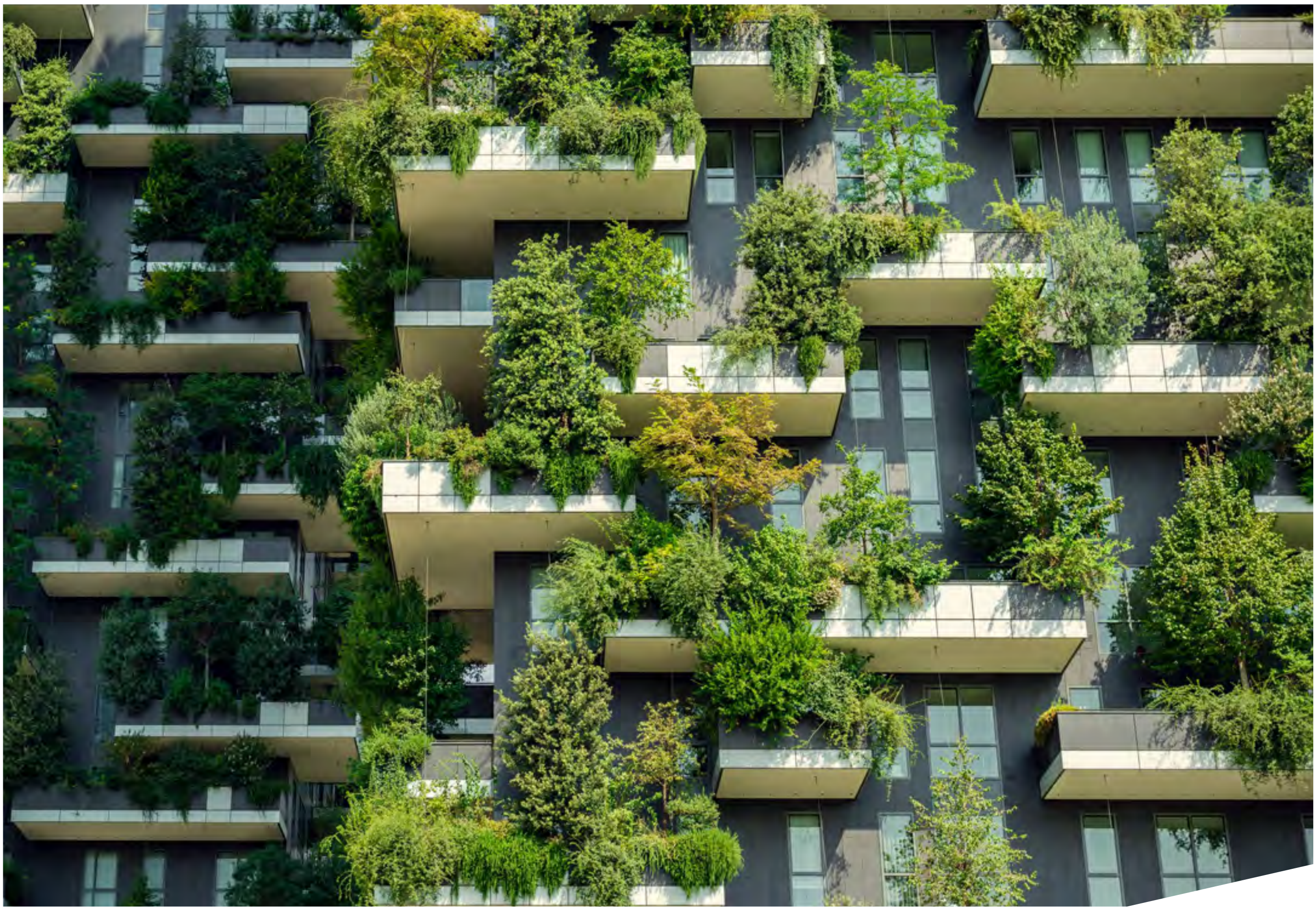
In doing so, we combine financial stewardship with a robust system of ESG integration – a rare combination in this space. We draw on best practices, including the SASB materiality framework and the ESG model developed by the Dutch Development Bank (FMO). The FMO model is based around the Performance Standards established by the IFC (World Bank) and the UK's Development Finance Institution, the CDC.

Our infrastructure investment strategy aims to provide scope for diversification and portfolio adjustment. Our ability to continually invest in our companies makes the strategy highly responsive to the changes in technology, law or operating contracts which can rapidly redraw commercial boundaries.

The pressing climate and social challenges today, along with the rising importance of companies' social responsibility, could yet define the next era of infrastructure investing. Many infrastructure assets have a lifespan of 50 or more years, so any investment decisions made today will have lasting repercussions, not just for investors' returns but also for the environment and society. The way investors allocate and redeploy investment has a major role to play in protecting our environment and enhancing outcomes for society. While a focus on clean energy is certainly important, investors should consider the vast amount of opportunity in decarbonising infrastructure assets, not just for financial return but also for doing good.

Sources:

1 Source: Global Carbon Project; BP.
2 Source: European Commission: Energy Performance in Buildings Directive, January 2019.
3 Source: Commission: Energy Performance in Buildings Directive, January 2019.
4 Source: Commission: Energy Performance in Buildings Directive, January 2019.
5 Source: LEED.
6 Source: World Green Building Council, 2013.
7 Source: World Bank: https://www.worldbank.org/en/news/feature/2012/08/14/urban-transport-and-climate-change.
8 Source: BP Energy Outlook, 2019 Edition.
9 Source: European Commission: https://ec.europa.eu/clima/policies/transport/aviation_en.
10 Source: Columbia Threadneedle Investments, Feb 2019.
11 Source: European Commission, https://ec.europa.eu/clima/policies/transport/aviation_en.
12 Source: Airports Beyond Benefits, IATA, November 2018.
13 International Chamber of Shipping: https://www.ics-shipping.org/shipping-facts/shipping-and-world-trade.
14 Source: Airports Beyond Benefits, IATA, November 2018.



STEWARDSHIP IN ACTION

Columbia Threadneedle Investments views an integrated, joined-up approach to stewardship as an integral part of its responsible approach to investment.

We vote actively at company meetings, applying our principles on a pragmatic basis. We view this as one of the most effective ways of signalling approval (or otherwise) of a company's governance, management, board and strategy. We classify a dissenting vote as being where a vote is cast against (or where we abstain/withhold from voting) a management-tabled proposal, or where we support a shareholder-tabled proposal not endorsed by management.

While analysing meeting agendas and making voting decisions, we use a range of research sources and consider various ESG issues, including companies' risk management practices and evidence of any controversies.

We subscribe to proxy advisors' research but have our own custom voting policy that is frequently changed. The RI team assesses the application of the policy and makes final voting decisions in collaboration with the firm's portfolio managers and analysts. Votes are cast identically across all mandates for which we have voting authority.

All our voting decisions are available for inspection on our website seven days after each company meeting.

We engaged with numerous issuers throughout the quarter. In prioritising our engagement work, we focus our efforts on the more material or contentious issues and the issuers in which we have large holdings – based on either monetary value or the percentage of outstanding shares.

There are many companies with which we have ongoing engagements, as well as a number that we speak to on a more ad hoc basis, as concerns or issues arise.

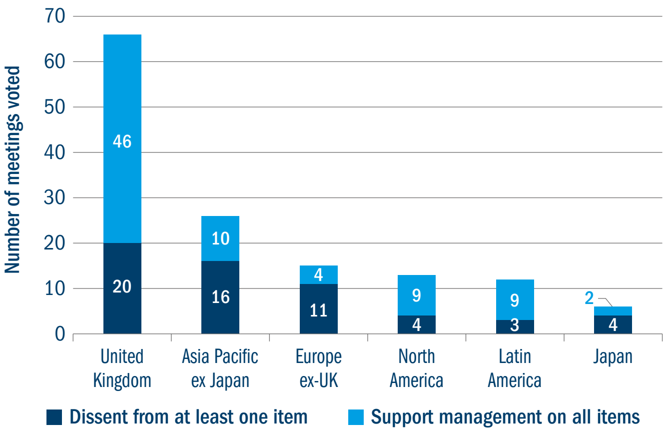
We actively participate in several investor networks, which complement our approach to engagement. Along with other investors, we raise market and issuer-specific environmental, social and governance issues, share insights and best practice.

07 Voting Q3

Between July and September 2019, we voted at 138 meetings across 24 global markets. This compares to 619 meetings voted across 32 global markets in the second quarter, the peak season for general meetings.

Of the 138 meetings, 94 were annual general meetings, 38 special, 4 Court and 2 combined annual/special. We cast at least one dissenting vote at 58 (42%).

Figure 2: Meetings voted by region



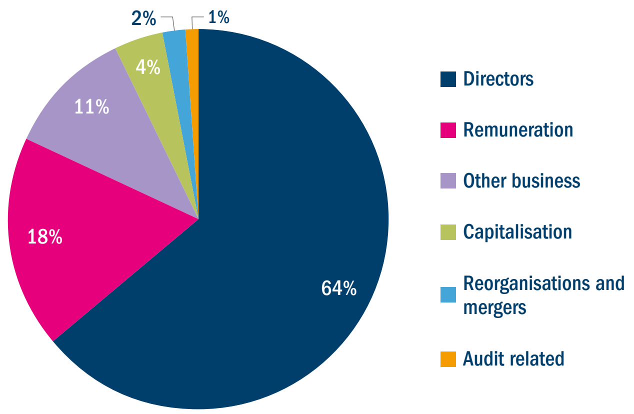
Source: Columbia Threadneedle Investments, ISS ProxyExchange, 30 September 2019.

We voted in 24 separate markets in the third quarter. Most meetings were voted in the UK (65), India (13), the USA (12), Brazil (10) and Japan (6).

We did not support 151 individual voting items throughout the quarter, the majority relating to directors' elections and executive pay.

A frequent reason for voting against directors in the United Kingdom and Europe was due to low levels of board independence, or non-independent presence on key committees. Generally, we have seen levels of independence improving but we continue to ensure companies are striving for the appropriate independence levels. We prefer boards to at least be 50% independent and for all key committees, such as the remuneration, nomination and audit committee's to be fully independent.

Figure 3: Proportion of dissenting votes per category



Source: Columbia Threadneedle Investments, ISS ProxyExchange, 30 September 2019.

08 Engagement highlights

Between July and September, we engaged with the 35 issuers listed below, some on multiple occasions.

Environmental, social and governance discussions
Alphabet, Ascential, Carnival, Centrica, easyJet, Eurofins Scientific, Facebook, Ingersoll-Rand

Specific social focus
Northrop Grumman

Specific governance focus
AstraZeneca, Berkeley Group, Brenntag, Cobham, CRH, Dulux Group, FirstGroup, Genus, Grainger, Hollywood Bowl Group, JD Wetherspoon, Kingspan Group, Lar Espana Real Estate, Rotork, Royal Mail, Socimi, SSP Group, Stagecoach Group, Standard Chartered, TeleColumbus, Victrex, Wm Morrison Supermarkets

Case studies

The following are case studies of ESG-related engagement led by members of the RI team.

Centrica, UK, Utilities

Succession planning, strategy, sustainability

- In our last quarterly report, we detailed our reasons for voting against executive pay at British energy company Centrica. Since then, the company has announced that CEO Iain Conn would be leaving his position.
- In September, members of the RI and UK equity teams met new Chairman Charles Berry for the second time this year. We discussed the ongoing search for a new chief executive, company structure and strategy and how best to align management and shareholder interests.
- Separately, we participated in a webinar where Centrica launched their new sustainability strategy with 15 ‘responsible business ambitions’ aligned to various United Nations Sustainable Development Goals and the world moving to a low carbon future. We requested that the company consider linking executive pay to the ambitions when it reformulates its pay policy next year.

SSP, UK, Consumer Discretionary

Board and director related, remuneration

- We met the senior independent director of catering company SSP following a contentious AGM where around one-third of shareholders voted against executive pay and the re-election of the chairman. Our view is that the company has made positive changes since then.
- The overall quantum of pay for the new CEO has been reduced and simplified. A two-year holding period has been added to long term pay awards to better align management and shareholder interests. The CEO's pension has been reduced from around 37% of salary to 20%. This is an improvement though still ahead of the general workforce.
- Pay has been criticised in the past – in the past five years, the CEO has received full bonuses and long-term award pay-outs, which could indicate a lack of robust targets. However, it can be argued this aligns with the shareholder experience; since the company's initial public offering, the company has returned 190% compared to 41% for the FTSE All-Share.[1]
- SSP is looking at improving the structure of its six-person board, seeking new non-executive directors with prior board experience in the travel and food and beverage industries. Many shareholders did not support the re-election of Chairman Vagn Sorenson due to the number of other boards he sits on; we discussed his time commitment and the importance of maintaining leadership stability at a time of executive succession.

[1] Source: Bloomberg for the period 7 October 2014 to 20 September 2019

easyJet, UK, Industrials

Sustainability, remuneration

- easyJet are re-evaluating and restarting their sustainability agenda. We completed a materiality questionnaire, presenting our view of sustainability priorities and later met the head of investor relations of the British airline to discuss the company's approach.
- As well as submitting responses to the CDP, the company aims to present a credible plan to be the airline of choice for environmentally-minded consumers. Work is ongoing to align with the UN SDGs. easyJet believes in the strength of their proposition – newer, more efficient aircraft than competitors combined with higher load factor increase fuel efficiency and therefore decrease the company's carbon footprint.
- easyJet has a target to achieve 72g/CO2 per passenger by 2022, down from the current 78.6g. We recommended including this in executive pay metrics.

Eurofins Scientific, Luxembourg, Health Care

Identification and management of material risks

- In June, testing company Eurofins disclosed it had suffered a cyber-attack that led to a backlog of 20,000 samples. We held a call with the company on its management of cyber risk, corporate governance and workforce management.
- Following the ransomware attack, the company hired external experts to firstly remediate and secondly work on a medium-to-long term action plan to further strengthen the company's information technology. Eurofins has a chief information officer who sits on the executive committee, reporting cyber security matters to the board as appropriate.
- The company's founder, Gilles Martin, also serves as its CEO and Chairman. We spoke about the need for robust short- and long-term succession plans and the possibility of appointing a lead independent director to represent minority shareholders' interests. Eurofins are planning to hire new non-executive directors to increase the level of independent representation on the board.
- The company's decentralised structure makes universal workforce management difficult and there is no centralised HR function. Across the approximately 1,000 business units, scientists make up the majority of staff. As well as competitive pay, Eurofins' comprehensive portfolio of technologies and lab equipment mean staff are motivated.

Carnival plc, UK, Consumer Discretionary

Environmental

- We met with executives to discuss the environmental challenges the company faces, and how these are overseen at board level.
- The company's Health, Environment, Safety and Sustainability committee monitors a series of KPIs surrounding ESG issues on a quarterly basis, which are also reported to the full Board.
- We discussed the recent court cases in the US relating to pollution and non-compliance with environmental regulations. The company is taking steps to improve compliance, and to address issues of corporate culture, which were identified in court documents as contributing to non-compliance. The company has undertaken a staff survey and are dedicating resources to employee training.
- We also discussed the company's GHG emissions target, the range of emissions reduction technologies it is assessing, and its plans for LNG ships.
- We discussed the pros and cons of the use of open vs closed loop scrubbers to meet IMO air pollution regulations, and how the company's use of open loop scrubbers might be perceived by customers.

Ingersoll-Rand, USA, Industrials

Environment, sustainability

- Ingersoll-Rand manufactures central heaters, air conditioners, and small electric utility vehicles, as well as other products. The company has released a 2030 sustainability plan with a series of new commitments and has improved its disclosure on ESG issues and climate risks, which we welcomed.
- We sought a call with the company to better understand how their sustainability commitments were integrated to their product strategy, and to seek clarification surrounding their 2030 goal on Scope 3 emissions.
- Sustainability is now a key driver of the company's strategy, with IR products helping customers to monitor and manage their energy use, achieve LEED certification, improve energy efficiency and reduce costs. Payback periods for some technology can be as short as 3 years.
- Meeting the company's new Scope 3 target will require a range of activities including reduced use of refrigerants with high global warming potential, improved energy efficiency, and development of new innovations in cooling and electrification. The goal is quite stretching and will require continued innovation on ways to reduce emissions.
- The company's ambition and commitment should position them well as emissions regulations tighten. We will continue the dialogue with the company as they release further information on their plans.

Alphabet, USA, Communication Services

Governance, privacy

- Alphabet recently hosted an investor conference call on ESG issues, addressing the questions they most frequently receive from responsible investors. Although the call was not a replacement for 1-1 dialogue, we welcome the effort to provide a forum for discussion of ESG issues, given the challenges of engaging with the US tech sector.
- The company provided some information on its approach to onboarding directors, including how it evaluates diversity and competencies of board members. It confirmed that the board and its committees regularly discuss issues such as company culture, content issues, and artificial intelligence (AI).
- The company affirmed its commitment to responsible decision making on AI, and to respect for human rights. Its AI principles indicate that any development of AI should be socially beneficial, avoid bias, be safe and accountable, incorporate privacy. A group is involved in review of the company's involvement with AI including human rights specialists, ethicists, and relevant experts. They also discussed new workplace commitments which should allow a simplified process for employees to raise harassment or discrimination concerns and improve support for staff during investigations.
- With regard to privacy, a potentially interesting development is the company's effort on Federated Learning, which would enable less cloud-based processing of data, and more on users' devices, which would improve privacy.

Facebook, USA, Communication Services

Governance, privacy

- We discussed the scale of changes and cross-functional work that has been required for the company to implement and comply with GDPR, and how this may position them in terms of their ability to adapt to and comply with future regulatory requirements on privacy issues.
- In the wake of the FTC consent order, we discussed the company's initial plans to respond; the oversight which the order requires, by the Board, the newly required privacy committee of the board, and Mr Zuckerberg; and how the order addresses oversight of data sharing by 3rd party app developers.
- We discussed the company's decision-making process surrounding allowing political advertising within their networks, the challenges that entails and the changes with regards to greater transparency for political advertising.
- We plan to continue dialogue with the company, in particular in relation to governance and oversight of privacy issues.

To find out more visit
COLUMBIATHREADNEEDLE.COM

EMEA.Stewardship@columbiathreadneedle.com
US.Stewardship@columbiathreadneedle.com
RI.Thematic@columbiathreadneedle.com

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