



Active is: Securing a brighter future

Sustainable Investing
Report 2019

Value. Shared.

Allianz 
Global Investors

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Active is: Securing a brighter future



The investment industry appears to be reaching a tipping point, where sustainable investing is no longer seen as a trend but rather as an intrinsic part of the way we run – or at least are expected to run – money as asset managers.

As an active investor with a long-term outlook, we consider sustainability issues intuitively in our investment decisions and engagement. For colleagues across AllianzGI, this is part of our firm's DNA. However, we also consider these issues consciously and deliberately. We have been developing bespoke products and producing dedicated environmental, social and governance (ESG) research for many years, and are in the process of integrating ESG in a way that can be evidenced across all of our mainstream strategies.

We recognise, though, that clients' interest in sustainable investing stems from different perspectives, which will lend themselves to different approaches and investment strategies. After building expertise across a range of sustainable investment approaches over a long period, we are now categorising them in a way that will help clients identify the appropriate strategy for their needs. This year's report includes a chart that outlines this categorisation and we provide insight into the steps we are taking to integrate ESG considerations into our portfolios.

While our offering in sustainable investing is diverse, our approach is holistic. Given the centrality of sustainability to our overall investment proposition, we appointed our first Chief Sustainability Officer earlier this year. The appointment of Beatrix Anton-Grönemeyer to this new role will help ensure that our ESG and SRI offerings are properly positioned and fully understood. Equally, she will work with colleagues to ensure that AllianzGI remains at the forefront of thinking and practice on engagement and reporting topics.

One inescapably prominent dimension of sustainability relates to climate change. Whatever your beliefs about the causes of the significant changes affecting our environment, it is beyond question that the investment implications in the years and decades to come will be significant. It will fall to active managers to distinguish the potential winners from the losers, and to support the innovation required to tackle these challenges, be it through market finance or other means.

To this end, the Climate Finance Leadership Initiative, of which AllianzGI is a founding member, has been tasked by the UN to develop solutions to meet the goals of the Paris Agreement through the mobilisation and deployment of private sector capital.

Addressing climate change is a recurring theme throughout this year's report. As well as a feature on financing the transition to a low-carbon economy, we share a guest contribution from Dr Martin Bruder Müller, Chairman of the Board of Directors of BASF SE and Chief Technology Officer. He describes how an innovative approach to carbon management is transforming climate protection into an integral part of BASF's corporate strategy.

This report also considers the extent to which the UN's Sustainable Development Goals (SDGs) can be used to achieve a greater, measurable impact through targeted investments.

Aside from how we are investing and engaging on behalf of clients, this report shines a light on some aspects of our corporate activity. We create transparency around our own carbon footprint, which we will report on in future years. We also share details of a multi-year partnership with "The Sea Cleaners". This initiative, led by an entrepreneurial visionary, will employ cutting-edge technology to take action to reduce the plastic pollution of the oceans. As well as supporting a worthwhile cause, this significant sponsorship will play an integral part in driving momentum for sustainability within our organisation.

We hope you will find this report insightful and we thank you for being part of our mission to secure our clients' future.

Andreas Utermann
Chief Executive Officer

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Highlights

We are committed to integrating E, S & G factors into all investment decisions and across all asset classes

Advancing ESG integration

Building on almost two decades of experience in sustainable investing and ESG research, Allianz Global Investors began integrating environmental, social and governance (ESG) considerations into a number of the existing strategies in 2017.

We started with the portfolios managed on behalf of our parent company, followed by the portfolios managed for third parties. Two years on, our integrated ESG strategies account for EUR 118 billion of our assets under management.*

During 2018, AllianzGI systematically integrated ESG as an additional risk factor across 18 third-party strategies with assets of EUR 26.8 billion.* The implementation included a number of AllianzGI's flagship strategies for global, European, US and Japanese equities.

The transition was accompanied by intensive training sessions for the respective portfolio managers and regular review meetings with the ESG Strategy team post-implementation.

"Our global digital collaboration platform was instrumental in facilitating a credible approach to ESG integration," says Steve Berexa, Global CIO Equities. "The more ESG-related discussions and retrievable information that are available on the platform, the easier it becomes for portfolio managers to enhance their traditional investment approach through ESG integration. The more our portfolio managers know about material E, S & G risks in their investment universe, the better they can actively take or avoid these in their investment decision-making. In short, this platform helps us to achieve scale and depth since it is used by our investors globally. While we started with equities, we are committed to rolling out ESG integration across asset classes as well."

"Our global digital collaboration platform was instrumental in facilitating a credible approach to ESG"

Expanding our sustainable investing offering

Since the last report, AllianzGI has broadened its offering globally, particularly by making some of its existing impact-investing strategies in liquid markets more widely accessible across geographies and jurisdictions.

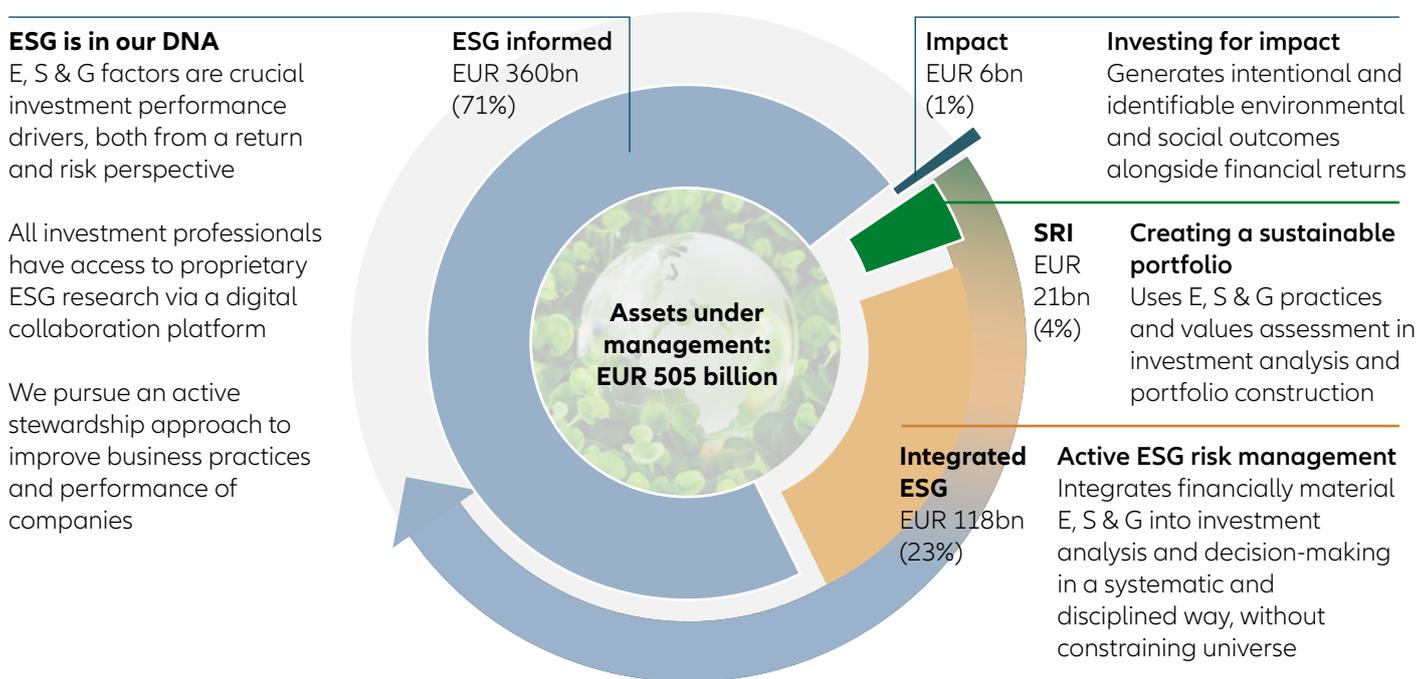
For instance, one approach focuses on overcoming shortages in water and invests in companies active in three areas: water supply, water efficiency and water quality.

Another approach is investing in equities that we deem well prepared for the transition towards a low-carbon economy. These are firms that have already reduced their carbon footprint significantly, have credibly committed to ambitious carbon-reduction programmes or offer solutions to help others significantly curb carbon emissions.

When investing in green bonds – which AllianzGI started to do in 2015 – we take a similar approach. The goal is to finance

the transition towards a low-carbon economy and invest in companies that have started to roll out their conversion credibly, even if they do not rank in the top tier in terms of their current environmental performance.

An increasing number of asset owners recognise the importance of ESG factors when considering emerging market sovereigns and corporates, but those factors are still not entirely reflected in valuations – that creates potential opportunities for active investors. AllianzGI pioneered development of two fixed-income capabilities focused on sustainable investing in emerging markets to reflect this growing client interest. These socially responsible investment (SRI) capabilities are the first of their kind at AllianzGI and among the first in the industry. They will exclude investments in countries that score at the bottom of AllianzGI's proprietary ESG framework.



An ESG pioneer since 2000

PRI top score A+ on ESG strategy and governance

Allianz SE sustainability leader and within DJSI

Data as at 31 December 2018. Source: Allianz Global Investors. Any differences in totals are due to rounding. Impact comprises different strategies targeting climate transition, environmental projects and renewable energy. Environmental, social and governance (ESG); Sustainable & responsible investing (SRI); Dow Jones Sustainability Index (DJSI); Principles for responsible investing (PRI). Sustainability leadership and inclusion in the DJSI are based on the research of and an evaluation of questionnaires submitted to RobecoSAM. The PRI assessment report is based on information reported directly by signatories. Moreover, the underlying information has not been audited by the PRI or any other party acting on its behalf.

*All AUM figures as at 31 December 2018.

Highlights



Integrating ESG in Fixed Income

Taking E, S & G into account is an integral part of the management of corporate bond portfolios at AllianzGI because ESG can provide an early sign of repricing of risk before rating agencies revise their credit assessment [see case study below]. For bond investors, active engagement plays a crucial role in understanding the risk of issuers, which makes it an important element of an active investment process. In 2018, portfolio managers and analysts of the Global Fixed Income team took part in 635 management meetings.

With ESG factors already playing an important role in fixed-income portfolio management at AllianzGI for many years, it was only in 2019 that AllianzGI saw the first systematic implementation of its Integrated ESG approach in fixed-income portfolios, namely in Euro and Global Corporate Credit.

“When integrating ESG within our fixed-income investment process, it was truly about cross-functional co-operation and interplay – particularly between Credit Research,

ESG Research and the portfolio managers,” says Laetitia Talavera-Dausse, Portfolio Manager, European Credit. “That collaboration ensures that we are incorporating E, S & G risk factors at the core of our investment process and, as a result, actively considering ESG when building our credit opinion and finally making an investment decision.”

In fixed income, the sheer number of securities adds to the complexity of integrating ESG; this cannot be accomplished in the same way as AllianzGI integrates its equities strategies. A major challenge is to strike a balance between the incorporation of material E, S & G risk factors, the relative value and keeping leeway for an active strategy.

“It adds value for our clients if we enhance our long-term understanding of issuers via a more holistic view of their business activities and accompanying risks, including good governance, social standards and environmental considerations such as climate change,” Talavera-Dausse says.

ESG in action: a case study from our Global Fixed Income franchise

ESG factors played a significant role for one of the largest issuers in the global credit universe. The company faced structural pressures in its sector, which were heightening competition.

“Our concern was that, at a time when the company faced operational and financial headwinds, there was governance upheaval with the exit of the CEO and CFO in a very short period of time and the bond markets were not pricing in the possibility of a downgrade to high yield for a large amount of outstanding bonds,” explains Mark Wade, Head of Global Industrials and Utilities Credit Research in the Global Fixed Income team.

Through 2016, our internal quantitative models started to flag negative signals. This coincided with our increasingly cautious qualitative assessment. By the end of 2016, AllianzGI had exited all exposure in the issuer, despite MSCI actually upgrading the

company through this period and relatively stable credit spreads and ratings. The change in tone came in the second half of 2017 when MSCI downgraded the company and the credit rating agencies downgraded the company to high yield, resulting in a significant widening in spreads.

“In our credit research we think like other stakeholders,” says Mark Wade. “E, S & G are assessed throughout the credit research process. This starts with the analysis of the macroeconomic environment and sectors. E, S & G factors are particularly important in the qualitative company analysis when looking at the transparency of business, the quality of the management and corporate governance. Lastly, an issuer’s capital, covenant, reporting requirement and governing law structure can be very telling on governance risks.”



Retiring responsibly

In June 2018, AllianzGI joined the Aligning Retirement Assets (ARA) initiative, led by the World Business Council for Sustainable Development (WBCSD), to help companies better align retirement assets with their sustainability goals. The initiative aims to support the adoption of ESG investing in corporate retirement plans through seminars, thought leadership and more.

“Over 200 of the world’s largest companies have joined the WBCSD,” explains Irshaad Ahmad, Head of Institutional Europe at AllianzGI and sponsor of the initiative. “But, less than 10% of these companies have translated this corporate belief into the investment beliefs used for their pension schemes. ARA aims to materially increase that percentage.”



AllianzGI garners top awards

In the 2019 Institutional Investor Extel survey, AllianzGI ranks second out of the top 100 pan-European fund management firms for ESG/SRI for the second year in a row. And five AllianzGI analysts and portfolio managers are on the list of the top 100 pan-European fund management individuals for ESG/SRI.

“Interestingly, three of them do not work within AllianzGI’s ESG/SRI team, which shows how far we have come in integrating ESG across our investment platform,” remarks Eugenia

Unanyants-Jackson , Global Head of ESG Research at AllianzGI.

AllianzGI was also presented with awards in Asia Pacific. In 2018, our ESG capabilities made us the overall leader in the category of Sustainable Investment in Singapore, and we received an “outstanding” in Hong Kong and Taiwan in the sustainable investing category at the Benchmark Awards. AllianzGI also won the Best Regional Application of ESG at Asia Asset Management Awards.



Ensuring we are all on the same page

Given the growing importance of investing sustainably, we want all employees to have a good understanding of the various approaches to investing in this area and the opportunities available to clients. To facilitate this, AllianzGI has rolled out a new module to train staff members on key concepts of sustainable investing and ESG factors. Some 1,800 investment and distribution staff members are required to take the training through the AllianzGI investment academy.

“As an active manager, it is our role to lead on the topic, provide guidance and be very transparent on the function that ESG plays in our portfolios. We see growing demand from

our clients in that area, and it is our duty to help them find the appropriate sustainable investment solution,” says Beatrix Anton-Grönemeyer, Chief Sustainability Officer at AllianzGI.

AllianzGI also started to share its sustainability expertise with clients and distribution partners to help them educate their teams. In 2019, Standard Chartered rolled out three bespoke ESG e-learning modules that have been developed by AllianzGI within their organisation.

And in the US, we recently launched ESG University, a training programme designed to educate clients so that they too may build their own sustainable investing practices.

Presenting a viewpoint

Active engagement at AllianzGI

At Allianz Global Investors, we take our responsibility as an active steward of our clients' assets very seriously.

We believe in high-quality research and gaining a deep understanding of the businesses in which we invest. A significant part of our research efforts focuses on understanding risks associated with our investments, including those related to E, S & G factors. Our portfolio managers, fundamental analysts and ESG analysts hold thousands of meetings with listed issuers every year to inform our investment decisions.

The majority of our meetings with companies are aimed at enhancing our knowledge of their business, management, performance and value drivers. We also believe that as an active manager, we are ideally positioned to engage in dialogue with investee companies and proactively seek to present a viewpoint, request change where necessary and monitor the results of our engagement.

"Our engagements are focused on issues specific to each company and idiosyncratic risks identified in our research process," explains Eugenia Unanyants-Jackson, Global Head of ESG Research. "For this reason, we also strive to make each engagement meeting impactful and productive for all participants by combining the input of the respective equity and fixed-income analysts and portfolio managers with the insights

of our ESG teams. The goal is to give the company perspectives from all critical parts of our investment platform, thus presenting a 360-degree view. Our investment views are influenced by the outcomes of these engagements and are linked to the proxy-voting process, forming a consistent stewardship approach."

Our preference is to engage investee companies on a confidential basis, but we are prepared to engage in a more public way if a company does not respond constructively. For instance, we participate in collaborative engagement initiatives, aimed at mitigating investment risks, improving corporate practices and seeking greater disclosure of information at an industry or market level.

Active engagement at work: cyber risk

In recent years, cyber risk has shifted from being perceived as an unfortunate incident for companies and management to a critical issue that poses a major potential risk for both business and investors. Accordingly, we have prioritised this topic within our engagement approach.

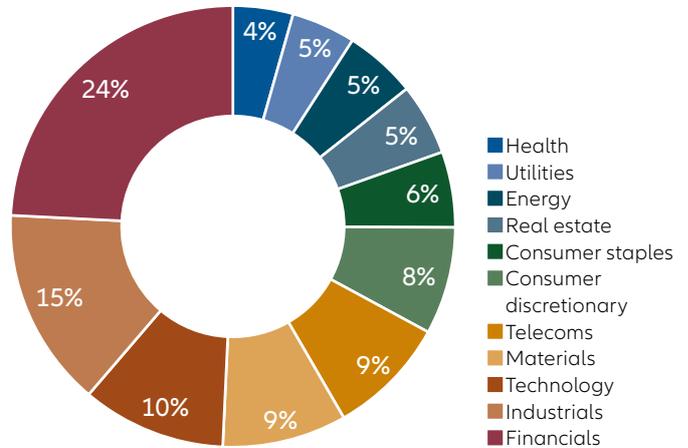
Companies in sectors with the highest cyber-risk exposure

AllianzGI undertook active dialogue on cyber practices and cyber risks via a thematic engagement project with companies in sectors with the highest cyber-risk exposure, such

“Our engagements are focused on issues specific to each company and idiosyncratic risks identified in our research process”

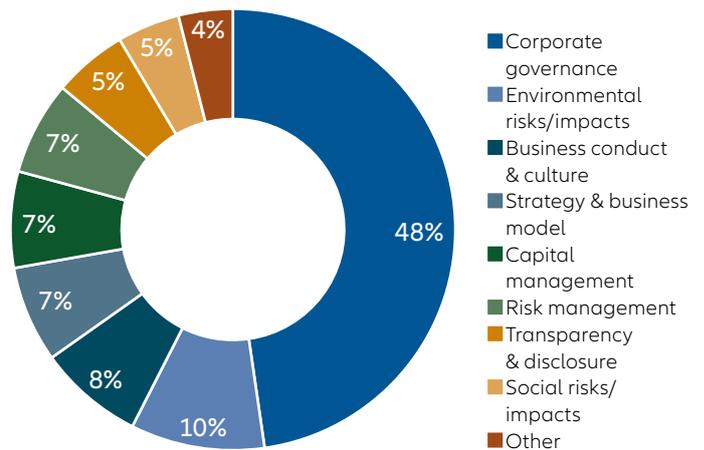
Industry engagements

AllianzGI engaged across the globe to seek positive change on 343 occasions covering 482 topics in total



Engagement activity per topic

AllianzGI engaged with companies on 482 issues of which 63% were ESG-related. Corporate governance topics make up 48% of all activities



as technology, financials and telecoms/internet. We wanted to understand approaches, policies and practices pertaining to cyber-risk management in these sectors and assess cyber resilience and preparedness at the company level. We also emphasised to the boards and management that we have certain expectations in terms of governance, leadership focus and cyber and data privacy culture.

Data security and cyber-risk considerations have become a critical part of our internal ESG research, either as a social risk factor or as a governance risk to show how structure and processes are geared towards implementation of robust cybersecurity measures and ensuring business continuity in the case of a major event. We focus on flagging issuers with a high risk for cybersecurity, stemming from both exposure and management practices, and identifying best practice examples for achieving strong cyber resilience.

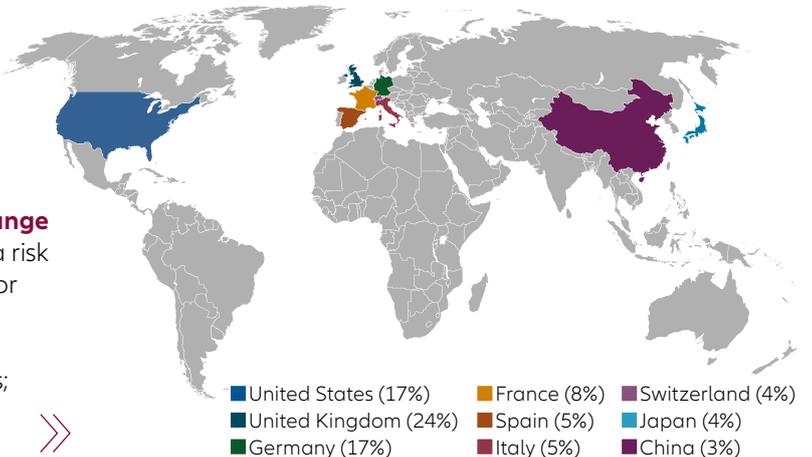
Active engagement at work: climate change

Climate change is increasingly becoming a risk factor that affects businesses – and investor portfolios. Extreme weather events may challenge some industries and create opportunities for others that seek solutions; carbon-intensive industries may struggle in the long term.



Engagement per geography

AllianzGI engaged 247 companies across 21 markets globally



AllianzGI had 343 total engagement activities with 247 companies across 11 different industries and 21 markets in which 482 topics were covered. The category “Other” captures: Audit & accounting, Financial performance and Operational performance. The category “Rest of the world” captures: Netherlands, Russia, Ireland, Sweden, Belgium, Denmark, Brazil, Czech Republic and Finland. “Asia” contains: Japan, China, Hong Kong, Singapore and Korea. Source: Allianz Global Investors, 2019. For illustrative purposes only.

“We also strive to make each engagement meeting impactful and productive for all participants”

An Asian bank with high exposure to carbon-intensive industries

AllianzGI engaged with a bank in Asia that had high exposure to carbon-intensive industrial sectors. Transportation, manufacturing and construction together represented one-third of its loan book. We wanted to understand the financial impacts of tightening environmental regulations and increased scrutiny of non-governmental organisations. We also wanted to encourage better disclosure of the bank’s approach to environmental and carbon risk management and to ensure the bank has effective ESG due diligence processes in place.

Our engagement found that while the company is at an early stage in terms of integration of environmental factors into credit analysis and pricing considerations, there is a good foundation and a solid structure to build a more sophisticated approach in the future.

Active engagement at work: social factors

Social factors can have a large impact on a company – affecting everything from public perception to share price and worker productivity. Health and safety, labour relations, product safety, human capital management and culture were key engagement topics for us in 2018.

A global diversified mining company

AllianzGI engaged with a mining company that had a history of challenges with labour relations at some of their operations. Over a period of two years, we held regular discussions to understand their labour management approach, the extent of the risk this poses to the company and the potential social and financial impacts. It was important for us, as an investor, that a long-term sustainable solution to maintaining healthy

labour relations across all operations was developed by the company. So far, the company has negotiated a number of labour agreements and has overhauled its approach to human capital management and employee engagement programmes. We concluded that social risks to the company have decreased significantly as a result of the company’s new approach.

Active engagement at work: corporate governance

In 2018, we engaged with companies across all our markets on a variety of corporate governance topics. Our governance engagements are focused on issues that are considered material for the companies we invest in and identified as a part of our research or proxy-voting activities.

A large international consumer staples company

We engaged with a large international consumer staples company whose chairman we considered unable to dedicate sufficient time to the business during a particularly difficult time in the company’s history. Through repeated conversations with management and the board, a collective engagement with other investment managers and voting for change at AGMs, we achieved considerable success in promoting constructive succession planning and eventual change of the chairmanship. This results in a much stronger governance position for the company.

Active engagement at work: US executive remuneration schemes

We held 39 engagements with US companies on corporate governance, all of which included at least some discussion on the structure and design of executive remuneration. The most common pushback we experienced to our suggested improvements was along the lines of “but this is what all our peers are doing”.

We encouraged our investee companies to stop benchmarking themselves against other suboptimal structures and design their management incentives to help meet the objectives of their businesses and contribute to sustained value creation. Peer comparisons and benchmarking are useful tools, but we will raise our concerns when companies use these in a way that structurally limits their ambitions and performance while increasing remuneration for executives thus resulting in a “peer trap”.

For more detail use the following QR code



Engagement at work

AllianzGI takes active stewardship very seriously and this external contribution is an example of a company that values being “actively stewarded” by its investors.



Tjerk Huysinga
Executive Vice President of Investor Relations,
Royal Dutch Shell

Shareholder engagement and transparency have become more important over the years. For investor relations in Shell, as well as many other departments, it is through engagement with shareholders that we can help drive change within our organisation and bring forward emerging topics internally. First and foremost, it is important to listen and to accept the challenges brought forward. In the past five years, we have seen a shift in investor queries from potentially sensitive or difficult topics related to day-to-day business operations to a focus on the decarbonisation of our portfolio and the management of climate risks and opportunities.

We have received very positive feedback from our stakeholders about the pathway that Shell has chosen: from announcing the Net Carbon Footprint ambition in 2017 to releasing a joint statement with members of Climate Action 100+/The Institutional Investors Group on Climate Change in late 2018. It was through engagement and collaboration that this statement landed. By mid-2019, Shell had delivered on almost all of the commitments made. We will continue to engage and look for opportunities to implement and evolve our approach to things that matter to our business and our shareholders.

For example, we have now set the first unconditional three-year target on our Net Carbon Footprint ambition. That target, along with other measures to achieve the target, were integrated into an energy transition condition in our long-term incentive plan for senior executives. And in April this year, we released our Industry Associations Climate Review. All of these milestones were driven by different parts of the organisation. Delivery on the joint statement commitments, in our opinion, is key to building trust. Trust that we think is vital to the successful execution of our strategic ambitions, not least to maintain a strong societal licence to operate.

Going forward, we expect that investors' demands for transparency will continue to increase, especially in the area of climate risk- and opportunity-management; they will also seek insight into the responsible management of our business operations. As we have a broad shareholder base, we expect that the views of investors on these topics will vary greatly, something which can be challenging to manage. Over time, we believe that continued engagement is essential to generate mutual respect for different views from both investors and within our own organisation.

Proxy voting

Just as active engagement is an important part of our active stewardship investment philosophy, we take our shareholder responsibilities seriously and fulfil them by exercising voting rights on behalf of our investors. Proxy voting enables us to vote during shareholder meetings on behalf of our investors. This allows us to have a say on important issues affecting companies we are invested in. Our voting decisions are informed by in-depth research and analysis and discussions with investee companies. AllianzGI is committed to full transparency of our proxy-voting activities. We publish our detailed Global Corporate Governance Guidelines and Stewardship Statement and provide a real-time disclosure of all votes cast, including commentary on votes against management and abstentions.

Why we vote against certain proposals

- **Executive compensation:** we vote against increasing executive pay if we find a poor link between remuneration and performance, lack of transparency regarding key performance indicators (KPIs) and targets, or have concerns over potentially excessive executive pay.

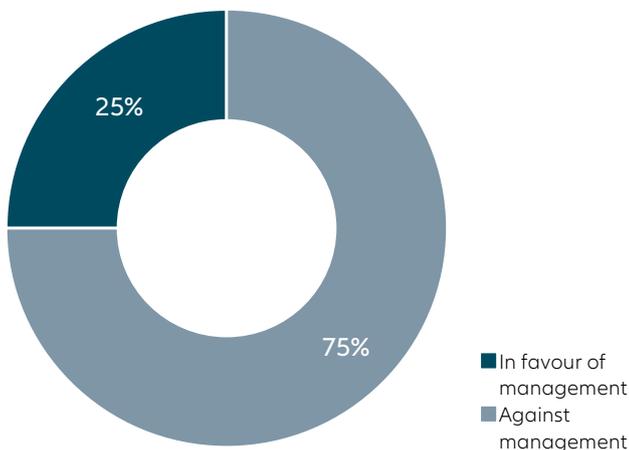
“Our voting decisions are informed by in-depth research and analysis and discussions with investee companies”

When reviewing executive compensation packages, we look for an emphasis on long-term performance across a reasonable range of key value drivers for the business.

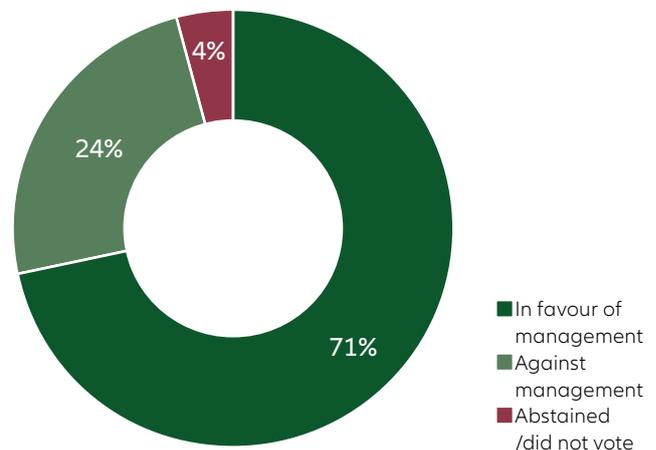
- **Board independence and overboarding:** we aim to promote independent boards and, when voting, our goal is to support boards that have a good balance of independence. We also strive to encourage diversity of background, experience and skills that are relevant to the business.

Proxy voting 2018 by the numbers

Voting at 8,535 shareholder meetings (2017: 7,961)



Voting on 88,962 single proposals (2017: 83,488)



Source: Allianz Global Investors, as at 31 December 2018. Figures do not add up to 100% due to rounding differences.

- **Auditor-related votes:** as a guide for audit contracts, our expectation is that our investee companies will regularly evaluate and renegotiate audit contracts and change auditors after a maximum of 20 years of service.
- **Capital-related reauthorisation:** we cast a large number of votes on capital authorisations, voting against 62% of capital-related proposals in the US, against 51% in Italy, 46% in Germany, 43% in Switzerland and 40% in France throughout 2018. In only exceptional circumstances, and when justified by the company, will AllianzGI support an increase in capital with pre-emption rights of greater than 33%, and an increase in capital without pre-emption rights of greater than 10%, if undertaken.
- **Environmental and social matters:** shareholder proposals related to environmental and social matters are particularly important to AllianzGI because we see them as a key part of our stewardship programme aimed at reducing environmental and social risks in our portfolios. In 2018, we supported over 50% of shareholder proposals related to environmental and social matters.

Voting on agenda items



In 2018, Allianz Global Investors voted against at least one agenda item at **75%** of all meetings globally (up from **68%** in 2017), opposing **24%** of all resolutions.

Total percentage of AllianzGI votes against management proposals by country in 2018

44%

Japan



35%

USA



31%

France



31%

Italy



26%

Germany



26%

Hong Kong



21%

Taiwan



21%

Spain



21%

Belgium



20%

Switzerland



16%

Netherlands



10%

Sweden



6%

UK



52%

AllianzGI voted against **52%** of all compensation-related management proposals, mostly because of executive remuneration issues.

95%

AllianzGI voted against management on **95%** of compensation-related proposals in Hong Kong and against **75%** in the USA, compared to only **16%** in the UK.

27%

Board- and director-related proposals – AllianzGI voted against **27%** of management resolutions.

48%

There was also a vast difference in votes in relation to director-related proposals with AllianzGI voting against **48%** of director-related proposals in Japan compared to just **7%** in the UK.

For more detail use the following QR code



Financing the transition

Funding the low-carbon economy

We know that climate change is a serious threat for society, and the financial sector has a prominent role to play to help overcome it and facilitate the transition to a low-carbon economy. The allocation of capital is a powerful lever for change in the real world. The financial industry can use its power to allocate capital to influence companies and encourage them to adopt climate-friendly policies. It can also increase the competitiveness of climate-friendly products, solutions and practices, and encourage innovation and change, while helping investors avoid businesses that are associated with adverse climate risks.

Additionally, large capital investments are crucial to meeting the targets detailed under the Paris Agreement and the UN Sustainability Development Goals (SDGs). For example, estimates from a recent G20 summit suggest that an additional USD 2.9 trillion of investment in sustainable energy infrastructure is needed to meet the UN SDGs by the target date of 2030. We believe that a variety of finance strategies – including investment in sustainable energy sources and new technology – will be needed to help finance the transition to a low-carbon economy.

The good news is that private capital is increasingly available to bridge that financial

gap. Investments that target specific environmental or social objectives in addition to achieving financial returns are in high demand. Impact investing can be seen as a natural answer to some of the challenges specified by the SDGs.

Sustainable energy and technology

Investment in renewable energy is accelerating to meet the significant requirements in this area. 2018 was the fifth year in a row where global investment in renewables exceeded USD 300 billion. The cost of solar and wind power is falling, driving the adoption of these technologies. The result is that more electricity is being generated by renewable sources than ever before.

China is the country with the highest volume of newly installed renewable energy capacity, followed by the US. In 2018, China saw USD 100.1 billion in investments made – part of a continuing trend over the last few years. Great strides have been made in other markets, too. In Germany, for instance, 41% of the total energy mix in 2018 came from renewable energy sources.

While investments in renewable energy sources are key to achieving a global energy transition from fossil fuels to clean power, new and improved technology is required to accelerate the pace of this transition. This includes efficiency improvements in existing technologies as well



“Climate change is a serious threat for society, and the financial sector has a prominent role to play to help overcome it and facilitate the transition to a low-carbon economy”

as research and innovation in new areas, where financing research and development can help.

Achieving carbon neutrality

Governments shape the regulatory environment that fosters low-carbon production and consumption. They can also play a vital role by encouraging investments in new technologies such as carbon capture and storage solutions or synthetic fuels. Lower taxes for investments in new technologies, for example, can be one way to promote capital allocation to these areas.

Carbon pricing is another way to incentivise the reduction of carbon emissions by changing the behaviour of businesses and consumers. Efficient carbon pricing can help protect the environment and drive research and investment in carbon-neutral technology, as well as help businesses manage carbon-associated risks. Currently, 46 national and 24 regional governments either have carbon pricing schemes in place or are working towards implementing them. Roughly 1,400 companies have internal carbon pricing systems, including more than 100 Fortune Global 500 companies. However, about 80% of global emissions are still not covered by carbon pricing. In addition, about half of the initiatives in place today price one tonne of CO₂ emissions >>

The role of sustainable investing

at under USD 10, whereas it's estimated that the price per tonne needs to reach USD 40-80 by 2020 and USD 50-100 by 2030 to account for the negative externalities of CO₂ emissions.

Mobilising the financial sector

In January 2019, the Climate Finance Leadership Initiative (CFLI) was formed at the request of the United Nations Secretary-General to mobilise increased levels of private financing to tackle climate change. This group of influential leaders in the financial sector is chaired by Michael R. Bloomberg, the UN Secretary-General's Special Envoy for Climate Action. AllianzGI's CEO Andreas Utermann became one of the founding members of the CFLI.

In addition to facilitating private capital flows into climate-friendly investments through innovative partnerships and projects, the CFLI is committed to working towards the goal of making financial flows consistent with a pathway towards low greenhouse gas emissions and a climate-resilient development.

"As an active asset manager, we embrace the challenge and opportunity of identifying suitable investments in the climate finance sector and making capital allocation decisions on behalf of our clients that can assist in mitigating climate change and its effects," says Utermann.

"We are delighted to be involved in the CFLI, a unique coalition of interested parties that will help set standards, showcase best practices, remove obstacles to investing and impact

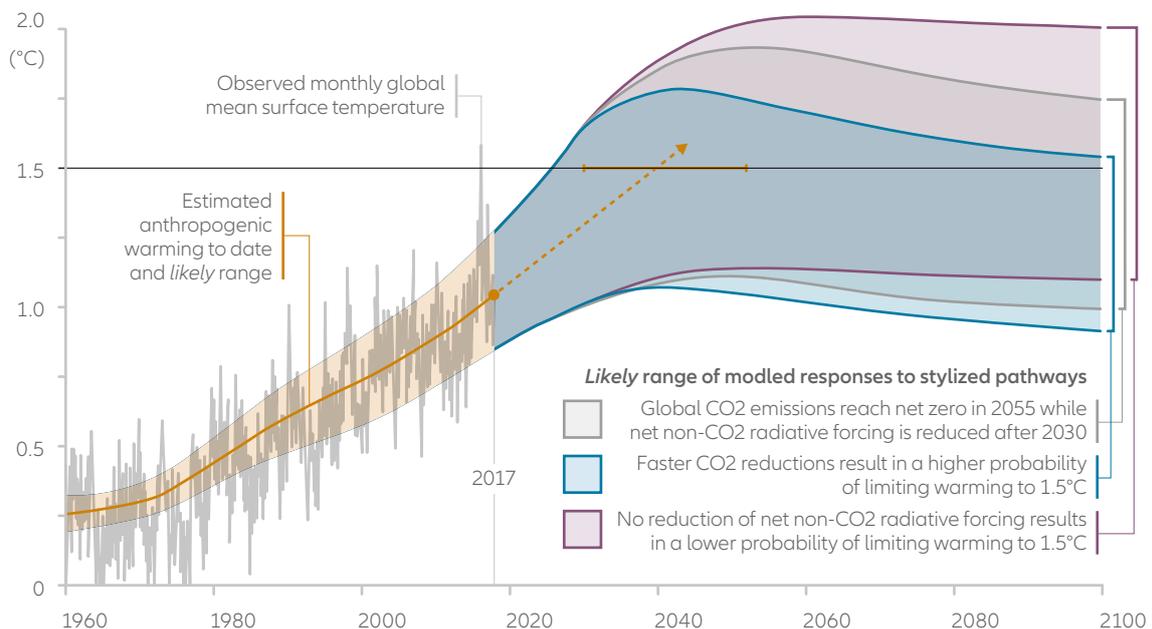
the environment in a positive and meaningful manner."

AllianzGI's top-level engagement in the CFLI complements the active role that we play in a number of collaborative networks, initiatives and associations:

- Climate Action 100+ initiative, which engages with the world's 100 largest greenhouse-gas emitters to curb emissions and strengthen climate-related disclosure
- Institutional Investor Group on Climate Change scenario working group
- UN PRI Infrastructure Advisory Committee, which helps to establish a framework for sustainable infrastructure solutions
- Global Impact Investing Network, which is dedicated to increasing the scale and effectiveness of impact investing
- EU Commission's Technical Expert Group on Sustainable Finance, which advises the Commission on the development of a unified classification system for sustainable economic activities
- Carbon Disclosure Project, Climate Bonds Initiative, Green Bond Principles, and the International Integrated Reporting Council

AllianzGI pioneered the concept of investing in ecological technologies more than a decade ago and has been an active investor in renewables since 2013. In 2015, we started to invest in green bonds and equities that foster climate transition.

Global warming relative to 1850-1900



Case study on carbon management

In a guest contribution, Dr. Martin Bruder Müller outlines that climate protection is an integral part of BASF's corporate strategy.



Dr. Martin Bruder Müller,
Chairman of the Board of Executive Directors
and Chief Technology Officer of BASF SE

For BASF, sustainability is a key growth area ensuring long-term business success. This is why we set ambitious non-financial targets along with our financial targets when we communicated the updated BASF corporate strategy in November 2018. With global greenhouse gas emissions and the associated man-made climate change among the most pressing challenges of our time, the overarching non-financial target is to grow our company CO₂-neutrally until 2030.

Since 1990, BASF has doubled its production volumes while cutting greenhouse gas emissions in half. This means that we have reduced our emission intensity from 2.2 tonnes of CO₂ equivalents per tonne of sales product in 1990 to 0.6 tonnes in 2018, a reduction of more than 70%. Consequently, further improvements are increasingly difficult to achieve due to already significantly optimised production assets, technological barriers and limitations imposed by the laws of nature. Achieving another significant reduction in CO₂ emissions requires entirely new technologies.

Therefore, BASF has launched an ambitious research and development programme, as part of our carbon management, where we have bundled all our efforts in this field. One specific project addresses the energy generation from fossil fuels as the largest source of CO₂ in the chemical industry. Energy is needed to run chemical production processes. BASF's steam

crackers, for example, must reach a temperature of 850°C to process our naphtha feedstocks into olefins, aromatics and other chemical building blocks. If this energy could come from renewable electricity instead of the natural gas typically used today, CO₂ emissions could be dramatically reduced by as much as 90%. BASF aims to develop the world's first electrical heating concept for steam crackers within the next five years.

Another project focuses on altering the industrial production of hydrogen, which also releases significant volumes of CO₂. Hydrogen will be essential for many sustainable fuel and energy storage applications in the future. Together with co-operation partners, BASF is developing a new process technology to produce hydrogen from natural gas. This methane pyrolysis technology splits methane directly into its components – hydrogen and carbon – and requires comparatively little energy. If this energy comes from renewable sources, in theory, the hydrogen could be produced on an industrial scale without CO₂ emissions.

These research projects are just two examples from a whole portfolio of topics being explored by BASF. Such innovations will translate into sustainable products that allow BASF to differentiate itself in the market. This is how we live up to our corporate purpose: We create chemistry for a sustainable future.

Impact investing and the UN's sustainability goals

Investors are beginning to realise that they have the power to make an impact by choosing where and how to invest their funds. Investing with sustainability goals in mind allows investors to influence the way our economy works or how a company behaves through the allocation of capital. It can drive innovation by channelling money towards new technologies, reinforce positive behaviour by rewarding good practices and impact the economic value chain. Furthermore, designated strategies can make investments with a specific goal in mind, such as addressing the need for clean water or curbing carbon emissions.

This type of investment strategy is not just good for the environment or social responsibility – it also has the potential to generate attractive returns.

A new generation of investments

“For us, impact investing in private markets is based on three principles,” says Martin Ewald, Lead Portfolio Manager Impact Investments for Private Markets at AllianzGI. “First, the intention of the strategy must be to generate a positive social and/or environmental impact at the same time as generating attractive financial returns. Second, there must be a causal connection between the investment and the impact generated. And finally, the social or environmental impact needs to be identifiable

and must be reported in order to ensure transparency and accountability for investors.”

In order to qualify for an impact-investing strategy, an investment needs to focus on addressing pressing environmental and social issues, with the UN Sustainable Development Goals (SDGs) used as a recognised credible international framework. The 17 global SDGs were set by the UN General Assembly in 2015 as a way of achieving a better and more sustainable future by 2030. Each goal relates to a specific area, such as eliminating poverty, reducing waste, providing access to quality education and taking action on climate change.

Although many investments may have some relation to a social or environmental theme, it does not necessarily mean that they will fulfil the criteria for impact investment. Impact investing in water, for example, means financing projects related to water efficiency or water quality; it does not mean investing in bottled water. Impact investing in the agriculture sector means investing in food security and sustainability rather than commodity futures.

When formulating an impact-investing strategy in private markets, we ensure that we are able to directly measure the impact of an investment and demonstrate causality between the investment and the generated impact. Our criteria for impact investing in public markets follow a similar logic. However, demonstrating causality between investment and impact is more difficult in public markets unless investments are at a project level as, for example, in the case of green bonds. Given that access to capital through publicly traded securities is critical for many businesses whose products, services and activities create positive environmental and social impacts, there is also scope for impact-focused investing in this space. We see engagement with investee companies as a powerful tool of fostering a closer link between equity or bond investments and positive outcomes.

“Besides the financial benefits, a diversified impact strategy can simultaneously create multiple positive impacts”

A diversified approach in private markets

Within private markets, there are a broad range of investment instruments available, including equity and debt investments in real assets and private companies. These allow for diversification in terms of risk and return. Additionally, impact investments are often not correlated with traditional asset classes. Therefore, targeting different types of impact investments can help to increase the diversification benefits of an investor's portfolio.

Besides the financial benefits, a diversified impact strategy can simultaneously create multiple positive impacts. For example, investing in a combined heat and power plant to increase energy efficiency can facilitate access to affordable and clean energy (SDG 7), contribute to sustainable industry, innovation and infrastructure development (SDG 9) and promote responsible consumption and production (SDG 12). The ability to apply the SDGs more broadly allows investors to understand projects in terms of the dimensions they contribute to.

"While the SDGs have many advantages, it is difficult to use them for impact measurement purposes or even as an absolute framework for portfolio construction," Ewald explains. "For this reason, measuring project-specific impact KPIs is a key part of our impact investment strategy on the private side. These impact KPIs are used in investment decisions and for ongoing monitoring purposes. Our investment team measures, monitors, optimises and reports the impacts generated by specific projects and by the fund. Improvements are made along the way as part of the investment process. This measurable impact of the investment is then reported to investors on a quarterly basis."

At AllianzGI, we aim to enable our clients to maximise their exposure to positive environmental and social outcomes in private and public markets strategies, thus offering a choice of impact-investing strategies across all asset classes.



ESG and your portfolio

How do ESG factors impact portfolio performance?

Astute corporations recognise the importance of environmental, social and governance (ESG) factors for future business success. Investors, too, are paying attention to ESG factors. Incorporating them into investment decisions seeks to provide higher risk-adjusted returns over a market cycle. In some places, such as the EU, there is pending legislation that requires that all funds are ESG risk-managed going forward. Investors are still trying to understand how to fully unlock the performance potential of ESG risk integration into investment portfolios.

A recent AllianzGI study with a focus on ESG tail risks aimed to find out which process of ESG integration looks most promising. To understand how ESG factors may affect

portfolio risk and return, we analysed historic investment performance of European and global equity portfolios between 2008 and 2018.

The study looked at three different areas related to ESG risk factors. First, we provided evidence for the materiality of ESG factors from a risk rather than a reward perspective. ESG is priced on the downside rather than the upside. Second, we analysed which lens investors should use to see how ESG portfolio risks affect their investment performance. Third, we examined the value of active investing and stewardship through corporate engagement and proxy voting.

We largely framed ESG risks in the following manner, which helped us to address and examine ESG portfolio risk in-depth.

ESG risk framework

ESG risk	Macro	Sector	Portfolio	Idiosyncratic
Financial impact	Loss of gross domestic product	Sector devaluation	Portfolio tail risk	EPS revisions Credit downgrades
Modelling	ESG extended economic	Sector ESG materiality framework (SASB/proprietary)	ESG (tail) risk portfolio modelling	ESG extended DCF models ESG in credit ratings
Real-life examples	GDP at risk due to climate change	Coal sector devaluing	Carbon price stress testing	Daily newspaper
Regulatory ESG risk (ie, ESG litigation, CO₂ tax and trade)				
Applies to nearly all asset classes				



Our research indicated three clear results.

1. ESG factors are not pricing the average portfolio returns upwards, but only define the exposure to downside risks

As a starting point, our research sought to answer whether portfolios that build on lower ESG risks have generated stronger returns compared to those that are exposed to higher ESG risks. Our findings, which are in line with other academic research on the subject, show that simply skewing portfolios to better ESG-risk-scoring holdings has not generated higher returns. However, our research provides good evidence that, historically, portfolios with a higher ESG risk profile have shown significantly more financial portfolio tail risk versus benchmark portfolios.

Accounting for ESG factors in your investment portfolio may be an effective way to generate alpha by helping to manage downside risks. Avoiding large portfolio drawdowns by ESG risk management has historically contributed to better risk-adjusted returns. The analysis, however, did not provide any significant correlation between highly rated ESG factors and outperformance versus benchmark.

2. Managing low-ESG-rated holdings is more relevant for compound returns than tilting towards high-ESG-rated companies in portfolios

Understanding the source of ESG risks and opportunities is key. We examined how different ESG-risk-scoring portfolios performed according to their extreme loss expectations: what is the difference in financial damage incurred in the worst 1% and 5% portfolio loss events? What is the difference in maximum portfolio drawdowns?

In doing this, we found that the relatively better ESG-risk-scoring investments have delivered a very similar risk profile compared to the benchmark. This is not the case when it comes to low-ESG-risk portfolios. The significant difference is in the lower tranche, indicating the importance of ESG as a source of tail risk. This may be addressed through fundamental research and active management.

It is important to note that, in our view, ESG risk is not about average portfolio risk, but instead about extreme events that are financially material and stem from an ESG-related source.

3. Active management is key to properly incorporating ESG factors into portfolios

Our research provides further evidence that investors should not rely solely on investing in companies with high ESG ratings or simply avoiding high-ESG-risk holdings. There is evidence that a simple passive or tilted ESG strategy would actually overpay and would concentrate assets without exploiting an additional return potential. To address E, S & G risks attentively, there are a host of E, S & G factors that investors must consider, including constantly changing macro and regulatory dynamics, corporate fundamentals and market and political events that might play a part in future performance. We are convinced that active management that makes a judgemental risk/reward trade-off on E, S & G risks (ie, properly incorporating E, S & G factors into portfolio composition) leads to better risk-weighted returns.

For the full whitepaper use the following QR code



Demand for ESG investments is growing

Investors need guidance to turn interest into action



Two recent surveys commissioned by AllianzGI suggest that the appetite for ESG-informed investments will grow substantially in the coming years. Among both retail and institutional investors, survey respondents indicated an increasing interest in ESG-related assets and a healthy appetite for investing in them.

Our survey results indicate that 71% of institutions hope to manage all of their portfolios in an ESG-conscious way by 2030, compared with only 1% today. This represents a huge shift in how people think about and approach their investments. However, our research also shows that both retail and institutional investors require additional guidance to help them move from interest to action when it comes to investing in ESG-related funds.

Retail investors: only a minority discuss sustainable investments with their financial adviser

In November and December 2018, we commissioned The Nielsen Company to survey 10,000 European citizens to find out how retail investors view ESG investments. The general findings of the research showed that 75% of respondents think sustainability aspects are

Retail investor survey

75%

of respondents interested in sustainable investments

40%

of respondents believe sustainable investing has positive impact on returns

26%

of respondents say they have been offered a sustainable investment after raising the topic with their adviser

20%

have discussed the topic of sustainable investments with their adviser



Institutional investor survey

71%

of institutions hope to manage all of their portfolios in an ESG-conscious way by 2030

92%

of institutions indicate they are familiar with the concepts of impact investing and integrated ESG

56%

say they would allocate more to ESG funds if benchmarks were clearer and more consistent

important or very important to them when investing money, while 40% of the respondents believe that sustainable investing has a positive impact on returns. Furthermore, younger generations showed a greater preference for making an impact with their investments than older generations.

While there is a clear overall trend towards ESG investment, levels of interest vary across different countries. In Portugal, Italy and Spain, more than 80% of respondents say that putting their money in sustainability-oriented investments is important or very important to them – compared with 67% of German respondents.

There is also a high level of interest in the UK: 83% of UK-based respondents say they are very interested in sustainability in general and 70% say that they would invest in funds with sustainability goals.

While the majority of retail investors are interested in sustainable investments, a smaller number are turning this interest into action. Of European respondents with a financial adviser, only 20% have discussed the topic of sustainable investments with their adviser. And, even when they have discussed the topic, they don't necessarily go on to make an investment in sustainable assets. Only 26% of respondents say they have been offered a sustainable investment after raising the topic with their adviser. This might change very quickly once regulation requires advisers to assess the sustainability preferences of their clients.

Institutional investors: more guidance would help drive inflows

We have also explored these topics from the perspective of institutional investors. In a global survey of 490 institutions carried out for AllianzGI by Oxford Economics at the end of 2018, 71% of respondents say they expect ESG investing to grow dramatically more popular over the next

three years. Perception of ESG strategies is also very positive. More than two-thirds of respondents believe that ESG investing has a beneficial effect on corporate behaviour and governance, while only one-fifth of respondents think that ESG investing means sacrificing returns.

Furthermore, 92% of institutions indicate they are familiar with the concepts of impact investing and integrated ESG and 88% are familiar with sustainable and responsible investing. By contrast, only 59% are familiar with the UN Sustainable Development Goals.

Our survey results recorded varying interest for ESG-conscious investments, depending on institution type. While 86% of banks predict strong growth in this area, only 53% of pension managers agree. By region, 80% of US investors believe ESG investing will grow dramatically over the next three years, versus 63% of investors in Asia Pacific. While this data shows a greater enthusiasm among certain institutions and within particular regions, the overall trend still points to a growing interest in ESG-related investments.

What is the key takeaway? Greater guidance around sustainable investments would help to drive further institutional inflows. Nearly three-fifths of respondents (56%) say they would allocate more to ESG funds if benchmarks were clearer and more consistent, while 60% say their ability to invest in ESG funds is hindered by confusion over the different approaches to ESG investing and a lack of standardised ratings. This means there is a huge opportunity for active managers to provide value to clients in this area by helping them navigate ESG investments and find the solutions that best fit with their investment objectives.

Use the QR code to learn more about AllianzGI's global institutional survey



A new regulatory environment

The European Commission's action plan for financing sustainable growth

Institutional and retail investors alike are increasingly embracing sustainable investing. As regulators consider changes to the rule book in order to promote companies that grow sustainably, investors and their advisers should factor in how upcoming regulation will affect their investment choices. This is an area where clients increasingly seek guidance.

Last year, in support of the European Union's climate and sustainable development agenda, the European Commission released a 10-point action plan for financing sustainable growth. The action plan is meant to serve as a roadmap for addressing the EU's Paris Agreement as well as other environmental and social sustainability goals. It's estimated that roughly EUR 180 billion in additional investments will be needed to meet the climate and energy goals set out in the Paris Agreement.

The EU's objectives are to:

- A. Direct capital towards sustainable finance
- B. Ensure that sustainability risks are integrated into financial decision-making
- C. Make sustainable investing more accessible and transparent while fostering long-termism

The action plan is being rolled out using both legislative and non-legislative measures. Four legislative measures are being pushed forward to facilitate the objectives: implementing a standard taxonomy for environmentally sustainable actions; instituting requirements to integrate sustainability factors into the investment decision-making process and enhancing disclosures related to sustainable investment and sustainability risks; creating new low-carbon and positive-carbon benchmarks to help show the relative carbon impact of investments; and requiring advisers and asset managers to take into account investors' preferences on sustainability via

the Markets in Financial Instruments Directive and the Insurance Distribution Directive.

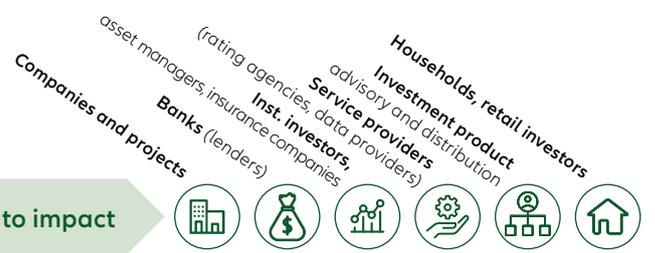
Implications for investors

The biggest change for institutional investors is that fiduciary duties for sustainable investments will be clarified and enhanced. Under the action plan, sustainability due diligence and risk-management policies, as well as executives who are accountable for management of sustainability risks, should be considered part of an asset owner's fiduciary duty. In addition, specific disclosure for products that promote sustainability or have sustainable investments as an objective is expected to be required soon.

Risk management is another important part of the European Commission's action plan. This supports the objective of making sustainability considerations a mainstream part of risk management. Institutions for occupational retirement provision (IORP II) regulated pensions and Solvency II-regulated insurance companies and asset managers should have greater integration of sustainability risks into their financial risk-management frameworks. Furthermore, the action plan calls for more emphasis on materially relevant sustainability factors through incorporating forward-looking sustainability risk assessments.

Additional guidance from the European Commission relates to institutional and retail sales. This proposes that the sustainability preferences of both institutional and retail clients should be discussed in financial product suitability assessments. Retail clients' sustainability preferences should also be documented.

■ *By Steffen Hörter, Global Head of ESG AllianzGI and Member of the EU Commission's Technical Expert Group on Sustainable Finance, and Julia Backmann, Director Business Legal AllianzGI*



Objectives of EU	Measures	Regulation to impact	Companies and projects	Banks (lenders)	Inst. investors, advisory and distribution	Service providers, data providers	Investment product	Households, retail investors
A, B, C	1) Establish taxonomy for sustainable activities		●	●	●	●	●	●
A, B	2) Introduce standards & labels for green finance products				●	●	●	●
A	3) Foster investments in sustainable products		●	●	●		●	●
A, B, C	4) Incorporate sustainability in investment advice				●		●	●
A, C	5) Sustainability benchmarks					●	●	
A, B, C	6) Sustainability in ratings and market research			●	●	●		
B, C	7) Institutional investor duties			●	●			
B, C	8) Sustainability in prudential requirements			●	●			
A, B, C	9) Sustainability in disclosure and accounting		●	●	●			
C	10) Foster sustainable corporate governance and reduce short-termism		●	●	●			

Key:
 Objectives of the EU:
A = direct capital towards sustainable activities
B = integrate sustainability risk
C = make sustainable investing more accessible and foster long-termism.

Level of impact: ● High ● Medium ● Low

Real results: ESG in action



Claire Douchy
Head of Sustainable and
Positive Investments,
Société Générale Private Banking

ESG has been an investing pillar for Société Générale Private Banking (SGPB) for around ten years and it has been embedded now for three years in our product and service offering for high-net-worth clients. Our approach demonstrates Société Générale's commitment towards energy transition and our leading position in renewable energy project finance. Thus, we largely rely on the expertise of the investment bank's Project Finance teams that structure positive impact solutions.

SGPB is committed to operating an open architecture and, in the field of sustainable and positive management, it is essential for us to complement the expertise of our historical partners Lyxor and Amundi with other managers with a good track record.

I am convinced that we have reached a turning point where climate, the defence of biodiversity and sustainable development have become important matters. Our challenge is to build a consistent, accessible and impactful offering and increase our private bankers' competencies in sustainable finance and related strategies. Accessibility means that ESG products should become easier to understand thanks to common labels that are meaningful to clients. The challenge for asset managers or advisers will be to identify and explain the impact on these concepts while delivering financial performance.



Andrea Mariani
Director at Pegaso, occupational
pension fund for employees in
Italy's public utilities sector

For Pegaso, the use of ESG criteria has become an integral part of our investment approach as we have demonstrated in our strategic plan 2021. We are convinced that it will improve investment management outcomes and further strengthen our role and responsibility as an institutional investor. With increased interest in ESG investments at this time, we need consolidation and standardisation of valuation metrics, as they are a key input for the analysis.

Regulation needs to shape that process without adding complexity through incoherence. We have partnered very selectively with investment managers, with whom we want to grow the knowledge and active use of ESG criteria, as we foster a constructive and proactive investor-manager relationship.

**“We need
consolidation and
standardisation of
valuation metrics”**



Yann Duvaud Schelnast
Head of Sustainable Investment, Innovation and Governance, Allianz Investment Management France

In the wave of deploying our ESG approach, we always look at new paths and solutions that help us to fit our objectives to drive our assets towards a resilient portfolio. Answering our end-clients' needs and wishes in terms of sustainability remains one of our primary targets. We pay attention to implementing valuable new products and catching investment opportunities. Reaching real-world impact through investing in green bonds is one of our latest undertakings.



Udo Riese
Financial Control - Head of Risk & Monitoring, Allianz Investment Management Munich

We value the full integration of ESG in all processes of portfolio management – covering traded stocks and alternative assets like infrastructure or private equity. As our ESG approach targets real-world impact, trusted engagement with invested companies is key to us.



Eugenia Koh
Head, Sustainable Investing and Engagement Strategy, Private Bank and Wealth Management, Standard Chartered Bank

ESG investing is essentially an approach focused on what matters to investors – better risk management, the capitalising of long-term macro trends and ultimately, incorporating factors that can help deliver long-term performance. For some of our more socially conscious clients, it's also about harnessing the financial system to serve as an engine in the global economy's transition towards sustainable development. For Standard Chartered, it's about future-proofing the business and responding to these macro trends ourselves as well.

The demand for ESG is being fuelled by increased investor awareness and interest, government support in many markets and wealth changing hands to the next generation of more socially conscious millennials. Industry research tells us that millennials are twice as likely to invest in companies or funds with ESG outcomes. The upper end of millennials are coming into their 40s in just a few years, becoming the bulk of the investor base.

In addition to the increasing client interest, we see the evolution of ESG in the industry as another inflection point. ESG investing will increasingly become mainstream and the more we can standardise the terms and language around ESG and demonstrate a track record of performance, the more we can achieve momentum in this. We also continue to hear from our clients that guidance on impact measurement metrics is important to them.

AllianzGI is one of the known players in the space and has been a strong thought leader. Since it is a nascent space, education of clients and bankers remains important and we are glad to have launched an online education series of modules with AllianzGI on ESG investing. This enables us to further raise awareness and build the space.



Michael Sanders
Principal, Cammack Retirement Group

ESG and SRI investing are likely to grow rapidly over the coming years. An increasing number of investors are looking for options that match their social philosophies. What we need is for top investment professionals, firms and portfolio managers to begin focusing on these offerings. The higher quality the options are, the better their performance may be, and the more people will feel confident with these alternative options. For institutional investors, more and more will seek to align their line-ups with organisational mandates, philosophies and goals. Our firm specialises in retirement consulting to large not-for-profit and public organisations. Many of our clients are mission-driven, while many others are large colleges and universities. All of these organisations are facing pressure from staff – or in the case of the higher education clients, faculty and students – to align the investments in their endowments or foundations with the values of the organisation. This often includes a strong stance on being carbon-neutral. The challenge is finding suitable options to satisfy the demand for these investments. These clients face another hurdle in that they need to find options that are in the best interest of their participants. This means rigorous analysis of the funds available to ensure they are suitable for plan participants.

“Aligning the investments with the values of the organisation”



Ivonne Forno
General Manager, Laborfonds
(complementary occupational pension fund for employees in Trentino-Alto Adige region, Italy)

Laborfonds was the first Italian pension fund to set up an ESG-focused sub-fund in 2008. Plan members, especially women, have invested: with EUR 267 million of assets (as at 31 March 2019), this sustainable option is the second-largest within Laborfonds’ offering. We have detailed plans to further reduce our carbon footprint. More and more people will be ESG-sensitive and, in the mid-term, sustainable investing might play a central role. We welcome the European Commission’s initiatives on sustainable finance.

“In the mid-term, sustainable investing might play a central role”



Lucia Capella
Allianz Investment Management Italy,
Head of Financial Control Investment
Management

In Italy, we are committed to integrating environmental, social and governance (ESG) holistically into our core fixed-income and equities portfolios; it is for us of great importance that portfolio managers consistently include ESG considerations in the selection of the companies they invest in and build their ESG assessments on a range of different sources including valuable proprietary ESG research. Sustainability is for our investments an opportunity as well as a risk.

“Building ESG assessments on a range of different sources”



Raymond Joseph
Citi Private Bank, Co-Head of Citi
Investment Management

Prior to 2016, we incorporated ESG criteria into client portfolios on a customised basis and offered a limited selection of third-party and proprietary investment strategies. Then, we began to formally explore offering ESG investing capabilities to our clients more broadly. As we began talking to colleagues internally and gathering feedback from clients, further interest in launching ESG capabilities emerged. That interest is global and spans generations. What began as an initiative to satisfy client demands has turned into a movement internally that our Citi Private Bank associates have embraced and championed to ultimately formalise our philosophy and approach to sustainable and impact investing.

Notably, we are finding that many ultra-high-net-worth investors view ESG-focused investing as a natural extension of their family’s values and philanthropic endeavours. Other investors are surprised when their investments are counterproductive to their philanthropic goals or personal values. As a new generation takes on a more significant role in the investment decision-making process, the importance of these types of considerations is poised to continue to grow significantly.

“Many ultra-high-net-worth investors view ESG-focused investing as a natural extension of their family’s values”



It's time to act

Allianz Global Investors has entered into a five-year partnership with The Sea Cleaners, a new project designed to combat plastic pollution in the world's oceans. AllianzGI's support for The Sea Cleaners is a natural fit with the firm's commitment to sustainable investing, with the partnership also set to open up new engagement opportunities for colleagues and clients, many of whom are already actively working to combat plastic waste.

Partnering with AllianzGI will support the development of "The Manta", The Sea Cleaners' giant new waste collection ship. Measuring 70 metres long, 49 metres wide and 61 metres high, The Manta will use state-of-the-art technology to collect plastic macro-debris in high-density areas like coastlines and estuaries before they break up and disperse, causing irreversible damage to biodiversity.

"A shocking nine million tonnes of plastic are dumped in the ocean every year – that's about 300kg per second"

On land, The Sea Cleaners work to raise awareness among future generations of the harm caused by plastic pollution through a wide range of activities in schools and fairs.

"A shocking nine million tonnes of plastic are dumped in the ocean every year – that's about 300kg per second," says Thorsten Heymann, Global Head of Strategy at AllianzGI. "As an active, long-term investor, we want to play an active role in combating the scourge of plastic pollution, a common cause we share with The Sea Cleaners. This partnership is something we are passionate about for two reasons: first, it resonates with a critical part of our value proposition for clients, reflecting our desire to take a truly holistic approach to investing sustainably; and second, the joint journey will provide new ways for our colleagues and clients to engage with a topic that we know they care about a great deal."

As part of a drive to reduce plastic use across its global business, AllianzGI is running internal campaigns to reduce its use of single-use plastics including introducing "Plastic-Free Tuesdays" in its London office, while colleagues have also taken part in beach clean-up exercises at Baker Beach in San Francisco, Lamma Island in Hong Kong and Taiwan's "Coastal Cleanup". AllianzGI's Hong Kong office was recently awarded the "Hong Kong Green Organisation Certification" in recognition of its active participation in adopting various environmental practices, including reducing its use of plastics and promoting a green workplace.

Interview: Yvan Bourgnon, President-Founder of The Sea Cleaners

You are the visionary driving force behind The Sea Cleaners. How did it all start?

Bourgnon: I first sailed around the world when I was eight with my parents over three years. Later, during the many races I participated in across the world, I was shocked by the amount of plastic waste polluting the seas. All world seas are now in danger. We have to face this new challenge of fighting ocean pollution. The ocean became my passion and I made it my profession as a sailor.

And what have you done?

Bourgnon: I created the association The Sea Cleaners in September 2016 to fight ocean plastic pollution. To face this new challenge, I surrounded myself with experts and professionals in this field. We found an innovative solution: Manta, a revolutionary factory ship.

Can you provide more detail about Manta?

Bourgnon: We intend to collect large quantities



of plastic before it degrades or disappears into the depths of the ocean, where the toxins it releases create long-term pollution for the entire marine ecosystem. Manta will be the first-ever high seas ship capable of collecting and treating massive amounts of floating plastic

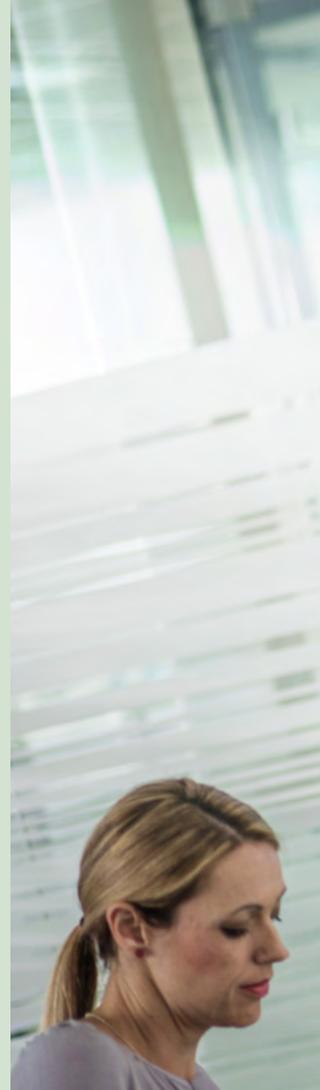
waste in the ocean. For this purpose, a real factory will be on board to collect, sort, compact and store plastic waste. The Manta will be able to store more than 250 tonnes of waste in its hulls before repatriating it to adapted recycling centres onshore. The ship is powered by wind turbines, solar panels and automatised rigs and will also conduct cutting-edge scientific research. One energy-recovery unit will also convert non-recyclable plastics to run the ship and the on-board factory.

When will Manta start to clean the oceans?

Bourgnon: The first Manta should be in action in 2022. The support of Allianz Global Investors is a huge step towards taking action and fighting ocean pollution.



Becoming more eco-friendly



Allianz has been a 100% carbon-neutral business since 2012. Being part of Allianz group, AllianzGI offsets unavoidable carbon emissions by retiring carbon credits that were created via investments in sustainable forest protection projects. As part of its carbon-offsetting initiative, Allianz is involved in REDD projects in Indonesia and Kenya and a programme of activities project in the energy efficiency sector in India. In 2018, Allianz retired 373,448 carbon credits that were generated by investments in the above-mentioned low-carbon initiatives. Each credit accounts for one tonne of carbon. The savings in emissions are independently measured and

certified once a year. Allianz aims for all of its electricity to be generated by renewable energy by 2023. AllianzGI in Europe has already made major steps towards achieving that goal.

In 2018, in Frankfurt, our largest European office location, we were able to reduce carbon emissions by 356 tonnes per year through further optimisation of building technology, with air technology and heating accounting for almost half of CO₂ savings.

Another area of change was related to the use of plastics. In Frankfurt and other European office locations – where applicable – we already use tableware and cutlery in our tea kitchens that are washable and reusable. Plastic cutlery for events has been banned and replaced by wooden cutlery. Plastic to-go plates and containers have been replaced by products made out of corn starch and non-bleached organic cardboard. Tea bags in plastic wraps have been eliminated as well and replaced by fair trade tea available in recycled cardboard boxes. Plastic bottles for water, cola, etc, have been replaced by glass bottles. For 2019, our goal is to replace additional office supply (pens, markers, etc) made out of plastic with biodegradable solutions.

AllianzGI in Asia Pacific has also found ways to become more eco-friendly in its daily

“Allianz has been a 100% carbon-neutral business since 2012 and offsets unavoidable carbon emissions”



	AllianzGI	Allianz Group
	CO₂ emissions (tonnes per employee)	CO₂ emissions (tonnes per employee)
Energy consumption (internal)	1.3	1.6
Business travel	2.9	1.0
Paper consumption	0.03	0.09
Total	4.2	2.7
	Water consumption (cubic metres per employee)	Water consumption (cubic metres per employee)
Water consumption	30.9	13.1
	Waste (kg per employee)	Waste (kg per employee)
Waste	111	140

operations by asking for ideas from teams in the region. The feedback and the suggestions were impressive. We evaluated and clustered outcomes into five key areas, with solid strategies and implementation plans: awareness, reduction, reuse, recycling and certification.

First achievements: in our Taiwan office, we have replaced the air conditioners in certain areas with energy-efficient models. In Hong Kong, we have joined the Energy Saving Charter 2018, launched by the Environment Bureau of the HKSAR. As we have observed, the monthly energy consumption of air conditioning has reduced significantly.

We promote a paperless office and have already placed prominent signs to remind colleagues to print only when necessary. In the first half of 2018, the average monthly paper consumption in the Hong Kong office dropped by 20% compared to the same period in 2017.

All offices in Asia Pacific have recycling bins in the common areas for collecting plastic products, papers and cans. At the same time, we continue to source more office supplies made with recycled content, besides recycled papers for printing. For example, in our Hong Kong and Taiwan offices, we have switched to recycled paper towels.

Active is: Fostering a low-carbon economy

This year, AllianzGI is the official carbon-offsetting sponsor of the Principles for Responsible Investment in Person conference (PRI in Person) – one of the most important meetings for responsible and sustainable investors. This means that we will offset the direct greenhouse gas emissions of the three-day conference and all emissions related to delegates travelling to the conference. The total emissions from the conference will be measured and the same amount of carbon in the form of carbon credits will be retired. Those credits come from the Rimba Raya Reducing Emissions from Deforestation and Degradation (REDD) project in Borneo, which is helping to prevent the deforestation of nearly 65,000 hectares of peat swamp forest, with the goal of avoiding more than 130 million tonnes of carbon emissions. This compares to removing one million cars from the world's highways every year for the next 30 years.



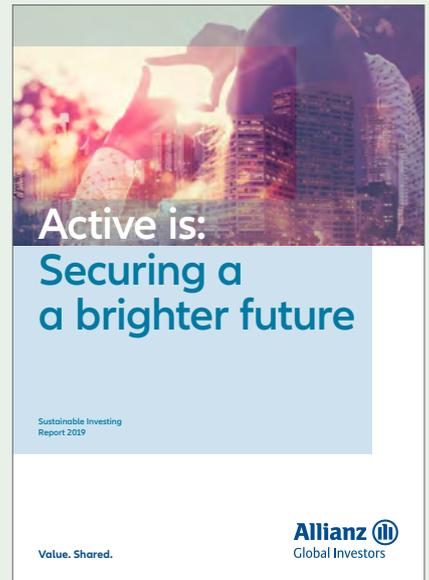
The logo for 'PRI in Person' features a blue bar chart icon to the left of the text 'PRI in Person'.



Learn more about the PRI in Person conference using the QR code

Rimba Raya is the world's largest initiative to protect and preserve high-conservation-value tropical lowland peat swamp forests and the world's largest privately funded orangutan reserve.





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