

Change happens together

Our global responsible investment approach

Annual review 2019






For today's investor





Contents

How responsibility is built-in at Aviva Investors	5
Our heritage as responsible investors	5
A foreword from Euan Munro	6
Our contribution to a changing world	7
Our 2019 responsible investment highlights and achievements	8
 Responsibility built-in	11
Investment integration: Integrate commitment and transparency	12
Our overall policy architecture	12
Equity and Credit	13
Multi-asset, macro and liability-driven investments	20
Going beyond ESG integration in real assets	22
Responsibility built into our process from strategy and origination to reporting	24
Designing sustainable investment solutions that meet client needs	26
Climate change pillar: Interview with Rick Stathers	28
Earth pillar: Interview with Eugenie Mathieu	30
Addressing our community pillar through real assets	32
Our solution framework	32
An exciting year for Aviva Investors France's ESG team: Interview with Sophie Rahm	33
UK Life: Interview with Jason Bullmore	34
 Powering change	37
Driving change with companies we invest in through voting	38
Embedding sustainability in our voting: Focus on climate change	40
Driving changes with companies we invest in through engagement	48
Driving changes on diversity	60
Driving changes on climate change through real assets	63
Driving changes through market reforms	66
 Connected thinking	69
Connecting for climate change	71
Why asset managers cannot be passive on climate change: Interview with David Cumming	72
Global Responsible Investment team	74
UK Stewardship Code Compliance Statement 2020	76
Contact us	77



How responsibility is built-in at Aviva Investors

Investing responsibly is not a fad. For us, it is an investment belief. By building responsibility into all our investment processes and products, we aim to improve our risk management and investment performance while at the same time help to create more sustainable investment solutions fit for the future. As an active owner of capital, our scale and influence help us drive the change required to build a future our clients are able to retire into.

We are ultimately united by a firm-wide ambition to work with and for our clients to do what is right for them, society and the world around us.



Responsibility built-in

Responsible investing is a driving force across our £346bn of assets under management. It is deeply embedded into our culture, investment decision-making, products and solutions (as at 31 December 2019).

Pillar 1



Powering change

As an active owner with scale and global reach we use voting and engagement to drive a transition to a sustainable future.

Pillar 2



Connected thinking

Creating a sustainable future and delivering long-term investment returns can only be accomplished by working together with clients, competitors, policy-makers and regulators to connect different perspectives, share knowledge and experience.

Pillar 3

Our heritage as responsible investors

1970

We were holding companies to account by voting at their annual meetings.

1994

Aviva Investors among the first asset managers to publish Corporate Governance Voting Policy.

1995

At UN Summit, Aviva pledges to “balance of economic development, the welfare of people and sound environment by incorporating these considerations into business activity”.
Aviva starts reporting on environmental impacts of business.

A foreword from Euan Munro

Our responsible investment approach took centre stage in 2019. Embedding ESG considerations into every investment decision means responsibility is built-in across the business, enabling us to deliver sustainable outcomes for our clients and boost returns. We have continued to invest in the Global Responsible Investment team and this Annual Review showcases their ground-breaking achievements, each delivered in collaboration with our investment and public policy teams.



To pick out a few, the successful launch of our climate franchise enables our clients to allocate capital to companies best positioned for the transition to a warmer, low-carbon world. Our headline-grabbing engagement with BP, co-filing a resolution to increase climate disclosures, is emblematic of our commitment to powering change as an active owner. And our partnerships with likeminded organisations to drive capital market reform, culminating with our representation at the climate negotiations in Madrid, highlight our commitment to connected thinking in sustainable investment.

Our work in 2019 provides a launchpad for 2020 and the ensuing decade, one that will be defined by our collective response to the climate emergency. Transformational change is required, underpinned by a ratcheting up of policies and actions across the board. Already, 77 countries and 100 cities have made net-zero commitments, and 778 companies have set science-based targets. But there is a great deal more to do. Aviva Investors will remain at the forefront of this movement, for our clients and the planet.

A handwritten signature in dark ink, reading "Euan Munro".

Euan Munro

Chief Executive Officer

2001

We become a founding CDP signatory (previously Carbon Disclosure Project) and first asset manager to formally integrate corporate responsibility to voting policy.

2006

Aviva makes its operations carbon neutral. We are a founding signatory for the Principles of Responsible Investment.

2007

We sign up to ClimateWise and Accounting for Sustainability Principles.

Our contribution to a changing world

The idea at the heart of capitalism is deceptively simple: prices signal which goods or services are to be produced, ensuring that supply and demand are matched. In Adam Smith's famous image, the "invisible hand" of the market allocates resources efficiently between corporations and individuals.

Today, capital markets are failing to deliver on this promise in three related ways: they are failing the investors and corporations they exist to bring together, by forcing them to focus on short-term profit at the expense of long-term growth; they are failing to preserve the health of our planet, upon which we all rely; and they are ultimately failing the people of the world, by destroying the resources upon which we also rely. The invisible hand is choking the planet.

The evidence for these market failures is widespread, compelling and well-known. Two billion people live on less than US\$3 per day, while the world's richest 1 per cent now own more wealth than all the other 99 per cent put together¹. Over a third of the world's agricultural land and 90 per cent of marine fish stocks are seriously degraded. An estimated half of the world's coral has been lost since the 1980s². And we are on track for an average temperature rise of almost four degrees by 2100³, threatening drought and weather conditions that humanity has never before witnessed.

Increasingly, economists, investors and regulators are recognising that these issues, previously perceived in largely environmental and social terms, will also have severe financial and economic consequences if left unchecked. Unsustainable economic growth will harm people's pensions savings and investments.

In this Annual Review, we set out our own connected thinking on the subject, as well as how we seek to power change on behalf of our clients.

Steve Waygood

Chief Responsible Investment Officer



1. Credit Suisse

2. United Nations: <https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1812>

3. World Meteorological Organization (2019)

2008

Aviva committed to publishing proxy voting record online.

2010

We are one of the first to sign up to the Financial Reporting Council's United Kingdom Stewardship Code.

2012

We founded the Corporate Sustainability Reporting Coalition with call to action at Rio+20 Conference.

Aviva is founding signatory for Principles of Sustainable Insurance.

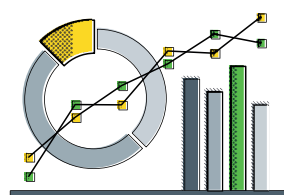
Our 2019 responsible investment highlights and achievements

Delivering a sustainable future will only happen if we all take action to create positive change. With our clients front of mind, we have made active sustainable choices in how we invest and drive change in the world.



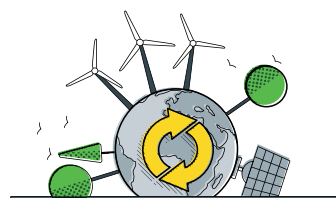
Tackling climate change

In 2019, we voted in favour of 86.9% of shareholder resolutions on climate change⁴ and launched a new climate transition strategy to help clients allocate capital towards a low-carbon future. ShareAction ranked us as the number three global investor for voting on climate action.



Proprietary ESG research

We have a dedicated team of 21 ESG analysts that act as a centre of excellence, as well as delivery of proprietary quantitative ESG scoring tools which are predictive of performance.



Shaping a sustainable world

Founding signatory to the UN Principles of Responsible Investment (UNPRI) and catalysed the development of the Sustainable Stock Exchange (SSE) Initiative and World Benchmarking Alliance (WBA) that aims to publicly rank 2000 companies on ESG credentials.

Source: Aviva Investors (Saleslogix), as at 31 December 2019, unless otherwise referenced.
4. ShareAction

2014

Aviva launched Roadmap for Sustainable Capital Markets & Sustainable Capital Markets Manifesto.

2015

We joined the Investors Forum Board. Aviva published Strategic Response to Climate Change and participated in COP21.

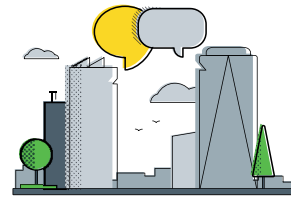
2016

We are asked to join The Financial Stability Board's Taskforce on Climate-Related Financial Disclosures (TCFD). We are invited to be a member of the European Commission's High-Level Group Experts on Sustainable Finance.



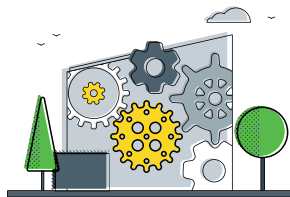
Commitment to voting

In 2019, we voted on 61,876 resolutions at 5,382 shareholder meetings, with an overall average of 24% voted against management resolutions, with 46% of votes against pay proposals.



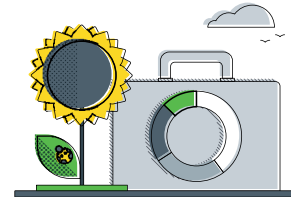
Engaging at scale

In 2019, we undertook 3,122 company engagements with 2,149 individual companies to identify and reduce ESG risks in our portfolios.



Investing in green infrastructure

In 2019, we invested £717m into low-carbon and renewable infrastructure, exceeding our annual target of £500m and creating over 150,000 tons of carbon emissions avoidance.



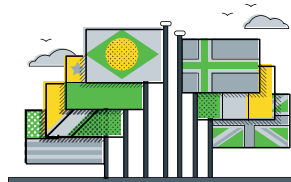
New sustainable solutions

We can help you understand and manage your ESG and climate risk. In 2019, we launched a number of new sustainability-focused funds.



ESG and alternative asset classes

In real assets, all proposed transactions are assessed against an ESG risk and sustainability impact framework.



Global recognition

Aviva received the United Nations Foundation Leadership Award in recognition of our work to support the United Nations Sustainable Development Goals.

2017

Received Responsible Investor Award for Innovation and Industry Leadership.



2018

We received an award from the UN for our sustainability work.



2019

Awarded as “ESG Manager of the Year” at the Global Investor Group Investment Excellence Awards.

We won the Stewardship Disclosure (Asset Manager) award category at the ICGN Global Stewardship Awards.

Winner at the Insurance Asset Management Awards as “Infrastructure Manager of the Year”.







Responsibility built-in

Responsible investing is a driving force across our £346bn (as at 31 December 2019) of assets under management. It is deeply embedded into our culture, investment decision-making, products and solutions.

As a long-term, active investor we hold a deep conviction that environmental, social and governance (ESG) factors can have a material impact on investment returns and client outcomes. ESG is therefore a fundamental consideration in how we manage investments on behalf of our clients.

We integrate material ESG factors into our investment approach for all asset classes and regions that we invest in. Our investment teams are supported by a Global Responsible Investment (GRI) team of 21 professionals, that act as a centre of excellence on ESG working closely with the investment teams.

Macro, thematic, industry, security- and asset-specific qualitative insights are generated to enhance investment processes. We also have proprietary quantitative ESG scoring tools to underpin the assessment of ESG risks at both a security and a portfolio level across asset classes.

Our approach is set out in our firm-wide Responsible Investment Philosophy and we have an ESG policy that outlines how this is implemented for every asset class. Our commitments are fully embedded into our internal controls environment and are subject to robust challenge from the firm's control functions as well as assurance from our external auditors.

We also recognise that institutions and individuals have different ESG needs. Our ESG Investment Solutions team helps clients define their approach to ESG, including climate change, and designs investment strategies that meet their preferences. We offer several sustainability-focused funds that are designed to deliver sustainable outcomes as well as financial performance.

Investment integration: Integrate commitment and transparency

We recognise our duty as a trusted agent of its clients' assets, to protect and maintain the long-term value of their investments. Consistent with those obligations, Aviva Investors maintains a deep conviction that environmental, social and governance (ESG) factors can have a material impact on investment returns and client outcomes.

In order to deliver on our commitments as a founding signatory to the UN Principles for Responsible Investment and under the AI Responsible Investment Philosophy, we integrate ESG factors into investment analysis and the investment decision-making process.

This is achieved in a consistent way across every asset class in line with our asset class ESG policies. While the approach is tailored across each capability – investing in infrastructure is not the same as investing in a company – all our capabilities meet a consistent set of integration proof points.

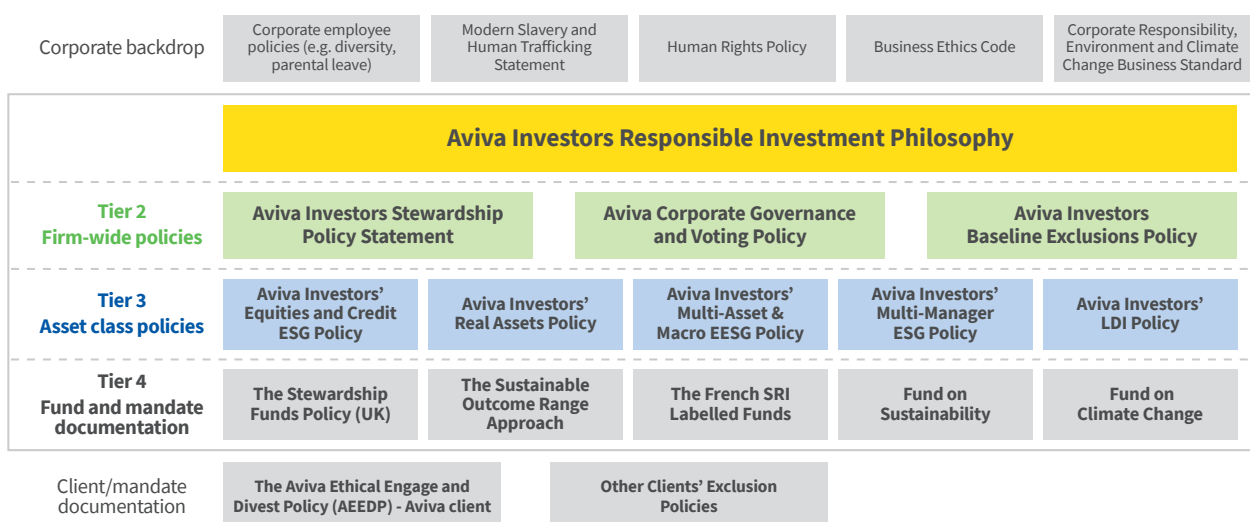
We have clear alignment between ESG and investment research. Our 21-strong Global Responsible Investment team of professionals is closely linked with investment teams across sectors, themes or asset classes. ESG is also embedded into our investment process, for example through the inclusion of ESG analysis into our sector and company notes.

Targeted qualitative and quantitative ESG research is produced and integrated into investment processes at a macro, thematic, sector, industry, company or security level. We also have a set of proprietary quantitative ESG scoring tools that help us assess ESG and climate risk across our investments. There is active participation of ESG analysts in our investment and engagement meetings.

Our overall policy architecture

We have developed a clear policy framework with a consistent set of responsible investment policies to ensure our approach to ESG at an institutional, asset class and product level is clearly understood.

The responsible investment policies sit within a tiered policy framework, ensuring that all policies maintain consistent principles and any positions agreed at an institutional level cascade down and are implemented across each asset class in an efficient manner.



Equity and Credit

Qualitative ESG foundation

Aviva Investors corporate ESG research



Sector primer reports

Focused on education provides, a 'how-to guide' for analysing and engaging on ESG characteristics of companies within sector group



Industry reports

Focuses on industry dynamics and provides a view on best / worst in class players on key ESG performance metrics



Company reports

Company specific assessment of ESG performance (including specification of an ESG rating and momentum), engagement topics and controversies



Application specific reports

- Company / sector briefing
- Company meetings
 - Fund specific (Stewardship, CTF)

Quantitative ESG foundation

With the regulatory environment shifting to explicitly encompass environmental, social and governance (ESG) concerns, we have also been enhancing our risk assessment methodologies. We have been looking to add value to the ESG scores compiled by MSCI, with the aim of recognising companies with superior sustainability credentials. MSCI scores are a rich and potentially powerful way of differentiating between companies, but we intend to enhance the data set further, by combining it with applied domain knowledge created by our own ESG team. By providing our investment teams with timely, high-quality data, we believe we can help inform better investment decisions.

Integration within equity and credit

To support the integration of ESG factors into the decision-making process of the equity and global corporate credit teams, we maintain a team of ESG analysts who monitor and evaluate sectors, industries and companies using agreed/proprietary ESG criteria.

The ESG content produced is made available to portfolio managers and investment teams through formal reports and is used by the corporate credit and equity teams to support investment decisions (including analysis for potential investment, holdings tracking, and review for potential divestment). It is also used for the broader education of the investment teams on sector specific ESG themes, as well as engagement with companies and clients.

Research content is communicated to portfolio managers and analysts through notes and reports published on the Aviva Investors Internal Research Hub ("IRH") and via various investment forums.

ESG analysts also contribute to portfolio reviews led by portfolio managers and asset class specific investment analysts.

Investment opportunities are evaluated on an individual basis, and companies, industries or sectors with high ESG risk exposures must be reviewed and justified by the portfolio management teams.



INTEGRATION CASE STUDY

Giving credit to Volkswagen's ESG progress

Volkswagen

Following the Dieselgate scandal in 2015, VW worked hard to improve its ESG metrics.

Right after Dieselgate in 2015, MSCI downgraded VW to CCC from BBB. As VW recovered, its securities offered interesting opportunities. At the same time, VW was working hard to improve its ESG metrics. We saw MSCI methodology as too backward looking and engaged with VW management to gain more comfort on their ESG progress and suggested further governance improvements.

The company has made a lot of progress that we hope will prevent similar issues in the future. While electric vehicles and hybrids currently make up a small percentage of sales, VW have set out a very aggressive approach to electric vehicles.

Their goal of their 'Together 2025' strategy is to become the global leading provider in sustainable mobility, and this includes their strategy on electric vehicles. In March 2019, they announced plans to launch 70 new electric vehicles in the next ten years.

VW seem confident they will meet their 2021 EU emissions targets and not get fined and could clearly articulate their strategy on how they achieve this. They need to launch 200,000 BEVs in 2020 and 2021 to meet the targets and this will be achieved through the launches they have in the pipeline across their brands.

The company uses a range of measures in order to achieve a significant reduction in CO₂ emissions in production including increasing energy efficiency, switching from coal to gas and increasing the use of regenerative energy systems for electricity supply. VW has a large supply chain with over 40,000 tier one suppliers worldwide, who employ more than five million people across 41 locations in 21 countries. However, they work to mitigate the risks through measures such as having a Code of Conduct all suppliers have to sign up to, providing training and education and where required auditing their suppliers.

VW has many employees covered under collective bargaining agreements which is positive in terms of protecting employee rights. However, this does give them exposure to unions and potential labour disputes and strikes.

There are no independent directors on the board which is a risk from oversight perspective. We would encourage them to consider their succession planning for the supervisory board and appoint an independent Chair. We would also like to see independent members on both the audit and remuneration committees.

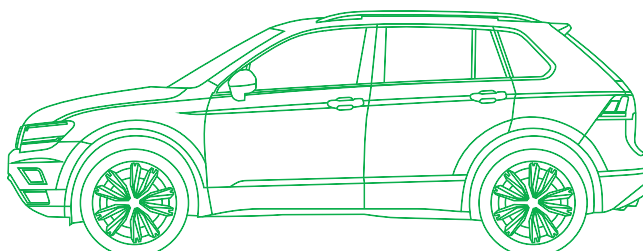
While we have engaged with the company and they are aware of shareholder concerns in this area, it appears this issue cannot be easily be flagged up to the supervisory board and it is difficult for investors to get access to the supervisory board. Although we note this is not uncommon in Germany, VW has a dual-class structure consisting of 295.1 million common shares which carry one vote per share and 206.2 million preference shares which carry no vote. Minority shareholders have limited ability to influence the company with nearly 90 per cent of the voting rights being held by three parties. Porsche holds 52.2 per cent (the majority) of the voting rights in VW, the state of Lower Saxony 20 per cent, Qatar Holdings 17 per cent, other shareholders 10.8 per cent.

Conclusion

Equity and credit portfolio managers engaged with the ESG team to better understand the sensitive case of Volkswagen.

Following the discussions with VW management in 2019, the ESG team upgraded its ESG score to positive with the risk of governance being mitigated by a strong trust in its leadership to deliver the strategy. As far as the ESG momentum is concerned, it is neutral. Both ESG analysts and portfolio managers decided to reinforce their positions on VW.

“We would encourage them to consider their succession planning for the supervisory board and appoint an independent Chair. We would also like to see independent members on both the audit and remuneration committees.”





INTEGRATION CASE STUDY

Meeting with lead independent director

Alstom

We are significant Alstom shareholders and valued dialogue with the board to confirm our investment view.

At the 2019 AGM, we were unable to support the CEO's re-election as he occupies a combined CEO/Chair role and we had concerns regarding the balance of power on the board.

The current arrangements came under increased scrutiny for us because corporate transactions, such as the failed merger with Siemens, can result in deviations of interests between management and shareholders.

We had several calls during the year with the company, including the lead independent director (LID). We found the company was receptive to our views. The LID also did a roadshow in London to meet shareholders. We welcome the company's efforts to give shareholders access to the board. We held a meeting where the ESG team were joined by our fund managers. The LID is clearly a valuable member on the board given his experience, skills and knowledge. The conversation helped inform our view of the company and provided insights into the governance and dynamics at the board level. He provided clarity on strategy, especially on rail and signalling. Two things stood out in particular: Alstom's exceptional execution reliability; and how climate change constitutes a real business opportunity.

Conclusion

Our conversation with the lead independent director reaffirmed the strategic opportunities the company can capture and confirmed our positive conviction on the stock.



INTEGRATION CASE STUDY

Integrating ESG in US equities

Salesforce

Our positive view of Salesforce lies in the management's attitude towards ESG.

Salesforce has long been viewed as one of the leaders in ESG and has a large section of their website dedicated to environmental & social practices. The company's founder, Marc Benioff, is a strong supporter of environmental sustainability, human rights, equality, philanthropy, ethical and humane use, and workforce development, and has deeply ingrained these beliefs in the Salesforce culture. Salesforce pioneered and has inspired other companies to adopt the 1-1-1 integrated philanthropy model, which leverages one percent of a company's equity, employee time and product to help improve communities around the world.

Conclusion

Salesforce is viewed as one of the leaders in ESG, and this is reflected in our positive view.



INTEGRATION CASE STUDY

Bayer has long-standing corporate governance issues

Bayer

We engaged with Bayer following the company's acquisition of Monsanto and resultant litigation over the safety of its widely used weed killer, Roundup.

Our engagement with the company has allowed us to discern persistent governance issues at Bayer which, in our view, led the company to underestimate the long-term risks associated with the acquisition, both in terms of safety and brand reputation.

Following the high-profile acquisition of crop giant Monsanto in 2018, Bayer had come under attack, facing up to a barrage of lawsuits concerning the safety of Monsanto's weed killer product, Roundup.

At the centre of the suits is the product's main active ingredient, glyphosate, which is alleged to cause Non-Hodgkin Lymphoma (NHL). Bayer's stock price subsequently fell by more than 30 per cent following the widely criticised acquisition of Monsanto. The company has since been under pressure from shareholders to put an end to the wave of legal claims and to reassure investors that adequate risk management measures are being taken.

The company was further put to the test when, at its 2019 annual general meeting, a majority of shareholders voted against the discharge of the management board. This was tantamount to a vote of no confidence and marked the first failed discharge of an incumbent CEO (Werner Baumann) at a German blue-chip company.

At the core of Bayer's trust issues are deep-seated corporate governance concerns which are amplified by the German corporate governance system. The two-tier board structure separates the supervisory board's responsibilities, who are in charge of long-term strategic planning, from the management board's operational and executive focus.

While the company sought to address risk management concerns by setting up a committee to monitor the company's glyphosate weed-killer litigation, we remained unconvinced with the committee's ability to effectively consult with Bayer's management board and make recommendations on litigation strategy due to its composition; at present the committee is made up of eight shareholder representatives and employee representatives and can therefore not be considered able to provide independent advice.

Conclusion

Our engagement with Bayer's Chair of the supervisory board, Werner Wenning, brought to light significant gaps in the supervisory board's ability to sufficiently challenge assumptions made by the management board in its strategic execution.

We felt that the supervisory board was unable to question management due to a lack of independence, with Werner Wenning having served as group CEO from 2001 to 2010.

We continue to hold an active equity position in the company though we have decreased our exposure in fixed income, maintaining a negative ESG view on the company. In light of the extent to which the company's value and reputation have been impacted, we have engaged with the company – and continue to do so – at the highest level.

“Bayer's stock price subsequently fell by more than 30 per cent following the widely criticised acquisition of Monsanto.”





INTEGRATION CASE STUDY

Divestment from energy stock

SRC Energy

The regulatory environment and concerns on the social licence to operate in Colorado resulted in serious investment concerns on fracking stocks.

In October 2018, our equity team in the US decided to sell their stake in a Colorado energy producer, SRC Energy. The main reason for this was the pushback from Colorado residents regarding fracking. Our view was that the citizens of Colorado would ultimately prevail, with curtailment/restrictions placed upon oil and gas fracking in the state and that this would impact the performance in the longer term.

The Anadarko explosion in 2017 in Firestone, Colorado, sparked concerns over the risks of oil and gas production in Colorado from anti-fracking activists who have been calling for a state-wide emergency moratorium. An environmentalist group, Colorado Rising, proposed Proposition 112, to require new oil and gas projects to be set back at least 2,500 feet from occupied buildings. Although P112 was defeated, the energy infrastructure investment in Colorado suffered and that reduced the value of proven reserves in the state. This heavily damaged the reputation of companies operating locally. This incident resulted in all E&Ps stocks in the Denver-Julesburg basin reaching five-year lows and has affected their competitiveness.

Conclusion

The environmental safety of fracking has not been proven at this stage. There are still ongoing concerns regarding its seismic impacts, and companies have shown limited efforts to minimise risks related to fracking.



INTEGRATION CASE STUDY

Applying an emerging market lens to ESG – the case of Chinese governance in Alibaba

Alibaba

Considering ESG factors is something we do across all asset classes. Emerging markets are no different, where we incorporate specific domestic ESG issues. This was particularly evident to support our investment decisions on Alibaba Group, one of China's major growth stories of recent years.

To help inform the equity team's investment case for the company, an opinion and rating were provided by the GRI team on Alibaba Group's sustainability performance and momentum. In line with our corporate research framework for companies designated as being within our 'comprehensive coverage' (including Alibaba Group), a full company report was generated. This included a discussion of metrics and a qualitative assessment of the relevant ESG topics, as well as a list of company-specific engagement questions.

Concerns were raised regarding the firm's corporate governance practices and certain social factors. These issues were made clear to the equity investment team as part of their process to help inform whether an increase to an existing position was warranted.

From the team's analysis of the company's ESG profile it was found that, despite several improvements made to their governance profile, there were still underlying concerns in the level of minority shareholder representation even by the standards of other Chinese companies. These stemmed from the significant influence that the Alibaba Partnership maintains over board nominations.

We also noted concerns with the presence of a joint CEO/Chair and an overall lack of transparency around the coverage and execution of the company's data privacy policies. Some improvements were noted, however, as the company has showed better disclosure practices, publishing of their first ESG report for 2018 which included metrics around workforce diversity and their management of IP rights protection issues. However, we feel the company still has much room to improve in light of its underlying governance issues.

Conclusion

Our concerns were communicated to our investment teams and factored into an eventual decision not to increase an existing equity position in the company. The complex governance arrangements stemming from the Party Committee made transparency a particular issue in this case.

Furthermore, given our existing Alibaba holdings, the GRI team sought to further engage with the company on both governance and sustainability issues. A combined approach of ESG integration and active engagement with companies in our portfolios helps us provide the best outcomes for both our investors and the wider market.



INTEGRATION CASE STUDY

Safety and governance: Key factors in our investment view and likely to significantly impact company performance

Boeing

The Lion Air crash in October 2018, Indonesia, followed by the Ethiopian Airline crash just five months later – both of which were 737 Max aircraft and killed all those on board – have had significant consequences for Boeing. Following renewed scrutiny after the second crash, regulators ordered the grounding of the jet in March 2019.

It became apparent to us that the 737 Max was rushed due to competitive pressure both from a record backlog of commercial jet orders and from the more efficient Airbus A320neo; and there was inadequate pilot training on new features. As such, the board oversight has come under significant scrutiny. This first led to the separation of the roles of CEO and Chair (both previously performed by Dennis Muilenburg) and then ultimately in December 2019, the CEO was fired.

The view we took in early 2019 was that the apparent governance failings and the severity of the safety issues meant that the global regulators are going to take their time before giving the green light for the 737 Max to return to the sky (and much longer than Boeing had thought).

This has proven to be the case. As such, Boeing has been burning cash in every quarter that the aircraft is grounded, and it is still unclear when it will return to service. The longer the problem drags on, the more the market is likely to question the long-term outlook for the 737 Max and passengers' willingness to fly on it. The eventual costs of compensation and litigation to airlines and the families of the victims are also unquantifiable but could be very large.

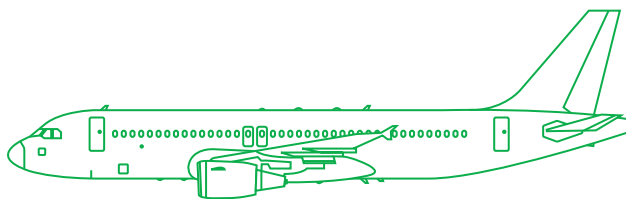
This is likely to have a material impact on the company's credit position as well as the share price. In December 2019, Moody's lowered its rating on Boeing Co's debt and said it sees long-term risk to the company's reputation. A further downgrade of the ratings could occur if the grounding runs into the second half of 2020.

Also, despite the management changes, there are still questions around the company's governance. The board has lost more credibility having back-tracked on what it said earlier in 2019: that there was no reason to separate the CEO and Chair roles. Further, having been on the board for ten and eight years respectively, the new CEO and Chair should have already been aware of the perceived cultural problems at the company and hence, it would be preferable if one of these roles were being performed by an outsider.

Conclusion

Over the long term, US Aerospace & Defence securities have outperformed the market. We have a positive view of this sector given its attractive long-term structural growth outlook, including a significant number of potential new passengers in emerging markets.

However, given the issues highlighted, we have a negative ESG view on Boeing. We do not have an active equity position in the company and have limited exposure in fixed income. When there is more certainty on the 737 Max timings and the extent to which corporate governance has improved, we are likely to engage with Boeing and reevaluate our position.



“In December 2019, Moody's lowered its rating on Boeing Co's debt and said it sees long-term risk to the company's reputation. A further downgrade of the ratings could occur if the grounding runs into the second half of 2020.”



INTEGRATION CASE STUDY

Businesses need to be more prepared for impacts of climate change**Various companies**

The Rhine water levels decreased to all-time lows in summer 2018. Our objective was to consider both the level of exposure and the short-, mid- and long-term risks for companies that have factories along the River Rhine.

With its source in the Swiss Alps, the River Rhine is fed by glaciers and rain but levels have been significantly affected by global warming – both ice flows and rain have reduced. Shipping from Rotterdam to Basel provides an advantage of 40 per cent in costs compared to rail transport. Barges can transport more than five times their own weight. Further, the ability to transfer to trucks and rail is limited.

During 2018, large barges that are critical for the delivery of materials to the numerous factories and plants along the river were not able to travel, impacting production and increasing costs for alternative transport for a number of industrial and chemical companies such as BASF, Thyssenkrupp and Covestro. BASF took a hit of 250 million euros on 2018 operating income. The decline in the German economy was partly attributed to low water levels on the Rhine.

We looked at two things. First, the probability of another drought in 2019. Second, how prepared certain companies are for lower water levels.

We were pleased to learn that Rhine water levels were relatively healthy compared to 2018, with water levels up between 40 per cent and 50 per cent. Further, companies appear to be more prepared. BASF says it has reduced the dependency on the intake of cooling water from Rhine river and has been sourcing more specialised barges suitable for low water levels.

Further engagement revealed they have teamed up with universities and meteorologists to improve their predictability by at least three to four weeks, meaning they now have more time to react. For example, they may increase inventory if they predict Rhine levels are going to be low. We also engaged with Thyssenkrupp, who have adopted a similar response.

Both companies see the Rhine as critically important to their business so are also doing longer-term planning. A taskforce has also been formed, headed by the German Transportation Secretary who has established an eight-point plan on improving infrastructure for the long term.

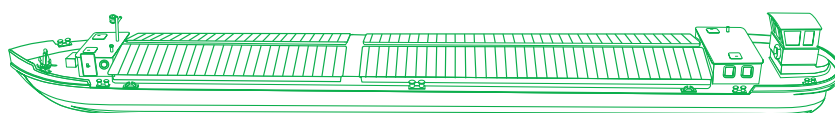
In terms of our initial analysis, we identified that a relatively small German refiner called Raffinerie Heide might be affected by the lower Rhine levels but had already decided to gradually exit that position anyway. There may also be some impact on Shell, BP, Total; who are big operators of refiners in Germany. However, this is not a big part of their operations as they are well diversified.

Conclusion

Our analysis did not identify any material risks to our investments due to (i) higher Rhine levels and (ii) companies appear to be more prepared; although the latter won't be properly tested until there is a repeat of 2018.

Further, while there are plans to work on the River to improve water levels, this is going to take a long time. In the meantime, extreme weather (both heatwaves and excess rain) and its impact on water levels (not just the Rhine) is now a permanent risk that we will be keeping under review and something we are ready to engage with companies on.

“Shipping from Rotterdam to Basel provides an advantage of 40 per cent in costs compared to rail transport. Barges can transport more than five times their own weight.”



Multi-asset, macro and liability-driven investments

Over the course of 2019, we strengthened ESG integration across our multi-asset, macro and liability-driven investments. For each, ESG insights are now embedded throughout the investment process.

This starts by shaping the firm-wide macroeconomic outlook, the Aviva Investors' House View. A Global Responsible Investment (GRI) representative attended each of the quarterly House View forums in 2019, ensuring material ESG factors were accounted for and understood.

Linked to this, GRI analysts conducted thematic research on ESG trends, or the ESG implications of macro trends, which were disseminated across investment teams. The ESG Insight piece on the implications of China's Belt and Road Initiative was also included in the House View 2020 Outlook, published in December.

Other pieces of thematic research fed directly into the investment idea generation and strategic asset allocation processes. For example, a representative from the GRI team routinely attended Strategic Investment Group meetings for the AIMS funds, ensuring ESG factors were incorporated into every investment idea. In some cases, ESG considerations were at the centre of the investment idea – including one on electric vehicles.

Underlying securities and corporate holdings are assessed using the ESG scores, judgements and processes described in the above section. For sovereign holdings, in 2019 we began calculating scores for the environmental, social, governance and overall ESG performance of over 100 countries. The scores range between zero and ten, with ten representing the best performance, and draw on 11 material indicators (Figure 1). These indicators are underpinned by more than 400 individual data points.

The quantitative scores for sovereigns provide portfolio managers with an actionable metric which they incorporate into their assessments of valuation and other fundamental factors. The calculation of sovereign ESG scores also means (aggregate) ESG scores for all physical assets can now be tracked for multi-asset. Linked to this, GRI analysts are participating in a working group to establish principles for assigning ESG scores to select non-physical holdings, to be implemented in 2020.

To complement quantitative country scores, in 2019, ESG analysts began providing qualitative, momentum judgements on core countries. By monitoring the ESG performance of sovereign issuers in real-time, analysts helped identify countries that were likely to see their ESG scores positively or negatively re-rated and provided valuable information to portfolio managers. This qualitative research involved reviewing media reporting of country news and events, sell-side research, NGO research, government reports and maintaining a dialogue with a network of experts. ESG analysts also provided ad-hoc judgements on countries outside of our core coverage to support investment decisions for specific funds.

Finally, regarding responsible stewardship and engagement, the exercise of voting rights and our approach to engagements for corporate holdings is also applicable to assets held in relevant macro, multi-asset and liability-driven investment funds. We have also developed a strategy for engaging with sovereign issuers that should enable us to form a more complete understanding of a country's ESG trajectory.

ESG insight through quantitative tools

Figure 1 – Aggregation of Environmental, Social and Governance metrics

Aviva Investors ESG country model		
Environmental	Social	Governance
15%	35%	50%
<ul style="list-style-type: none"> • E1: Environmental Performance* • E2: Natural Hazards* 	<ul style="list-style-type: none"> • S1: Gender Inequality* • S2: Infrastructure* • S3: Inequality* • S2: Human Development* 	<ul style="list-style-type: none"> • G1: Doing Business • G2: Institutions • G3: Governance • G4: State Fragility • G5: Press Freedom

INTEGRATION CASE STUDY

Qualitative judgement on ESG momentum in India

At the biannual ‘Country Review’ for India, GRI analysts provided quantitative and qualitative insight into the country’s ESG performance. By contributing to a more complete information set this increased the investment team’s conviction on the country. The qualitative ESG element of the review highlighted several issues, relating to ethnic tensions, air quality and food price inflation, which proved to be significant in the evolving outlook for India.

Conducting investment research on core countries, particularly Emerging Markets, is a key part of the Multi-asset & Macro investment process. Twice a year, the research for each core country is brought together and discussed – constituting a Country Review – to inform investment decisions and aid idea generation. An accompanying research report summarises the fundamental view, risks and opportunities for the country in question.

In 2019, the Country Review for India included an explicit consideration of qualitative ESG factors which complemented the quantitative ESG country score. For example, the team explored the implications of a government that would likely

lean more heavily on ethnic tensions as a source of legitimacy as growth slowed – this included quantifying the portion of GDP that might impacted by associated unrest. This proved material to the outlook for India as, for example, the parliament passed a controversial law offering fast-track citizenship to non-Muslims from neighbouring countries, leading to widespread protests.

The ESG input also provided a clear line of sight on risks and opportunities relating to environmental factors, particularly stubble burning and pollution levels in major cities. Again, this proved material as factories in Delhi were forced to shut due to an air quality emergency being announced in November. Subsequently, the Indian Supreme Court issued notices to all states and union territories regarding stubble burning – an issue we continue to track.

Conclusion

Overall, by explicitly considering ESG factors – and involving the GRI team – the Country Review for India provided a more holistic view on India and enabled investment teams to track a wider set of material issues. By complementing the quantitative ESG score with qualitative insight, timely ESG information was integrated into the investment research process, ultimately giving investment teams greater conviction in their trading decisions.

Going beyond ESG integration in real assets

Our £44bn real assets platform is made up of equity and debt investments in both real estate and infrastructure, with a concentration of assets in Europe and a growing interest in developing countries.

In equity, we are focused on creating opportunities for clients through long lease, refurbished and development

in real estate, and have a diversified portfolio of low-carbon, renewable and social infrastructure projects including onshore wind, solar and energy from waste.

In debt, we have a range of interests in hospitals, schools and utilities, as well as being a financier of trade and the development of new roads and rail in developing countries.

Our approach to integration

In line with the growth of our real assets business, we have reviewed our ESG approach for our illiquid assets as part of our firm-wide efforts to strengthen our approach across all asset classes.

This was critical as ESG factors are materially important given the longevity of holdings and asset-specific exposures. As long-term investors, we seek to select

projects or investments where we feel the asset can make a positive impact on society. In this context, the consideration of social development was a logical evolution of our existing practices to ensure we had a balanced view of both risk and impact. In 2019, a total of 60 ESG opinions on individual transactions were provided, all of which had a material impact on investment decisions.

How we integrate ESG in Real Assets

Our approach to ESG integration ensures that we take into consideration all potential risks and opportunities over the lifetime of a project. All transactions being considered will require an in-depth ESG questionnaire to be completed which, where relevant, may be supplemented by an independent ESG Opinion for the Investment Committee's consideration.

ESG perspectives provide enhanced due diligence and consider ESG in the context of whether the investment proposal contains a balance between risk and impact. By applying our in-house balanced ESG scorecard approach we can measure the net positive and negative impacts, which ultimately reveals the project's full ESG value. This enables a balanced perspective, recognising that there may often be a mixture of both positive and negative contributions, and can be used across all our investment decision-making.

ESG opinion – risk and impact



Investment desk focus – structured finance investing in Sub-Saharan Africa infrastructure

Structured finance products carry augmented ESG risks due to increased complexity and lack of transparency. The mapping of ESG factors requires a tailored approach to ensure material ESG risks are captured.

Transactions in this area often involve investing in existing or new infrastructure to support economic and social development. Potential ESG risk considerations can often be linked to the underlying counterparty, albeit with limited or no ESG-related influence on the underlying counterparty due to indirect relationship.

Below are two case studies in the Sub-Saharan Africa region where we have deployed our enhanced ESG due diligence approach to ensure that both ESG risks are mitigated and positive social development impact arises.

Investing in railroads – Tanzania

We supported a financing for the construction of a railway line in Tanzania. The project will provide a reliable means for transporting people and cargo, and will improve the connection to neighbouring countries. It will also act as a stimulus to the national economy. While there are several ESG risks in relation to this project (e.g. construction risks and community impact), we gained assurance that these were properly mitigated and were aligned with internationally recognised standards. We also applied a climate-risk assessment to ensure both physical and transition risks were analysed by relevant parties.

Investing in roads – Republic of Benin

We supported the financing of a project to develop and upgrade roads to urban centres in Benin. This is part of the country's wider major projects programme to encourage economic growth and improve living conditions of the population. We engaged with the Benin Government to ensure ESG-specific aims and objectives of the road project were outlined. This gave us assurance that key measures of success will continually be tracked once the roads are operational. Engagement with governments also allows us to encourage assessment of wider thematic ESG issues that may affect the project.

Engagement

Multilateral organisations are regularly involved in the financing and guaranteeing of development. In addition to our investments, we have engaged with relevant institutions to ensure structural market reforms are addressed in relation to ESG issues.

While there is an understanding that the changing of a country's overall governance and social development may take time, greater transparency at a project level will give investors assurances that ESG issues such as usage of proceeds are properly considered and mitigated where possible – this will, in turn, give investors the ability to make more informed ESG assessments.

Bringing our originators together

In 2019, we established an ESG Real Assets Origination Forum, which provides a means to discuss ESG-related investments at the origination stage.

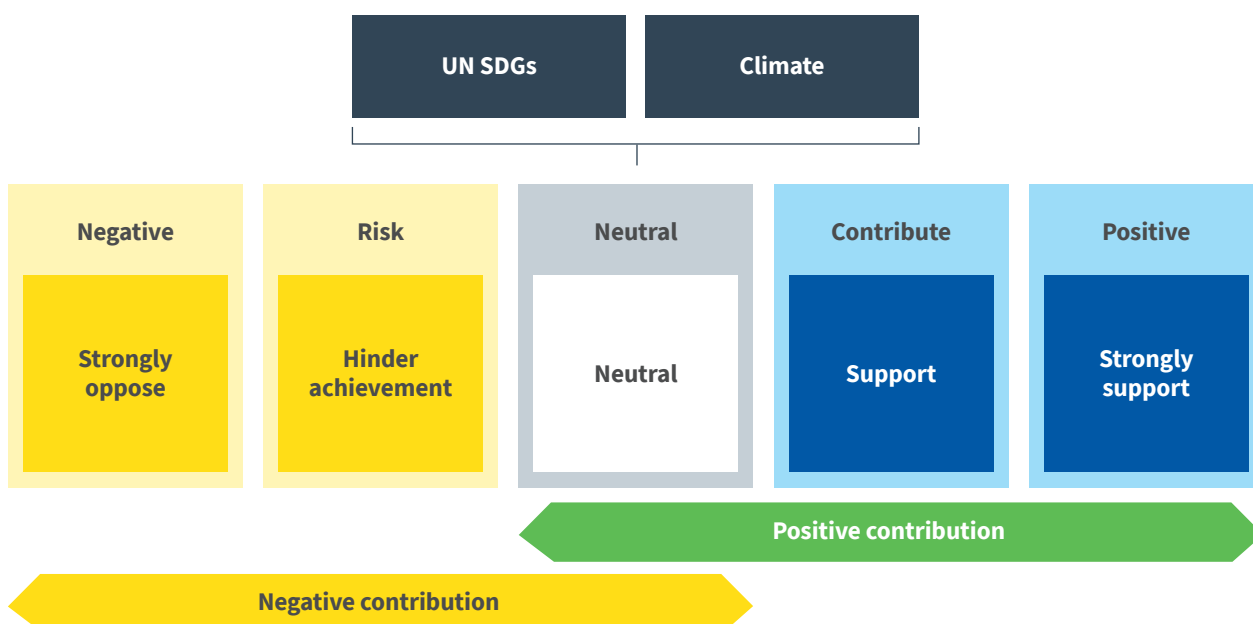
We recognised the need to establish synergies in our ESG approach and house views across the various sub-asset classes. The Forum develops a consistent 'one house' approach for ESG-related transactions at origination stage, with representatives from across real estate and alternative income investment desks. The aim is to provide a platform for developing deeper knowledge and consistency among deal teams concerning ESG investment risk and impact appetite – an exploration of nascent technologies that are emerging as we transition to a low-carbon economy.

Responsibility built into our process from strategy and origination to reporting

In 2019, we adopted the EU Taxonomy in our investment process to support our origination teams with classifying which activities are environmentally sustainable. This taxonomy is designed to help investors understand whether their money is being used to finance environmentally sustainable activity.

Providers of financial products will have to disclose how they have used the taxonomy in assessing the sustainability of the investments that make up the product, and what proportion of those investments qualify as sustainable under the new rules. Products that have ESG or sustainable features will have to make more detailed disclosures. The long-term and illiquid nature of our real assets investments provide a strong position to support sustainable activities.

Developing impact model to align ESG Social Development



Assessing climate risks and opportunities

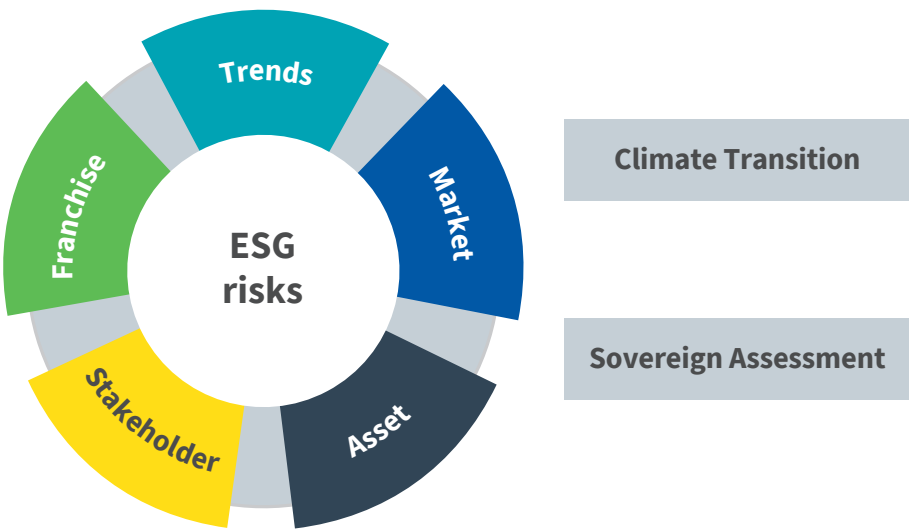
Given the wide range of geographies and asset classes we cover, climate-related transition risks and opportunities are relevant to all our investments in real assets.

Climate transition risks are assessed by our origination teams at the point of origination, where opportunities are sourced from the market and analysed for suitability for clients.

Through the origination process, the team assesses the asset, activity or counterparty involved in the transaction

for exposure to climate transition risk, undertaking a detailed analysis of high-risk sectors such as chemicals, utilities and automotive. This could include assessing the risk of exposure to a commercial office occupier or a utility company seeking funding for investment in a power generation plant. Where transition risk is high, we may seek to mandate an environmental covenant in the transaction agreement or may choose to decline the transaction where transition risk cannot be mitigated.

Holistic and dynamic ESG Scorecard model



Designing sustainable investment solutions that meet client needs

Institutions and individuals will naturally have specific sustainability concerns they want to have considered as part of their investment strategy. For example, some clients want the ability to exclude certain ethically controversial areas such as tobacco or fossil fuels.

Increasingly, clients also have specific sustainable outcomes they want to support. For example, they may want to positively steer their investments towards investments in solutions to environmental and social challenges we face as a society, such as climate change or diversity – and to try to measure the impact their investments are having.

We therefore offer several sustainable funds that are designed to meet client needs for negative exclusions, active ownership and impact measurement on sustainability issues. Our ESG Solutions unit works with clients to create ESG investment strategies to meet their ESG investment preferences, either through pooled funds or bespoke segregated mandates.

These goals, created by world leaders from 197 countries aim to end poverty, protect the planet, and ensure prosperity for all. The 17 goals and their corresponding targets are a call to action for a sustainable and more inclusive future where no one is left behind – and are the milestones marking the path to the future we want.

The transition needed to take the global economy from where it is today to delivering what is needed to meet the goal by 2030 is immense. Everyone needs to play their part – governments, the private sector, civil society and each and every one of us. From an investment perspective this means that every country, sector, industry and company we invest in will change. This transition will bring investment opportunities as we look to back the leaders and those committed to change and avoid the laggards.

The scale of investments required is significant. The UN estimates the gap in financing to achieve the SDGs to be \$2.5 trillion per year in developing countries alone.

The International Energy Agency (IEA) estimates we need US\$1 trillion each year to move the economy onto a net-zero carbon basis. To put this in context, the Marshall Plan to rebuild Europe after World War II cost US\$13.3 billion at the time, or US\$103.4 billion in today's money. Similarly, the Apollo programme cost US\$25.4 billion at the time, or about US\$150 billion in today's terms. In other words, we need to mobilise four times the Marshall Plan plus the Apollo programme each year.

While governments and the public sector will continue to play a key financing role, particularly in the delivery of essential public services, there is greater scope for the private sector to deliver the solutions and investments in many areas of the SDGs to help close the gap. The good news is that global financial assets are sufficient to meet the financing needs of the 2030 Development Agenda, but the challenge is how to channel them into sectors, enhance the risk-return profiles of new and sometimes vulnerable investments, and generate sustained impact on the ground. Much more needs to be done to encourage and enable business to deliver innovative solutions at the scale and pace needed to realise long-term impact.

Our thematic and impact research team work with our investment teams to deliver research and develop investment strategies that can support the transition to a sustainable future based on four pillars – delivering positive change for people, the communities they live in, the planet they rely on and the climate that surrounds us (see figure below: A four pillar plan).

In 2019, our focus was on our climate transition strategy to give our clients a way to deliver performance but also support the transition to a low-carbon economy.

A four pillar plan



Climate change pillar

Interview with Rick Stathers

Senior ESG Analyst



What is the challenge presented by your pillar?

The main challenge is facilitating the pace and scale of action that is required in order to keep global heating to within 1.5°C by 2100. Historically, the global ambition was to keep heating to within 2°C above pre-industrial levels by 2100, but in 2018, the Intergovernmental Panel on Climate Change produced a report highlighting the increase in impacts and risks between 1.5°C and 2°C of heating; underscoring the need to meet the ambition enshrined within the Paris Agreement "...to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius".

Outside of the impacts on society, natural and managed systems is the increasing recognition of the impact on the global economic system, as highlighted by JP Morgan's recent report "Risky Business: The climate and the macroeconomy, 2020".

However, the window of opportunity to limit heating is small, under current rates of emission we have seven to eight years before the 1.5°C carbon budget is exceeded. The transformation required to transition from a high-carbon economy to a low-carbon one is massive, requiring transformative shifts in technologies, economic theory, capital allocation, and stock valuation and selection.

The notable shift in client demand and regulatory pressure is helping to meet this challenge, combined with a growing economic case for low-carbon solutions.

What investment approach does it support?

The climate change pillar supports multiple investment approaches, covering:

- the establishment and evolution of market-leading investment products in the form of our Climate Transition Franchise
- the enhancement of tools for greater integration of climate risks and opportunities into mainstream portfolio management, stock selection and valuation
- active stewardship through engagement and voting practices
- reporting of outcomes

What were your key milestones in 2019?

In 2019, the GRI team and AI made notable advances.

Our voting policy was enhanced to withhold support for the highest-emitting companies not complying with the requirements of the Taskforce for Climate-related Financial Disclosure (TCFD).

We developed a proprietary model (the "T-risk" model) to assess the exposure of 159 sub-industries to the physical and transition risks presented by climate change (to our knowledge the only model of its kind to this level of granularity).

Impact of climate change on GDP

Global mean surface temperature increase °C	No. of estimates	Impact % on level of GDP estimates	
		Average of estimates	Range of estimates
≤2	4	0.3	-0.5 to 2.3
2.5	11	-1.3	-3.0 to 0.1
3.0	9	-2.2	-5.1 to -0.9
5.4	1	-6.1	-6.1
6.0	1	-6.7	-6.7

Source: Tol, R., The Economic Impacts of Climate Change, Review of Environmental Economics and Policy, 2018 in JP Morgan

We also launched a climate transition investment solution in July which is designed to invest in companies that provide solutions to adapting to or mitigating climate breakdown, as well as those in the wider economy that are orientating their business models to be successful in the transition to a low-carbon, warmer world.

We have embedded the T-risk model in the real assets' investment decision process.

What is your objective for 2020?

2020 is the year that global emissions need to peak, our overall objective is to do everything possible to support this, through market reform, continuing the roll out of the climate transition franchise and further embedding climate considerations and performance into our investment process.

For COP26 specifically, we hope to create a collaboration of stakeholders calling for the establishment of an International Platform on Climate Finance.

What challenges will you be facing (depending on the objective)?

There is a long-standing expression within the climate movement “think global, act local” in this case we need to think not only about how to align our investment process with facilitating a 1.5°C future, but also how do we help this happen at a global level. Solving the challenge of our lifetime will require collaboration not just within our four walls, but from all stakeholders in the global economy and the whole planet.

As a society, we have the knowledge to prevent climate breakdown, but do we have the wisdom?

Earth pillar

Interview with Eugenie Mathieu

Senior ESG Analyst



What is the challenge presented by your pillar?

In 2019, 450 scientific experts around the world warned that nature is declining at a rate unprecedented in human history — and the rate of species extinctions is accelerating, with grave impacts on people now likely. Natural ecosystems have lost about half their area, a million species are at risk of extinction, and numbers of wild mammals have fallen by 82 per cent – all largely as a result of human actions, according to the IPBES report⁵. Put simply, the planet is facing its sixth mass extinction, with the current rate of species extinction estimated to be as high as 1,000 times the pre-human rate.

Research⁶ estimates the annual value of ‘ecosystem services’ – the benefits we get from nature – at \$125 trillion, including drinking water, fresh air, heat absorption, forests and oceans, food and pollination. These benefits are either undervalued or not valued at all in business and investment decision-making.

This devastation of nature has been caused mainly by changes in land and sea use, direct exploitation of organisms, climate change, and pollution. High-impact industries include food producers, processors and retailers, forestry, and the extractive sector. The challenge for us as an investor is to identify which high-impact companies are managing their impact and the consequent risks better than others.

In contrast, the conservation, sustainable use and restoration of nature can provide significant business opportunities; the OECD cites long-term viability of business models; cost savings and increases in operational efficiency; increased market shares; new business models, markets, products and services; and better relationships with stakeholders. The global organic food and beverage market, for instance, is expected to grow 16 per cent per year, to reach \$327 billion by 2022.

“Solutions and tools are available to avert the crisis but it requires scaled-up investment flows for conservation and sustainable use of biodiversity, as well as incentives to change the way we consume, produce and dispose of material goods. Above all, it requires a profound change in the fundamentals of growth models and development paradigms to recognise the value of natural capital.”

– The head of the UN Convention on Biological Diversity, Cristiana Paşca Palmer, May 2019

What type of investment approach does the Earth pillar support?

Unfortunately, company reporting on the impact on nature is patchy, not uniform across sectors, and mostly focuses on companies’ own operations rather than the much larger impact of their supply chains. For example, food manufacturers tend to report on the amount of water used and waste produced in their factories/facilities, but not on the area of habitat they have caused to be converted or number of species that have disappeared from the land they buy from.

The real impact indicators are hard to measure, particularly in multi-layer supply chains. Moreover, companies benefit from being able to exploit nature for free, while the externality costs are borne by the local and global population.

Our approach has therefore had to rely more on thematic engagement than on the data-based comparisons we usually make between thousands of companies. Our engagement has focused on trying to limit high-impact activities, such as extracting oil & gas from World Heritage Sites and expanding palm oil plantations into rainforests.

What were your key milestones in 2019?

In 2019, we focused on the issues of deforestation resulting from palm oil expansion, plastic waste, GHG emissions and water use in the fast food supply chain and factory farming. Key highlights were engagement wins with Unilever and Starbucks on plastics, (see pages 54 and 59).

What is your objective for 2020?

In 2020, we introduced the Earth Pillar as a part of our investment approach. We hope to expand our research and engagements in number and depth.

What challenges will you be facing (depending on the objective)?

One particular challenge we face is persuading palm oil companies to achieve better traceability in their supply chain. Hundreds of companies made a commitment to eradicate deforestation from their supply chain by 2020, but not one company has yet succeeded. Many companies still cannot show which specific plantations their palm oil comes from, or where their landbanks are. Until companies can routinely provide this information, the impacts of deforestation are unlikely to change.

Did you know?

The OECD estimates that the world lost an estimated \$4-20 trillion per year in ecosystem services from 1997 to 2011, owing to land-cover change and an estimated \$6-11 trillion per year from land degradation. The costs of inaction on biodiversity loss are high and are anticipated to increase.

Biodiversity and ecosystem destruction can jeopardise the supply chain and operations of businesses. Interruptions to production and distribution of goods and services have surged by 29% due to nature risks⁷.

5. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report on Biodiversity and Ecosystem Services 2019, <https://www.ipbes.net/news/Media-Release-Global-Assessment>. Compiled by 145 expert authors from 50 countries over the past three years, with inputs from another 310 contributing authors, the Report assesses changes over the past five decades, it is based on the review of 15,000 scientific and government sources
6. Costanza Robert et al. (2014), Changes in the global value of ecosystem services <https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/article-costanza-et-al.pdf>
7. Annual WEF Risk Report 2019

Addressing our community pillar through real assets

Supporting communities in infrastructure

This year we have invested over £145,000 in communities surrounding our renewable energy assets throughout the UK. This is delivered through five Community Grant funds associated with our Utility-Scale wind farms, with a total of 42 projects funded this year. Projects can range from sports equipment to machinery and plant to support the maintenance of community assets, and typical grants range from £1,000 to £5,000. In the year, we approved a grant to FOSCOS, The Friends of Southminster Community Open Spaces, enabling the purchase of a memorial bench and tools for volunteers who plant and maintain trees in a forest in Southminster. FOSCOS is an established team of around 16 volunteers who work in partnership with the local parish

and district councils and have previously won a Maldon District Conservation award for their work. In March, we made a grant to Maldon & Essex Lifesaving Swim Club, providing Life Support and basic first aid in schools and clubs within the Maldon District Communities. The club was established in 2008 as a Not for Profit Community Club to support public knowledge of life-saving, life support, water safety, and first aid. The club actively encourages community participation and is particularly keen to educate young people, currently delivering an inclusive programme of life support skills into schools. Our grant contributed to water safety education for 1,000 young people in 12 months.

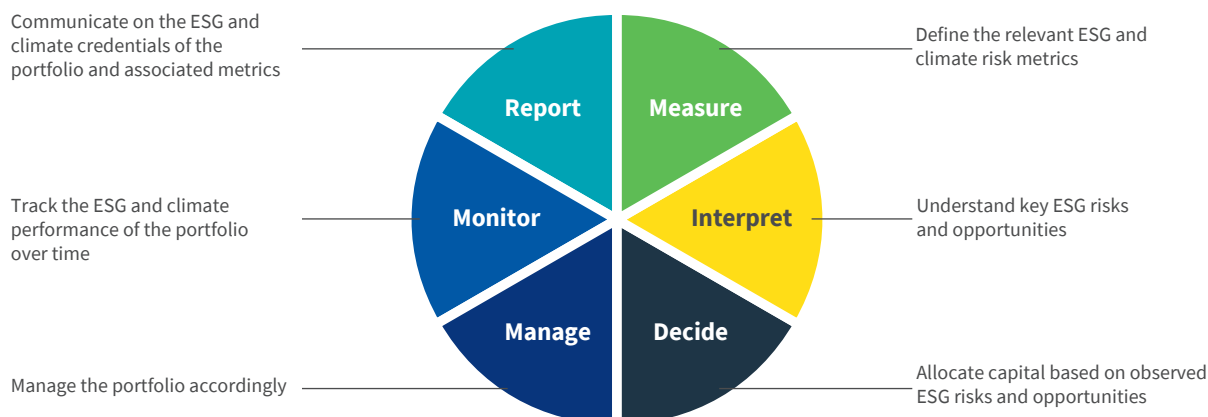
Connecting communities through fibre broadband

The percentage of households benefitting from a broadband connection has soared from 70 per cent in 2009 to 93 per cent in 2019. Despite this high level of coverage, rural communities still suffer from poor connection speeds. The recent Future Telecoms Infrastructure Review demonstrated the Government's intention to connect hard-to-reach rural areas to fibre broadband to address this issue. Higher connection speeds have been proven to benefit productivity in the education sector, removing the barriers to efficient working for teachers and providing access to what is now an essential learning tool for children.

Our investment in fibre broadband through TrueSpeed provides free services to several local schools within its network area. TrueSpeed donates their fibre service free of charge to aid with local education and access to digital infrastructure for rural community schools and their pupils. Schools can access this service free of charge when broadband connections reach 30 per cent in the area surrounding the school. The service comes with no installation fee and provides reliable futureproof broadband for life, helping both teachers and students with faster access to the internet and online services.

Our solution framework

A step-by-step framework to manage ESG and climate risk



An exciting year for Aviva Investors France's ESG team



Interview with Sophie Rahm

Head of ESG - Aviva Investors France

What challenges did you face in 2019 with the French clients?

2019 was a very exciting year for us. There is no doubt that the space of Responsible Investment, and crucially how it impacts the way we manage money, is gathering a lot of momentum locally. We received a lot of ESG queries from our clients, especially from our main internal client Aviva France. In 2019, Aviva France embarked on a profound transformation to modernise its product offering, and ESG considerations were at the core of this enterprise. Therefore, we continued our efforts to have more and more SRI funds available for end clients, and launched two thematic funds; one focused on the transition to a lower carbon world, the other looking to allocate capital towards companies positioned favourably with regards to the Sustainable Development Goals (SDG). The regulatory context across Europe and in France particularly, most notably via the requirements of Article 173 of the French Energy Transition law, as well as a rapidly evolving 'green finance' landscape at the European Union level means we have had to be agile and flexible in delivering for our clients. More recently, we have also been busy exploring how ESG data points can inform traditional financial solutions tailored for insurers. The challenges have been numerous, but they have also given us the opportunity to be creative and work in close collaboration with our clients as well as our investment teams.

How did you manage to meet their needs?

The Aviva Investors France's ESG team working closely with the Global Responsible Investment Team was front and centre of Aviva France's project to redefine its product offering, in full alignment with its objectives as a responsible insurer. The 'Aviva France Solutions Durables' offer launched in April 2019, of which AIF was an essential component. This was a major piece of work for us, and given the extent of the project, our team expanded significantly, with now three full-time staff members since March 2019. There was a demand for more products tilted towards ESG, and therefore I have mobilised my team and others on two thematic flagship products, both of which

garnered strong support from Aviva France. A series of recent surveys had shown that end clients were getting more and more aware of the ecological and social nature of megatrends (climate transition, biodiversity, social justice, well-being, etc.). Our job was to offer the possibility to end clients to express such concerns financially, by investing either in SRI funds or recently launched thematic funds. Demands from retail clients were a strong driver of our activity in 2019. More generally, institutional investors have grown keener and keener to understand how we integrate ESG into our investment decision-making processes. The investment teams at Aviva France have also challenged us continuously on both integration and reporting, with the aim to gain further insight on how its own ESG strategy can be adjusted and stick more closely to its ambitions.

What are your objectives for 2020?

As much as 2019 was focused on products, 2020 will be about ensuring more and better ESG integration throughout our investment proposition. It is crucial we continue to embed ESG at the core of our investment decision-making practices. Therefore, we are probably going to see less product activity; we will be working a lot more with internal stakeholders, optimising our systems and processes to make ESG considerations a new normal in the way we invest.

On Aviva France's side, our main interlocutor will be the investment team and the Chief Investment Officer that will drive us in its ideal direction. On Aviva Investors France's side, it will mean us working hand in hand with fund managers, analysts, IT, marketing, communication, and products to a certain extent. Our mission will really be about embedding ESG risks and opportunities analysis into the way we decide on our investments. This is already happening, and I expect the ramp up to continue in 2020. My main objective is really putting our fund managers in a position to be as ESG savvy as they are financially savvy.

UK Life

Interview with Jason Bullmore

Investment proposition lead,
UK savings and retirement

How strong are the ESG demands from your clients and have they increased over recent years?

There is growing recognition that incorporating ESG factors alongside active ownership are key to delivering a successful investment strategy, ultimately helping to improve outcomes for workplace pension scheme members. There is increasing government and regulatory focus on ESG issues, for example from October 2019 trustees have had to revise their statement of investment principles (SIP) to show how ESG factors are taken into account within their investment strategy, while Independent Governance Committees (IGCs) are now required to report on provider's ESG policies. Alongside this, scheme members, who have historically not shown high levels of engagement with their pension, are showing greater interest in how their provider is addressing ESG-related concerns.

To what extent are ESG considerations incorporated into the solutions you provide to your clients?

Within our default investment solution range, ESG considerations and baseline exclusions are integrated throughout the construction and the ongoing management of the solution. This solution benefits from the combination of multi-asset fund management, ESG research and strong active ownership practice within Aviva Investors.

Aviva Investor's internal proprietary ESG score is a critical component of our ESG integration approach. This ESG research is integrated within this default solution, which is structured as a fund of funds investing in a combination of both actively and passively managed funds, as follows:

- Actively managed components: ESG considerations are assessed by the portfolio manager before taking investment decisions and for ongoing risk management.
- Passive regional equity components: we tilt the indices to companies with higher ESG scores, based on a proprietary ESG score, by discarding those ranked in the lowest 10%.
- Active Ownership: we exercise our voting rights and engage companies to press for change and encourage more progressive ESG corporate practices over time.
- Exclusions: we exclude companies in line with Aviva Investors' baseline exclusions on controversial weapons and also, a set of companies involved in coal extraction and power generation which have 'failed engagement'. We engage on a variety of topics with companies which may be materially impactful for the company valuation. For a selected number of sectors, including coal, we take an engage and divest approach which means that a, 'failed engagement' situation may arise where Aviva Investors have engaged with companies and fail to see the company adequately addressing those issues over a given timeframe.

How does UK Life plan to contribute to peaking emissions in 2020? Is climate an integral goal to the solutions you offer to your clients?

Aviva understands the importance of peaking emissions and meeting 2.1°C of the Paris Agreement. As the manager of a significant proportion of Aviva UK Life's assets, Aviva Investors focus their engagement-led divestment approach on climate change, with emphasis on companies producing the highest carbon intensity fossil fuels, coal and tar sands.

Since 2015 Aviva Investors on behalf of Aviva shareholder funds have been continuously engaging with 40 companies that derive a significant proportion of their revenue from coal mining or coal-fired power generation.

Following this engagement programme:

- 10 companies have made some form of commitment to no new coal capex and five companies have either set or committed to set a science-based target to reduce their greenhouse gas (GHG) emissions.
- 18 have been placed on our Stop List, with no further investment permitted.

In 2019, Aviva Investors extended this engagement to a further group of around 100 coal companies, focusing on those with over 30 per cent revenue from coal activities, asking them to:

- Commit to no new capex on coal.
- Make a public commitment to the Paris Climate Agreement goal of keeping the global temperature increase below 1.5°C.
- Set a science-based target (SBT), which is an externally vetted target, to reduce GHG emissions in line with the Paris Agreement.

In 2020 we plan to update our climate change engagement approach further and will be publishing details in due course.





Powering change

As an active owner with scale and global reach we use voting, engagement and market reform to drive a transition to a sustainable future.

We have conviction in acting, advocating and leveraging influence to deliver change with and on behalf of our clients. We take our role as an active steward very seriously. Our focus is on engagement, voting and market reform to generate outcomes that benefit our clients as well as the broader economy, the environment and society as a whole.

Stewardship means taking responsibility for something entrusted into your care. That means monitoring, engaging, and, where appropriate, intervening on matters that can have a material impact on the long-term value of our clients' investments – issues such as board diversity, human rights abuses and greenhouse gas emissions. Whether it is a company or a real asset project, we use our expertise and influence to promote good practice, gain insight, reduce risks and spot opportunities.

Being a responsible investor means recognising that sometimes it's not enough to just engage with a company or a project in isolation. We operate in a market that's imperfect and full of failures. All too often the true cost of running a business, such as emitting carbon, is not something the company has to pay for themselves. Unfortunately, that makes it easier for investors and companies to make short-term decisions that can harm investment returns and our society in the long run. Yet policy makers and regulators play a critical role in defining the framework within which companies and investors operate. We are proud to have led and worked on several reforms and initiatives at a local, national and international level to create more sustainable financial markets.

See page 76, *Aviva Investors Stewardship Code*.

Driving change with companies we invest in through voting

Voting is a crucial part of the investment process and we have had a formal and considered voting policy since 1994. We have explicitly incorporated corporate responsibility disclosure and performance into our voting since 2001; being one of the first asset managers to do so globally. Our Corporate Governance and Corporate Responsibility Voting Policy is reviewed annually and signed off by the Aviva Investors and Aviva Group Board.

Throughout 2019, we voted at 5,382 shareholder meetings representing 96 per cent of meetings where we had the legal right to. Unvoted meetings were primarily due to additional costs associated with legal and administrative processes in certain jurisdictions which outweighed the benefits to our clients of casting a vote.

We vote against items where we feel the specific proposals are not in the best interests of our clients; where we have wider concerns with individual directors, strategy, oversight and reporting; or to reflect disappointing outcomes from prior engagements. In 2019, we voted against (or abstained on) 14,578 management proposals (24 per cent) and supported 462 shareholder resolutions (54.8 per cent).

Our 2019 voting statistics – key numbers

- Voted on **61,876** resolutions at **5,382** shareholder meetings
- Voted against **24** per cent of management resolutions including **46** per cent of pay proposals
- We have seen a **substantial increase in voting in Asia**. This is primarily driven by the additional meetings in the Chinese market following the admission of the A shares to the investable indices

2019 voting activity by issue

	Total Number of Resolutions	Per cent Non Support
Directors	27,061	28%
Remuneration	6,411	46%
Auditors	4,350	25%
Shares Issues/ Capital Related	8,356	17%
Report & Accounts	3,808	5%
Related Party Transactions	1,955	20%
Takeover/Merger/Reorganisation	727	19%
Anti-takeover Measures	81	28%
Shareholder Resolution	843	44%
Shareholder Resolution (Supported by Management)*	997	10%
Other	7,287	9%

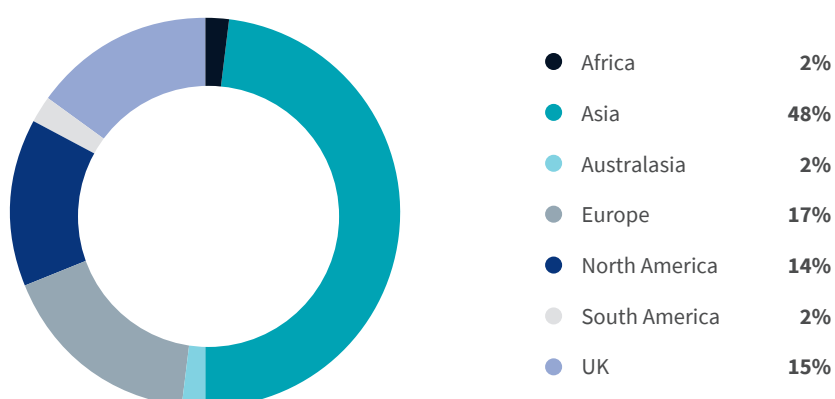
* These are resolutions proposed by shareholders in the Chinese market which are typically “management” resolutions

Source: Aviva Investors (Saleslogix) as at 31 December 2019

2019 voting activity by type

	Total Number of Resolutions	Number of Supports	
Shareholder Resolutions	95	31	32.6%
Environmental	29	27	93.1%
Environmental & Social	147	128	87.1%
Social	460	248	53.9%
Governance	112	28	25.0%
Miscellaneous	843	462	54.8%

2019 voting activity by region



Pay-Related Resolutions – Global

Remuneration Proposal	Number of Resolutions	Against/Abstentions
2019	6,410	46%
2018	5,357	50%
2017	5,796	44%
2016	4,857	49%
2015	4,766	41%
2014	5,046	41%

Source: Aviva Investors (Saleslogix) as at 31 December 2019

Embedding sustainability in our voting: Focus on climate change

We will consider not supporting the report and accounts or individual directors where we have concerns in relation to a company's practices against sustainability global standards.

All companies are exposed to ESG risks and opportunities, as well as having a direct impact on stakeholders and the environment. The extent to which these issues are understood and managed determines the sustainability of a company's business model. As part of our process in evaluating and measuring a company's commitment to global standards on business practices, we will refer to the UN Global Compact Principles on Human Rights, Labour Standards, Environment and Business Malpractice. We will also assess how companies manage climate change risks. We refer to and incorporate the findings of key global initiatives, which measure and track companies' performance against significant sustainability initiatives. These include the Corporate Human Rights Benchmark (CHRB), as well as the World Benchmarking Alliance (WBA). In addition, we are likely to take voting action as an escalation of a failed engagement on sustainability issues.

We have committed to:

- **Vote against companies on the list of Climate Action 100+ that do not have a science-based target.**
- **Vote against companies as an escalation of a failed engagement on sustainability issues, including climate change.**
- **Support climate resolutions that would improve a company's climate risk management and disclosure and help better position the company compared to peers against climate.**

Shareholder resolutions

We actively consider the merits of all shareholder resolutions as part of our voting policy. Sometimes, we are part of the shareholder group that has filed the resolution, sometimes led by civil society organisations and often in collaboration with other investors. We will typically support climate-related shareholder resolutions that would improve a company's climate risk management and disclosure and help better position the company compared to peers.

Large emitters

We have been members of Climate Action 100+ since its launch in 2017. The investor initiative aims to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. More than 370 investors with over \$35 trillion in assets collectively under management are engaging companies to: curb emissions, improve governance and strengthen climate-related financial disclosures. The companies include 100 'systemically important emitters', accounting for two-thirds of annual global industrial emissions, alongside more than 60 others with significant opportunity to drive the clean energy transition.

It is clear that companies must be bolder in their climate ambition and outline a clear and accelerated pathway to net-zero emissions. This should include the setting and disclosing of science-based targets and enhanced reporting against the Taskforce on Climate-related Financial Disclosures (TCFD) framework. This will enable us as investors to model the viability of businesses under different climate scenarios and rebalance our portfolio exposures accordingly.

Ultimately, companies have a responsibility to manage climate risk. We would expect these companies, and certainly those that are the largest emitters, to have set a science-based target by now. We will be holding these companies to account by withholding support at their R&A resolution or director elections where they have not made sufficient progress.



VOTING CASE STUDY

Supporting shareholder action to end climate-obstructive trade associations

BHP Group

2019 saw the issue of corporate climate lobbying rise to the top of the investor agenda. The impacts of anti-climate lobbying are far-reaching in their regulatory, economic and reputational consequences and risk derailing progress towards the Paris goals and an orderly transition to a net-zero world.

Lobbying is becoming more sophisticated, as evidenced by the \$5m sentiment campaign developed by the Minerals Council of Australia (MCA) and Coal21 that targeted specific segments of the male and female voting public to change their sentiment towards coal.

The issue is particularly pertinent in the Australian context, where extreme physical climate impacts in the form of a prolonged heatwave and extensive bushfires meet political rhetoric steeped in denialism. The role and influence of corporate players in either supporting or obstructing meaningful climate policy thus deserves particular scrutiny. As the world's biggest mining company, BHP's influence on public policy is likely to be material. In 2019, we supported a shareholder resolution asking the company to consider terminating its membership of industry associations whose record on climate change and energy-related advocacy is inconsistent with the Paris Agreement's goals.

While BHP stands out as a leader in its sector for its commitments to adapt its business model, there remain material differences between BHP's public position on climate change and those taken by some of its trade associations, notably the MCA and the Business Council of Australia (BCA). We had numerous interactions with both the company and the Church of England Pensions Board, one of the co-filers of the resolution. This enabled us to form a balanced, informed view on the merits of the proposal.

Conducting multiple engagement is resource intensive. However, when it comes to high profile issues and where we have significant exposure, it is critical to the investment process. At the BHP AGMs in October (for UK shares) and November (Australian shares), we therefore supported a shareholder resolution asking the company to consider terminating its membership of industry associations whose record of climate change and energy-related advocacy is inconsistent with the Paris Agreement's goals. This vote mattered, particularly against the backdrop of Australia's own climate stance. Australia's emissions have increased around one per cent each year on average since 2014.

In developments over the last year, the Australian government dismissed findings of the IPCC, discontinued its funding to the Green Climate Fund (GCF), and ignored the call by the UN Secretary General and its Pacific Island neighbours to increase its climate action. The Australian bushfires that started in mid 2019 will only increase the pressure on government and companies to do more.

Conclusion

Although the resolution did not pass, the 27 per cent of votes that were cast in favour of the resolution have sent the BHP Board a very clear message. As a result of the level of support for the proposals, BHP made public commitments to strengthen the governance and oversight of the associations it belongs to in the future.

The company subsequently undertook a review of its industry association positions on climate and energy policy and disclosed the results of its review at the end of 2019. The review concluded that BHP had "material differences on climate and energy policies" with four trade organisations out of a total of 30, which include the NSW Minerals Council, the US Chamber of Commerce (the Chamber), the Mining Association of Canada (MAC) and the American Petroleum Institute (API). The company announced it would remain a member of the MCA, given the "high-level benefit BHP derives from membership".

The company has stated that membership of industry associations enables it to lead and influence the development of improved environmental standards which it would not be able to replicate in isolation (e.g. carbon capturing storage is critical for meeting Paris goals which is at the heart of Coal21 purpose). However, it has also hinted that it may instead need to work with groups of different companies on specific issues if they continue to lobby. BHP's new Chief Executive Officer (CEO), Mike Henry, has so far declined to confirm whether the company will address shareholder concerns and leave the Minerals Council of Australia (MCA) over its position on global warming. This vote is likely to be a springboard to establish a new global lobbying standard.

ShareAction recently recognised us for our work and voting record on shareholder resolutions in their report measuring how asset managers use their votes for climate action. <https://shareaction.org/wp-content/uploads/2019/11/Voting-Matters.pdf>



VOTING CASE STUDY

Improvements but still a long way to go on corporate governance

Large Japanese companies

Since the introduction of the Japanese Corporate Governance Code in 2015, there has been a significant improvement in board independence. However, the next challenge in Japan is how to reflect and improve gender diversity on boards. Despite the government's effort to facilitate this, analysis shows that only 10.5 per cent of board members at TOPIX 100 companies are women; progress is significantly lagging most other countries.

We look for diversity of thought on boards and view diversity through a broad lens, including gender, ethnicity, nationality, skills and experience.

Inclusive and diverse boards are better able to understand their customers and other stakeholders and benefit from fresh perspectives, new ideas and vigorous challenge. Simply put, diverse boards are more likely to be more effective boards and in turn lead to strong performing companies. When it comes to steering our ongoing ESG-related efforts, gender diversity on boards is an increasingly important investment criterion and a key consideration when evaluating corporate governance practices.

Earlier this year, we updated our voting policy to express our concern at the weak representation of women in board positions in Japan. For large Japanese companies (e.g. listed on Nikkei 225, TOPIX 500 and JPX Nikkei 400), we voted against the top executives of the board where no females are represented on the board. In 2019, this resulted in us voting against the re-election of 230 executive directors. We also exceptionally supported top executives to reflect where we would like to see further improvements (only one female director). To support our understanding, we have also engaged directly with companies in this area including SoftBank, JFE Holdings, Kansai Electric, and Tokyo Electric Power.

Conclusion

We will continue to focus our voting and engagement to improve gender diversity in the coming years (particularly in light of Japan's enactment of the Female Employment Promotion legislation) and will continue to hold boards to account if insufficient progress has been made.



VOTING CASE STUDY

Executive pay

Micro Focus

Our vote against Micro Focus' remuneration report at the company's 2019 AGM contributed to the resolution being voted down by shareholders. In response, the company acknowledged the concerns raised and committed to undertake a thorough review of compensation with the objective of putting a new policy to shareholders at the 2020 AGM.

Shareholder discontent focused around the company's decision to give management an additional year to hit Total Shareholder Return (TSR) performance targets under the potentially very generous Additional Share Grant (ASG) plan. The reason for the time extension was due to the challenges of the integration of the Hewlett Packard Enterprise acquisition which impacted profits and share price.

A few months before the AGM, we met with the company to discuss the rationale for the decision. We became more comfortable as the company confirmed that the TSR targets were still coming off the original share price reference point and, as such, if met would mark very strong performance. Hence, our decision to vote against was not because the board was effectively giving management another chance to achieve the targets (which if met will result in the vesting of substantial awards), but as the company continued to also grant additional share awards such as LTIP awards at 200 per cent of salary to the Executive Chair and CEO – this in our view was totally inappropriate. We also had concerns over the stretch of the earnings per share (EPS) targets, the bonus levels (being 76 per cent of maximum) and the generous salary positioning, given the performance of the business and the generous variable pay opportunity.

In addition to the reputational damage for the company in not obtaining support from its shareholders regarding the decisions made for the year, such decisions highlighted the lack of understanding of shareholder sentiment and the alignment of pay with performance. Another concern was that management may be incentivised to prioritise short-term performance over the long-term sustainability of the business.

Conclusion

The company wrote to us and other shareholders later in the year proposing changes to executive pay including the removal of future ASGs from the policy and a two-year deferral for vested LTIP awards. The company also proposes to require shareholding requirements to apply two years' post-employment and to align pension contribution rates for directors with the workforce. Had the company consulted shareholders properly before the 2019 AGM, it would have avoided shareholder discontent. However, we welcome the way the company has since responded and the proposed changes will ensure a much stronger alignment with shareholders and employees.

**VOTING CASE STUDY****Holding the board to account (valuation still has a governance discount)****Ryanair**

We are strong supporters of Ryanair's business model which has delivered high returns to shareholders over the last decade. However, we have material concerns with the governance of the business which has allowed for a fundamental breakdown of relationships with a large number of employees resulting in significant disruptions to operations. We again held the board directors accountable.

Concerns have, in part, been attributable to a board characterised by numerous factors compromising the independence of directors, including commercial links with the business. This has led to questions on the extent to which the board has been able to provide objectivity and a robust oversight of management. At the 2019 AGM, we voted against the re-election of both the long-serving chairman and the senior independent director, and in fact all the other non-executive directors. During the year, share option awards were made to the non-executives meaning we no longer class any of them as independent. In addition, we voted against the remuneration report because the CEO received an award of around €111 million without a clear rationale and we view the awards as excessive. There also continues to be poor disclosure on the arrangements.

Conclusion

Almost 50 per cent of shareholders also voted against the remuneration arrangements, 25 per cent voted against the chairman and 30 per cent voted against the chairman of the remuneration committee.

We note that in February 2019 the company announced that both the long-serving chairman and the senior independent director will step down by, or at the September 2020 AGM. In order to ensure a smooth succession, Stan McCarthy who joined the Board in May 2017, will transition to Chairman of the Board in summer 2020. Further, Louise Phelan (already a non-executive director at Ryanair) will become senior independent director. These changes represent a significant milestone for the company which we hope will help improve the company's relationship with all its stakeholders.



VOTING CASE STUDY

Voting with conviction

BP

We consider voting to be an important part of the investment process and have had a formal and considered voting policy since 1994. We have explicitly incorporated corporate responsibility disclosure and performance into our voting since 2001 – being one of the first asset managers to do so globally.

Aviva Investors, in collaboration with Hermes EOS, and Legal & General filed a shareholder resolution in May 2019, asking the management of BP to provide clarity on how the company's strategy is consistent with the goals enshrined in the Paris Agreement. In so doing, the resolution required the company to include in its corporate reports (1) how it evaluates consistency of each new material capex investment with the Paris goals (2) to review its financial and non-financial performance metrics and targets to ensure that these reflect the aims of the Paris climate agreement and (3) to report on progress against on an annual basis.

The most important strategic conundrum facing the oil and gas industry today is climate change. The science makes it undeniably clear; greenhouse gas emissions are caused by human activity, including the burning of fossil fuels. Recognition of this reality thus requires fundamental changes to our energy system if we are to meet the Paris goals of limiting global heating to "well below 2°C". Companies, such as BP, sit at the core of this conundrum, but could potentially offer the right solutions in advancing a transition to a low-carbon future. The oil and gas industry can make or break the goal of the Paris Climate Agreement and investors therefore need to understand to what extent oil companies are misallocating capital for green or brown field growth projects whose economics are at risk under different lower carbon scenarios. To mitigate this risk, shareholders need assurance that firms have a long-term transition strategy to diversify their business lines.

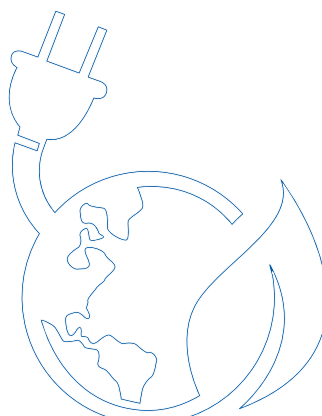
BP's limited climate risk disclosures in the past have made it difficult for investors to either confirm or deny the company's alignment of its hydrocarbon investments with the Paris Agreement. Although BP is boosting investment in its renewable energy business, it is also planning on expanding oil and gas production. The resolution, which Aviva Investors co-sponsored with Hermes and L&G, requires the company to evaluate whether each new fossil fuel project is consistent with the Paris Agreement. It aims to keep the rise in global temperature this century well below two degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The resolution was driven by a concern the company was disclosing insufficient information to enable investors to appraise whether its strategy – particularly those planned investments in fossil fuel reserves – was consistent with the Paris goals being met. That was in turn making it difficult to weigh up the long-term investment case.

In the course of many months leading up to the AGM, Aviva Investors engaged with BP's senior leadership team on the precise requests of the resolution with the aim of securing the support of the company's management.

Conclusion

The climate resolution, proposed by Aviva Investors alongside members of investor group Climate Action 100+ and backed by the BP board, was passed with 99.14% of the vote at BP's annual general meeting. This marked an unprecedented level of shareholder support for a climate-related resolution and signalled a clear demand for greater disclosure about how BP intends to align its business with the Paris climate goals. The challenge now upon BP is to demonstrate to what extent its capital expenditure falls in line with what the Paris Agreement dictates and how it assesses the strength of its targets and performance indicators to achieve this. Aviva Investors, in collaboration with CA 100+ investors, has since further engaged the company in implementing the demands set out in the resolution and will continue to do so.

The climate resolution, proposed by Aviva Investors alongside members of investor group Climate Action 100+ and backed by the BP board, was passed with **99.14%** of the vote at BP's annual general meeting.





VOTING CASE STUDY

AGM with activist proposals

Hyundai Motor Company

An activism campaign in Korea where we chose to support Hyundai – we highlight our role as being a long-term steward of the company and incremental governance improvements in the company management.

At the 2019 AGM, activist investor Elliott put forward a range of proposals to boost shareholder returns and install new non-executive directors for Hyundai Motor Company. This followed an EGM in 2018, where Hyundai Motor Group's plans to restructure and solve circular ownership were shelved as a result of investor dissent (including our vote against). We discussed the 2019 proposals with Elliott and decided not to support the one-off special dividend pay-out proposal as we felt that the levels were too excessive. We were cautious that there are potentially high levels of disruption in the industry in the foreseeable future, which may require significant investment over the coming years.

As long-term investor, we want to ensure that Hyundai remains able to compete within the industry. Hence, while we were in favour of better capital allocation decisions and better management of the company's balance sheet, we would not like to leave Hyundai potentially handicapped as we enter into this phase of change. Although only Hyundai nominations were elected, we nevertheless welcomed fresh board oversight which will be important to the delivery of the company's trajectory towards a greater focus on shareholder returns and corporate governance. We also subsequently engaged with Hyundai to highlight our continued concerns.

Conclusion

As a result of our 2018 and 2019 engagement and voting, we are seeing a number of positive governance changes at Hyundai. This includes greater board independence as well as stronger diversity (through international experience) on the board. During the activism campaign we chose to support Hyundai. We see our role as being a long-term steward of the company, and we were concerned that taking such a large dividend from Hyundai would jeopardise its ability to compete; the auto industry is facing major challenges in the form of the evolution of autonomous and electric vehicles. However, Hyundai still faces the greater challenge of revamping its ownership structure and we will continue to engage them on this.



VOTING CASE STUDY

A mix of encouraging best practice disclosure in South Korea and demonstrating voting action on Com2uS

Com2uS

Poor financial disclosure is a systemic issue among South Korean companies; something particularly evident among small-cap companies. This is an issue where we routinely exercise our vote against as effective financial and remuneration disclosure is a core governance practice.

In the lead up to the AGM, it is important that shareholders are given vital financial information in order to conduct a thorough analysis of the company's financial position. In Korea, we often see companies failing to disclose an auditor's report with its meeting circular. Audited reports are important as they give a true and fair view of the state of financial affairs. We feel that companies should disclose such information in a timely manner so that shareholders can make informed decisions on voting matters ahead of the AGM.

During 2019, we voted against a number of Korean companies to voice our concern over timely financial statement disclosure. One particular case concerned Com2uS, a Korean game development company, where we identified the need to both engage and vote in relation to these issues.

Through our engagement with Com2uS we were able to highlight the underlying issue that shareholders were not given sufficient time to review the company's financial statements – a core consideration in relation to governance. The company acknowledged the issue and sought to improve timely disclosure in the future.

Conclusion

As an outcome of our engagement and voting, the company has undertaken a commitment to review how financial statements can be disclosed in a timely manner prior to the AGM.



VOTING CASE STUDY

Aligning remuneration with strategy at Carrefour

Carrefour

Carrefour has been undergoing a transformation plan and engaging with shareholders in the process to understand their expectations on governance implications. They have improved in aligning remuneration with shareholders' interests.

Early 2018, Carrefour presented its five-year transformation plan, "Carrefour 2022", focused on "adapting its model and organization to become the world leader of the food transition for all".

This ambition, based on four pillars, includes several key factors for success including investments in digital, expanding its private label and developing its organic offer as well as a cost reduction plan and reduction of certain stores' footprint, in order to improve competitiveness. We welcome and support this plan. This emphasises the future improvement of cash flow generation.

Alongside the transformation plan, Carrefour improved its approach to dialogue with shareholders to better understand their expectations around governance. We expect executive incentivisation to be linked to the transformation plan.

One of our primary concerns when evaluating companies is a clear alignment between strategy, value creation and pay outcomes. In the case of Carrefour, the most important metric we therefore expected to see underpin the plan was free cash flow. We were pleased to see this criterion within the annual bonus. However, at the 2019 AGM, we were unable to support the remuneration resolutions because some concerns remained around the challenging nature of some criteria as well as disclosure.

Conclusion

Carrefour was successful in incentivising the CEO in line with the transformation plan and strategy. We were unable to support the remuneration proposals as we have identified several areas of improvement.



VOTING CASE STUDY

Pushing for equal pay in the US with Microsoft

Microsoft

Pay equity is a hot topic worldwide. Investors are taking action in the US by demanding that companies report median pay gaps.

According to the US Census Bureau, women earn 82 cents for every dollar earned by men. The Institute for Women's Policy research projects that, at the current rate of progress, pay equity will be achieved in 2059. US companies have started reporting the equal pay statistic, that is statistically adjusted, looking at men and women's pay for performing similar jobs. However, the company defines what it considers to be an "equal job" which results in the equal pay for equal work statistic not always being a transparent and comparable statistic across time and organisations. As pay inequity has significant implications for investors, investors demand companies report median pay gaps.

There were 28 shareholder proposals filed in the US in 2019 asking for more transparency about the gender pay gap, of which 13 went to a vote (the remaining were withdrawn after reaching agreements).

More specifically, the shareholder resolutions were requesting a report on the median gender pay gap, emphasising the difference between reporting an equal-pay statistic versus a gender pay gap. We supported all 13 proposals, which received a median support level of 25.8 per cent. Shareholders targeted several companies within the technology sector where diversity concerns remain. Microsoft had its first resolution on the matter at their 2019 AGM. Microsoft started reporting on pay equity back in 2016, on both gender and ethnic minorities, but controlling for job titles and level. This equal pay statistic does not reflect the same issues as the median gender pay gap.

Conclusion

We supported a shareholder resolution filed at Microsoft asking to report the global median gender pay gap including associated policy, reputational, competitive, and operational risks, and risks related to recruiting and retaining female talent. We believe that by reporting the median gender pay gap, companies help shareholders better understand the impact of diversity initiatives on representation and equity. The resolution received 29.5 per cent support.

**VOTING CASE STUDY****Governance crisis at
EssilorLuxottica****EssilorLuxottica****Shareholders challenge EssilorLuxottica's boardroom
war by proposing independent members.**

The merged eyewear giant EssilorLuxottica, created in 2017 from one of Europe's largest ever cross-border mergers, has seen some significant tensions emerge between France's Essilor and Italy's Luxottica. We had outstanding concerns regarding the merger governance agreement, which resulted in the founder and executive chairman of Luxottica and Essilor CEO sharing power for the first three years. This structure is mirrored at board and committee levels, represented by an equal number of members from each entity. We consider this structure as inefficient and potentially ineffective.

Having engaged with the company, we were concerned that the two companies were still operating separately. Other barriers included the cultural differences as well as the significant ownership of Luxottica's CEO through Delfin. This year's AGM saw two independent shareholder resolutions to appoint independent members to the board, filed by a group of shareholders.

Conclusion

After participating on a call with the proposed directors, we decided to support their election. These two resolutions did not get majority support as they received circa 44 and 34 per cent each from shareholders but considering the quorum and Delfin's voting rights, we consider the results have given a clear signal to management that the current governance deadlock is not sustainable and that the market expects more focus on appointing independent leadership and oversight.

Driving changes with companies we invest in through engagement

Engagement is a vital part of our investment process across a range of asset classes.

We use our influence through engagement and voting to promote sustainable business practices, gain insight and reduce investment risk. And we're not afraid to call out bad performance.

Our approach to engagement, including how we escalate concerns, is set out in our Stewardship Statement. Engagement routinely takes the form of meetings or calls with the board or senior sustainability executives. We set out clear objectives for engagement and follow-up where it is appropriate. Engagement outcomes are registered in our database, reflected in our voting and feed into our proprietary ESG Heat Map. For active holdings, engagement is undertaken in close co-operation with the investment teams who often lead on engagement meetings and key conclusions from company engagements are fed back to fund managers through weekly meetings.

Effective engagement is resource intensive and prioritisation of efforts is key. We use our ESG Heat Map as well as sector-specific research to help identify areas of greatest concern and overlay considerations, such as the size of our holding, thematic priorities, AGM-related priorities and event-triggered engagement. We draw up engagement plans annually, with progress reviewed and assessed on a quarterly basis.

In 2019, we undertook 3,122 company engagements with 2,149 individual companies. Engagement intensity ranges from a single letter to multiple meetings.

Above and beyond the engagements highlighted above, we also participated in a further 1,276 collaborative letter-based engagements, addressing topics such as climate disclosure and human rights.

Active engagement and collaboration with other investors is an important, if not essential, requirement for being able to exercise appropriate influence at companies when this is required. By sharing information or areas of concern regarding companies, not just in times of stress but also in normal times, it is possible to identify potential issues or risks. We therefore meet regularly with other investors to discuss developing concerns about the way companies are run and to discuss how investors can collectively work to persuade companies to improve practices.

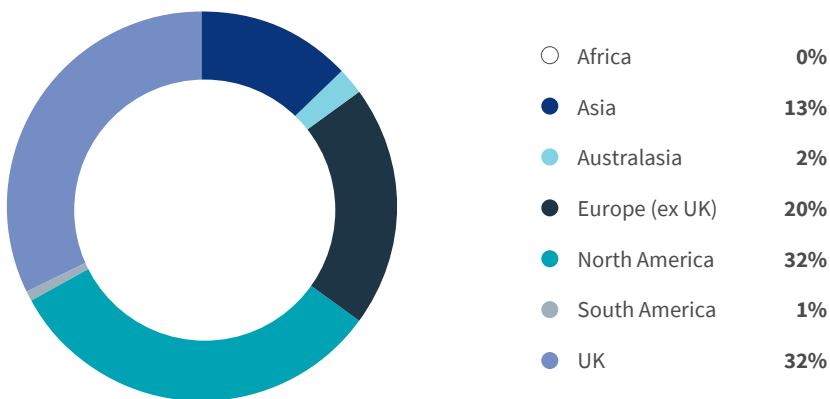
For us, this is equally as important as the collaboration that takes place during a period of crisis. This is why we are founding members and active participants in a number of UK and international investor networks and forums, including the UNPRI and the UK Sustainable Investment and Finance Association. These networks facilitate discussion and sharing of information and individual institutions may decide to work collaboratively when appropriate.

Our 2019 engagement statistics – key numbers

- In 2019 we undertook **3,122** company engagements with **2,149** individual companies to identify and reduce ESG risks in our portfolios.

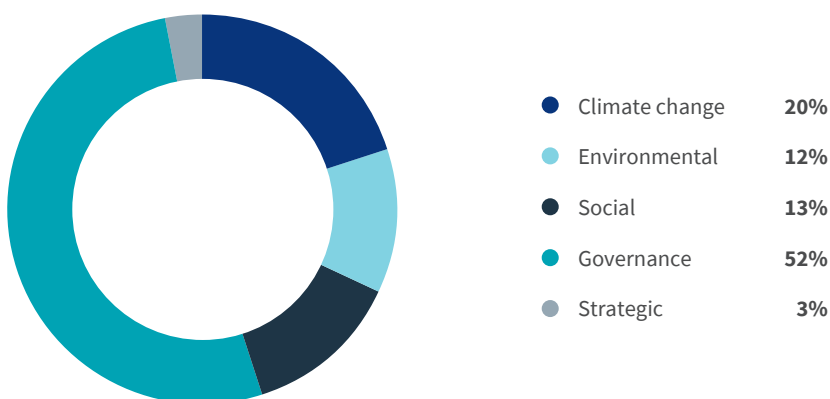
Aviva Investors (Saleslogix) as at 31 December 2019

Engagement by region



The data in chart above is based on substantive engagements.

Engagement by category



The data in chart above is based on substantive engagements.



ENGAGEMENT CASE STUDY

Protecting human rights through the power of benchmarks

CHRB

We created the Corporate Human Rights Benchmark in 2013 with a view to use the competitive nature of markets to challenge companies to embed human rights in their organisation. Six years on, the benchmark is widely supported by companies, governments, investors and civil society. This is our update for 2019.

The Corporate Human Rights Benchmark (CHRB), founded significantly due to Aviva's thought leadership and funding is a free and publicly available benchmark which ranks companies in the agriculture, apparel, and extractive sector on their human rights policy, practice and performance. We use the benchmark as a measure to identify human rights risks and guide our human rights investment strategy. In 2019, we set out to engage with targeted companies based on the 2018 CHRB results with two main objectives. Firstly, to raise awareness of the benchmark and set out investor expectations on human rights. Secondly, to influence change within targeted companies. We also updated our voting policy to vote against the boards of companies that scored poorly.

Along with investor allies, APG and Nordea, we wrote a letter to the 101 companies ranked by the benchmark. The letters either praised good performance to reinforce positive behaviour or flagged poor performance. Both iterations invited companies to have dialogue with investors on the issues highlighted.

Between the ally coalition we were able to engage with nearly 50 companies on these results, mostly with positive success. Aviva Investors engaged directly with 13 companies. Of these we received responses from 10 companies and held in-depth follow up meetings with investor relations and sustainability teams of five companies; Anglo American, ENI, General Mills, Kraft Heinz and Tesco.

Aviva Investors also voted against 40 low scoring companies across all global regions. Votes against were filed against either the director most responsible for human rights, discharge of the board or the reports and accounts. Companies targeted ranged from Starbucks in USA, to Prada in Italy, to China Petroleum & Chemical in China.

Conclusion

Following engagement, ENI announced that it had settled a human rights investigation with the OECD. Kraft Heinz also published a new human rights statement. Looking ahead, the 2019 CHRB Results increased its coverage from 101 to 200 companies and included companies from the ICT sector – such as Amazon and Samsung. We will continue to engage with and vote against low scoring companies throughout 2020. We will also send letters to any company voted against in 2019 outlining our voting policy, voting action and to request improvements to human rights performance.





ENGAGEMENT CASE STUDY

Promoting fairness in executive management remuneration

FTSE 100 companies

Why should executive managers receive larger pensions compared to the rest of their workforce? This is a question we and other investors asked FTSE 100 companies during 2019. The response from companies has been positive – none more so than those in the banking sector.

Throughout 2019, we engaged FTSE 100 companies on executive pensions calling for pensions to be aligned to the wider workforce – an emerging measure for fairness in remuneration practices. One sector which has been exposed to greater levels of scrutiny has been the banking sector.

Historically, the difference between executive and staff pensions has been substantive and unjustified. For example, the CEO of Lloyds received a 2018 pension allowance equivalent to 46 per cent of salary, compared to the wider workforce who received 13 per cent. The investor calls for pension allowance reductions initially received hostility. The CEO of Standard Chartered went so far to publicly label investors as ‘immature’ in a very high-profile attack which was widely reported in the press.

During 2019, we engaged through meetings and calls with all major UK banks (HSBC, Barclays, Standard Chartered, Lloyds, RBS and Santander UK) and their remuneration committees on pensions, reaffirming our expectations for workforce alignment. We also voted against remuneration reports at company AGMs if necessary. To date, HSBC, Standard Chartered, RBS and Santander UK have confirmed reductions to executive director pensions.

Conclusion

We welcome the efforts shown by those companies that have aligned their executive director pensions with the wider workforce. Most discussions were well received, and our feedback considered and acted upon – demonstrating the influence of constructive investor dialogue. We anticipate that those yet to announce plans to align executive director pensions will follow. Engagement and voting action with the remaining leading banks and other FTSE 100 companies will continue in 2020, until our expectations for pension and workforce alignment are met.



ENGAGEMENT CASE STUDY

Culture and conduct in US banks

Wells Fargo and Citigroup

Despite US banks being the world’s biggest and most profitable, their ESG strategies are less defined. Major conduct issues and lack of progress for climate issues drew our attention to the issue. We spoke to two US banks to understand more. The conversations led to two different outcomes.

In 2019 we identified ESG risks in two US banks that we held: Wells Fargo and Citigroup.

Wells Fargo had recently undergone a scandal in which the bank was fined \$1bn by US regulators for overcharging on auto loans. It had also been fined \$140m by US regulators after 5,000 staff fraudulently opened over 1.5m bank accounts. The problems arose through poor culture, controls and incentive structures. We also identified the bank as having poor climate change strategies with poor disclosure and weak policies to limit lending to fossil fuels.

Citi were also involved in conduct issues, being fined by US regulators in 2018 for overcharging credit card customers. Although the climate policy and strategy were better than other US banks, we still felt more could be done and looked to explore these issues in more detail.

Calls were held with investor relations and sustainability teams at both banks. For Wells Fargo, we found that the bank had demonstrated evidence of improving its board, management, systems and processes. However, it was lagging behind US peers in its sustainable finance strategy. For Citi, we discussed its governance structures, looking to understand the mechanisms to ensure oversight and control while the company seeks to grow its digital business. We also proposed that the company consider becoming the first US bank to sign up to the UN Principles of Responsible Banking – hoping that this will encourage a race to the top by US banks in developing ESG strategies.

Conclusion

Our engagement with Citigroup has been positive. While more needs to be done to consider climate risks and opportunities in company strategy, there is willingness from the company to do more. Following our discussions, Citigroup signed up to the UN Principles of Responsible Banking.

Wells Fargo, on the other hand, cannot be viewed quite so positively from an ESG perspective. Insights from our discussion, the continued disregard of ESG issues in company strategy and regulatory scrutiny led us to divest Wells Fargo in some of our funds.

We will expand our engagement with US banks in 2020 as their lack of response to climate change intensifies.



ENGAGEMENT CASE STUDY

Engagement across the ESG spectrum

Glencore

As one of the world's largest miners and commodity traders, Glencore's operations are naturally exposed to a host of ESG risks, ranging from climate risks, safety, local stakeholder engagement and governance. Over the last year, we engaged with Glencore across a breadth of topics, resulting in a few notable successes.

In light of Germany's planned coal phase-out, Europe's projected coal use will fall by 290m tonnes, according to some estimates. Coal consumption in the US is also on a path to decline given competition from domestically sourced natural gas.

The picture looks entirely different in Asia; consumers there are projected to use 1,400m tonnes more coal. Having bought coal operations from Rio Tinto and Yancoal, Glencore is prepared to supply this market, making coal the company's greatest source of free cash flow.

As one of the world's largest producers and exporters of thermal and coking coal, Glencore's role in tackling the climate emergency is therefore evident. We engaged with the company's ESG team, Senior Independent Director, as well as its Chairman on this topic, asking for further disclosure on how the company intends to restructure assets to fall in line with the goals of the Paris Agreement.

As the transition to EV is gaining speed in Europe and globally, demand for cobalt has jumped over past years and will significantly increase in the future. Cobalt is a critical base metal and an essential component of lithium-ion batteries for electric vehicles.

The rising global demand for cobalt to meet technological demands such as electric vehicles and energy storage has put the spotlight on mining conditions in the Democratic Republic of Congo (DRC). Glencore is targeting a large increase in copper

and cobalt production from Katanga by 2021. Along with its presence in the DRC comes greater scrutiny of the company's business practices; Glencore's operations in the DRC have been the subject of legal action by the Congolese government and Gécamines, the state mining company. Its historical relationship with Dan Gertler, an Israeli national who appears to have acted as an intermediary between Glencore and the DRC government, is now being investigated by the US Department of Justice.

Glencore's risk appetite has at times pushed the boundaries of what are acceptable risks from an ESG perspective. Our engagements with Glencore thus focused on the company's organisational culture and board dynamic.

Conclusion

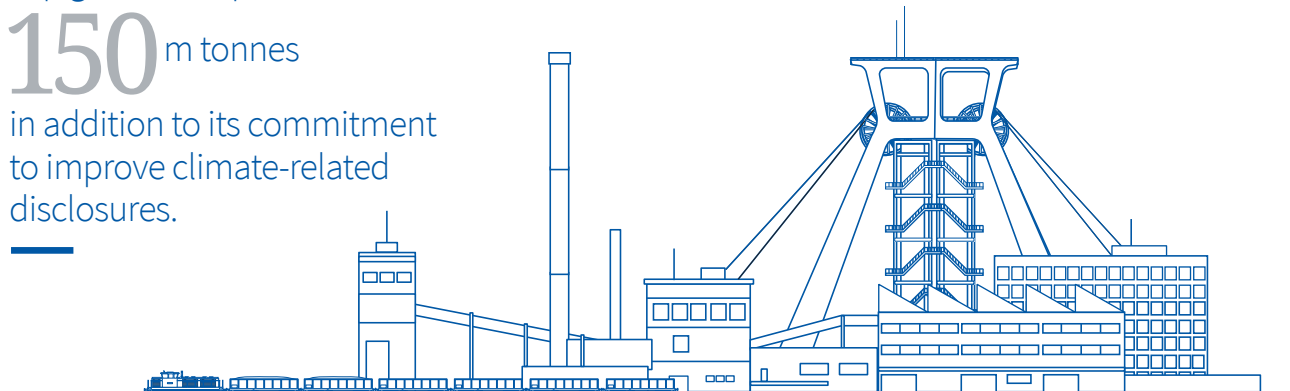
We welcomed Glencore's announcement last year to cap global coal production at 150m tonnes, in addition to its commitment to improve climate-related disclosures. Starting in 2020, the company will disclose its longer-term projections for the reduction of its scope 3 emissions as well as its assumptions for Paris-aligned capital expenditure. While the announced production cap won't preclude the company from operating its existing mines for at least another 15 years, we seek to continue engaging the company on its climate strategy.

In response to the disclosure request by the Investor Mining and Tailings Safety initiative, of which we are a participating member, Glencore has launched a dedicated microsite detailing the status and profile of all of tailings dams, publishing details of its management approach, including regular surveillance, dam safety inspections, and dam safety audits. With organisational changes currently underway, we continue to engage the company on various ESG topics in the future.

We welcomed Glencore's announcement last year to cap global coal production at

150m tonnes

in addition to its commitment to improve climate-related disclosures.





ENGAGEMENT CASE STUDY

Meeting with lead independent director on governance

Vinci SA

As a relatively large shareholder, we met with Vinci's lead independent director to seek reassurances on the governance of the company, particularly given the risks posed by the combined roles of CEO and Chair.

Yannick Assouad's appointment as lead independent director is relatively new (Thibault de Silguy was lead director before and now Vice Chairman). She acknowledged that she has to prioritise the company where she is CEO but, generally, this has not been an issue so far; she is used to working long hours and it was evident that she is comfortable in challenging management. Also, as part of her accepting the role at Arkema, she explicitly said she would not be a member on any committee, therefore limiting the amount of time she can devote to Arkema.

Good answers were provided around the governance around contract tendering (there are a significant number of contracts at low margins) and it was evident that the board has sufficient expertise and diversity to support its large global presence. We also received assurances on the allegations around labour conditions in Qatar – i.e. there was no evidence of bad working conditions for those labourers, which has been confirmed by an initial audit; it has collaborated with investigations; and importantly it has improved group-wide anti-corruption policies and management of such issues.

Conclusion

Our first impression of the new lead independent director was positive and we feel her personality and openness contribute to a strong and efficient board and management oversight. This is a mitigating factor for the combined roles of CEO and Chair. There are some gaps in H&S disclosure, which we will be reviewing in 2020. More broadly, it is clear that management are much more conscious of the increasing focus of business impact on the environment and society, as well as meeting stakeholder expectations.



ENGAGEMENT CASE STUDY

Improved understanding of its approach to ESG

St James's Place

We had multiple engagements with the company – in part because we have been building up our holding – to get a better understanding of its approach to ESG and to request better disclosure over how it manages ESG risk in its investment process.

We discussed a broad range of issues such as gender diversity (as there was only one female on the board), executive remuneration and responsible investment.

This included a deep dive with the company on its approach to RI/ESG integration. It was a useful first meeting and it is clear that SJP can and wants to do a lot more on ESG integration. We will be measuring this progress at the end of 2020.

Towards the end of 2019, we engaged with the company regarding both the succession arrangements for the Chair and the welcomed improvement to board composition, namely increased gender diversity.

Conclusion

We welcome the improvements made by the company. Our internal ESG score for the company has improved significantly as a result; this takes a more granular look at ESG factors, with more weight attached to (strong) corporate governance than our external research providers.



ENGAGEMENT CASE STUDY

Engaging with Unilever to support them changing their plastic policy

Unilever

As a major plastic user, we decided to support Unilever in their change in their plastic policy.

We used our shareholder voice to individually engage and support Unilever in their change in their plastic policy, which we felt needed updating given the rapid change in public mood on the issue. Not only this, but to connect thinking and engage collaboratively with other investors as part of the As You Sow alliance; to leverage our combined influence on Unilever.

We met the CEO, Alan Jope, in July and shared our view that the company's existing targets on plastic were sub-par. As a result of our coordinated actions, he has since publicly stated there was "no paradox" between sustainable business and better financial performance and "we profoundly believe that sustainability leads to a better financial top and bottom line".

Conclusion

We are proud that our voice as a key shareholder, working alongside other investors, can be part of driving change.

Unilever, the company behind brands such as PG Tips, Domestos and Hellmans, announced plans to halve the amount of virgin plastic it uses.

This commitment makes them the first major global consumer goods company to commit to an absolute plastics reduction across its portfolio. They plan to slash new plastic use over the next five years by using more recycled plastic and finding other alternative materials – including selling toothpaste that comes in chewable tablets, among other things. They have also committed to reduce the amount of plastic packaging they produce annually by about 14 per cent by 2025 across all their brands from Dove soap to Lipton tea. The company's new pledges complement two earlier ones to use 25 per cent recycled plastic in its packaging and to make all plastic packaging reusable, recyclable or compostable by 2025.

Key parts of the new plastic strategy by Unilever include:

- Multiple use packs (reusable and/or refillable)
- 'No plastic' solutions (alternative packaging materials or naked products)
- Reducing the amount of plastic in existing packs (concentration)
- Replacing non-recycled plastic packaging with recycled plastics

“We profoundly believe that sustainability leads to a better financial top and bottom line.”

Alan Jope

Unilever CEO



**ENGAGEMENT CASE STUDY**

Gender diversity in Japanese companies

SoftBank, JFE Holdings, Kansai Electric, and Tokyo Electric Power

Female board representation in Japan – how we exercise voting and engagement to voice our concerns. We highlight cases linking to SoftBank, JFE Holdings, Kansai Electric, and Tokyo Electric Power.

Since the introduction of the Japanese Corporate Governance Code in 2015, there have been significant improvements in board independence. However, the next challenge in Japan is how to reflect and improve gender diversity on boards. Despite the government's effort to strengthen measures, we continue to see female directors at major companies underrepresented. When it comes to steering our ongoing ESG-related efforts, gender diversity on boards is an increasingly important investment criterion and considered a key consideration when evaluating corporate governance practices.

In 2019, we expressed in our engagements with Japanese companies our concern at the weak representation of women on board positions in Japan. For large Japanese companies (e.g. listed on Nikkei 225, TOPIX 500 and JPX Nikkei 400), we voted against the top executives of the board where no females are represented on the board. We have also exceptionally supported top executives where we would like to see further improvements (only one female director). To support understanding, we have also engaged with companies in this area including SoftBank, JFE Holdings, Kansai Electric, and Tokyo Electric Power.

Conclusion

Through our engagements, it was clear there remains a need for further improvement in relation to gender diversity on the board. While there were no immediate improvements, we have obtained commitments that this issue will be raised at future board meetings as agenda items. We will continue to exercise our vote where relevant – and will continue to engage on these issues to further improve understanding.



ENGAGEMENT CASE STUDY

Changing global mining standards

Vale

Following a tragic incident, where a tailings dam at the Corrego de Feijao iron ore mine collapsed in the state of Brumadinho, Brazil, we joined an investor coalition, calling for a global independent public classification system and corresponding independent and public audits to monitor the safety risk of mining company tailings dams.

For Vale, this marked the second dam disaster within five years (the Mariana dam collapsed in 2014).

Over the course of the last three decades, the mining industry began to shift towards a preference for near-surface, lower-grade ore, which produces much more waste material (i.e. tailings). According to research by the World Mine Tailings Failure (WMTF) group, the world's foremost repository of data on tailings dams failures, there is a correlation between the number of failures and the decline in grades across all minerals; the volumes of waste and characteristics of the waste have pushed the world's 18,000 dams beyond design limits. The cost to decommission is high with Vale estimating the cost to decommission its ten remaining inactive upstream dams in Brazil at US\$ 1.3bn – this will be a challenge for smaller producers. However, the cost of a dam failure can be exceptionally high, both financially and in reputational and ESG terms.

Large gaps in practices arise, primarily driven by uncertainties that are inherent to the mining industry. A favourable turn in commodity prices incentivise miners to increase capacity, thus producing more and grabbing more deposition space for tailings. As a result of this, dams are built up over time to hold more and more tailings. Such was the case in Brumadinho where the dam reached heights of 87m, exceeding best practice recommendations by 37m.

In addition to this, there is little transparency regarding how companies are managing social and environmental risks at a site-specific level, with no comprehensive public or government database of where these tailings dams are, let alone whether they are at risk of failing.

According to the WMTF group, there could be 17 more catastrophic failures worldwide from 2020-2029, with a severity that is comparable to Brumadinho. While regulation in many parts of the world needs to tighten, companies and regulators also need to improve disclosure to allow investors to assess the tailings risk profile in their portfolios.

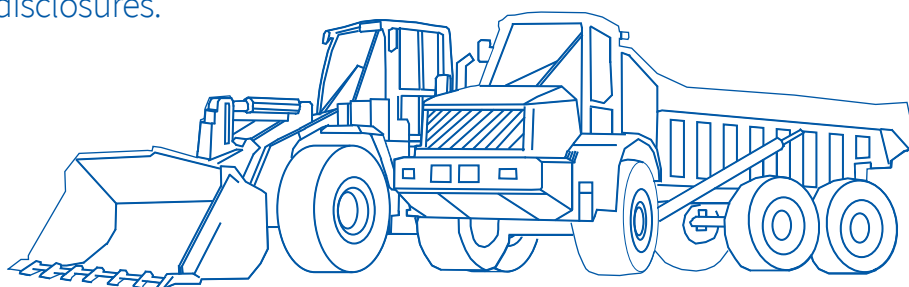
We therefore joined an initiative led by the Church of England Pensions Board, calling for a global independent public classification system and independent and public audits to monitor the safety risk of mining company tailings dams. The Mining and Tailings Safety initiative gathers investors responsible for US\$3.8 trillion of assets. In addition, the initiative sent out public disclosure requests to 727 extractive companies, asking for comprehensive disclosures on all tailings facilities where the company has any interest, through subsidiaries, partnerships, or joint ventures.

Conclusion

Out of an estimated 18,000 tailings storage facilities globally, as many as 6,000 could already have incubated failure conditions that are detectable now and could lead to failure of a similar scale as witnessed in Brazil. These are presently unexamined by miners, by government or by investment portfolios.

As a result of the coordinated disclosure request, 40 of the top 50 mining companies have made disclosures which has resulted in information about thousands of individual tailings dams/facilities being made public on company websites. In heeding the call by investors for greater transparency and stricter standards, the International Council for Mining and Metals (ICMM) announced its governing Council of 27 member CEOs will establish an independent panel of experts to develop an international standard for tailings facilities for its member companies.

40 of the top **50**
mining companies have
made disclosures.





ENGAGEMENT CASE STUDY

An ongoing engagement on ESG to promote long-term sustainability

Samsung Electronics

Following the massive corruption scandals involving South Korea's political and business elite that brought down their first female president Park Geun-hye, we had hopes that tangible change was on the horizon for the country's powerful chaebol groups. However, slower-than-expected government efforts have placed yet greater importance on active investor engagement to help encourage effective reform among the largest players in the South Korean economy.

Despite a number of positive governance changes made by the company following the corruption scandal, in 2019 we looked to continue our regular engagements with Samsung Electronics. We engaged on corporate governance issues that we felt were still evident; specifically board leadership, composition and diversity. We also sought to engage the company on wider environmental and social issues, including renewable energy targets, health and safety, human rights, labour union relations, responsible sourcing and supply-chain management.

We discussed the above governance and sustainability issues during a meeting with the investor relations team and in a subsequent call dedicated to environmental and social issues with their sustainability representatives.

On corporate governance, we expressed concern with the continued tenure of the chairman due to his presence on the board during the corruption scandal and our preference for independent leadership to help the company change its organisational culture away from its past controversies. During our separate engagement on environmental and social issues, we discussed their renewable energy targets and their practices around health and safety and human rights and communicated our preference for increased reporting and clarity around both areas.

In follow-up communications with the sustainability team, we highlighted several NGO rankings through which they could improve their disclosure and transparency in these areas including the Corporate Human Rights Benchmark, Ranking Digital Rights index and the Carbon Disclosure Project.

Conclusion

Although we still have reservations around the company's board governance, we are encouraged by their increased willingness to engage on broader areas including environmental and social factors. They noted our suggestions around disclosure improvements and NGO rankings for incorporation into their sustainability planning for 2020 and we look forward to future conversations with the company on further improvements across all factors.



ENGAGEMENT CASE STUDY

Collaborative engagement on human rights with Amazon

Amazon

We observe a positive ESG momentum for Amazon.com, a FAANG open to investor dialogue.

Amazon has significant human rights risk exposure through its value chain. In June, we co-signed an investor letter to Amazon, along with 70 investors with assets worth \$4.53 trillion. The aim of this collaborative engagement was to have a conversation on human rights within Amazon's value chain, including products and services' use.

While we had a broader one-to-one ESG conversation with Amazon in November at our offices (focused mainly on governance and effective board oversight), we also touched on the subject of human rights. Shortly after our meeting, Amazon published its Human Rights Principles, which we welcome. We participated in a call with Amazon and the investor group to share our comments on the newly issued principles. We gained an appreciation of how Amazon considers its responsibility to respect human rights through its value chain and various business activities.

Conclusion

We warmly welcome Amazon's openness to investor dialogue and efforts to understand stakeholders' viewpoints and take these into account. The direction of travel is encouraging. In our conversations with the company, the investors group pointed to several areas for improvement where policy gaps were identified and where policies' application remains challenged by controversies. We encouraged the company to look into the Corporate Human Rights Benchmark (CHRB) framework and the UNGP for future reporting purposes.



ENGAGEMENT CASE STUDY

Engaging on cyber security

Equifax

Cyber is an important risk. As companies across all sectors increasingly rely on personal data within their business models, there is ever-increasing scrutiny from consumers, regulators, society – and also investors.

Cyber-risk has often been misunderstood by investors, interpreted narrowly as limited to assessing controversies (cyber-attacks). GDPR has shifted the landscape. Investors are now looking at the regulatory risk, analysing the probability and level of potential fines, given a data breach. We take a more holistic approach to analysing cyber security risk within companies. Because this risk concerns intangible assets (personal data), implications for stakeholders are harder to quantify, which reflects the importance of having analysis focused on the business model. Shareholders should carefully assess how companies manage cyber risk as a standard business risk, through a governance lens.

Our approach to understanding companies' readiness for cyber-attacks and cyber risk management is divided into four aspects.

- **Policies:** Companies should give an appreciation of the scope of the company's policies and processes, encompassing all operations and third parties.
- **Accountability:** The number of layers between the CISO to the CEO should be limited to two, which increases executive accountability. The board should provide oversight to the executives on this issue, with specific expertise, mapping exercises and scenario testing where the board is involved.
- **Human error:** Companies should evidence company-wide training and having the right culture.
- **Scenario testing:** Companies should undertake scenario testing, involving all layers at company level.

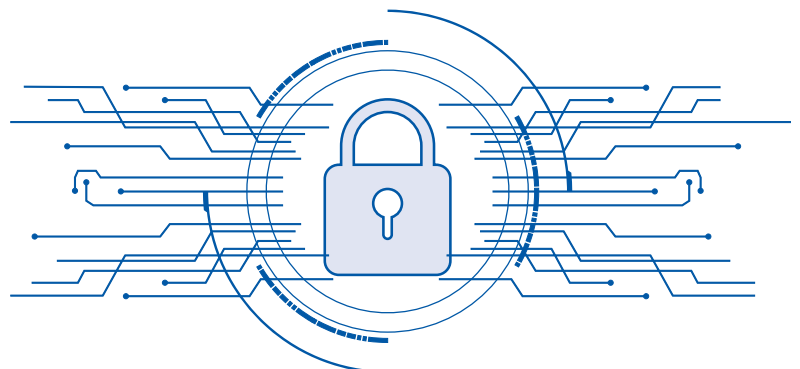
We apply this framework across our engagements with companies from various sectors; proactively as well as reactively. In 2019, we engaged with approximately 20 companies on this subject.

In September 2017, Equifax announced a data breach that exposed personal information of 147 million people. We had an initial call in November 2017 with the company to better understand events that led to the breach, as well as the company's evaluation of potential business implications. We have had regular engagements with Equifax since then and are supportive of the EFX2020 business transformation strategy. Data security features highly on the strategic agenda, notably in terms of corporate culture. We welcome the link to remuneration, whereby for employees that are eligible for a bonus, 25 per cent of their bonus is at risk if the company as a whole does not meet certain security measures, set by a third party. In January 2020, Equifax agreed a \$1.38bn settlement.

Conclusion

Our multi-year engagement with Equifax reflects the importance of having a holistic approach to cyber security risk. While controversies are important, the greatest risk for investors is not that a breach happens but the company's reaction to it. That is, how fast they spot the breach, how fast they stop it from spreading and how they manage implications in terms of policies, processes and reputation (for customers, civil society and the market).

“We welcome the link to remuneration, whereby for employees that are eligible for a bonus, 25 per cent of their bonus is at risk.”



**ENGAGEMENT CASE STUDY****Engaging with an emerging market small-cap company on data privacy issues****Douzone**

Engaging on cyber security with Douzone – a case where we sought further assurance to support our existing ESG investment view.

Cyber security and data privacy are increasingly importance issues for companies. For Douzone, a company in the computer software business, it was particularly important that they had the correct policies and governance structures to mitigate these risks.

As an enterprise application developer, Douzone is perceived to be only moderately exposed to data security risks compared to companies that are in the business of handling substantial customer data. Despite this, data security and data protection are important, as is the integrity of their services and their ability to defend against cyber-attacks. Furthermore, the move towards cloud-based solutions makes data security management an increasingly important issue.

With this in mind, we engaged with the company to better understand how they sought to improve data protection and information security policies, as well as their systems for audit frequency. We also engaged with them to confirm that they had board level representation at an executive level to ensure there is sufficient responsibility for privacy, data security and protection.

Conclusion

As a result of our engagement, we gained further assurance on how they secure their cloud services to ensure that they met international information security standards. They also acknowledged that this is a key issue in their company and will continue to strive to meet international data protection standards.

**ENGAGEMENT CASE STUDY****Engaging with Starbucks to fight plastics proliferation****Starbucks**

We decided to engage with Starbucks in collaboration with other investors to initiate a change in their plastic consumption.

In 2008, Starbucks set a target to serve 25 per cent of its drinks in reusable containers, but this effort had failed. As You Sow, the investor group we are collaborating with, felt that this failure was down to a lack of resources and effort devoted to elements such as training baristas and new signage, and we were concerned that the company had not proposed an alternative. Despite its leadership position in the market, Starbucks appeared reluctant to be a leader or catalyst on promoting reusables. Furthermore, the Starbucks branded bottled water Ethos contained no recycled content, while competitors' bottles contained 50 per cent or higher.

In September 2019, we co-filed a resolution on cup reuse and recycling for the Starbucks 2020 AGM. The resolution was led by As You Sow and Trillium Asset Management.

US NGO As You Sow had filed the same resolution the previous year and received 44 per cent support. However, it was felt that the company had not taken the requisite action, so this year we supported it being refiled. While our holding in the company is small (<0.04%), we believe it sent an important signal that a large UK investor was an active supporter of this resolution.

The resolution proponent believes that the board should evaluate and report on the potential for fulfilling the company's environmental impact leadership commitments and goals toward reducing ocean pollution, including more detailed disclosure of any trends, policies and metrics such as: recycling and reuse schemes, environmental impact assessment and better disclosure surrounding sustainability metrics.

Conclusion

Starbucks has agreed to shift from single-use packaging to reusable packaging, conduct unprecedented research to promote customer behaviour change, develop new global reusable container goals and cut global packaging waste 50 per cent by 2030.

Driving changes on diversity

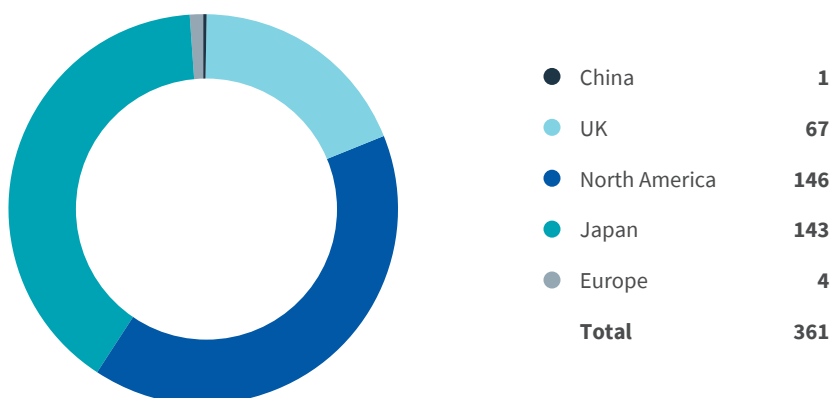
We believe it is shareholders' duty to make companies accountable. An effective board is a function of the quality of its culture, processes and people. Central to this is building the right balance of directors with diverse skills, experience, backgrounds and perspectives. Diversity is one of the key criteria we look at when analysing boards.

While diversity improvements have been made at board level and executive levels improve, there is still much progress to be made. Quotas can make things move, as examples in Europe show (see box below). However, culture must change as well. These issues are addressed in both our engagements with companies, and our voting activities.

How did it translate in our voting?

Over the last two years we have engaged with over **100** companies on diversity. In 2019, we have taken voting action at **361** companies, an increase from **284** companies in 2018.

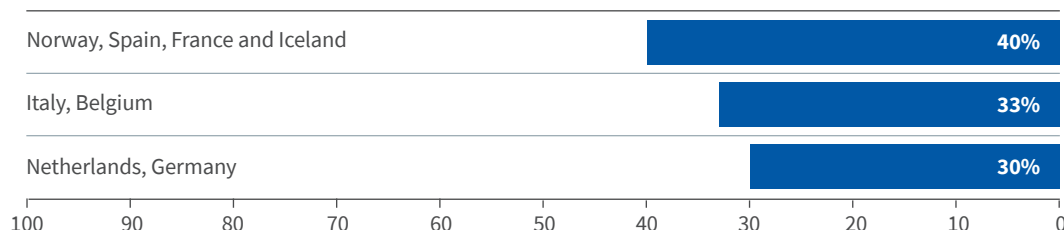
Geographic spread



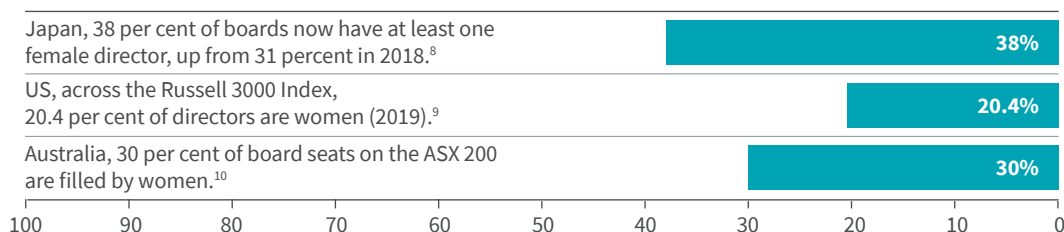
However, we want to continue to push companies to go further and therefore from 2020 onwards we will be looking for boards to be at least **33 per cent female** and we will take voting action on the nomination committee chair when we do not feel sufficient progress has been made.

Some striking numbers

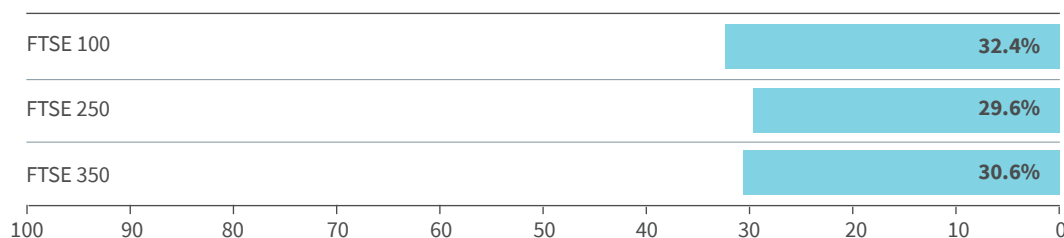
EU – quotas (some firm with sanctions, some comply or explain) at board level



Progress still to be made in voluntary countries



UK – progress – but still a lot of progress to be made to achieve targets¹¹



While we consider diversity (experience, background, skills, etc.) on the board, we also focus on tangible KPIs of gender diversity. Our policy has evolved with time: we started voting against companies for diversity issues back in 2013. In 2018 and 2019 we were looking for boards to be 25 per cent female and we voted against the chair of the nomination committee where we had concerns on lack of progress.

2019 in short

Voting numbers: 361 companies – **461** resolutions – emphasis on holding directors accountable: **437** director elections, **24** report and accounts resolutions.

Overall, of the **361** companies we withheld support from because of diversity issues, **128** companies have long-standing issues on diversity (we had already withdrawn support last year); this represents **35.5 per cent** of this year's votes.

In the UK, there are **45** companies where we have changed our voting stance from 2018 to 2019 (from withholding support to supporting management) – because of improvements in companies' practices. We engaged substantially on the issue on **8** of them. However, in **21** cases we have voted against for more than two years because we have not seen enough improvement.

There are also **156** companies worldwide where we withheld support last year because of diversity issues, yet supported this year because of improvements.

8. ISS

9. https://2020wob.com/wp-content/uploads/2019/10/2020WOB_Gender_Diversity_Index_Report_Oct2019.pdf

10. <https://aicd.companydirectors.com.au/advocacy/board-diversity/we-have-reached-a-milestone-for-female-directors>

11. <https://ftsewomenleaders.com/wp-content/uploads/2019/11/HA-Review-Report-2019.pdf>

DIVERSITY CASE STUDY

Vistry Group

At the 2018 AGM we voted against because they had one woman on the board (out of seven board members). There were also concerns of the lack of gender diversity in senior management. We engaged following the AGM. Since the 2018 AGM, Vistry Group appointed a second woman on their board – Katherine Christina Innes Ker. We therefore exceptionally supported at the 2019 AGM as, although they did not reach 25 per cent preferred, they have shown progress in the last year.

DIVERSITY CASE STUDY

Dechra Pharmaceuticals Plc

In the year we approved construction and operation of a 25 mega-watt gasification facility, known as energy-from-waste (EfW). This type of asset uses refuse-derived fuel (RDF), typically in the form of black bag waste which cannot be recycled. This type of project addresses two environmental challenges, the need for clean energy and the need to avoid pollution from landfill. Our Hooton project, agreed in March, is located in Eastham, Cheshire and is expected to be fully operational by July 2020.

Geographies comments:

Majority of our votes were in Japan and North America. We voted against **231** directors at Japanese companies, and **147** directors at companies in North America. Still need to see progress.

What's next for 2020?

We expect companies to develop their talent pipeline and increase the representation of women in senior management and on the board. We will look for female directors to represent a third of the board and will take voting action on the Chair of the nomination committee if the company does not evidence significant progress in this area.

Companies have a responsibility to consider their stakeholders' interests. Our view is that acknowledging diversity and encouraging differences within the workforce is in the interest of shareholders.

Numerous studies have evidenced how diversity in the workplace is an asset for businesses as it fosters innovation, creativity and stronger governance, which ultimately creates resilient and effective organisations. Businesses will benefit by holding standards that create an environment where employees feel valued, safe and involved. This will enable them to develop and retain skilled workforce better.

In 2020, we will expect companies to evidence how they foster an inclusive culture within their workforce, across recruitment, retention and promotion.

Our engagements on diversity and inclusion will go beyond gender representation and touch on areas such as LGBT, Ethnicity, Faith, Age, Socio-economic backgrounds, etc.

Driving changes on climate change through real assets

232mWh

Energy generation from our 92 medium and utility-scale on-shore wind turbines

160,000tCO₂e

GHG emissions savings from our renewable energy installations in 2019

24,000

Solar photovoltaic installations providing 75mWh of clean energy to households

69%

Reduction in carbon emissions from our real estate portfolio since 2015

£660,000

Saved for real estate occupiers through our Smart Buildings Programme

£145,000

Granted to 42 community projects funding community transport and facilities

Tackling emissions reductions in real estate

Our Real Assets team is committed to reducing emissions as part of the broader Aviva Investors and Aviva Plc's climate change strategy, as well as the ongoing drive to benefit clients and occupiers through investing in sustainable and resilient buildings.

We are committed to the decarbonisation of our Real Assets platform and are addressing this by reducing impact in real estate and developing low-carbon and renewable energy generation capacity in infrastructure. In our directly managed real estate properties in the UK and Europe, we are committed to an absolute reduction of Scope 1 and 2 carbon emissions of 20 per cent over ten years, from a 2015 baseline.

The business has reached a 69 per cent reduction since 2015, benefiting from energy efficiency projects,

procurement of renewable energy and the increasing volume of renewables on the national grid. We are committed to increasing energy efficiency to drive reduction in carbon emissions and have achieved an 11 per cent reduction in 2019 measured against our 2018 performance.

We have achieved this through several important energy efficiency initiatives. This included our Smart Building Programme in collaboration with Carbon Intelligence which has reduced absolute real estate emissions by over one thousand tonnes. Our property managers have also implemented many different carbon reduction projects. This has included the addition of a combined heat and power unit at The Translation Building, solar panels at 25 Soho Square and LED lighting at Regal House.

REAL ASSETS CASE STUDY

Helping occupiers to save through our Smart Building Programme

In 2019, our Smart Buildings Programme contributed to over £660,000 of avoided energy costs for occupiers, with a further £1m of energy cost saving projects planned for initiation in 2020.¹² Since the launch of the programme in 2016, we have achieved over £1m in energy and life-cycle savings. The programme was also awarded the Gold Green Apple and shortlisted for the IEMA impact awards.

The Smart Building Programme focuses on the optimisation of technology and the engagement of people to achieve significant energy savings. The solution utilises smart analytics and Building Monitoring Systems (BMS) data acquisition technology to gather granular building equipment data. The programme establishes intelligent control of energy use by providing new visibility of plant operations to achieve energy savings.

Collaboration from shopping centre and office stakeholders was central to a successful programme. For example, by engaging and having an open dialogue with building customers such as

Catalyst at Ealing Gateway and GiffGaff at Belmont House we were able to improve their comfort and resolve energy and sustainability-related issues.

The ability of the programme to also lengthen the life cycle of the building's equipment reduces additional plant replacement costs to the service charge or business. At Ealing Gateway we quickly rectified faulty plant schedules to switch off outside of working hours and weekends.

Following the success of the Smart Building Programme, we will continue working with Carbon Intelligence and the Property Managers. The programme is anticipated to achieve over £1m energy savings in 2020 across 24 buildings. A priority will be to use the programme to engage with more occupiers to improve their experience.

12. Aviva Investors and Carbon Intelligence as at 19 February 2020.

Investing in green infrastructure

This year the UK government became the first major economy to pass a legally binding net-zero target. The transition to a net-zero economy will need substantial investment in renewable energy infrastructure.

The target will drive the UK to bring greenhouse gas emissions to net-zero by 2050 bringing significant changes to the economy. A recent report from Imperial College found at least 42 per cent of electricity must be supplied by renewable sources by 2030 to reach net-zero emissions by mid-century. This will require the UK's renewable power capacity to double, and investment in the sector to grow from £10bn to £20bn annually.

In July 2015, we announced an investment target of £500m annually for the next five years in low-carbon infrastructure. In 2019, we invested £717.3m into wind, solar, energy-from-waste (EfW) and energy efficiency projects.

This level of investment in renewable and low-carbon energy generation supports the transition to net-zero and will create 159,000 tCO₂e savings. This year we announce a new ambitious target of £10bn low-carbon infrastructure investment by 2030. This level of investment in renewable and low-carbon energy generation supports the transition to net-zero and will create 150,000 tonnes of carbon emissions savings, equivalent to emissions from 15,000 households.

REAL ASSETS CASE STUDY

Growing our onshore wind portfolio

In June we acquired a 49 per cent stake in two utility-scale operational onshore wind farms in Scotland. Renewable energy generation from the portfolio is 75 megawatts and over an investment time horizon of 25 years. The wind farms are backed by the Renewables Obligation Certificates (ROCs), one of the main support mechanisms for large-scale renewable electricity projects in the UK.

REAL ASSETS CASE STUDY

Investing in energy-from-waste

In the year we approved construction and operation of a 25 mega-watt gasification facility, known as energy-from-waste (EfW). This type of asset uses refuse-derived fuel (RDF), typically in the form of black bag waste which cannot be recycled. This type of project addresses two environmental challenges, the need for environmentally less damaging energy and the need to avoid pollution from landfill. Our Hooton project, agreed in March, is located in Eastham, Cheshire and is expected to be fully operational by July 2020.

REAL ASSETS CASE STUDY

Powering change in the German utilities sector

In considering the financing of a European infrastructure corporate in the utilities sector, we noted that the company's primary product offer is the provision of localised energy with a strong focus on efficiency improvements.

The company presented a clear roadmap to decarbonise but remained exposed to a highly negative source of GHG generation (lignite), albeit declining. Before investing, we wanted additional assurance that the company would adhere to its decarbonisation plans. While the business currently has a diversified fuel mix including gas, biomass and lignite – they are expected to shift significantly towards greener sources by 2025.

The company's agenda includes broadening of the business to greener technologies, such as solid process waste products and biogenic dust fuels. We negotiated to impose an ESG specific covenant onto an infrastructure debt issuer, prohibiting the building of any new lignite or coal plants, and including tight limitations on transactions activity for this area. For example, acquiring any company or business that is in the process of building any lignite or coal plants would be prohibited.

Reporting obligations were also included in the agreement, ensuring that we are kept up to date with the progression of the decarbonisation programme. The specific obligations include an annual presentation by the company's management on its implementation of its de-carbonisation strategy. This includes an explanation of the lignite, coal and biofuel strategy being implemented and an overview of the company's exposure to lignite and coal fuels including the number of plants and share of revenue.

This example highlights the opportunities which can be created to reduce emissions through infrastructure debt transactions and demonstrates the impact of taking an active ownership approach over an exclusionary policy.

Driving changes through market reforms

Policy makers and regulators play a vital role in defining the framework within which companies and investors operate. Many market failures, where the true cost of an activity such as emitting carbon, are often not adequately priced. Furthermore, the way the capital markets are currently structured undermines the development of a sustainable economy. Crucially, for us and our clients, this erodes the long-term potential for sustainable companies to create value.

We advocate policy measures and market corrections to tackle failures with the aim of improving long-term outcomes for our investments, our clients and the world around us. These corrections should be coordinated at domestic, regional and global levels through inspirational and harmonised policy frameworks with the objective of transforming the entire financial system.

We have led and worked on multiple measures over the past year to encourage the global transition to sustainable financial markets. Some key examples are covered below.

UK Government

Publication of the Green Finance Strategy

In the UK, the government published its Green Finance Strategy in July 2019. This implemented many of the recommendations that we helped to shape as a member of the UK Green Finance Taskforce, including an expectation that London-listed companies and large UK asset owners will disclose in line with the recommendations of the Taskforce for Climate-Related Financial Disclosures (of which we are also a member) by 2022, and calls for international clarification of investors' fiduciary and regulatory duties to consider ESG factors in investment decisions.

Department for Work & Pensions UK

Better disclosure on ESG criteria

2019 also saw the implementation of changes made by the DWP to investment duties for pension trustees that we have long called for and helped to develop. These changes see trustees required to disclose their investment approach and how all material factors, including ESG and climate change, are taken into account as well as disclosing their policies on stewardship of investments and engagement with members and beneficiaries to understand their preferences. The FCA has made a similar extension of duties for Independent Governance Committees to oversee these policies within the workplace pension schemes that they oversee. We warmly welcome these changes and the clear leadership shown by the Pensions Minister, Guy Opperman, in scrutinising trustees and firms' implementation of the changes to ensure that there are substantive changes made due to these policies rather than just paying lip service to them.

Investment Association

Publication of a Responsible Investment Framework

In order to help individual savers and investors better navigate the developing world of ESG and sustainability, the Investment Association published a Responsible Investment Framework report, explaining key terms and recommending disclosures by firms to make it clear for investors what the products they are buying take into account. We were heavily involved in helping the Investment Association develop this framework, which was led by its Responsible Investment and Stewardship Committee, which is chaired by our CIO for Real Assets, Mark Versey.

Accounting for Sustainability

Second investor summit

We convened a second investor summit with the Prince of Wales' Accounting for Sustainability to coincide with the release of a supplement to our joint report Financing our Future that sets out a series of proposed initiatives for market participants and regulators to embed sustainability within the financial system (<https://www.accountingforsustainability.org/en/knowledge-hub/reports/financing-our-future.html>). Our CEO, Euan Munro, gave a keynote speech at the summit and a blog with his thoughts is available on the A4S website.

European Commission

Action Plan for Financing Sustainable Development

In the EU, we have continued to engage with policy makers and industry groups to push for ambitious reforms to drive sustainability through reform of capital markets. This has been done as the Commission has continued to drive the implementation of its Action Plan for Financing Sustainable Development (which puts into action some of the recommendations that we helped to develop through our membership of the EU's High-Level Expert Group on Sustainable Finance).

In particular, we helped develop the EU's taxonomy of sustainable economic activity, a new regulation on sustainability disclosures, new sustainability-focused benchmark methodologies, and the development of proposals to clarify duties of asset managers, asset owners and financial advisers regarding the integration of ESG into their processes. We have been at the heart of these changes, particularly in pushing for changes to the suitability test for advisers and portfolio managers to ensure that sustainability preferences are discussed, giving support to the Commission on the ambition of their changes, and pushing for consistency of definitions and practice as these regulatory changes develop.





Connected thinking

We believe in the power of connected thinking. Creating a sustainable future and delivering long-term investment returns can only be accomplished by working together with clients, competitors, policy-makers and regulators to connect different perspectives, share knowledge and experience.

It is only when clients feel connected to their capital, able to see where their money is going and what it is doing on their behalf, that they will feel truly empowered and impelled to push for change. That's why we have created and contributed to initiatives that aim to make sustainable investment easier for customers, like building new sustainable standards at firm and fund level with the British Standard Institute or shaping the Investment Association's sustainable framework.

We connect stakeholders and build award-winning sustainable institutions that deliver for everyone. Already in 2009, we helped establish the Sustainable Stock Exchange Initiative to push markets to be more sustainable, which over the last decade has grown to more than 90 SSE Partner Exchanges and over 350 collaborating organisations. More recently we set up the World Benchmarking Alliance, an impact initiative that publicly ranks large, leading companies around the world on the impact they're having on the planet to incentivise businesses to do more.

Finally, we connect insights to better understand the complex sustainability trends around us. As a large, global player with ESG integrated across all asset classes and locations combined with a strong network of sustainability organisations, we have unique access to a wide range of information about ESG risks and opportunities across the economy.

CONNECTING CASE STUDY

Connecting with wider stakeholders

The World Benchmarking Alliance

The World Benchmarking Alliance (WBA) initiative is a great example of what can be achieved when stakeholders across civil society, business, governments and consumers connect their thinking and collaborate together to tackle some of the world's biggest challenges.

The UN Sustainable Development Goals (SDGs), agreed in 2015, are the milestones marking the path towards the future we want. These goals cannot be achieved without the firm commitment of the private sector to work with government and civil society to deliver the solutions and investments needed to achieve the SDGs. Many of the world's leading companies are already aligning their business models with the SDGs. However, information and analysis of corporate sustainability performance remains hard to access or compare, making it difficult to credit leaders or hold laggards to account.

A powerful and potentially transformative way to address this challenge is the production of international league tables measuring and comparing corporate performance on the SDGs. The global need for such league tables is widely acknowledged, from the Business and Sustainable Development Commission (BSDC) to the EU High-Level Expert Group on Sustainable Finance. These league tables require sophisticated benchmarks that can provide financial institutions, companies, governments, and civil society with information they can use to allocate capital, increase transparency, track and compare corporate sustainability performance, and ultimately catalyse action and accelerate SDG delivery.

This is why we have worked with the UN Foundation, BSDC, and the Index Initiative to create the World Benchmarking Alliance (WBA) which was launched on 24 September 2018 in New York on the eve of the General Debate of the 73rd session of the United Nations General Assembly. The WBA's mission is to provide everyone with access to information that indicates how companies are contributing to the SDGs. It will do so by developing free and publicly available corporate sustainability benchmarks that rank companies on their sustainability performance and contribution to achieving the SDGs.

The WBA's launch followed a year of international consultations, expert meetings, and online surveys, with more than 10,000 stakeholders representing business, civil society, government and consumers themselves. Through this collaboration, the WBA defined its vision, institutional structure, and priorities in terms of focus industries and SDGs.

Conclusion

2019 saw continued development of the benchmarking methodologies including a gender equality and women's empowerment benchmark, food and agriculture, and digital inclusion. Results for the climate and energy, sustainable seafood, and corporate human rights were also published.

2020 will see the continued development and publication of the benchmarks and the launch of 2,000 'keystone' companies that will be assessed by all benchmarks. The WBA is also expected to play a role in helping to leverage and harmonise the incoming wave of SDG-related monitoring initiatives that are currently being developed.

The WBA is funded by Aviva and the governments of The Netherlands, United Kingdom and Denmark.



**World
Benchmarking
Alliance**

Connecting for climate change

It is only by working with multiple stakeholders that you can deliver a positive impact – be they governments and central banks to charities and customers. Our work to tackle the climate emergency is one of the examples of how we do that.

Climate change is a strategic issue for the financial sector in general and the insurance sector in particular. Left unchecked, climate change will continue to affect the actuarial assumptions underpinning the insurance products that our industry provides. It will also render significant proportions of the economy uninsurable, shrinking our addressable market. It is also material to the long-term success of many of the companies and economies in which we invest. Over coming decades, climate change presents solvency issues to businesses in many different industries, including our own.

Improving the information on climate change

Since 2001, we have included a policy to withhold support for a company if its disclosure on ESG issues is absent or non-existent; this would include an analysis of disclosure on climate-related issues. One of the main drivers for climate disclosure has been the CDP (previously known as the Carbon Disclosure Project), which issues an annual climate disclosure request on behalf of investors to over 6,000 companies. Aviva was one of the original investor members of CDP and has supported it since its inception in 2002. We therefore include a consideration of CDP disclosure in our voting analysis.

Stock exchanges are a key element of the solution in incentivising climate disclosures. For this reason we played a prominent role in helping to establish the Sustainable Stock Exchanges (SSE) Initiative in 2009. The SSE initiative is a peer-to-peer learning platform for exploring how exchanges, in collaboration with investors, regulators, and companies, can enhance corporate transparency — and ultimately performance — on ESG issues including climate change. In 2017, we sponsored the publication of the 2017 Sustainable Stock Exchange report, which tracks corporate disclosure against seven sustainability indicators including energy use and carbon emissions.

Putting a value on climate risk

In our continuing response to understand climate risk and the economic implications to our customers, business and society as a whole, Aviva commissioned research from the Economist Intelligence Unit in 2015 on the value-at-risk of climate change to investment, pensions and long-term savings.

The report “The cost of inaction: recognising the value at risk from climate change” highlights the significant value-at-risk. Asset managers cannot simply avoid climate risks by moving out of vulnerable assets and asset classes. The full impact of climate change has the potential to affect the value of our entire portfolio of assets.

Pushing for regulatory change

Since that report was published, several significant events have taken place including the historic agreement on a global warming limit at the Paris Climate Conference (officially known as the 21st Conference of the Parties, or COP21), its early adoption by 55 countries and the European Union (the US administration has subsequently decided to withdraw its support from the agreement).

In a follow up report in 2017 we reviewed the issues relating to climate-related financial disclosure and investigate the mandates of ten different international, EU and UK financial institutions, all with very different focuses and mandates, to consider what role they play, or could play, in supporting climate-related financial risk reporting. The report “The Road to Action: Financial Regulation Addressing Climate Change” proposed how existing financial institutions could better take up the challenge to address climate change through better regulation.

In addition, we are strong supporters of the recommendations of the UK’s Financial Stability Board Taskforce on Climate-Related Financial Disclosures (TCFD). This includes a requirement to stress-test business models against 2°C policy scenarios. We are also involved with the Climate Action 100+ initiative, an investor coalition targeting the world’s largest corporate greenhouse gas emitters to take necessary action on climate change. On behalf of Climate Action 100+, Aviva Investors took on the responsibility to engage with BP, Centrica, Hon Hai Precision Industry, National Grid and Royal Dutch Shell.

Ranking climate leaders and laggards

During the 2019 COP25 climate negotiations the World Benchmarking Alliance, which we set up and fund through Aviva's Foundation, launched its first climate ranking with a spotlight on how the automotive sector is transitioning to a low-carbon future.

The ranking of 25 of the world's biggest automotive companies found that most firms still have the brakes on – they're not investing enough in low-carbon vehicles, not setting clear enough targets to transition their business and do not have the right climate experience on their boards to deal with what is and will be a huge disruption of the sector as the world moves to a low-carbon future.

The ranking has valuable information for us as an investor and we are committed to embed the insights from the rankings into our analysis and engage with companies to encourage them to do more.

Why asset managers cannot be passive on climate change

Interview with David Cumming

**Chief Investment Officer,
Equities and Head of UK Equities**

As active investors step up their engagement efforts on the climate crisis, discussions need to be at the CEO rather than board level, argues David Cumming.

The United Nations warns we are approaching the "point of no return on climate change"; scientists describe it as an "existential threat to humanity". And yet, the lack of urgency by governments and many parts of the private sector – including some of the largest financial institutions belatedly talking up their own credentials – threatens the most catastrophic failure in the history of free-market capitalism.

Climate change is causing the most significant shift in the investment universe I have seen in 35 years in the industry. But if asset managers are to play a critical role in the response to the crisis, they will have to adopt a more radical and active approach.

Our climate engagement programme

Our climate engagement programme is executed by all investment functions as a reflection of the centrality of climate risks to our investment outlook. Typically, interactions with company chairmen and the board are led by members of the GRI team to ensure that boards are appropriately reflecting on climate. Portfolio managers are tasked with driving the climate agenda with the executive team as part of their regular company interactions, to ensure board-level discussions and commitments are being actioned and operationalised. Engagements outcomes are looped back into the research process to ensure a dynamic and informed climate investment view of companies and sectors.



Our customers, particularly the next generation coming into money, and those that will replace my generation in running money, increasingly regard climate change as the biggest global threat. We need to respond in a manner that is substantive, authentic, informed and impactful. This means focusing on actions, not excuses; outcomes, not intentions. Failing to do so will hurt firms' reputations, their businesses and their ability to attract talent.

To create impactful outcomes, we need to understand the problem and agree objectives. The threat of rising temperatures is well understood; mass extinctions, mass migration, flooding and environmental destruction. Given the consequences, investors cannot wait for governments to respond. We have to start redeploying capital now to find solutions and address the risks.

The obvious template for solutions is the 2015 Paris Agreement, which seeks to limit the increase in global temperature this century to well below two degrees Celsius above pre-industrial levels, and to pursue efforts to limit the increase even further to 1.5 degrees Celsius. Investors should recognise we are nowhere near these levels currently: the FTSE 100, for example, is on course to burn the planet at 3.9 degrees Celsius.

In our equity business, combining the climate expertise of our responsible investment team with the financial, sector and company knowledge of our portfolio managers will be critical in driving a positive corporate response. But while we were one of the first managers to integrate sustainability factors, including climate change, into our voting policy in 2001, our engagement needs to change. This will now be led by our equity team, fully supported by our responsible investment colleagues.

Rather than engaging mainly with boards in an effort to get climate change on a company's agenda, we will prioritise discussions with chief executives, chief financial officers and their executive teams. If we want companies we invest in to take the necessary actions on capital expenditure, innovation and repositioning assets, we must communicate with their senior management and hold them directly accountable.

To that end, we will make climate a key agenda item in around 1,000 company engagements this year. We will include a climate ask in every discussion, built around the need for companies to adopt science-based targets. While many companies are setting emissions reduction targets and other environmental measures, we are long past being satisfied with symbolic gestures.

We want to know whether a company's ambitions and targets are sufficiently progressive to create the necessary outcomes to tackle the climate emergency. The use of science-based targets is an independently verifiable approach that specifies by how much and how quickly companies need to reduce carbon emissions to align with the Paris targets.

There will be consequences for those that do not meet our expectations. We will vote against directors of companies in high- and medium-impact sectors that are climate laggards and against directors of companies in the Climate Action 100+ that have not committed to science-based targets.¹³ How companies react this year will determine our actions in 2021: While our approach has always been driven by engagement over divestment, we will consider shifting capital away from non-responsive companies. Climate Action 100+ is an investor initiative to pressure the world's largest greenhouse-gas emitters to take action on climate change.

Clearly, as an active asset manager, we see this issue through a certain lens. We believe an engagement approach like ours only works if you have the climate expertise, the resources and proven influence with company decision makers. Passive managers cannot deliver on these preconditions. They track indices that are algorithms of the past, supporting existing business models and ignoring the massive future business impact of climate change.

Passive managers often have tens of thousands of holdings but limited research coverage; their engagement therefore takes place at a superficial level. They lack connectivity with the core reality of a business and are not equipped to evaluate the credibility of corporate responses. Passive investors' poor record on voting on climate-related shareholder proposals supports this view. As a result, there is limited incentive for companies to engage with passive managers on this issue.

Climate change has changed everything. Investment objectives now have to include responsible values and actions, in addition to financial returns. We have to respond by engaging in a different way and by taking decisive action when the companies we invest in don't. We cannot be passive in the face of climate change. We have to be active.

13. Climate Action 100+ is an investor initiative to pressure the world's largest greenhouse-gas emitters to take action on climate change.

Connecting insights: a dedicated Global Responsible Investment approach connected to the wider world beyond

Our ESG views are informed by connected thinking; across asset classes, across multi-stakeholders and across the industry. Our cross-cutting GRI function facilitates knowledge sharing across the business and upskills the investment teams.



Steve Waygood
Chief Responsible
Investment Officer



Mirza Baig
Global Head of
Governance & Stewardship



Abigail Herron
Global Head of ESG
Strategic Partnerships



Marte Borhaug
Global Head of ESG
Investment Solutions



Camille Pons Cabrita
ESG Analyst



Charles Devereux
ESG Analyst



Doris Ko
ESG Operations Manager



Eleanor Austin
ESG Special Projects



Rebecca Vine
Senior Corporate
Governance Analyst



Richard Butters
Responsible Investment
Analyst



Rick Stathers
Senior ESG Analyst



Silvia Pignato
ESG Analyst



Paul Lacoursiere
Global Head of
ESG Research



Edward Dixon
Head of ESG
Real Assets



Sophie Rahm
Head of ESG –
Aviva Investors France



Eugenie Mathieu
Senior ESG Analyst



Louise Piffaut
ESG Analyst



Nathan Leclercq
Senior Corporate
Governance Analyst



Sora Utzinger
ESG Analyst



Stanley Kwong
ESG Analyst



Thomas Dillon
ESG Thematic Analyst

UK Stewardship Code Compliance Statement 2020

Our annual review also aims to be compliant with the UK Stewardship Code 2020. The new Code emphasises that good stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients, leading to sustainable benefits for the economy, the environment and society. It also asks investors to explain how they have exercised stewardship across asset classes, such as listed equity, fixed income, private equity, infrastructure investments, and in investments outside the UK. This includes the integration of environmental, social and governance (ESG) issues into the investment process.

Our RI annual review also has a strong focus on the activities and outcomes of stewardship (not just policy statements).

The Code consists of 12 Principles for asset managers and asset owners, and six Principles for service providers. These are supported by reporting expectations (and which should be publicly reported).

For principles that are not specifically covered in the annual review, details of how we apply these will be provided below:

Principles for asset owners and asset managers	Outcomes evidenced	Page reference
1. Purpose, strategy and culture	Our overarching approach and 3 pillar structure of this report demonstrates how our purpose and investment beliefs have guided our stewardship, investment strategy and decision-making practice.	5
2. Governance, resources and incentives	Our robust governance structures and resources are evidenced by Policy Architecture and dedicated GRI team resource. In 2019, the GRI Team has grown significantly to 21 dedicated professionals, who facilitate firm-wide research and integration capabilities.	74
3. Conflicts of interest	Details of how we identify and manage any potential conflicts related to stewardship are included in our Global Voting Policy http://www.avivainvestors.com/voting and on our website (avivainvestors.com) For example, during the year under review, we did not make any vote decisions or vote any internal fund holdings for the Aviva plc 2019 AGM. If any external clients held Aviva shares then we would have provided them with independent research to help them make their own voting decisions. When no instructions are received, we would take no action.	
4. Promoting well-functioning markets	We demonstrate how we respond to market-wide and systemic risks and promoting well-functioning financial markets within our Connected Thinking Pillar of this report.	5-9
5. Review and assurance Investment approach		
6. Client and beneficiary needs	Within the Responsibility Built-in Pillar, we demonstrate how we take account of client and beneficiary needs in our sustainable outcomes and solutions work.	34
7. Stewardship, investment and ESG integration	We have evidenced firm-wide ESG integration practice within our Responsibility Built-in Pillar, with numerous case studies and examples of ESG impact on investment decisions.	11, 69
8. Monitoring managers and service providers		
9. Engagement		37
10. Collaboration	Our Active Ownership activities, evidenced with numerous case studies can be found within our Powering Change Pillar.	37
11. Escalation		37
12. Exercising rights and responsibilities		37

Contact us

Visit avivainvestors.com/responsible for more information and subscribe to updates on how we are powering change



Important Information

Except where stated as otherwise, the source of all information is Aviva Investors Global Services Limited (AIGSL). As at 9 April 2020 unless stated otherwise any views and opinions are those of Aviva Investors. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. Information contained herein has been obtained from sources believed to be reliable, but has not been independently verified by Aviva Investors and is not guaranteed to be accurate. Past performance is not a guide to the future. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested. Nothing in this material, including any references to specific securities, assets classes and financial markets is intended to or should be construed as advice or recommendations of any nature. This material is not a recommendation to sell or purchase any investment.

In the UK & Europe this material has been prepared and issued by AIGSL, registered in England No.1151805. Registered Office: St. Helen's, 1 Undershaft, London, EC3P 3DQ. Authorised and regulated in the UK by the Financial Conduct Authority. In France, Aviva Investors France is a portfolio management company approved by the French Authority "Autorité des Marchés Financiers", under n° GP 97-114, a limited liability company with Board of Directors and Supervisory Board, having a share capital of 17 793 700 euros, whose registered office is located at 14 rue Roquépine, 75008 Paris and registered in the Paris Company Register under n° 335 133 229. In Switzerland, this document is issued by Aviva Investors Schweiz GmbH.

In Singapore, this material is being circulated by way of an arrangement with Aviva Investors Asia Pte. Limited (AIAPL) for distribution to institutional investors only. Please note that AIAPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIAPL in respect of any matters arising from, or in connection with, this material. AIAPL, a company incorporated under the laws of Singapore with registration number 200813519W, holds a valid Capital Markets Services Licence to carry out fund management activities issued under the Securities and Futures Act (Singapore Statute Cap. 289) and is an Exempt Financial Adviser for the purposes of the Financial Advisers Act (Singapore Statute Cap.110). Registered Office: 1Raffles Quay, #27-13 South Tower, Singapore 048583. In Australia, this material is being circulated by way of an arrangement with Aviva Investors Pacific Pty Ltd (AIPPL) for distribution to wholesale investors only. Please note that AIPPL does not provide any independent research or analysis in the substance or preparation of this material. Recipients of this material are to contact AIPPL in respect of any matters arising from, or in connection with, this material. AIPPL, a company incorporated under the laws of Australia with Australian Business No. 87 153 200 278 and Australian Company No. 153 200 278, holds an Australian Financial Services License (AFSL 411458) issued by the Australian Securities and Investments Commission. Business Address: Level 30, Collins Place, 35 Collins Street, Melbourne, Vic 3000, Australia.

The name "Aviva Investors" as used in this material refers to the global organization of affiliated asset management businesses operating under the Aviva Investors name. Each Aviva investors' affiliate is a subsidiary of Aviva plc, a publicly traded multi-national financial services company headquartered in the United Kingdom. Aviva Investors Canada, Inc. ("AIC") is located in Toronto and is registered with the Ontario Securities Commission ("OSC") as a Portfolio Manager, an Exempt Market Dealer, and a Commodity Trading Manager. Aviva Investors Americas LLC is a federally registered investment advisor with the U.S. Securities and Exchange Commission. Aviva Investors Americas is also a commodity trading advisor ("CTA") registered with the Commodity Futures Trading Commission ("CFTC"), and is a member of the National Futures Association ("NFA"). AIA's Form ADV Part 2A, which provides background information about the firm and its business practices, is available upon written request to: Compliance Department, 225 West Wacker Drive, Suite 2250, Chicago, IL 60606.