RESPONSIBLE INVESTING

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»We are actively participating in climate change initiatives and consequently have been strong supporters of climate related shareholder resolutions; but investors and companies can and must do more to accelerate the just transition to a more sustainable economy.«

Roelfien Kuijpers
Head of Responsible Investments
and Head of Strategic Relationships
Dear reader,

Powerful forces have been unleashed in recent years that have accelerated and will continue to accelerate the shift towards responsible and sustainable investing. The growing importance of ESG is verified by top legal opinions, regulatory trends, independent research, as well as our own experience, which reveals that integrating ESG factors into the investment process has the potential to improve performance and reduce risk. An important driver for encouraging the uptake of responsible investment practices is the growing body of academic literature on the financial benefits of ESG. We first assessed the ESG academic literature with a white paper in 2012.

Three years later, one of our portfolio managers in cooperation with the University of Hamburg assessed more than 2,000 academic studies. At the 2017 PRI in Person conference in Berlin, PRI’s board chair Martin Skancke said: „If there is still any doubt about the positive relationship between ESG and financial performance, I suggest investors take a look at the academic findings of DWS and the University of Hamburg.“

In autumn 2018, we will publish our third report on the ESG academic literature, providing a deep-dive analysis on how incorporating all extra-financial data can improve performance and reduce risk. We are also encouraged by improvements in the data related to ESG. This includes improved disclosure from corporations (often driven by investors, stock exchanges and regulators), the application of big data and AI technologies, as well as the groundbreaking advances we are seeing in the area of mapping locations of companies’ facilities for assessing physical climate risk. It is also encouraging that more insurance companies and pension funds are starting to analyze and act on low-carbon transition risks after the first efforts by regulators in California, the UK, the Netherlands and Switzerland to use energy technology scenarios to assess investor portfolios.

While all methodologies have their pros and cons, we need to continuously evolve and deepen data-driven analysis across all asset classes and all aspects of sustainability. This is important since what is measured, gets managed.

For those of us pioneering and delivering new investment solutions, the Paris Climate Agreement and the United Nations Sustainable Development Goals have provided an invaluable framework for governments, investors, companies and other institutions in society to create a better world. As investors, we must encourage accelerated action to realize the economic and social benefits of these important international agreements and avoid the increasingly dangerous risks of climate change. We are actively participating in climate change initiatives and consequently have been strong supporters of shareholder resolutions on that topic; but investors and companies must do more to accelerate what seems to be just a transition to a more sustainable economy.

These strides made in delivering a new investment philosophy are being assisted by powerful governmental and supervisory actions that are working towards developing a sustainable financial system. Governments, insurance and pension fund regulators, central banks and sovereign wealth funds are increasingly assessing and acting to address and account for ESG, climate change and the Sustainable Development Goals. A few years ago it was unthinkable that sustainability and climate change would be an important priority for these types of institutions.

We are proud to draw on our early leadership, our extensive track record and our many efforts to develop societal and client-based solutions for environmental, social and corporate governance issues.

Roelfien Kuijpers
Head of Responsible Investments and Head of Strategic Relationships
DWS’s ESG track record spans two decades

- **1994**: First active participation in Hoechst annual general meeting (AGM) (26.04.1994)
- **1997**: First financial institution to create a microfinance fund (DBMDF)
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- **1997**: First financial institution to create a microfinance fund (DBMDF)
- **2006**: Initiation of DWS decisive focus on climate-change-related investment themes
- **2007**: Start of ESG data integration into the investment database
- **2008**: Designation as PRI signatory
- **2009**: Installation of carbon counter at NY Times Square
- **2010**: Integration of CO₂ ratings in G-Cube
- **2011**: Disclosure of voting policy and results on website
- **2012**: Publication of white paper on ESG based on review of 100+ academic studies
- **2013**: Establishment of international proxy voting guidelines
- **2014**: Signing of Carbon Pricing Leadership Statement
- **2015**: GSF reaches €2.1bn in principal investment commitments to U.S. communities
- **2016**: Launch of the ESG engine
- **2017**: ESG becomes an official part of the research process

*Source: DWS (September 2018). No assurance can be given that investment objectives will be achieved.*
Participation in China’s Green Finance Committee

Establishment of new ESG Thematic Research team

Four of our largest real estate funds receive a „Green Star“ – the Global Real Estate Sustainability Benchmark’s (GRESB) top score

DWS leads Deutsche Bank accreditation with Green Climate Fund (GCF)

Membership awarded in IIGCC & UKSIF

Publication of ESG white paper based on review of 2,250 academic studies

2016

ESG Thematic Research team publishes 1st report

Level of certified green buildings in real estate asset management reaches €9.25bn

Five of largest DWS real estate funds receive the GRESB’s top score (Green Star).

Establishment of a dedicated Corporate Governance Center responsible for governance analysis and engagement with investees

Green Climate Fund decides to become the anchor investor in DWS’s Africa Clean Energy Strategy

2017

January:
Petra Pflaum is appointed CIO for Responsible Investments

September:
Roelfien Kuijpers is announced as DWS’s Head of Responsible Investments

September:
DWS’s inaugural ESG Summit takes place in Berlin

September:
EFFAS ESG certification program for portfolio managers is rolled out

November:
Creation of the Responsible Investment Leadership team

December:
DWS reports more than €20bn of Assets under Management globally, managed according to ESG criteria

DWS records the most votes in favor of climate-related U.S. shareholder resolutions in five years

2018

February:
Launch of DWS SDG ratings

February:
DWS named Responsible Investor of the Year – Insurance Asset Risk

June:
DWS reaches almost €30bn in Assets under Management globally managed according to ESG criteria

July:
DWS and Apple launch clean energy fund to invest in climate solutions in China
It is time to really push responsible investing forward. No global asset manager can afford to neglect this trend.

Petra Pflaum
CIO for Responsible Investments
Responsible investing in practice

Petra Pflaum was appointed DWS’s CIO for Responsible Investments at the start of 2017. She oversees the continued integration of our environmental, social and governance capabilities and the growth of ESG-themed solutions across our Active, Passive and Alternatives divisions. She first joined DWS in 1999 and served as Co-Head of Global Research and Global Head of Small and Mid-Cap Equities. She remains EMEA Co-Head of Equities and is a member of the DWS Investment GmbH Management Board.

Q: Petra, what is it that you seek to accomplish in your role as CIO for Responsible Investments?
A: I have long believed that ESG integration improves the risk-return profile of a portfolio. It is not a case of wanting to change the world for the sake of it – we are convinced that integrating ESG factors improves the value we can create for our clients.

The feedback we receive from clients when integrating ESG criteria into their portfolios is that they appreciate the transparency and guidance we can provide and the incorporation of these aspects into our investment processes.

It would make me very proud if we could achieve a consistent responsible investment approach across our platform, enhance the level of ESG integration in our processes and increase the number of dedicated ESG solutions for our clients.

Q: What are the potential benefits and key challenges of integrating ESG?
A: We strongly believe that integrating ESG criteria into our investment process contributes to a better understanding of the environment in which companies are operating. It enables us to identify risks and opportunities that traditional financial analysis might not reveal. There is robust academic evidence that integrating ESG information has a positive impact on corporate financial performance across major asset classes.

One of the key challenges to be addressed from an asset management point of view is the quality of ESG disclosure from corporates and organizations. Another is the task of ensuring that we integrate all ESG-relevant issues into our investment decisions.

There is no better way of creating long-term value than responsible investing.

Q: How are clients engaging in the broader ESG space?
A: Clients very often come to us to learn about ESG megatrends and investment opportunities. Research and insights are central to having informed conversations with them and identifying the considerations and solutions that best suit their individual objectives and requirements.
I was a fund manager for almost two decades and spent many years heading our equity and fixed income research. Whatever my role, I have always promoted responsible investing because I believe investment decisions should be based on as much information as possible. This is exactly what more and more investors want – a 360° view.

Petra Pflaum
CIO for Responsible Investments

Q: What is your position on executing clients’ voting rights in your role as a fiduciary?
A: Corporate governance, including genuine and regular engagement with companies, is an integral part of our investment process. Exercising our voting rights is essential in making our voice heard.

In 2017, we voted at a total of 757 meeting in 42 listed markets, which represented an increase of 33% compared to last year. We continued to gradually increase the number of meetings voted at per year, making sure we didn’t compromise on the quality of the analysis. These meetings represented approximately 70% of the equity assets under management of DWS in Europe1. As our Corporate Governance and Proxy Voting Policy applies demanding criteria, we voted “Against” management recommendations in 26% of the total number of items voted in 2017, out of which 22% were “Against”, 4% “Abstain” and 1% “Withhold” most notably when we evaluated the proposed executive remuneration plans.

Often when we speak at important AGMs, we voice our criticism over the treatment of shareholders, which underlines our fiduciary role. In 2017, we continued our engagements with investees globally, some of which were continued from previous years and others newly initiated.

Q: How do you handle different ESG perspectives when constructing a portfolio?
A: There are numerous data providers that offer a broad spectrum of ESG information on corporations and sovereigns, but they all approach the topic from different angles. Some look at norms. Some look at controversial sectors or environmental sustainability. Each has its own way of aggregating and ranking issuers. The challenge is to use all of this information as objectively as possible.

This is why we developed the ESG Engine, a proprietary tool that delivers a 360° view based on the information provided by seven leading ESG data vendors covering 13,000 issuers worldwide. We also created our own SynRating methodology, which enables us to identify the leaders and laggards in the ESG space.

These capabilities allow us to assess and analyse the ESG quality of our clients’ portfolios. The ESG Engine also provides bespoke ESG filters, depending on a client’s individual values and requirements. We believe it is the most comprehensive tool of its kind.

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1 The representative voting rights are exercised by their respective capital management company, i.e., either by representatives of the DWS Investment GmbH, Deutsche Asset Management S.A., DWS International Gmbh or by the representatives of the Deutsche Asset Management S.G.I.I.C., S.A.
Q: As an asset manager, to what extent do you consider ESG factors?
A: As a general rule, two basic motivations compel investors to consider ESG issues. The first revolves around strictly ethical concerns – for example, sectors that investors may find controversial, such as tobacco. The second revolves around identifying as robustly as possible the expected risk and return of an investment. The difference between these two motivations drives two distinct but complementary investment strategies for our organization.

On one hand, we have the incorporation of environmental, social and governance information into our investment decisions – what we call ESG integration. On the other hand, we have the development of our ESG-focused products and services – what we refer to as ESG solutions. All of our ESG solutions go beyond the ESG integration approach and also include a combination of best-in-class, exclusion and engagement.

With the integration of Sustainable Development Goals (SDGs) information into our ESG Engine, we are now able to screen companies for their share of SDG revenue.

Q: As an asset manager, you cannot change the world for the better but you can make an impact beyond performance. What is that impact?
A: We must always remember that we act as a fiduciary partner to our clients and they expect us to protect and grow their assets. As I said earlier, it is not our role to save the world for the sake of it. Even so, there is an impact we can achieve.

Corporations and sovereigns that do not comply with certain rules will enjoy less and less market acceptance over time. By not investing in them or by investing much less than we could – for example, keeping a stake that allows us to influence corporate governance – we send a clear signal to them to improve their ESG footprint. It boils down to a simple truth about capital markets: there will be a correction over the longer term if there is no demand.

I can see a future where we don’t need a separate ESG function anymore and where the consideration of ESG factors becomes an integral part for all players in the market. With our experience in making ESG investable in different ways, we are at the forefront of this trend.

Stefan Kreuzkamp
Chief Investment Officer
Our commitment to responsible investing

As a fiduciary partner, we are fully committed to providing state-of-the-art ESG solutions and expertise to enable our clients to invest responsibly. Our goal is to allow them to invest in a way that contributes to a sustainable future.

Chief Investment Officer for Responsible Investments

DWS’s CIO for Responsible Investments ensures that our clients receive the full benefit and transparency of integrating environmental, social and governance factors into their portfolios.

ESG Thematic Research

Our dedicated ESG Thematic Research team analyses relevant ESG topics and publishes reports on the issues and megatrends impacting investment decisions, such as climate change, renewable energy, water sustainability, corporate governance and social and labor practices. Future research papers will be published in cooperation with our DWS Global Research Institute.

Corporate Governance

As an active shareholder, DWS has worked for more than two decades to achieve greater alignment of management and shareholder interests. We engage directly with company management on environmental, social and governance issues.

Comprehensive ESG data analysis

Our proprietary ESG Engine was developed to structure ESG data across multiple perspectives, offering a unique 360° view of each issuer. The ESG Engine provides a high level of investment flexibility, enabling us to deliver fully customized solutions.
Overseeing our responsible investing strategy: The CIO Office for Responsible Investments

Our CIO Office for Responsible Investments is structured along four areas of focus and supports all three investment divisions of DWS: Active, Passive and Alternatives.
Guiding our ESG activities: The Sustainability Office

The core role of our Sustainability Office is to frame ESG governance for DWS and to ensure transparency for all stakeholder groups regarding our ESG activities.

The Sustainability Office delivers ESG governance through a set of ESG principles and guidelines, such as its Responsible Investment Statement. This framework aims to facilitate ESG integration into our investment processes and ensure that ESG is integrated into new product approvals and reputation risk processes. One example is our global policy on Controversial Conventional Weapons.

Transparency efforts include our mandatory ESG reporting requirements, such as Deutsche Bank’s Non-Financial Report (NFR) and Principles for Responsible Investment (PRI) Report. In addition, we supply information about our ESG activities to a variety of stakeholder groups through active participation in industry initiatives, market surveys, requests for proposals (RfPs) and our website.

The Sustainability Office also coordinates the many ESG-related projects and requests directed towards our Responsible Investment team.

External affiliations and accreditations

- Signatory of the Principles for Responsible Investment (PRI) since 2008
- Signatory of the Climate Disclosure Project (CDP)
- Member of the Institutional Investors Group on Climate Change (IIGCC)
- Member of Ceres Investor Network on Climate Risk and Sustainability
- Member of the UK Sustainable Investment and Finance Association (UKSIF)
- Member of FNG – German, Austrian, Liechtenstein and Swiss Sustainable Investment Forum related to EuroSIF
- Signatory of the UN Global Compact (UNGCC) since 2000 via the signature of Deutsche Bank
- Member of the Global Impact Investing Network (GIIN) via the signature of Deutsche Bank
- Founding member of the Urban Land Institute (ULI) Greenprint Center
- Active in the International Integrating Reporting Council (IIRC)
- Member of the European Funds and Asset Management Association (EFAMA) – Responsible Investment, Responsible Investments and Corporate Governance working groups
- Member of the Bundesverband Investment und Asset Management (BVI) – Corporate Governance and Compliance working groups
- Member of the Deutsche Vereinigung für Finanzanalysten und Asset Management – Berufsverband der Investment Professionals (DVFA) – Corporate Governance Kommission
Development of internal ESG principles and directions for business implementation

ESG governance function within reputational risk processes of DWS

Sign-off function within new product approval processes

Strategic coordination with Deutsche Bank Group Sustainability

Coordination of global ESG initiatives

Coordination and enhancement of global memberships

Preparation of mandatory reporting, including Deutsche Bank Non-Financial Report and PRI Reports

Coordination of DWS’s active participation in industry initiatives and market surveys

Provision of transparency in engagement dialogues with non-governmental organizations (NGOs)

Classification of DWS’s products and services according to ESG and responsible investment approaches
Expressing our view: The value of corporate governance

Our commitment to strong corporate governance is both a crucial element of our fiduciary duty and an integral component of our investment process. We regard active ownership as a powerful force in promoting better policies and practices and, in turn, driving superior long-term performance.

Fostering good corporate governance requires dedication and expertise. It demands extensive knowledge of businesses’ structures and how they function, as well as legal guidelines and laws. Above all, it calls for the determination to identify material governance issues and engage directly with investee companies striving to achieve positive change.

For us, our corporate governance activities go beyond the fiduciary duty to exercise our voting rights. We maintain a high degree of involvement with our investees around the world using a consistent engagement approach to foster their governance practices and structures and successfully address governance issues. There are various ways in which we engage with our investee companies depending on the company itself, the sector and the issue in question. However, when we see any gaps between our expectations and the company’s attitude towards corporate governance, we begin to engage directly with the company. We regard active engagement as an essential part of our commitment to supporting good corporate governance. Our responses include direct engagement with the management and the board, publicly voiced criticism at an AGM or of shareholder proposals. The use of voting rights represents an especially important means of driving change.

Our long history of our direct involvement in corporate governance issues dates back to 1994 when we first personally participated in an AGM. We have been strengthening our track record ever since, starting in Germany and Europe and gradually applying our philosophy internationally. In 2018, we expect to significantly increase the number of meetings we vote in.

Our corporate governance activities are centered around our proprietary Corporate Governance and Proxy Voting Policy, which is updated annually to reflect our dedicated approach in combination with global corporate governance trends and developments. The process of globally harmonizing our principles for good governance has entered a crucial phase. While we always respect regional regulations, it is essential for us to have our own policy and guidelines in place and to make our expectations consistent and clear. Stringent processes and strict guidance underline our conviction that good corporate governance leads to better performance.

»We place significant value on engaging with investee companies on corporate governance issues and encouraging them to adopt policies and practices that are likely to benefit their shareholders and other stakeholders in the long run.«

Nicolas Huber
Head of Corporate Governance

We transparently outline our expectations and detailed voting guidelines in our Corporate Governance & Proxy Voting Policy that is sent out to our investee companies at the beginning of each year and also made available on our website.

Several issues are foremost in our thinking. Our Corporate Governance Center encourages companies to work towards
greater transparency and the alignment of management and shareholder interests, including executive remuneration, increased boardroom-level independence and holistic diversity. Our proxy voting record clearly reflects this.

We take our stewardship responsibilities as a fiduciary very seriously and have also summarized our understanding of active ownership in the compliance statement to the UK Stewardship Code as well as in our Responsible Investment Statement. DWS has been listed as a Tier One Asset Manager signatory to the Stewardship Code for the UK Financial Reporting Council.

The UK Stewardship Code provides guidance on how asset managers should engage with portfolio companies to improve long-term, risk-adjusted returns for shareholders. Due to its UK-operating business, DWS is obliged to file a “comply-or-explain” statement to the code, which is analyzed and ranked by the Financial Reporting Council (FRC). The Tier One ranking is an important signal also to our clients as it reflects the structure and experience we have built up over the last years. It also highlights how deeply we integrate engagement and discussions of governance matters into our investment analysis making them a part of our philosophy as a long-term oriented and responsible investor.

1 As of July 2018
Providing academic insights and market knowledge: Our ESG thematic research

A robust ESG thematic research capability is essential to increasing the awareness of controversial and pertinent ESG issues that are relevant for our client base and investment professionals.

With in-depth analysis, our clients are better placed to make a decision on how they treat certain controversial sectors as well as identify potential investment risks and opportunities. We also leverage the knowledge of our sector analysts across equities and fixed income for ESG integration-related issues.

Financial markets are contending with rapid technological change and the increasing scope and pace of ESG regulation, with consequent implications for investment returns. The following research snapshots provide a flavor of some of the themes, sectors and asset classes we believe hold significant ESG risks and/or opportunities.

> “Our task is to support our clients and investment teams to understand and consider major sustainability risks and opportunities in their everyday business. In addition, we collaborate with clients and stakeholders to help develop solutions to environmental and social challenges. In this way, we can protect and grow our clients’ investments.”

Michael Lewis
Head of ESG Thematic Research

The Business and Sustainable Development Commission estimates the SDGs could be a key driver of economic growth and unlock opportunities worth up to $12tn per annum by 2030, or more than a tenth of global output. In addition, almost 400m jobs could be created across the food and agriculture, cities, energy and materials and health and well-being sectors.

On the other hand, failing to achieve the SDGs could create macro-financial risks. A range of major social issues as diverse as the loss of biodiversity, smoking, obesity, illiteracy and food waste is estimated to burden output growth by a fifth.

We believe the UN Sustainable Development Goals are therefore providing investors with valuable signals as to the investment intentions of corporations and the direction of government policy around the world. In addition, the SDGs are providing stronger incentives for responsible investing that not only seeks financial returns but also attempts to measure environmental and social outcomes.

Responsible investing & carbon reduction

Corruption, child labor, fossil fuel stranded asset risk, food contamination, gender pay inequality, excessive CEO pay—all of these and other issues can lead and have led to shareholder losses and/or reputational damage to companies and investors. A growing number of investors therefore aim to insulate their portfolios from such risks and capture returns from better-managed companies by over-weighting those with strong environmental, social and corporate governance (ESG) ratings and under-weighting or excluding those that are poorly rated or at risk from the transition to a low-carbon economy.

We explore the mounting evidence in favor of ESG investing and consider the drivers of low carbon methodologies and the benefits of titling portfolios to highly ESG rated securities. We debate whether divestment or engagement is more effective when seeking to alter the behavior of highly polluting or unsustainable companies. Finally, we identify some potential index tracking solutions that combine the desire for both ESG and low carbon filters using MSCI’s ESG Leaders index methodology.

We estimate that the tobacco industry creates at least five times more societal costs than benefits. We are struck by the strong parallels with the objectives of the Paris Climate Agreement and the UN Convention on Tobacco Control: their ultimate goals are supported by the vast majority of countries and both call for a near complete elimination of carbon emissions and tobacco use. Our work shows why stress testing and improved disclosures on behalf of tobacco companies will become a necessary requirement over time.

The coal sector is facing challenges on multiple fronts. These include the increasing adoption of natural gas and renewables in power generation, as well as action by many governments, particularly in the emerging world, to curb air, land and water pollution. Coal assets are also under increased scrutiny since limiting global temperatures from rising beyond permissible levels will require a significant portion of coal reserves to remain unexploited and consequently stranded.

Better access to financial systems could increase the GDP of all emerging economies by 6% by 2025, which is equivalent to adding an economy the size of Germany and potentially creating up to 95 million new jobs across all sectors of the emerging economies.

Expanding such access is a key part of the UN Sustainable Development Goals and a necessary step in enabling many of the other Global Goals to be realized.

The global microfinance sector

Almost half of the total global adult population lacks access to financial services. Microfinance helps by providing micro loans, savings products, micro insurance and payment systems. The sector has grown to US$70 billion, serving over 200 million borrowers.

Institutional investors are the fastest-growing group providing capital to the microfinance sector.

References:
1 The Global Findex Database: Measuring Financial Inclusion around the World, 2014
2 Consultative Group to Assist the Poor (CGAP), 2015
We also have a long history in partnering with leading academics and universities around the world to advance the frontier of ESG thematic research. This includes our December 2015 study in cooperation with the University of Hamburg, which has been widely recognized in the world of ESG investing: “ESG and Corporate Financial Performance,” by Gunnar Friede, Professor Timo Busch and Professor Alexander Bassen, published by the Journal of Sustainable Finance & Investment.

The study aggregates the results of more than 2,200 empirical studies written since the 1970s.

A strong correlation exists between ESG and corporate financial performance in emerging markets.

More than 50% of these studies demonstrate a significant positive relationship between ESG factors and corporate financial performance.

We found a disproportionately positive response to integrating ESG criteria into Emerging Market Equities, Fixed Income and Real Estate.

The report builds on the 2012 DWS white paper Sustainable Investing: “Establishing long-term value and performance,” which reviewed more than 100 academic reports on ESG investing. This study played a key role in educating investors about the importance of ESG integration.
Creating the world’s first physical climate risk index

Beyond our ESG thematic research, we help our clients and key stakeholders to develop solutions to environmental and social challenges. A good example of our activities in this field has been the work with one of our international clients to develop the world’s first index incorporating the risk of physical climate change impacts.

The index aims to provide a foundation for downside protection from extreme weather events such as flooding, rising sea levels and heat stress. Climate risk is moving to the top of the agenda for investors, policymakers and regulators. This has been driven in part by the Paris Climate Agreement and the Bank of England Governor’s speech in September 2015, which identified physical, liability and regulatory risks that make climate change a threat to financial stability.

So far, measuring portfolio carbon intensity has been a starting point to assess these risks. However, carbon footprinting fails to capture the entire picture, particularly as it relates to physical climate risk. Simply using carbon footprinting/carbon intensity is not a risk metric at a portfolio, sector or company level and this approach does not assess which companies are aiming to align their business models with a low-carbon future (Two Degrees Investing Initiative, March 2017).

A more sophisticated approach to climate risk assessment is needed. Most of the focus has been on transition risks, which relate to the likelihood that following the Paris Climate Agreement investors should be prepared for rapid policy changes and the possibility of an abrupt repricing of asset valuations.

However, policies are not yet strong enough to sufficiently reduce carbon emissions. Research from the prestigious academic journal Nature Climate Change estimates that there is only a 5% chance of keeping global warming below 2 °C. This means there is a severe risk of physical climate change.

Summer temperatures in the Northern Hemisphere

*Source: Makiko Sato and James Hansen, Columbia University Earth Institute*
Many of the major ESG challenges in the next several years will concern addressing climate change, improving supply chains and deploying technology across multiple sectors of the economy. Given the increasing scarcity of natural resources and the requirement of business models to adjust in response to rapid technological change, the pressure at a company level will intensify.

Michael Lewis
Head of ESG Thematic Research

Climate change, which will be a scenario that investors will increasingly have to manage as best as possible. Barring unexpected breakthroughs in carbon capture and storage or geo-engineering technology less transition risk simply implies more physical risk and vice versa. As a result, investors have no place to hide when it comes to climate change. Physical climate impacts can range from water stress and cropland decline to river flooding and heatwaves with potential disruptive effects on property and trade flows.

From a sector perspective, extreme heat can threaten energy and agricultural production, as well as general workforce productivity. Sea-level rise poses risks to low-lying energy infrastructure, particularly in the U.S. Gulf Coast, while the 2011 floods in South East Asia are an example of how supply chains can be dramatically affected – in this instance for the global IT and vehicle sectors.

Improved disclosure, robust analysis and new indexes that move us forward from the traditional carbon footprinting approach are required to account for all types of climate risk. We therefore view the work of the Financial Stability Board’s Task Force on Climate-Related Financial Disclosure as critical in delivering enhanced climate risk data.

We are currently working on constructing a methodology focused on quantitative metrics that cover both physical and transition risks. While the data is not yet perfect, we believe it is a significant step forward. The physical climate risk data we are helping to develop and apply to investment products will set a new standard in the market. Finding solutions to ESG challenges gives us the opportunity to improve the quality of our ESG integration activities and to expand available ESG information – for example, the physical impact of climate change on our investment professionals across our Active, Passive and Alternatives divisions.
The heart of our responsible investing process: The ESG Engine

The DWS ESG Engine was developed in direct response to growing data and analytic expertise in the sphere of responsible investing. As a proprietary software system that combines the different perspectives and approaches of seven leading external data providers, it has become the centerpiece of our commitment to integrating ESG into our investment process for all liquid assets across Active, Passive and Alternatives.

1. **Fully integrated** – the signals from the ESG Engine are available to the entire platform and comprehensively considered when making investment decisions.

2. **360° view** – draws on the expertise of seven leading external providers of ESG data: ISS-Ethix, MSCI, ISS-oekom, RepRisk, SigWatch, Sustainalytics and Trucost.

3. **Multi-faceted analysis** – covers ethical concerns as well as risk and opportunities.

4. **Exclusion screening** – rules out companies associated with activities that do not meet specific ESG criteria.

5. **Norms-based screening** – focuses on human rights abuses, child/forced labor, health and safety, environmental impact and issues around business ethics.

6. **Corporate best-in-class rating** – our so-called “SynRating” ranks corporations against their peers and identifies the true leaders and laggards of ESG.

7. **Climate impact profiling** – provides expert evaluation of numerous environmental factors, including carbon footprint, use of fossil fuels, carbon ratings and use of natural resources.

8. **Sovereign norms-based screening** – benefits from high flexibility to use similar screening approaches to gauge would-be responsible investments in around 200 sovereign nations.

9. **Sovereign best-in-class rating** – identifies nations leading in ESG and introduces a deliberate focus on societal freedom.

10. **UN Sustainable Development Goals (SDGs)** – identify corporations whose products and services contribute to a better world.

11. **ESG of portfolios, funds, indices and ETFs** – Our ESG Fund Rating methodology identifies true ESG funds.
The power of objectivity – Investors have different motivations to consider ESG signals when making investment decisions. The prominent ones are ESG risk and opportunities as well as ethical concerns.

The DWS ESG engine masters those challenges by collating and processing large amounts of objective data from various leading ESG data providers. This multi-provider / multifacet / multi-factor approach constitutes one of the key strengths of the ESG engine. Another strength is the “Industry 4.0”-style flexibility to easily implement client-bespoke ESG investment guidelines. All of this is made possible by employing modern ways of software development and building on robust data processing algorithms.

Delivering value to the client – The ESG Engine is fully integrated into our overarching investment process. The huge array of data it produces has been successfully uploaded into our investment management platform, empowering all of our portfolio managers and analysts – irrespective of whether they are responsible for dedicated ESG strategies or “traditional” portfolios – to utilize ESG signals when making investment decisions.

We found that there is no “one-size-fits-all” approach for institutional investors, different requirements drive different sustainable investment solutions. For our ESG retail funds, we introduced a mandatory minimum ESG standard that implements standardized rules for sustainable investment decisions.

Smaller universe, undiminished performance – One of the key challenges facing any investment manager tasked with constructing an ESG-compliant portfolio is to generate a favourable risk-return profile while working under certain constraints.

As a rule of thumb, applying common ESG filters shrink the investment universe by roughly 25%. Yet it does not automatically follow that performance should suffer.

The ESG Engine began as a classical negative/exclusionary screening facility with ESG signals on corporate fixed income and equity issuers. It has now turned into a fully fledged tool to analyze all facets of ESG, including positive focus schemes (like the “UN sustainable development goals”), financing sustainable projects (like “green bonds”) or carbon footprint reporting. Today the DWS Engine covers all liquid assets, most notably sovereign debt as well as third-party funds and ETFs. The process is one of constant refinement and improvement.

»Our strength lies in implementing the necessary technology in a flexible and robust way. Turning something into a solid methodology that is fully integrated into portfolio management systems represents a real achievement.«

Dr. Carsten Keil
Head of ESG Engine & Solutions
Our proprietary ESG Engine

Trusted ESG data

- 7 leading ESG data vendors + public sources
  - ISS-oekom
  - Sustainalytics
  - MSCI
  - Trucost
  - ISS-Ethix
  - SigWatch
  - REPRISK

Automated analysis of multiple ESG facets

- **Products**
  - Screening for tobacco, defence etc.
- **UN SDG**
  - Sustainable Development Goals
- **Norms**
  - Human rights, business ethics etc.
- **CO₂ & climate**
  - Best in Class: leaders and laggards
- **Green bonds**
  - Financing sustainable projects
- **Sovereigns**
  - Political impact with freedom focus
- **Portfolios**
  - ESG for portfolios, indexes, funds

ESG solution

- **Dedicated ESG**
  - Custom-tailored ESG screens
  - Active as well as Passive
  - Equity, Fixed Income, Multi-Asset
- **ESG Integration**
  - ESG signals are available to the entire platform for all functions

1 The DWS ESG sovereign rating is derived from data that includes the Freedom House 2018 freedom scores, available at freedomhouse.org
The 17 United Nations’s Sustainable Development Goals (SDGs) define targets to make the world a better place. They cover targets like “zero hunger” or “affordable and clean energy”. While the targets sit on sovereign-respectively society level, private companies can make a contribution with their products and services – the DWS SDG ratings seek to identify those companies and provide guidance for investment selection. By nature, the SDG ratings emphasize the positives of a corporation and yield a selection guidance, whereas the “classical” ESG-schemes – in classical setup – seek to show warnings and yield a deselection or exclusion recommendation. Hence the DWS SDG ratings support a move in the sustainability market away from exclusion to inclusion schemes.

DWS SDG Ratings: Contributing to make the world a better place

1. Lead by quality: Leaders in ESG ratings
   - Leading in SDG revenue shares
   - Leading SDG revenues by peer group
   - Leading SDG revenues by SDG theme
   - Leading SDG revenues within a region

2. Confirm ESG quality
   - Avoid controversial sectors and weapons
   - Avoid violations of international norms
   - Avoid bad ESG ratings
   - Avoid bad carbon footprint ratings

3. A new true measure of ESG excellence
   DWS SDG letter rating: A–F
   
   A/B: “True SDG leaders”
   C/D: “Mid-field SDG contributors”

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1 A rating of ‘A’ denotes being a ‘true SDG leader’ with a score >87.5 SDG points on a scale between 0-100, whereas a rating of ‘F’ denotes having no SDG contribution with a score below 12.5 SDG points

ESG Engine
Connecting the dots: Integrating ESG into our investment platform
ESG in Active Investments:
From integration to tailor-made solutions

As a general rule, two basic motivations compel investors to consider ESG issues in determining the companies, sectors and countries in which they choose to invest.

The first revolves around ethical concerns – for example, controversial sectors like weapons – while the second centers around a combination of identifying more robustly the expected risk and return of an investment.

The difference between these motivations drives two distinct yet complementary investment strategies within our organization: the integration of ESG information into our investment decisions (“ESG integration”) and the development of our ESG-focused products and services for clients (“ESG solutions”).

DWS offers both approaches to its clients and has established a clear ESG infrastructure to support the ESG integration process and the management of ESG-focused products.

During the past 10 years, we have developed a detailed framework of ESG-related policies to guide and support our activities as a responsible investor. These include our ESG Integration Policy, our Corporate Governance and Proxy Voting Policy, our Responsible Investment Framework and our Controversial Conventional Weapons Policy. All are coordinated through our Sustainability Office in cooperation with our Active, Passive and Alternatives divisions. With a view to ensuring that ESG is a key part of our day-to-day portfolio management processes, we have also invested in two key areas.

Firstly, our investment professionals receive specialist ESG training to deepen their knowledge and understanding of critical ESG factors. More than 400 investment professionals in Active have been required to participate in the seven-hour CESGA EFFAS (European Federation of Financial Analysts Societies) course with many even becoming certified ESG analysts.

Secondly, our state-of-the-art ESG Engine has been fully integrated into BlackRock Aladdin, the system we use to research, build, manage, monitor and measure all our portfolios.

Beyond these activities that are in a constant improvement process, we see the systematic integration of Environmental, Social and Corporate Governance topics in our CIO View as a natural evolution of our ESG integration process. ESG global trends that are material for various sectors and countries are now being integrated into our asset allocation process. We expect this will be value enhancing for our portfolio managers and our clients as the integration of ESG criteria supports a more comprehensive analysis for their risk-return expectations across different sectors and countries.

“We take into account the most financially material ESG factors that impact a company’s business model and competitive position.”

Susana Peñarrubia
Head of ESG Integration – Active
The CIO Office for Responsible Investments has been instrumental in reporting on the Active investment platform’s commitments (for example, our yearly PRI reporting), researching critical ESG themes and organising the execution and reporting of annual proxy voting activities. An ESG Gatekeeper structure has been implemented across our Equities, Fixed Income and Multi-Asset teams to ensure that the Active division is fully engaged with all ESG activities.
There are four principal approaches when considering ESG aspects in actively managed mandates and retail funds: positive/best-in-class screening, norms-based screening, negative/exclusionary screening and sustainability-themed/thematic impact investing. Depending on a client’s needs and preferences, these can be used in combination.

Thanks to the flexibility of the ESG Engine, we have been able to formulate common “minimum ESG” investment standards for all of our ESG retail funds in Active. Those standards and the underlying ESG signals cover corporate issuers as well as sovereigns, green bonds and third-party funds. We use these standards to ensure that funds are dedicated ESG funds and as a basis for our conversations with institutional clients seeking advice on customized ESG solutions.

### Complementing ESG Activities

#### ESG integration
The systematic and explicit inclusion by investment managers of environmental, social and governance factors into the investment process.

#### Corporate engagement and shareholder action
The use of shareholder voting power to positively influence corporate behavior.
ESG in Passive Investments: A flexible approach to defining the investment universe

Along with using proxy voting to encourage good corporate governance, the fundamental determination of a suitable investment universe is vital to the effectiveness of passively managed mandates that are ESG-compliant.

Generally speaking, the same strategies used for actively managed solutions can be employed. These methods have been outlined by the Global Sustainable Investment Alliance (GSIA), a collaboration of the world’s biggest sustainable investment organizations. We tend to favor the following:

1. **Use of existing ESG indices**
   The variety of existing indices in equities and fixed income provides a broad spectrum of ESG factor considerations that can be mirrored in our passively managed solutions. This method can provide a very efficient approach for ESG investments.

2. **Customized ESG indices**
   Using an existing ESG index and adding an extra ESG factor – for example, the exclusion of certain sectors – adds another level of individualization. This approach enables clients to realize a more tailored solution that may better reflect their beliefs and preferences.

3. **Fully customized ESG portfolios**
   By using our proprietary ESG Engine, we are able to fully individualize a given index to satisfy clients’ most specific needs.

Drawing on these approaches, we are able to use a unique implementation in determining an ESG-oriented investment universe. We can rely on existing or customized ESG indices, closely cooperating with index providers, or we can use our proprietary ESG Engine to filter a standard market index.

»Our capability of working with ESG data and our qualitative approach to corporate governance provide a distinct advantage to our clients when constructing an index-based ESG portfolio.«

Manooj Mistry
Co-Head of Index Investing
»One trend we are seeing – in particular from pension funds – is a special focus on low-carbon investing within overall multi-asset allocations. We are very experienced in tailoring ESG solutions to meet this demand.«

Constantin Nicklas
Coverage Strategy & Analytics Europe and Asia

**Major ESG Indices**

<table>
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<tr>
<th><strong>Index Provider</strong></th>
<th><strong>Positive / Best-In-Class</strong></th>
<th><strong>Negative / Exclusion</strong></th>
<th><strong>Thematic Investing</strong></th>
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<tr>
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<td>- MSCI Global Environment Indices</td>
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<td>- MSCI ESG Universal Indices</td>
<td>- MSCI Thematic Environmental Indices</td>
<td>- MSCI Global Climate Indices</td>
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<td>- MSCI ESG Sustainable Indices</td>
<td>- MSCI Low Carbon Target / Leaders Indices</td>
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<td>- MSCI Governance Quality Indices</td>
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<td>- FTSE4Good Index Series</td>
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<td>- FTSE All-World ex Fossil Fuels Indices</td>
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<td>- FTSE All-World ex Coal Indices</td>
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<td>- DJSI Diversified Indices</td>
<td>- S&amp;P Carbon Efficient Indices</td>
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<td>- DJSI Blue Chip Indices</td>
<td>- S&amp;P Carbon Efficient Select Indices</td>
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<td>- S&amp;P Long-Term Value Creation Index</td>
<td>- STOXX Global ESG Leaders / Enviroment Leaders / Social Leaders / Governance Leaders Indices</td>
<td>- STOXX Global ESG Leaders / Enviroment Leaders / Social Leaders / Governance Leaders Indices</td>
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Unique ESG methodology
The indices exclude companies involved in controversial business areas or with severe ESG controversies and select best-in-class ESG-rated stocks. The result is a unique ESG filter based on the MSCI ESG Leaders methodology, using award winning MSCI ESG Research.

Striking a balance
MSCI ESG Leaders finds a balance between low ESG integration and high ESG integration by targeting 50% of the market capitalization for each sector and country of the parent index. (The MSCI SRI indices select only 25%).

Additional carbon filter
The indices apply a carbon filter derived from the MSCI Low Carbon Leaders range, targeting significant reductions in carbon intensity and potential emissions.

Broad exposure with a strong ESG and carbon filter
Even after applying the carbon filter, the indices maintain broad market exposure with strong ESG scores and carbon metrics whilst still exhibiting similar sector and regional allocations to their parent benchmarks due to the broad coverage of ESG Leaders.

ESG allocation toolkit
Coverage of the key developed market regions and single countries (MSCI World, MSCI Europe, MSCI USA and MSCI Japan) on the equity side as well as Euro corporates in fixed income offer a diversified ESG allocation toolkit.

Efficient pricing
Xtrackers ESG ETFs offer cost-efficient access to the core building blocks with diversified ESG strategies.

Source: DWS, MSCI Inc. As of May 2018.
ESG in Alternative Investments: A core component of our real assets business

ESG is central to our Alternatives division’s investment process. It helps us to identify and mitigate potential key risks and to harness opportunities across our real assets business, which includes real estate, infrastructure, and listed securities in these asset classes.

DWS has been a pioneer and thought leader in sustainable real estate for more than a decade. We were a founding member of the Urban Land Institute’s Greenprint Index, which engages real estate owners to collectively track and reduce the carbon footprint of global real estate.

In 2010, we committed to the US Better Buildings Challenge, where we set a goal of improving the energy efficiency of our portfolio by 20% before 2020. We met this objective four years ahead of schedule and continue to aim for portfolio-wide energy-reduction targets.

Energy efficiency and sustainable building technologies play a critical role in addressing long-term issues around climate risk in commercial real estate. Our investments in improving our buildings allow us to meet growing tenant demands for healthy and sustainable real estate.

»Asset managers and their clients no longer need to sacrifice performance for the sake of sustainability. This is one reason why ESG will become even more mainstream – and maybe more quickly than we think. This is particularly true for Alternative Investments.«

Pierre Cherki
Head of Alternatives

€9.43 billion in green-label assets (those with certifications such as LEED, BREEAM, ENERGY STAR, or equivalent as of the end of 2017)

7 funds recognized with Green Stars distinction by the Global Real Estate Sustainability Benchmark in 2017 (€23.3 billion AuM)
Our approach to investing in sustainable real estate is split into four phases:

- **Gathering energy, waste and water information on our buildings**
- **Analyzing performance and developing property-level, energy-reduction and sustainability goals**
- **Setting targets: property, regional and portfolio-level**
- **Measurement and impact**

We believe that a robust approach leads to better risk-adjusted returns for our properties by helping to reduce operational expenses, mitigating environmental risk and enabling us to deliver high-quality spaces to tenants.

We recognize that today’s investors are thinking about energy usage, renewables, water scarcity and other environmental concerns. For instance, in California, where water scarcity is a major issue, we have installed smart trackers that develop an optimal irrigation plan by analyzing temperature, expected precipitation and other factors. The program has resulted in significant water savings, and the projects typically pay for themselves in utility cost savings in just two years.

Although different sectors – residential, office, industrial, retail and so on – have different priorities, the market as a whole is clearly moving more towards optimizing buildings. This is particularly the case in the US and Europe. We continue to be a leader in furthering the journey.

»As a large manager of real assets, we have a tremendous opportunity to make a substantial impact in promoting the advantages of a sustainable approach to buildings.«

**Mark Roberts**
Global Head of Alternatives Research and Strategy
Head of Multi Asset & Solutions, Americas
Case study:
Energy Reduction Investments at the Riverfront Office Park

In the past five years, we have undertaken significant investments to improve the sustainability of one of our flagship properties, the Riverfront Office Park in Cambridge, Massachusetts.

**Investments**
- Installed a state-of-the-art building management system
- Made extensive HVAC upgrades
- Retrofitted 80% of the building’s lights with LEDs
- Installed a fresh air intake retrofit

**Outcome**
- Reduced electricity use by more than 50% from 2008 peak levels
- $185,700 saved in annual energy costs
- Upgrade from LEED Silver to LEED Gold
- Significant improvement in air quality, a growing issue for corporate tenants
- 792 metric tons of CO₂e mitigated

»The milestones we have achieved have been the result of commitment, drive and execution from our portfolio, asset and property management teams. They realize the vision of our sustainability goals.«

Jessica Elengical
Head of ESG Strategy, Alternatives
The seeds of sustainability: Our 20 years of impact investing

Deutsche Bank was the first major financial institution to launch a microfinance fund. This milestone initiative later became part of DWS’s investment platform, and in 2017 we celebrated its 20th anniversary. The fund introduced an investment philosophy that has since helped millions of entrepreneurs gain access to the funding and expertise needed to create new businesses and improve communities in emerging economies.

Since 1997, we have invested in microfinance initiatives in more than 50 countries across four continents. More recently, in 2016, our microfinance funds were integrated into our Sustainable Investments platform, which was created specifically to mobilize more public and private capital for impact investments.

Microfinance and financial inclusion: We have one of the richest lineages in asset management. In total, we have helped an estimated 2.8 million entrepreneurs during the past decade alone.

Within each of the three sectors, the SI group manages investment concepts that are focused on private equity of private debt. All investments are located in emerging and developing countries or are closely tied to communal benefits in developed countries.

Every single one of our investments creates the sort of outcomes that communities and the wider world need – for instance, less water usage, less carbon and less pollution. Each also contributes towards the stabilization of emerging economies by providing credit for individuals – which can be particularly empowering for women.

We also contribute to the United Nations Sustainable Development Goals (SDGs), a key element of the UN’s Global Compact. The SDGs were defined in direct response to the major environmental, social and governance challenges facing humanity. Our funds currently contribute to 13 of the 17 SDGs.

Pillars of the Investment Universe
The Sustainable Investments group manages investment funds that are categorized into three major areas:
- Agriculture
- Climate Change Mitigation
- Financial Inclusion
It is important to acknowledge that investments like these do not come easily. The space of investable projects that produce both viable financial returns and positive contributions to SDGs is growing rapidly. However, it requires an extremely disciplined approach to identify those that fit the bill.

Andrew Pidden
Head of Sustainable Investments
Tackling global warming in developing nations: DWS and the Green Climate Fund

The Green Climate Fund (GCF) was launched in 2010 by the 194 countries party to the United Nations Framework Convention on Climate Change. It was created to support developing nations in their efforts to respond to the challenges posed by global warming. As part of Deutsche Bank’s GCF accreditation, DWS has been assigned to manage the Universal Green Energy Access Programme.

The GCF plays a crucial role in supporting one of the key targets of the 2015 Paris Climate Agreement: keeping climate change below 2 °C. It seeks to bring about what the UN calls “a paradigm shift to low-emission and climate-resilient development” and has a particular focus on the least developed countries, small island developing states and African states – all of which urgently need to reduce or limit their greenhouse emissions.

“We have to convince everyone that the cost of mitigating climate change right here and now is a fraction of the cost, both financially and socially, of not mitigating it,” says Andrew Pidden, our Head of Sustainable Investments. “If you told someone the chance of their house burning down within the next 50 years was 99.8% – which is the Intergovernmental Panel on Climate Change’s percentage probability of mankind-induced climate change – they would insure it today. This is exactly the sort of scenario we are talking about with climate change, but too many people still do not accept the need for insurance.”

The cost of mitigating climate change right here and now is a fraction of the cost, both financially and socially, of not mitigating it.

The GCF completed its first full year of official operations in 2016 and a year later has a portfolio of more than 30 projects. Backed by a multi-million-dollar initial investment from the GCF, the program is intended to improve access to renewable energy in Africa. Endorsed by the governments of Benin, Kenya, Namibia, Nigeria and Tanzania, it will aim to enable local banks to extend medium-term and long-term loans to businesses that provide clean-energy solutions.

“We want to put power into remote African villages by aiding the growth of microgrids and replacing diesel generators with renewables,” says Pidden. “The longer-term plan is to extend this scheme to other African countries.”
»This is the sort of high-impact initiative that our unique positioning – that of a dedicated investment unit on the DWS platform – allows us to pursue.«

Andrew Pidden
Head of Sustainable Investments
ESG: a new mindset

Only a few years ago, responsible investing was still widely regarded as a “nice-to-have”. Now it is increasingly – and rightly – viewed as a “must-have”. What was once routinely treated as an add-on, an optional extra, is well on its way to becoming an essential.

The ever-growing role that ESG factors play in clients’ decisions is obvious from day-to-day practice. Almost every Request for Proposal (RfP) we receive includes questions dedicated to ESG. Different clients have different definitions of what “sustainable” or “ESG” means, and an interactive process is vital to discovering what they find important and how they want to implement the solutions we can provide.

»We have all of the relevant building blocks for constructing a tailored ESG portfolio – Active, Passive and Alternatives. It is our role to listen, understand and come up with the right solution. Our clients know that we are a trusted partner for them, with our ESG roots giving us a solid toolkit to work with.«

Thorsten Michalik
Head of Global Client Group Coverage, EMEA and Asia Pacific

Responsible investing is integral to how we do business. It is not an add-on or something that we simply turn on and off. Just as it is central to our investment processes, so it is central to the conversations we are having with customers around the world.

All of our sales professionals understand the value that the integration of ESG considerations can bring to portfolios. Responsible investing is always evolving, and the solutions we deliver need to reflect what our diverse clients want from this space.

Crucially, this philosophy reflects the fact that different clients, markets and regions are responding to responsible investing in different ways. Some clients may know very little about ESG, while others might be familiar with the idea but unable to fully embrace it without expert guidance.

»Our clients’ interests take priority whenever they seek advice from us, and we want to enable them to invest according to their own ESG criteria and beliefs.«

Pieter Furnée
Global Client Group Head of Responsible Investing

»In the US and across the Americas, corporations and financial institutions are becoming increasingly interested, partially because of the greater sense of responsibility within society. This important trend will be a key component for future investment decisions.«

Robert Kendall
Head of Global Client Group Coverage, Americas
Encouraging to look back, exciting to move forward

Many of us at DWS have observed the remarkable growth of responsible investing at first hand. Importantly, many of us have also contributed to it in some way. Spanning more than 20 years, our track record speaks for itself.

But this is not just about the past: it is about the present and, even more importantly, the future. Along with our clients, we are proud to have played our part in the story of responsible investing so far – and we are excited by the prospect of adding to it.

»ESG is becoming a major new factor in asset management. I can see a future where each and every client – retail as well as institutional investors – considers ESG factors a core element in their portfolio strategy.«

Thorsten Michalik
Head of Global Client Group Coverage, EMEA and Asia Pacific
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