DWS Climate Report 2020

Our actions towards TCFD

DWS

Marketing Material

DWS Climate Report 2020

Our actions towards TCFD

Ladies and Gentlemen,

2020 will be remembered as unique year of challenges but also one of new opportunities.

The outbreak of COVID-19 caused much disruption and heartache around the world, but also forced us to slow down our fast-paced lives and reconsider how we are truly addressing the important challenges we are all facing of which saving the environment and the society in which we live are top priorities.

This is certainly also true for DWS. Like the rest of the world, we adapted to working remotely, reducing our business travel and using digital tools to maintain client and employee engagement. This has also taught us that there are smarter and more environmentally friendly ways of working and serving our clients that we can continue to use in the future. And it has put even more focus on the environmental damage we can already see and which is urging all of us to be faster and more committed to taking climate positive action. It has become clear that it is upon each and every one of us to make the necessary changes now that will ensure future generations' lives.

I have seen this first hand as CEO. These are learnings we can take with us into 2021 to supplement our ongoing sustainability efforts, which have remained a key focus for DWS, regardless of the pandemic. In 2020, our primary goal was to embed the concept of environmental, social, governance (ESG) across the entire asset management value chain and we made significant progress on this by setting up a Group Sustainability Office, Group Sustainability Council and an external ESG Advisory Board. Furthermore, we introduced "Smart Integration" to strengthen the integration of ESG risks in investment decision-making.

Without a doubt, our commitment to climate neutrality was one of our most important milestones of 2020.

DWS is amongst the 30 founding asset managers committing to the Net Zero Asset Managers Initiative (NZAMI). Collectively, our aim is to decarbonise investment portfolios and accelerate our contribution to achieving net zero emissions and limiting global warming to 1.5°C by 2050 or sooner. This initiative underpins our commitment to becoming climate neutral in all our actions in line with the Paris Agreement and ahead of the official deadline.

In order to detail our net zero commitment, we are in the process of formulating our own Climate Strategy in line with TCFD (Task Force on Climate Related Financial Disclosures) recommendations, with this Climate Report forming an important building block.

In our first DWS Climate Report 2020, we not only reflect on our climate-related business activities in 2020, but also outline our planned efforts and initiatives to take climate positive action in 2021 and beyond. In particular we aim for a strategy which is aligned with key TCFD recommendations centred on Governance, Strategy, Risk Management, and Metrics and Targets.

Our Climate Report is fundamental to enhancing DWS' non-financial reporting whilst also ensuring that we provide transparent disclosure on climate action on a regular basis going forward.

Transparency is a key part of our fiduciary responsibility – and one that we take very seriously at DWS. This is precisely why we are following the guidance of the TCFD so that we can learn more about our own climate-related financials, risks and opportunities, and more importantly, what we can do about them to make ourselves better both as a fiduciary investor and as a corporate citizen.

We understand that the road to climate neutrality will be long, but we are confident that we will get there through collective action and by reducing our carbon footprint one step at a time.

Dr Asoka Woehrmann

Introduction

Being part of the solution

The climate crisis is one of the most pressing challenges of our time demanding immediate action to prevent the devastating impacts across biodiversity, social equality, global wealth and corporate valuations. The solutions for the transition to a net zero world are already present in our global society's toolkit and we are now at the decisive point in time where commitments need to translate into actions. With a collective effort across policy makers, industry and financial institutions we can leverage policies and regulation, technological innovation and the required investments to achieve the necessary change.

DWS is committed to being part of the solution by integrating climate-related impact as well as climate-related risks and opportunities into our core business. As a fiduciary for our clients' assets, DWS has an important duty to incorporate all material Environmental, Social and Governance (ESG) issues in every step of the investment process. At the same time, as a corporate citizen, we must ensure that we manage the impacts of our business activities on the environment and society in which we operate.

We plan to report on our climate actions transparently and on a regular basis going forward, starting with this first DWS Climate Report 2020 – our actions towards TCFD.

The lens for our Climate Strategy is driven by the (non-binding) Guidelines on reporting climate-related information[1] recommending an "outside in" and an "inside out" perspective. Based on this view we look at both the financial **risks and opportunities** we need to manage as well as the **climate impact** we have as an organisation.

Climate-related risks and opportunities

As fiduciaries, it is our duty to measure, analyse and manage all material risks and opportunities for our investments - including climate-related risks and opportunities. The Task Force on Climate-related Financial Disclosures (TCFD) has effectively changed how organisations view and tackle climate-related risks and opportunities across the globe. Its recommendations have been incorporated into numerous frameworks, regulation and supervisory expectations. As a supporter, DWS is driving the implementation of the TCFD recommendations and incorporating climate-related risks and opportunities into our governance structure, strategy and risk management processes. We have underpinned these efforts with additional analysis, including climate-related scenario analysis, with the aim of further developing our analysis toolkit and understanding climate-related risks.

Climate impact and net zero

The European Commission has consulted on expanding the definition of fiduciary duty to include responsibility for environmental and social impacts of investment decisions: the "inside out" perspective. At our Annual General Meeting in November 2020, DWS set a target of reaching climate neutrality in line with the Paris Agreement[2] and well ahead of the timeline officially set in the agreement. Underlining this commitment, in December 2020, DWS joined the founding signatory group of the Net Zero Asset Managers Initiative (NZAMI)[3] as the only German asset manager. This initiative covering 30 asset managers representing over $9 trillion of assets under management (AuM) commits to maximize their impact on driving the real economy towards net zero emissions and limiting global warming to 1.5°C. We will set our (interim) targets and action plan by the time of the COP 26 in November 2021 and will report on progress against them in our future TCFD reports.

In the recent past we have significantly improved our understanding of climate-related risks and opportunities through the integration of ESG into the Chief Investment Officer (CIO) View and development as well as calibration of value-added climate-related data. In 2020, we have continued our work by understanding the financial impacts on our investments as

[1] https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf
[2] The Paris Agreement is the first-ever universal, legally binding global climate agreement, adopted at the Paris climate conference in December 2015. The EU and its Member States are among the 190 Parties to the Paris Agreement. In December 2020, the EU submitted its updated and enhanced target to reduce emissions by at least 55% by 2030 from 1990 levels.
[3] http://www.netzeroassetmanagers.org

well as the climate-related footprint of our own corporate activities. The purpose of this report is to reflect on our on-going journey in 2020 and to provide an outlook for our planned climate-related activities in 2021. We believe further implementation of the TCFD and net zero investment recommendations will assist building a cohesive, resilient and strategic approach to the climate crisis as an asset manager.

This report follows the structure of the TCFD recommendations:
(1) Governance
(2) Strategy
(3) Risk Management
(4) Metrics and targets.

Governance

How are climate-related opportunities and risks reflected in our governance structure?

While it is important to identify and understand climate-related risks and opportunities, it is also fundamental to manage and govern these effectively. At DWS, we have designed and implemented processes to help us achieve this across our entire organisation, and we have enhanced our disclosure on these topics to ensure complete transparency for our clients, shareholders and regulators. Without this information, we cannot effectively monitor or progress climate-related action.

The overall responsibility for climate-related risks and opportunities lies with our Chief Executive Officer (CEO) but is also shared across the Executive Board.

Embedding sustainability criteria in DWS' corporate DNA and putting it at its core is not only aimed at helping us to future-proof our franchise but also to participate in the global growth of sustainable and responsible investing. We are fully aware of the importance of climate-related impact and risks as a part of sustainability as a whole and to this end, we are committed to integrating requirements from the TCFD further into our existing governance structures.

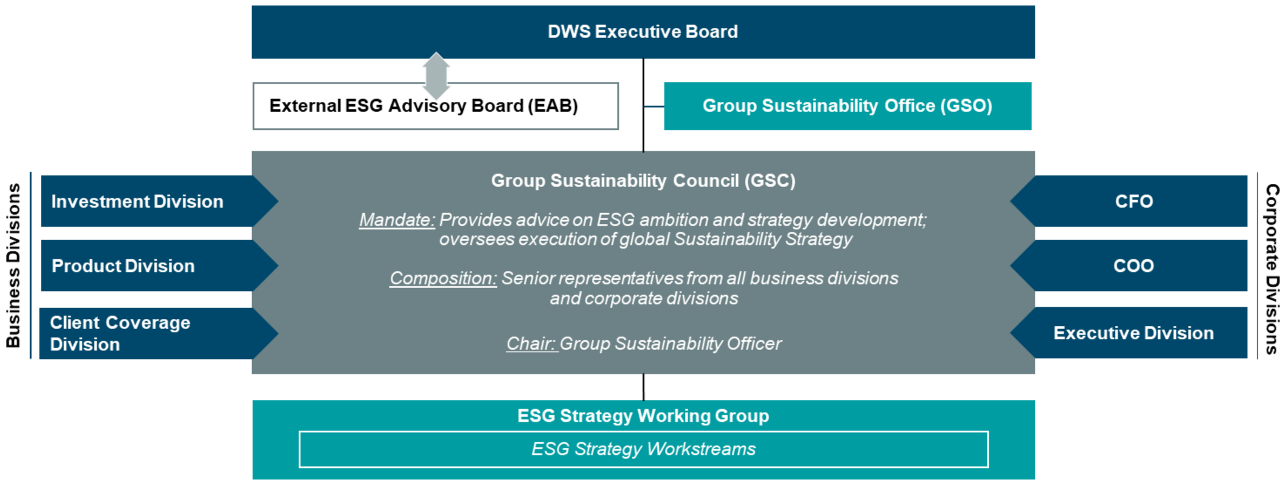
"We want to embed ESG in everything we do to become the leading ESG asset manager in Europe."

Dr Asoka Woehrmann, CEO

To ensure we do this, we have set up a dedicated **Group Sustainability Office (GSO)** to effectively manage our sustainability and climate-related activities across the whole organisation reporting directly to the CEO. In addition, we have launched a **Group Sustainability Council (GSC)** to ensure that all business divisions and corporate functions are represented on our path to sustainability. The GSC is also responsible for monitoring the Sustainability Strategy's execution progress, climate-related risks and opportunities and our sustainability KPIs.

To provide new outside perspectives and expertise, we have set-up an external **ESG Advisory Board (EAB)**[4] that consists of six highly recognised international sustainability and climate experts from diverse disciplines. The EAB will actively advise the Executive Board on accelerating our Sustainability Strategy and also focus on climate-related issues.

FIGURE 1. ILLUSTRATIVE ESG STRATEGY GOVERNANCE STRUCTURE



We will further refine the governance structure in 2021, including reporting and oversight.

[4] https://www.dws.com/Our-Profile/media/media-releases/dws-establishes-esg-advisory-board/

Strategy

How are we managing our response to climate crisis?

DWS wants to become a leading ESG Asset Manager and thought leader by applying “ESG first”-principles as fiduciary and corporate. In 2019, we initiated a review of our entire operating model and, as a result, formulated a comprehensive, firm-wide Sustainability Strategy[5] anchored around 4 priorities:

- Make sustainability the highest management priority and embed ESG in corporate DNA
- Enhance ESG integration and provide top analytics for ESG assessment and reporting
- Develop market leading products
- Lead and engage to promote best sustainable practice in the market

Addressing the climate crisis was identified as a key strategic theme, building on our long-term focus on climate dating as far back as 2006 when we first launched climate-related investment themes[6]. In the last two years, we have designed and progressively implemented processes to manage and govern climate-related risks and opportunities more rigorously across the entire organisation, as well as enhancing our disclosure on these topics to provide improved transparency to stakeholders going-forward.

The year 2020 marked an important milestone: DWS committed to climate neutrality in line with the Paris Agreement. DWS’ signing of the NZAMI further underlines the commitment to achieving this goal. This initiative sees asset managers commit to decarbonise investment portfolios and accelerate their contribution to achieving net zero emissions and limiting global warming to 1.5°C.

Accordingly, we are embarking on a comprehensive process of defining our Climate Strategy for the benefits of our clients as well as our company. First, we continue to develop and enhance methods for measuring climate-related impact for Active, Passive and Alternative investment areas and for our business operations. In the next step, we will formulate interim targets with a focus on this next decade, in line with our fiduciary duties and taking into account the underlying contractual relationships with our investors. In line with our ongoing TCFD, we will report regularly on progress towards achieving these goals.

We see **three important levers** available to us to drive this transition.

1. We seek to continue to **work actively with our clients on decarbonisation goals for their portfolios**. We will also promote investment solutions that are compatible with us supporting the transition towards climate neutrality. This also includes the development of new investment solutions.

2. We aim to **anchor climate-related targets even more firmly in our engagement approach**. We continue to increasingly encourage investee companies to commit to cohesive, net zero target setting frameworks for greenhouse gas reduction. Our voting guidelines for listed equity holdings[7] are already outlining our expectations towards our investees to set clear emission reduction targets, in line with the Paris Agreement and the SDGs and to strengthen disclosure of climate-related impacts, risks and opportunities.

3. To align on methodologies, we also **aim to further collaborate with other stakeholders and investor initiatives**, for example through cooperation with the Institutional Investor Group on Climate Change (IIGCC), Science Based Targets Initiative (SBTi), and the Climate Action 100+ Initiative.

Over the past years, we have already taken the first steps along this path. In the first half of 2020, we introduced “Smart Integration”, a process of enhanced due diligence for managing sustainability risks for our actively managed mutual funds

[5] For more details see DWS Sustainability Report 2019 and Combined Report 2020
[6] http://www.db.com/newsroom_news/archive/medien/deutsche-bank-asset-management-launches-climate-change-investment-initiative-en-12360.htm
[7] https://www.dws.com/de-de/loesungen/esg/corporate-governance/

in liquid investment strategies domiciled in Germany. Among other things, we use our proprietary ESG database to assess risks and opportunities arising from the consequences of the climate crisis.

In the context of our Climate Strategy work, we are also defining an implementation roadmap for full TCFD integration to be finalised in the third quarter of 2021.

"We see enormous demand by clients across all segments, seeking advice on decarbonising portfolios. We feel we can deliver well on our fiduciary duty and on our clients' requirements in this truly transformational process."

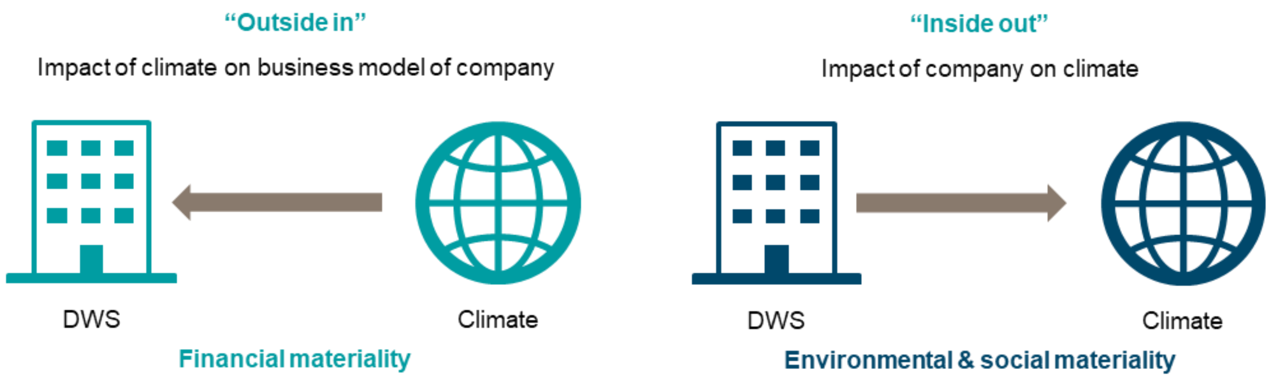
Dirk Goergen, Head of Client Coverage Division

We are convinced that, together with our clients, regulators and stakeholders, we can accelerate the transition to low-emission and climate-positive technologies and business models.

The lens for our Climate Strategy

The (non-binding) Guidelines on reporting climate-related information recommend taking an **"outside in"** and an **"inside out"** perspective as a starting point for framing activities driven by the climate crisis. The "outside in" perspective covers financial risks driven by the low carbon transition and physical climate-related impacts that have a material financial impact on companies and their product portfolios. The "inside out" perspective covers how investors can use their capital and influence towards the net zero emissions goal. This report is structured based on these lenses.

FIGURE 2. "OUTSIDE IN" AND "INSIDE OUT" PERSPECTIVE[8]



"Outside in": Our approach to managing climate-related risks and opportunities

We tackle climate-related risks and opportunities mainly through:

_ **ESG focused organisational setup** dedicated to identifying, analysing, and acting on climate-related risks and opportunities (see 'Governance chapter')
_ **Smart Integration**[9] to help mitigate climate and transition risks in affected portfolios
_ **Sustainable and responsible investment products** that reduce exposure to climate-related risks
_ **Scenario analysis** dedicated to assessing financial risk exposure resilience at the asset and portfolio level

ESG information is a core input into our investment research and decision making, and our proprietary database, the DWS ESG Engine.[10] This ESG Engine drives our ability to create tailored sustainable and responsible investment solutions for our clients. Our ESG Engine is also enabling a tailored ESG advisory offering to our institutional clients. With Smart Integration, DWS has introduced an overarching process of enhanced due diligence, when there is evidence from the ESG Engine that issuers face excessive climate and transition risk or severe and confirmed violations of international norms. A

[8] Source: DWS based on Guidelines on reporting climate-related information
[9] Smart Integration applies for actively managed mutual funds in liquid investment strategies domiciled in Europe, the Middle East and Africa (EMEA).
[10] 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 five leading external data providers, it has become the centerpiece of our commitment to integrating ESG topics into our investment processes in all asset classes across our Active investment decision.

key component is the in-house Climate and Transition Risk Rating (CTRR), which includes water risks and opportunities and also applies to sovereign issuers. The tool also identifies companies that are well positioned in a transition towards a low carbon economy. In 2021, we plan to expand the methodology by integrating physical risk into the rating.

To meet client demand we launched new innovative products and offered ESG-versions of existing funds that follow DWS' minimum ESG standards. We will leverage the knowledge gained from these new products to push the frontier of sustainable and responsible investments. We continually review and enhance our existing products to make them more sustainable and easily accessible to our clients. Below are some recent examples:

- **Reduction of portfolio carbon emissions:** launch of DWS Invest Qi Global Climate Action Fund[11] to meet growing investor demand for reduction of portfolio carbon emissions
- **Conversions into ESG funds:** conversion of our DWS Invest Climate Tech fund to follow our minimum ESG standards
- **Promoted retail distribution:** campaigns for the DWS Invest Green Bond fund and the DWS Invest SDG Global Equities fund

In addition, we can report on various product-related initiatives to further strengthen our ESG offering:

- **Create ESG flagships:** converting "traditional" (non-ESG dedicated) into dedicated ESG strategies
- **Fill ESG product gaps:** satisfying key client demand and improving fund characteristics and profile
- **Focus on asset retention and related revenues:** redesigning and repositioning of funds with large asset base
- **Strengthen differentiation of various strategies:** diversifying the product suite and reducing overlaps
- **Offer uniform perception of DWS ESG strategies:** providing to distribution partners well-known and successful investment capabilities
- **Find appropriate investment solutions:** addressing SFDR and MiFID II requirements as part of EU regulation (EU taxonomy for sustainable activities)

"Our ESG strategy is primarily driven by our conviction to do the right thing, for all our stakeholders. The way to get there is now framed by the ESG Default Principle in our product strategy."

Manfred Bauer, Head of Product Division

In our Passive business, we have worked with index providers to create unique indices with reference to reduction of carbon emissions and exposure to fossil fuel holdings. This includes a partnership with MSCI to combine an ESG methodology with a distinct low carbon reduction target, representing a first of its kind. As a result, all DWS European ESG Exchange Traded Funds (ETFs) have dedicated carbon and fossil fuel linked screens and CTRR scores, amongst other considerations, are often utilised for separately managed accounts. Furthermore, we believe that stewardship is a key differentiator here. DWS sponsored a survey together with CREATE-Research and concluded that pension plans differ in how much they have incorporated climate investing into their passive portfolios. The trajectory is clear, however: two thirds of pension funds intend to increase their climate-linked passive allocations over the next three years, highlighting the importance of climate-related considerations within passive investing[12].

Within our Alternatives business, we pursue ESG integration by screening potential investments and portfolio assets around factors related to physical climate risk, especially in Real Estate, and then incorporating the result of these reviews into the investment decision-making process.

In 2020, we conducted a scenario analysis pilot, considering climate-related transition risks in three materially affected sectors: Automotive, Oil Extraction and Chemicals. We were able to gain a deep understanding of transition requirements for companies operating in these sectors and to also understand any potential financial impacts (for further information we

[11] The subfund „DWS Invest Qi Global Equity" has been renamed in „DWS Invest Qi Global Climate Action" as per February 15th, 2021.
[12] For additional information on our survey, please refer to the following link: https://www.dws.com/Our-Profile/media/media-releases/two-thirds-of-pension-funds-to-increase-climate-linked-passive-investment-finds-dws-sponsored-survey/.

refer to table 2 “Climate-related risk assessment” in the ‘Risk Management’ section). We plan to build on this assessment in 2021 by applying a climate scenario framework for transition and physical risk analysis.

”Inside out”: Actions to support the net zero target

Based on academic research[13], we define “inside out” as the change that an investor causes on or contributes to the activities of their investees.

As mentioned before, we identified three important levers to drive our transition to net zero:

1. Engagement with our clients and further transitioning towards sustainable and responsible investing
2. Stewardship to advance climate-related action in our investments
3. Collaboration with other stakeholders and investor initiatives where relevant and legally feasible

1. Engagement with our clients and further transitioning towards sustainable and responsible investing

We believe that the transition to a net zero carbon economy can only be achieved by mobilising private and institutional capital into investments that address the climate crisis.

For some technologies and markets that may have lower access to long-term capital, private equity and private debt funds focused on positive impact and can provide important expertise as well as investment to advance society’s progress towards net zero emissions. Examples of DWS’ dedicated impact funds and strategies setting specific and measurable climate-related impact goals in this area include:

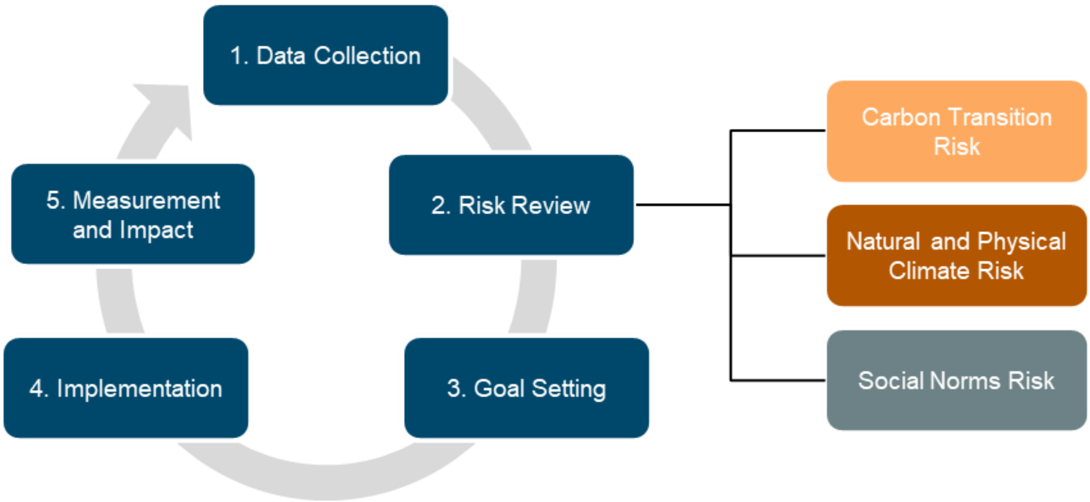
– **Africa clean energy strategy:** continued development of the Africa clean energy strategy in partnership with the UN Green Climate Fund and other public and private sector partners
– **Climate solutions partnership in China:** continued partnership and extension of a clean energy fund to invest in climate-related solutions in China within the already established Clean Energy and Environmental Fund (CEEF)
– **European public sector energy efficiency:** continued management of the European Energy Efficiency Fund[14], assisting public sector entities to reduce their carbon emissions

Furthermore, funds and assets that set specific, measurable climate-related goals also have a key role to play. The most advanced asset class for this approach is our real estate business, representing the first asset class to develop interim carbon reduction targets until 2030, as such supporting our net zero ambition. In 2020, the business executed in full the regional sustainability action plans as well as adopting a new global Real Estate ESG House View to guide the transition into the new era for sustainability. The new House View builds on the existing ESG program and consists of the following five-stage framework for all real estate assets under management.

[13] Kölbel et al., Can sustainable investing save the world? Reviewing the mechanisms of investor impact, 2018, available on https://journals.sagepub.com/doi/10.1177/1086026620919202

[14] www.eeef.eu

FIGURE 3. DWS REAL ESTATE ESG HOUSE VIEW



A key part of the ESG House View is the real estate team's efforts to integrate emissions reduction requirements into market research hurdle rates, screening of potential acquisitions, annual business planning procedures, and building retrofit plans. In October 2019, the European-managed platform committed to a 2050 net zero carbon goal as one of the founding signatories of the Better Buildings Partnership (BBP) Climate Change Commitment. Disclosure on progress towards this commitment began in December 2020 with the publishing of our first pathway to net zero emissions. This pathway is publicly available on the BBP website[15] and is informed by the IIGCC Real Estate Net Zero Framework and the science-based Carbon Risk Real Estate Monitor (CRREM).

Our real estate portfolio emissions reduction targets include the following:

- 2030 carbon reduction goal (European offices): In October 2019, we announced a commitment to achieve a 50% reduction in carbon emissions intensity by 2030 across our entire portfolio of Europe office properties against a baseline year of 2017[16].
- 2050 Net Zero carbon goal (European-managed portfolio): In October of 2019, we also became one of the founding signatories of the Better Buildings Partnership Climate Change Commitment, and recently published our first pathway to net zero emissions on their website. In addition, DWS co-chaired the Institutional Investors Group on Climate Change (IIGCC) Real Estate Net Zero Investment Framework to further guide our business and the industry to climate-related action through consistent reporting and concerted action.

2. Stewardship to advance climate-related action in our investments

Corporations and investors, as owners and lenders have a key role to play towards the need for emissions to be reduced in the mutual goal of coping with the impacts of global warming. In 2020, we continued our engagements with major investees on material environmental, social and corporate governance issues. In January 2020, we communicated our intention to increase our scrutiny on the accountability of management and boards when it comes to their companies' compliance with internationally accepted ESG standards (e.g. UN Global Compact principles, the OECD Guidelines for Multinationals, TCFD recommendations) and with regards to their management of material climate-related and other sustainability-related risks. Thus, one of the areas we prioritised in our engagements was climate change: 137 of our engagements addressed questions on the companies' management of the risks and opportunities arising from it and we sent a thematic climate engagement letter to 53 energy companies, facing material climate transition risks.

Voting on shareholder proposals is an important tool, which allows asset managers to exercise their ownership rights by holding the board accountable and promoting improved disclosure, effective board oversight, and commitments to address company-specific risks and opportunities. In this context, we are further refining our voting guidelines to consider climate-

[15] https://www.betterbuildingspartnership.co.uk
[16] Carbon intensity measured in kilograms of CO_2 emissions equivalent per square meter.

related change aspects. We expect companies' boards to take transparent, effective and intentional measures to solve existing ESG risks. Furthermore, they should avoid potential ESG controversies and risks their companies are facing, whereby protecting them from becoming structural and recurring. In that regard, we may hold entire boards accountable by using our voting rights in case they fail to respond adequately to climate-related risks or fail to provide the necessary disclosure. We are also generally supportive of ESG-related and in particular climate-related shareholder proposals, considering recognised standards such as the Ceres Roadmap for Sustainability, the Ceres Blueprint for Sustainable Investing, the UN Sustainable Development Goals (SDGs) and the Principles of the UN Global Compact. In 2020, we have continued showing our support for the environmental and social shareholder proposals we voted for across our funds according to local guidelines[17]. Below are two examples[18] from 2020 where DWS Investment GmbH supported climate change related shareholder proposals in the setting and publishing of targets for Greenhouse Gas (GHG) Emissions in the energy sector:

- Company A: The shareholder proposal called for more ambitious and far-reaching GHG targets to reduce GHG emissions to levels compatible with the global consensus specified by the Paris Agreement. Moreover, the ambitions of the company before the general meeting in 2020 had not resulted in an adequate change in investments beyond oil and gas.
- Company B: The proposal requested the amendment to add, in the management report, the company's strategy defined by the board aligned with the Paris Agreement and comprising a plan that would comply with objectives of reduction of emissions in absolute value. The targets should cover GHG emissions across scopes 1, 2 and 3. Since the annual general meeting, the company reiterated its ambition to achieving net zero emissions by 2050 (including scope 1, 2 and 3) at an investor day later in 2020. The company also communicated the steps to achieve this ambition, including intermediary targets and planned evolution of its operational scope over the next 10 years.

"We aim to support positive ESG transformation and decarbonisation. Accordingly, we engage in constructive dialogue with our investee companies and will intensify this process going forward. We are very clear: if we do not see change, we will divest."

Stefan Kreuzkamp, Chief Investment Officer and Head of Investment Division

[17] The voting results are made available on the Corporate Governance page of the DWS website: https://www.dws.com/solutions/esg/corporate-governance/.
[18] For more information we refer to https://www.dws.de/das-unternehmen/corporate-governance//?wt_eid=2158626974900618783&wt_t=1614941557965

3. Collaboration with other stakeholders and investor initiatives

We are collaborating with other stakeholders and investor initiatives where relevant and legally feasible on further advancing for example net zero investment methodologies as well as other climate-related initiatives and stakeholder education.

The table below highlights our most recent activities throughout 2020.

TABLE 1. CLIMATE-RELATED ACTIVITIES IN 2020

Name	Type of engagement	Events / developments 2020
Climate		
Carbon Disclosure Project (CDP)	Signatory	DWS proactively pursued a CDP rating and joined CDP Science Based Target Campaign in May 2020 to address more than 1,800 companies and require them to commit to the Science Based Targets.
Ceres Investor Network on Climate Risk and Sustainability	Member	DWS continued the engagement in the Investor Water Hub working group in 2020 and presented DWS' Water Risk research paper.
Climate Action 100+	Signatory	DWS continued the engagement with an Italian utilities company.
Climate Policy Initiative's (CPI) Global Innovation Lab for Climate Finance	Founding Member	DWS continued to be an active member in the 2020 Climate Lab cycle by participating in conferences and workshops held by the Climate Policy Initiative.
Coalition for Climate Resilient Investments (CCRI)	Founding Member	DWS, along with more than 30 other institutions, is supporting the Coalition for Climate Resilient Investment (CCRI) which aims to incorporate physical climate risk into infrastructure investment decisions. DWS is contributing to the Valuation working group.
EU Energy Efficiency Financial Institutions Group (EEFIG)	Founder and Steering Committee Member	DWS was invited to give a keynote speech during EU Sustainable Energy Week. We assumed our investor commitment to support a Just Transition on Climate Change. DWS advised policymakers on how to improve energy efficiency policies.
German Government's Sustainable Finance Advisory Council	Member	Our Chief Investment Officer of Responsible Investments was appointed as a member of the German Government's Sustainable Finance Advisory Council in May 2020.
Institutional Investors Group on Climate Change (IIGCC)	Board Member	DWS was invited to co-chair a working group aiming to define Paris Alignment for real estate. DWS experts contributed to Paris alignment working groups on Strategic Asset Allocation, Sovereign Bonds and equities/corporate bonds.
Investor Statement on a Just Transition	Founding Signatory	DWS is a founding signatory to the Investor Statement on a Just Transition recognising the social dimension of the transition to a resilient and low-carbon economy.
Net Zero Asset Owner Alliance (NZAOA)	Supporter	DWS is working together with our clients to successfully manage the climate-related objective set as part of their strategies.
Net Zero Asset Managers Initiative (NZAMI)	Founding Signatory	DWS joined the founding signatory group as the only German asset manager.

In addition, DWS has a long track-record in identifying and starting to use our investor influence to help society manage systemic risks, particularly regarding the climate crisis. However, we recognise that neither we as an asset manager nor the broader financial industry are doing enough to use its influence and capabilities to help society manage the market-wide and systemic risks of the climate crisis and other sustainability issues. DWS regularly contributes to public policy development to address systemic risks, with a strong climate-related focus:[19]

- Continuous support for stronger government climate-related policies: since 2009, DWS has continuously signed the annual investor letter to governments calling for stronger climate-related policies. Since 2009, DWS is the only investor, amongst the 20 largest asset managers by AuM, to have consistently supported the annual letter. Only four of the largest 20 asset managers (by AuM) signed the 2020 letter
- Our CEO signed an investor and business letter sent in September 2020 to European Heads of State, calling for stronger climate-related targets before a European Council meeting

[19] Refer to the UK Stewardship Code (Principle 4) for further information about our policy and systemic market engagement efforts (https://www.dws.com/solutions/esg/corporate-governance/)

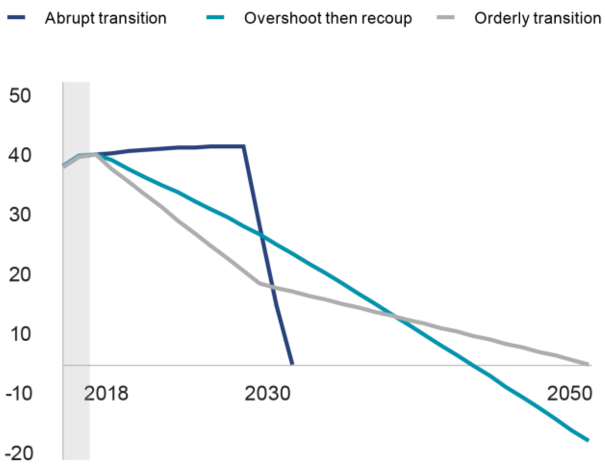
- DWS signed an investor letter to the UK Prime Minister, calling for a planned coal mine to be cancelled in light of COP 26 and signed a letter from the Green Finance Institute's Coalition for Energy Efficiency in Buildings, calling for the Green Homes Grant to be strengthened
- DWS' most substantive contribution to public policy development is regarding energy efficiency: a DWS expert was a founding member of the European Energy Efficiency Financial Institutions Group (EEFIG) in 2013. DWS led the committee in writing a letter to the EU Energy Commissioner in May 2020, with recommendations for the EU Renovation Wave Strategy. EU Commission officials welcomed the input of this letter and the steering committee's work to the mainstreaming of energy efficiency financing. DWS is currently contributing to an EEFIG working group on financial risk and value of energy efficient loans.

Ambition and steering mechanisms on our way to net zero

To set the right foundation for net zero, we are currently reviewing the scenarios, targets, data needs, challenges, integration opportunities, and asset and sector coverage methods, including the Science Based Targets initiative (SBTi), the NZAOA Protocol, and the IIGCC Net Zero Investment Framework.

FIGURE 4. ILLUSTRATIVE EMISSION PATHWAYS WITH A 1.5°C CARBON BUDGET[20]

Gigatonnes (Gt) of CO2 emissions per year



The area under the curve of each pathway remains within the same carbon budget[21]:

- An **orderly transition**, the most viable pathway, would require steep emission reductions in the next 10 years, but would allow for a more stable transition.
- An **abrupt transition**, delaying CO_2 mitigation, would overshoot the 570 gigatonne budget, and a lastminute transition would create global instability.
- **Overshooting and then recouping** could trigger irreversible climate-related feedbacks; many negative emission technologies remain largely unproven at the necessary scale.

Source: Investor Leadership Network

One of the main decision factors is the pathway to net zero. There are several different carbon trajectories to achieve this net zero pathway. The graph shows three transition scenarios. All transition pathways could reach net zero by 2050, the area below each curve amounts to the carbon budget. The different pathways could differ significantly as shown above. The light blue line shows a pathway that is associated with a transition that overshoots the allowed budget in the early years but takes carbon from the atmosphere in later years. The grey line shows an orderly transition in which stricter decarbonisation is pursued in the first years to 2030, allowing for a slower rate of reduction after 2030 and 2050.

After selecting a desired transition pathway, we will need to implement adequate steering mechanisms for our portfolios. Among others under consideration and analysis are sector decarbonisation targets, comprehensive engagement strategies, and transition investment allocations. Temperature scores are intuitive and enable investors and portfolio managers to easily understand the scale of the challenge that corporates face on the path to net zero. Engagement is another important tool that ensures companies follow a transition pathway. In addition to contributing to the Paris Agreement, the planned transition to net zero is expected to reduce systemic climate-related transition risk. Engagement can therefore have a positive influence and a tangible impact on individual company decisions.

[20] Source: McKinsey (2018) 1.5°C Scenario Analysis, IPCC SR1.5
[21] See reference on page 7: https://www.investorleadershipnetwork.org/wp-content/uploads/2020/09/ILN_Climate-Change-Mitigation-and-Your-Portfolio.pdf

A low carbon strategy for our operations

Measuring and managing carbon emissions across our operational footprint is a key focus topic for DWS. We report our carbon emissions for all key businesses and operational sites in line with the GHG Protocol Corporate Standard, addressing relevant scope 1, 2 and 3 emissions.

At the same time, we seek to embed climate-related awareness into our corporate DNA by integrating relevant sustainability indicators in all of our people management practices, including, training, performance and compensation. To enable staff to reduce their commute we offer the flexibility and tools to work remotely.

> *"From 2021 on, Sustainability and ESG are the number one priority in our objective setting for all functions at DWS. Wherever possible, we will include staff with targeted measures and potentially also individual* CO_2 *budgets to change behaviour at all levels."*
>
> *Kristina Flügel, Global Head of Human Resources*

With the outbreak of COVID-19, our technology and operations platform enabled our global staff working remotely for a sustained period of time. As the pandemic eases and we return to operating in the 'next' normal, we anticipate that employees will continue working from home more frequently. This will further support our target for lower carbon emissions.

DWS properties consist primarily of offices and branches leased under long-term rental agreements, where DWS does not have ownership and in most cases, no operational control. Thus, all related emissions were reported under scope 3 in 2020.

For corporate business travel, our internal guiding principle is to avoid all non-essential travel. Also, we try to minimise emissions from commuting by, for example, offering a "bike2work" scheme, and encouraging the use of public transport and carpooling when commuting to work. DWS also offers e-cars and hybrid cars as part of the corporate fleet system.

Emissions and waste from real estate operations are managed by Deutsche Bank. We are targeting to reduce the amount of waste we produce, and to reduce water and paper consumption[22]. In this context, we are focusing on a change to staff printing habits by promoting responsible paper consumption. We also intend to reduce paper-based client communication through an increased use of electronic communication channels.

Our carbon emissions from building energy use, leased vehicles and business travel have been offset by the purchase and retirement of emission reduction certificates as part of the carbon neutral activities of Deutsche Bank since 2012. For electricity we aim for 100% renewable sources by 2025 with an interim target of 85% by 2022.

Disclosure commitments

Beyond portfolio and operational transition, we are continuously improving our climate-related disclosures. In 2020, we responded to the CDP for the first time and achieved a "C" Rating. Until 2019, we did not have a standalone CDP rating and were consolidated under Deutsche Bank's rating. We believe that a rating process, as offered by CDP, will accelerate our climate-transition learning curve.

By voluntarily providing information to CDP, we will be able to:

- Compare to industry peers and identify how we can improve our scores
- Receive support and guidance on future climate-related disclosures
- Prepare for upcoming implementation of regulations, e.g. the EC's Sustainable Finance Action Plan

On top of that we have committed to fully integrating the TCFD recommendations, including climate-related disclosures. This was also highlighted when we joined the NZAMI where we have committed to publish TCFD disclosures for greater accountability going forward.

[22] Given building occupancy is split across multiple Deutsche Bank businesses, calculating DWS specific emissions and waste data is not possible.

Risk Management

How are we integrating & managing climate-related risks in our existing risk management framework?

Climate-related risks can have a material impact on DWS as a corporate as well as on DWS' investment portfolios. We follow regulators in defining climate-related risk factors affecting several of the already known financial and non-financial risk types. We therefore do not simply add climate-related risk as an additional risk type to be managed independently besides the existing risk types. Instead we integrate climate-related risks, alongside other sustainability-related risks, into the existing corporate and portfolio risks within existing risk measurement and management frameworks[23]. This is in line with the BaFin Guidance Notice on Dealing with Sustainability Risks[24] from 2019. It sets supervisory expectations on the integration of sustainability risk in the identification, assessment, monitoring and management of all (material) risks of financial institutions or investors into products managed by such institutions being exposed to.

> *"Companies will need to understand risks and opportunities associated with climate change and consider climate-related financial impacts and metrics that go beyond traditional accounting practices."*
>
> *Claire Peel, Chief Financial Officer and Head of CFO Division*

With respect to climate-related risks, we have identified several risk types and dimensions either affecting DWS group as an entity or investors in DWS managed products. Among these risk types affected, the following possibilities have been identified to be impacted with a higher level of significance:

Investment risk – DWS managed products

"Climate-related transition events"-related: A financial product may contain securities issued by companies that may not be operating their business in a way that is aligned with the "well below 2-degree path"[25]. An abrupt change in the financial market view on the importance of climate-related aspects (e.g. the pricing in of expected regulatory measures) may lead to declines in the price of assets.

"Physical climate-related events" related: A financial product may contain securities of a company with a business strategy that depends highly on physical assets. These assets may be at risk of floods due to rising sea levels. The values of the securities decrease as soon as the physical climate-related risk for the assets is priced, or flood damage is incurred.

Corporate risk – DWS Group

Strategic risk: Flows out of DWS existing managed products may be due to changing customer preferences and regulation related to climate-related change matters. The existing product portfolio manufactured and managed by DWS could potentially no longer meet client expectations with regard to a diverse and appropriate offering of sustainable investment products.

Reputational risk: The products manufactured by DWS with a specific climate-related label may potentially be seen as "green-washing" given the investments they hold. In addition to potential regulatory fines linked to such an event, sustainability-aware investors may withdraw their investments from these products, other similarly labelled DWS products and our wider fund range.

How do we identify, measure and evaluate climate-related risks?

Given the relevance and materiality, DWS is driving the integration of climate-related risks in its risk management processes with the assessments as shown in table 2 ('climate-related risk assessment').

[23] Further details of our sustainability risk management can be found in the DWS Combined Report 2020
[24] https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/dl_mb_Nachhaltigkeitsrisiken_en.html?nn=9866146
[25] The goal of the Paris Agreement is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

On a DWS managed product level, DWS is integrating well-established climate-related physical as well as climate-related transition indicators into the investment risk assessments performed for the individual products managed.

On a DWS group level, as part of the DWS TCFD Roadmap to be established in 2021, DWS plans specific steps towards rolling out a comprehensive, bottom-up scenario analysis to be used for a product platform level climate-related risk analysis. This will analyse climate-related transition as well as physical risks covering the entire liquid portfolio and the underlying issuers.

TABLE 2. CLIMATE-RELATED RISK ASSESSMENT

Perspective	Assessment	Type of Risk or Impact	Description	Year	Scenario(s)/ data used	Outcome
"Outside in"	Climate and Transition Risk Rating (CTRR)	Transition and physical risk	CTRR is applied within our Smart Integration approach to identify issuers facing financial risk, by amalgamating the latest gerenation of carbon and water risk measures. The **carbon pillar** is based on research data from our proprietary ESG Engine considering transition risks and opportunities. The **water pillar** uses DWS' proprietary water risk and opportunity rating seeking market consensus on water risk and opportunity across vendors and classifying companies from leaders to laggards.	Since 2019, water pillar since 2020	Data used from several providers, including MSCI, Morningstar Sustainalytics, S&P Trucost, and ISS-ESG	DWS' proprietary CTRR enables DWS to identify companies that are leading and lagging from a climate and transition risk perspective. As part of the due diligence process, the focus of our ESG integration and research activities lies on the carbon and water laggards.
	Physical Risk Assessment in Alternatives	Physical risk	Within the due diligence process for individual real estate assets, physical risks for the geographical location of the asset are analysed through Measurabl, who have integrated Four Twenty Seven (427) physical risk scores. The analysis includes heat & water stress, floods, hurricanes & typhoons, and sea level rise. This information is combined with the individual adaptation measures of the asset, e.g. does the building have specific measures in place to protect itself from certain hazards.	Since 2020 (certain regions 2021)	Four Twenty Seven (427) leverages downscaled outputs of global climate-related models (RCP 8.5[26]) alongside other environmental datasets	The integration of this assessment is considered as an effective way of steering the due diligence process and the discussions with respect to present physical risks. Resilience of buildings has gained the necessary focus. During 2021, physical climate risk ratings will also be used to establish physical climate risk indicators at the portfolio level if data availability is provided.
	Scenario analysis pilot	Transition risk	DWS conducted a scenario analysis pilot, considering climate-related transition risks in three materially affected sectors: **automotive, oil extraction** and **chemicals**. We were able to gain a deep understanding of transition requirements for companies operating in these sectors and to also understand any potential financial impacts.	2020	IEA B2DS (<2°C) IEA Reference Technology Scenario (circa 2.7°C)	**Automotive companies** show more potential for EBITDA losses in 1.8°C if not prepared for the transition. **Oil extraction** indicates significant negative EBITDA results in 1.8°C given the strong climate-related change mitigation efforts, while EBITDA increases are possible in 2.7°C. For **chemicals** both scenarios, 2.7°C and 1.8°C, show the potential for EBITDA losses, mainly chemical companies relying on CO_2-intensive inputs and energy-intensive production processes.
	Scenario analysis	Transition and physical risk	Based on the scenario analysis pilot (see above), DWS is currently expanding its scenario analysis assessment. It will cover all key sectors and the entire liquids portfolio, generating financial impact results for individual companies. The analysis will cover both transition and physical risks.	planned 2021	IEA B2DS (<2°C) IEA 2DS (2°C) IEA Reference Technology Scenario (circa 2.7°C) IPCC RCP	Results are still under development and will be reported once actionable next steps have been agreed.

[26] A Representative Concentration Pathway (RCP) is a greenhouse gas concentration (not emissions) trajectory adopted by the IPCC. RCP 8.5 refers to the concentration of carbon that delivers global warming at an average of 8.5 watts per square meter across the planet.

Perspective	Assessment	Type of Risk or Impact	Description	Year	Scenario(s)/ data used	Outcome
"Inside out"	Portfolio Coverage of Science Based Targets by Corporates[27]	Climate-related impact	The number of companies in the portfolio with committed and verified science-based targets within the framework of the SBTi gives an indication for companies engaging in significant climate-related action. DWS' performed an initial assessment of the companies that have set a SBT themselves to understand how many of its holdings have already embarked on a science-based climate-related transition journey. We plan to further elaborate this analysis and to include this in our own journey towards net zero as one option for engagement.	2020	Science Based Targets are based on the IEA scenarios	In our liquid portfolio – focusing on equities and corporate bonds only-[28], ~620 companies or 25% of AuM have a validated Science Based Target (17%) or commitment (8%) to set one within the target-setting framework of the Science Based Targets initiative (see figure 5). This represents ~85% of all listed companies participating in the SBTi.
	PACTA[29]	Climate-related impact	The PACTA[30] is a publically available tool that analyses companies' alignment with IEA scenario trajectories based on asset-level data and CAPEX projections focusing on utilities, oil and gas and the automotive sector. PACTA compares the CAPEX plans of companies for eight technologies with the scenario pathways (for both equity and bonds - resulting in 16 technology-asset class combinations): coal power, gas power, renewable power, nuclear power, oil production, gas production, electric vehicle and conventional vehicle production.	2020	PACTA compares the technology mix of the company with technology roadmaps of the IEA scenarios.	The data on technology mixes within the actively managed equity and corporate bond portfolio (EUR 274 bn AuM as of 31 December 2019) helped us to understand our current alignment to different transition pathways. Out of the 16 technology pathways comparisons with the IEA scenarios, six technology asset class combinations are in line with <2°C global warming. The coal power and renewable CAPEX plans of companies are strongly misaligned with global climate targets.
"Inside out" and "Outside in"	Carbon Management and Performance with Transition Pathway Initiative (TPI)[31]	Transition risk and climate-related impact	Over 70 investors, including DWS, are supporters of the initiative and committed to using TPI and its findings to inform their investment research, company engagement and in tracking managers' holdings. The asset-owner led initiative assesses companies' preparedness and performance for the transition to a low carbon economy. TPI compares company carbon performance to three scenarios based on the IEA Energy Technology Perspectives (ETP) Report.	2020	– Nationally determined contributions orParis Pledges (circa 2.7°C) – 2°C – < 2°C	In our liquid portfolio – focusing on equities and corporate bonds only-[32], 253 companies were included in the TPI carbon performance assessment (see figure 6). This represents ~90% of all companies that are assessed by TPI with respect to their carbon performance.

[27] DWS is exploring how SBT data can fit into its current portfolio steering methods and how this method could help in evaluating a company's net zero pathway.
[28] As of 31.12.2020, EUR 456bn
[29] The assessment is an initial comparison and not used for portfolio steering purposes.
[30] https://www.transitionmonitor.com/
[31] DWS is exploring how TPI data can fit into its current portfolio steering methods and how this method could help in evaluating a company's net zero pathway.
[32] As of 31.12.2020, EUR 456bn

What are our potential actions supporting the net zero target in real economy?

At this stage, we are in a due diligence process and are consolidating research results, whilst no decision has been taken on the framework to use so far.

Among others, the Science Based Targets Initiative (SBTi)[33] as well as the Transition Pathway Initiative (TPI)[34] are key initiatives to understand our potential actions to support the net zero target ("inside out" view).

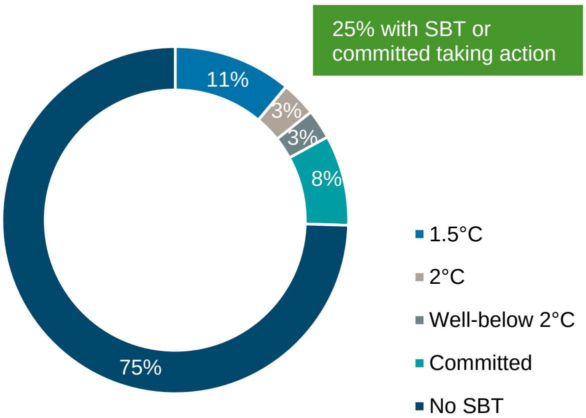
Mapping our liquid investment holdings[35] to the companies participating in SBTi and TPI provides an important starting point to understand our current positioning to support the net zero target, identify coverage gaps in the alignment to the climate-related targets and to derive engagement targets for investment professionals when seeking dialogue with our investees.

By developing our Climate Strategy we aim to accelerate the level of Science Based Targets (SBT) adoption and confirmation of committed targets and also monitor TPI alignment. Calculations and analyses are for illustrative purpose only and are part of the research process.

An initial comparison is showing:

1. The number of companies and thus AuM in the DWS portfolio with a validated or committed SBT within the framework of the SBTi, and
2. Companies' carbon performance (according to TPI) in our liquid portfolio by comparing companies' emissions now and in the future to the international targets and national pledges made as part of the Paris Agreement.

FIGURE 5. SCIENCE BASED TARGETS INITIATIVE (SBTi)



Science Based Targets (SBT):

About 85% of listed companies taking action with the SBTi are present in our liquid portfolio - focusing on equities and corporate bonds[36].

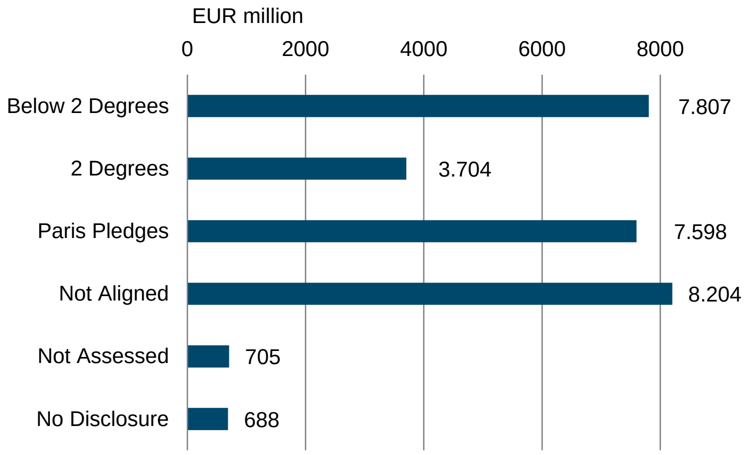
This translates to 25% of our AuM with a validated Science Based Target (17%) or commitment (8%) to set one within the target-setting framework of the Science Based Targets initiative.

Within our portfolio, 11% set a validated target of 1.5°C, 3% of well-below <2°C and 3% of 2°C.

DWS is a signatory to CDP's Science Based Targets Campaign which accelerates the adoption of science-based climate targets in the corporate sector, by engaging companies on this matter.

[33] The Science Based Targets Initiative (SBTi) provides a framework for companies to set climate-related targets based on the scenarios of the International Energy Agency (IEA). It has become the leading framework for science-based target (SBT) setting. The SBTi validates the targets handed in by companies. Where companies have decided to set themselves a target, but it has not been validated by the SBTi yet, they are marked as "committed".
[34] The TPI selects sectors based on their global emissions contributions and therefore their contribution to climate-related change. Within the high-emitting sector, they focus on the largest public companies as measured by market value. Hence not all companies in the DWS portfolio are included in the assessment by TPI.
[35] As of 31.12.2020, EUR 456bn
[36] As of 31.12.2020, EUR 456bn

FIGURE 6. TRANSITION PATHWAY INITIATIVE (TPI)



Transition Pathway Initiative (TPI):

In our liquid portfolio[37] – focusing on equities and corporate bonds only – 253 companies were included in the TPI carbon performance alignment assessment. This represents approximately 90% of all companies that are assessed by TPI with regards to their carbon performance now and in the future.

Of those, EUR 7.8 bn AuM are aligned with <2°C, EUR 3.7bn AuM are aligned with 2°C, EUR 7.6 bn AuM with the Paris Pledges (circa 2.7°C) and EUR 8.2 bn AuM are not aligned.

The benchmark for the assessment is the physical emissions intensities found in the scenarios by the International Energy Agency (IEA). The TPI uses three benchmark scenarios:

– **Paris Pledges:** "consistent with emissions reductions pledged by countries as part of the Paris Agreement (i.e. NDCs)"
– **2 Degrees:** "consistent with the overall aim of the Paris Agreement, albeit at the low end of the range of ambition"
– **Below 2 Degrees:** "consistent with a more ambitious interpretation of the Paris Agreement's overall aim"

The TPI focuses its carbon performance assessment on high-emitting sectors and the largest companies in terms of market value within these sectors. Thereby, the matched companies are among the most relevant companies in term of CO_2 emissions present in the DWS portfolio. Companies' current emissions as well as companies' future targets are considered in the assessment. TPI is a key partner of Climate Action 100+.

Going forward we will elaborate how these initiatives can help us achieve our own net zero commitment and how we can participate in accelerating climate action. We will continue to develop our steering methods and understand relevant science-based measures to evaluate whether a company is or can be aligned to a Paris-aligned world in the future.

How are we managing climate-related risks?

Smart Integration for actively managed mutual funds in liquid investment strategies

Smart Integration is an enhanced due diligence approach to manage sustainability risks. We use our proprietary ESG Engine to assess risks and opportunities from climate and transition and international norm violations. If we consider substantial risks in invested companies, we subject these companies to an enhanced review. This approach will be further expanded in 2021 and enables DWS to systematically engage with companies we are invested in to promote a change towards a more responsible future.

The CTRR derives a consensus climate and transition risk rating on issuer level by assessing and "preserving" different vendors' original verdict. This approach enables DWS to identify companies that are leading and lagging from a climate and transition risk perspective. In 2020, water risk was added to the CTRR as an additional pillar. The rating is evaluated in the ESG Engine for more than 10,000 issuing entities and is available to DWS portfolio managers and analysts for liquid assets.

Our stewardship practices through Smart Integration empower DWS to engage companies with the highest risk exposure focused on violations of international sustainability standards and climate and transition risk. So rather than excluding companies from our portfolios based on a top-down approach our portfolio managers are able to objectively analyse and identify leaders and laggards. Companies that fail to act, risk being excluded from DWS' investment universe.

[37] As of 31.12.2020, EUR 456bn

ESG integration for illiquid investment strategies

Similarly, climate-related risks are systematically managed within the due diligence and active portfolio management within Alternatives. The inherent differences between the liquid and illiquid asset classes require a more tailored approach to ESG integration to the specific asset class. The real estate business continues to position ESG and climate as integral to investment decision-making. As mentioned before, we introduced the global 2020 Real Estate ESG House View, which includes the review of transition and physical risks as an elemental stage in the review of each asset prior to acquisition and on all portfolio assets on an annual basis.

Sustainability risk management policy and product-level governance

The DWS sustainability and climate-related risk definition, its integration in the risk taxonomy, relevant sustainability factors, and the risk and control governance structure to manage sustainability risks is documented in the newly established DWS Sustainability Risk Management Policy.

Additionally, a dedicated implementation program to integrate sustainability risks and sustainability factors, including climate-related risks and factors into the risk management processes was implemented in 2020.

How is this fitting into DWS' overall risk management?

Corporate risk management

Sustainability risks, including climate-related risks, have already been part of the reputational risk assessment processes where in particular social, environmental, governance as well as sectorial factors have been considered within the overall risk assessment of new products manufactured by us.

In 2020, a sustainability risk impact assessment across a wide range of risk types has been performed, which determined the relevance of sustainability factors, including climate-related factors, for individual risk types.

Following this analysis, impacted control processes are currently being enhanced. The reputational risk management standards and processes have been enhanced to reflect the increased attention to and relevance of sustainability factors and sustainability risks. A concept for the assessment of strategic risk related to sustainability factors, which may include amongst others the changing customer preferences towards more sustainable products has been developed and will be rolled out over the course of 2021.

As an implication of the above, the risk governance processes including the risk inventory, the risk strategy as well as the risk appetite statement will be amended to reflect the continuously developing business strategy as well as the evolving impact of sustainability risks on the organisation.

Investment risk management

In 2021, a dedicated product-level governance will be rolled out for a wide range of portfolios managed by DWS to establish a risk steering of sustainability risk, including climate-related risks, on a portfolio level. With the continuous development of ESG and climate-related signals for the alternative asset classes, the concept will also be rolled out in 2021 to real estate funds and other illiquid asset classes.

Climate-related stress tests will be integrated in the stress testing frameworks already established by our investment risk function. Physical climate-related stress scenarios as well as climate-related transition stress scenarios are planned to be integrated in the market risk stress testing program executed by the investment management functions in 2021.

Annual risk strategy review process

The above developments will also be reflected in the DWS Risk Management Framework. This implies as well that sustainability risks, including climate-related risks, will be part of the annual risk strategy review process

Metrics and targets

How are we assessing climate-related risks and opportunities?

During 2020, DWS has successfully embedded a set of KPIs in the organisation and we have provided greater transparency to key decision-makers covering our progress in delivering against our strategy and achieving our sustainability and climate-related goals.

The table below shows our sustainability KPIs that are directly or indirectly connected to the climate crisis.

TABLE 3. CLIMATE-RELATED METRICS

Metrics	2019 Result	2020 Result	KPI ambition
Sustainability KPIs			
AuM			
Dedicated ESG AuM	69.7bn	93.6bn	Continue to grow our ESG AuM through a combination of flows into existing products, flows into new products and enabling the transfer of existing client assets from non-ESG products into ESG dedicated products
Engagement			
Corporate engagements	250	454	Increase the number of corporate engagements
Voting			
Proxy voting	1,722	1,859	Increase the number of companies whose shareholder meetings we vote at, for portfolios domiciled in Europe and Asia by >5%
Own Operations			
Global emissions – scope 1, 2 and 3[38]	11,982	6,822	See below for details of operational emissions ambitions
Ratings			
Sustainability Rating	N/A	C	Achieve an improvement in our 2020 CDP rating
PRI rating for Strategy & Governance	A+	A+	PRI continues to be an important KPI for DWS, however due to methodology changes in PRI ratings we will not be disclosing an updated ambition in this report

Background information on KPIs

We demonstrated strong dedicated ESG AuM growth in 2020 with a 34% increase over 2019. In 2021, we will also be tracking an ESG net flows KPI with the ambition to grow our net flows at the same, or at a faster rate than our overall flow target.

COVID-19 had an impact on our operational emissions, most notably with our staff working from home and travelling less. Consequently, our emissions levels in all categories were below 2019 levels. Irrespective of the impact from COVID-19, ongoing efforts are being made to ensure that we manage and reduce our operational emissions over time. Our ambitions include reducing our total energy consumption by 20% by 2025, sourcing 100% renewable electricity by 2025 and reducing our travel emissions by 25% by 2022[39].

[38] In t/ CO_2e includes scope 3 emissions from real estate, air travel and car fleet / leased vehicles. DWS real estate emissions for 2020 are determined on a pro-rata average FTE basis from DB Group emissions (natural gas, liquid fossil fuels, renewable and grid electricity, district heating, cooling and steam) and relate to the period October 1, 2019 to September 30, 2020. Q4 2019 is used as a proxy for activity in Q4 2020. 2020 air travel and leased vehicles based on January 1, 2020 to December 31, 2020 DWS data. All 2019 emissions results based upon the calendar year. Air travel derived from actual DWS flight data and leased vehicles from driven kilometres with diesel or gasoline cars. The most appropriate emission factors have been used for each activity data type from internationally recognised sources e.g. DEFRA (2018 and 19), GHG Protocol, eGRID (2018) and IEA (2019), RE-DISS (2018) or if more relevant from country or contract specific sources. The factors include all GHGs where possible and the gases' Global Warming Potential as per the IPCC AR5 assessments.

[39] Energy consumption and travel emissions versus 2019 baseline; travel includes air & rail

We achieved a “C” in our first CDP rating, in line with both the global and European average rating for all participating firms. CDP informed us that a C rating was a good result for a first-time responder. We will look to improve on this rating going forward.

In terms of our corporate engagements, in 2020 we held 454 engagements with 353 companies, which represented an 82% increase versus the previous year.

For proxy voting, the 2020 voting season experienced a unique challenge amidst the global health, social and economic impacts of COVID-19. As a result, many companies were forced to adapt quickly through managing their business remotely and making changes to their operations as well as annual meeting with shareholders. As long-term investors we continued to engage with our investee companies on short- as well as long-term issues via written communications and virtual meetings. For our funds in Europe and Asia, we focus on a quality-based analysis versus quantity of votes: the voting decisions follow a four-eye-principle approach and the proprietary Corporate Governance and Proxy Voting Policy. For the funds in scope, in 2020 we voted at a total of 2,370 general meetings of 1,859 companies, which represented an increase of 16% in the meetings voted and an 8% increase in the companies voted compared to the year before. The votes are based on a focus list of companies, which are screened on ownership in terms of market capitalisation, assets under management and relevant ESG criteria.

Through the establishment of the GSO and, more recently, the GSC, we will be able to provide further transparency and increased awareness within DWS of how we are performing against our KPI ambitions going forward.

Outlook 2021

Looking ahead in 2021, we will **continue** doing our part to accelerate **the transition towards a net zero carbon global economy** by partnering with our clients and deploying global investment expertise to drive sustainable investment decisions and capital. Engagement will be key on this journey.

Overall, we will be placing a particular focus on detailing the roadmap to climate neutrality by determining (interim) targets and **driving our Climate Strategy by seeking alignment with the TCFD recommendations**.

In the context of the **"inside out"** perspective, once the (interim) target setting is finalised as part of the Climate Strategy, the full design of metrics will follow to include complete incorporation in the governance structure enabling us to monitor and steer towards these targets.

Regarding the **"outside in"** perspective, we will continuously refine metrics to improve our management of climate-related risks and opportunities. Our proprietary ESG Engine already includes a variety of climate-related indicators and we will continue working on expanding our access to relevant information to improve our assessment of climate-related risks and opportunities.

Glossary

Term	Meaning
2DS	2°C Scenario
AGM	Annual General Meeting
AuM	Assets under Management
B2DS	Beyond 2°C Scenario
BaFin	The Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)
BBP	Better Buildings Partnership
bn	Billion
CAPEX	Capital Expenditure
CCRI	Coalition for Climate Resilient Investments
CDP	Carbon Disclosure Project
CEEF	Clean Energy and Environmental Fund
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief Investment Officer
Climate Action 100+	Investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.
Climate neutral	The concept of climate neutrality refers to a state where human activities result in no net effect on the climate system. To achieve such a state, relevant bio-geophysical changes due to human activities (e.g., changes to earth's surface reflectivity or a regional water system) would need to be avoided and net-zero emissions would need to be achieved. For reference see page 48, https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf
CO_2	Carbon Dioxide
COO	Chief Operating Officer
COP 26	26. UN Climate Change Conference 2021
COVID-19	Coronavirus disease 2019 (COVID-19) is a contagious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
CPI	Climate Policy Initiative's
CREATE-Research	CREATE-Research is an independent research boutique specialising in strategic change in global investment management.
CRREM	Carbon Risk Real Estate Monitor
CTRR	Climate and Transition Risk Rating
DEFRA	Department for Environment, Food and Rural Affairs
DNA	Desoxyribo Nucleic Acid - carrier of the genetic information of humans and almost all other organisms
E&S	Environmental and Social
e.g.	for example
EAB	ESG Advisory Board
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortisation
EC	European Commission
EEFIG	EU Energy Efficiency Financial Institutions Group
eGRID	Emissions & Generation Resource Integrated Database
EMEA	Europe, Middle East and Africa
ESG	Environment, Social and Governance
ESG Engine	The DWS ESG Engine is a proprietary software system that combines the different perspectives and approaches of five leading external data providers; it has become the centerpiece of our commitment to integrating ESG topics into our investment processes in all asset classes across our Active investment decision.
ETF	Exchange Traded Fund
ETP	Energy Technology Perspectives
EU	European Union
FTE	Full-time equivalent
GHG	Greenhouse Gas
GSC	Group Sustainability Council
GSO	Group Sustainability Office

Term	Meaning
Gt	Gigatonne
IEA	International Energy Agency
IIGCC	Institutional Investor Group on Climate Change
Inside out	The “inside out” perspective covers the material impacts that a company has on climate.
IPCC	Intergovernmental Panel on Climate Change
ISS	Institutional Shareholder Services
KPI	Key Performance Indicator
m	Million
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.
MSCI	Morgan Stanley Capital International
NDCs	Nationally Determined Contributions
Net zero	Net zero emissions are achieved when anthropogenic emissions of GHGs to the atmosphere are balanced by anthropogenic removals over a specified period. Where multiple GHGs are involved, the quantification of net zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, chosen time horizon, and others). For reference see page 48, https://sciencebasedtargets.org/resources/files/foundations-for-net-zero-full-paper.pdf
NZAMI	Net Zero Asset Managers Initiative
NZAOA	Net Zero Asset Owner Alliance
OECD	Organisation for Economic Co-operation and Development
Outside in	The “outside in” perspective covers financial risks driven by climate change that have a material financial impact on companies and their product portfolios.
PACTA	The Paris Agreement Capital Transition Assessment
PRI Rating	Principles for Responsible Investment Rating
RCP	Representative Concentration Pathway
RE-DISS	Reliable Disclosure Systems for Europe
S&P	Standard & Poor's
SBT	Science Based Targets
SBTi	Science Based Targets initiative
SDG	Sustainable Development Goal (overview of SDGs: https://sustainabledevelopment.un.org/sdgs)
SFDR	Sustainable Finance Disclosure Regulation
Smart Integration	DWS introduced Smart Integration in 2020, a process of enhanced due diligence for managing sustainability risks.
t/ CO_2e	Tonnes per carbon dioxide equivalent
TCFD	Task Force on Climate-related Financial Disclosures
Termperature score	Temperature scores are intuitive and enable investors and portfolio managers to easily understand the scale of the challenge that corporates face on the path to net zero.
TPI	Transition Pathway Initiative
UN	United Nations
US	United States
USD	United States Dollar
We	We means DWS

Important Information

DWS means DWS KGaA or DWS Group as applicable. DWS Group comprises DWS Group GmbH & Co. KGaA (DWS KGaA) and its subsidiaries according to section 15 et. seq. German Stock Corporation Act (AktG).

This report contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of DWS. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks as described in this report.

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