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Foreword

Dr. Jörg Kukies – State Secretary at the Federal Ministry of Finance

A lot has happened since the publication of the last baseline report of the Green and Sustainable Finance Cluster Germany in 2018. This is true of the progress we have made in sustainable finance. And it is sadly also true of the environmental disasters that have occurred, reminding us of the ambition and urgency still required in this field. The accelerating pace of climate change, along with the COVID-19 pandemic, is a sign that our society needs to do more to achieve the UN Sustainable Development Goals.

The financial sector has a big role to play here. With the EU Taxonomy Regulation, which entered into force in July of this year, sustainable economic activities have now been officially classified. This will make it easier for investors to identify sustainable investments and allocate funds in a way that protects the environment.

At the Federal Ministry of Finance, we have been working internationally to create the framework for a more sustainable financial system. Already back in 2017, improving environmental risk management in the financial industry was therefore made one of the objectives of the German G20 presidency. In the Coalition of Finance Ministers on Climate Action, we are looking for ways in which to mobilise private capital for the necessary investments.

In the European context, our aim is to make the planned regulation of sustainable finance both ambitious and practical. We believe that financial market regulation should promote the continued development of sustainable finance. Only if the agreed measures can be feasibly implemented will



Dr. Jörg Kukies State Secretary at the Federal Ministry of Finance

new regulations find acceptance and success. As Europe's largest economy, we in Germany want to set a good example. In a guidance notice published in December 2019, the Federal Financial Supervisory Authority (BaFin) outlined possible ways of dealing appropriately with sustainability risks. Meanwhile, KfW is acting as an international pioneer on the green financial market, not only by promoting green projects but also through the issuance of green bonds. In September, the German government itself issued its first sovereign green bonds.

There are still many challenges to solve. It will be essential to manage the financial risks of the transformation to sustainable finance and take advantage of the opportunities that emerge. Investors who set themselves ambitious climate targets may well find themselves the economic winners.

Dialogue between all actors and stakeholders will be vital. We support the work of the GSFC Germany, and hope readers will find this an interesting and informative report.

Foreword

Tarek Al-Wazir – Minister of Economics, Energy, Transport and Regional Development in the Federal State of Hesse

The economic impact of the coronavirus pandemic is dramatic, but it is far from our only challenge. We also face other persistent issues that are influencing and reinforcing one another – the climate emergency, isolationism and the structural change brought by digitalisation. In other words:

The pandemic has lent even greater urgency to the transformation to a crisis-proof and more sustainable economic system.

The financial system has a decisive role to play here. Back in 2017, the government of the federal state of Hesse identified that sustainable finance was a historic opportunity for the city of Frankfurt as a financial hub. It helped to set in motion the sector's key initiative – the Green and Sustainable Finance Cluster Germany. Today, the Cluster has gained international attention through its membership of the EU Platform on Sustainable Finance and through organising important events. It makes a major contribution to raising Frankfurt's profile as a centre for sustainable finance.

Two years on from the 2018 baseline report, the Green and Sustainable Finance Cluster Germany is now publishing a follow-up report, which examines the latest developments in green and sustainable finance in Germany. The market analysis shows that the sustainable finance environ-



Minister of Economics,
Energy, Transport and
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ment in Germany has become increasingly diverse. However, it also reveals the extent to which sustainable finance is dependent on reliable data and sound information from the real economy. Artificial intelligence and other technologies can help to deal with data complexity, and the state of Hesse is working to grow its expertise in this area.

Two megatrends – digitalisation and sustainable finance – will shape the financial sector of the future. We see them as an opportunity for innovation and dynamic change. Every successful change begins with a thorough analysis of the status quo. I hope you enjoy reading the report

Foreword

Kristina Jeromin and Karsten Löffler – Managing Directors of the Green and Sustainable Finance Cluster Germany e.V.

Sustainable finance is on its way into the mainstream of the financial market. This is our central and very encouraging finding as we examine the changes since we published Shaping the future – Green and Sustainable Finance in Germany two years ago. But this is no time to rest on our laurels.

The Cluster can look back on two eventful years. Among the many highlights were the three Sustainable Finance Summits in Frankfurt, which attracted increasing attention across Europe; the hosting of the ICMA Green & Social Bond Principles Conference; the publication of an ambitious Policy Roadmap; the development of a brief guide to implementation of the TCFD recommendations for financial market actors; the appointment of the German government's Sustainable Finance Committee; intensive work in Brussels on the Action Plan on Financing Sustainable Growth; and our increasingly international ties thanks to our membership of the UN's Financial Centres for Sustainability (FC4S) initiative.

For all these promising developments, there is also still a degree of reluctance and scepticism in some quarters when it comes to making our financial system more sustainable. Too wide is the perceived gulf in many areas between environmental and social imperatives and economic rationale. Public discourse has not infrequently treated economic and sustainability considerations as a trade-off,





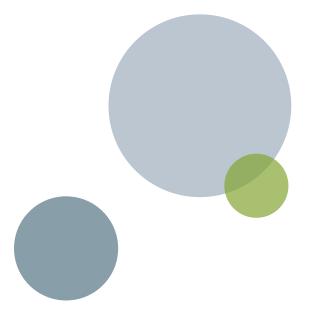
Kristina Jeromin und Karsten LöfflerManaging Directors of the Green and Sustainable
Finance Cluster Germany e.V.

particularly against the backdrop of the COVID-19 pandemic. Education and persuasion are called for here, along with a willingness to understand the needs of market actors and work together on solutions.

The results of the latest market survey also reflect this mixed picture in many respects. Most actors show strong commitment to sustainability targets. This is not yet matched to the same degree by progress on operationalisation, particularly when it comes to the regular disclosure of meaningful performance indicators. Sustainability-related financial products are now more widespread, but only just under a third of the institutions surveyed base part of their management remuneration on sustainability criteria. Our survey also found that financial market participants would like to see greater understanding of sustainable finance among other groups of actors such as customers and regulators.

The survey results encourage us to continue our successful work of the last two years and to keep

contributing proactively to promoting Germany's competitiveness as a financial centre. As part of this year's European Sustainable Finance Summit, we have published the route ahead for the coming year in the form of an Action Roadmap. With the German government's Sustainable Finance Committee set to publish its recommendations, and Germany due to head to the polls for a general election, there are busy months ahead. The increasing momentum at European level and the economic consequences of the COVID-19 pandemic will also play an important role in the further evolution of sustainable finance. We look forward to continuing to work with our sponsors and stakeholders, and hope you find the report an interesting read.



Overview

Green and SustainableFinance ClusterGermany

With "Shaping the Future – Green and Sustainable Finance in Germany 2.020", the Green and Sustainable Finance Cluster Germany (the Cluster) has developed a follow-up to its 2018 report "Shaping the future – Green and Sustainable Finance in Germany". This report examines and discusses the developments of the last two years in the field of sustainable finance. A new empirical market survey has been conducted to gather information on where sustainable finance currently stands in Germany.

The report shows that the momentum behind sustainable finance has been growing both at European and German level over the past two years. Regulators have built pressure through the publication of guidelines and regulations, while market harmonisation has progressed particularly through initiatives at European level. The Cluster has actively helped to create the EU taxonomy, thus meeting one of the key demands from market players that emerged from the market survey for "Shaping the future – Green and Sustainable Finance in Germany".



The latest market survey reveals that sustainable finance is now a mainstream topic for financial sector institutions. Fig. 1 shows some of the highlights of the survey. It is clear that sustainable financial products are now part of the standard offering of most financial institutions, with some institutions even regarding such products as their core business. Half the institutions surveyed have begun to put the EU taxonomy into practice, with almost a third already regarding it as an important tool. The market players still face challenges, however. This is particularly true when it comes to the use of more complex tools such as the climate scenario analysis and the creation of informative reporting. A discrepancy remains between commitments to the sustainability agenda, e.g. the Paris Agreement or the United Nations Sustainable Development Goals, and follow-through on these commitments in the form of coherent measurement techniques and disclosure of the achieved progress.



Figure 1 Highlights of the empirical market survey

The visible progress suggests that the work of the last two years has been fruitful in both the public and private sector and within the Cluster. The results of the market survey will feed into planning for the next few years' activities. There clearly remains a need to coordinate and consolidate the various strands of work in Germany and in the European context. The Cluster therefore plans to reinforce its network-based approach – not only by bringing together the institutions in the financial sector, but also by stepping up collaboration with the real economy, civil society organisations and academia.

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1 | Transforming the financial system – sustainable finance goes mainstream

When the Green and Sustainable Finance Cluster Germany e.V. (the Cluster) published its first empirical market study "Shaping the future – Green and Sustainable Finance in Germany", sustainable finance had only just begun to move into the mainstream. Two years on, the European financial system is in the midst of a deep transformation, and sustainable finance is the phrase on everyone's lips. The Cluster's sponsors and Germany as a financial centre have begun to integrate sustainable finance into every relevant business area, including strategy, product development, risk management, consulting and reporting. Both C-level management and operational staff are part of these efforts and playing an active role.

Political action is driving sustainable finance

Political initiatives and regulatory developments have contributed substantially to this rapid development. The EU Action Plan on Financing Sustainable Growth has markedly shaped legislation on sustainable finance at European level. The Action Plan resulted in the appointment of the Technical Expert Group on Sustainable Finance (TEG) and more indepth work on the topic within the European supervisory authorities (ESAs), the European Commission's committees and the Joint Research Centre. At German level, the guidance notice published by the Federal Financial Supervisory Authority (BaFin) and the work of the German Sustainable Finance Committee of the Federal Government have significantly shaped the pace of developments.

The private sector is beginning to use the opportunities and making sustainable finance a reality

The private sector is increasingly recognising the opportunities offered by sustainable finance. It is responding with new sustainable financial products and services. In the last two years, for example, the global market for sustainable bonds has more than doubled in size. In June 2020, 16 institutions from across the banking industry in Germany signed a voluntary commitment to protect the climate and have committed to actively help achieve the objectives of the Paris Agreement. The economic and financial impact of the COVID-19 pandemic is also showing that sustainable finance outperforms the market when it comes to resilience in times of crisis².

Sources:

 $^{(1) \}qquad \text{Development of the green bond market:} \\ \underline{www.environmental\text{-}finance.com/content/the\text{-}green\text{-}bond\text{-}hub/the\text{-}2020s\text{-}the\text{-}decade\text{-}of\text{-}sustainable\text{-}bonds.html}}$

⁽²⁾ FC4S on the impact of the COVID-19 pandemic on sustainable finance: www.fc4s.org/publication/implications-of-the-covid-19-pandemic-for-global-sustainable-finance/

This report Shaping the future – Green and Sustainable Finance in Germany 2.020 shows the progress and remaining challenges. It begins by setting out the political developments of the last two years. This is followed by a summary and analysis of the market survey. The report also provides an opportunity to look back at two eventful years for the Cluster. It will show how the Cluster has established itself as a key player for sustainable finance in Germany and Europe. The report concludes with a look ahead at how the Cluster can continue to promote sustainable finance in Germany between now and the end of 2022.

1.1 | Developments at European level in the last two years

Sustainable finance has been actively promoted at European level over the last two years, particularly through the implementation of the EU Action Plan for Financing Sustainable Growth. Published in spring 2018 by the European Commission, the Action Plan³ set out three overarching objectives for a comprehensive sustainable financial system in the EU:

- Reorient capital flows towards sustainable investment in order to achieve sustainable and inclusive growth
- Manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues
- Foster transparency and long-termism in financial and economic activity.

Large parts of the Action Plan are implemented already. The Cluster has played an active part in

this process through its membership in the Technical Expert Group on Sustainable Finance (TEG).

With the Renewed Sustainable Finance Strategy and the Platform on Sustainable Finance, the EU is set to remain a driving force for sustainable finance. The Cluster will continue actively contributing to the process through its membership of the Platform.

The measures begun at EU level over the last two years encompass a wide range of initiatives, all of which are intended to help achieve the three objectives above

Sources

⁽³⁾ EU Action Plan: Financing Sustainable Growth: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0097

EU-Taxonomie

Karsten Löffler represented the Cluster in the TEG. As co-chair of the sub-group on energy, he has actively contributed to the development of the EU Taxonomy's energy criteria.

EU Green Bond Standard

The EU taxonomy is a classification system providing financial market participants with a harmonised understanding of environmentally sustainable economic activities. The EU taxonomy achieves one of the prerequisites for the transition to a low-emission, resource-efficient European economy in line with the EU's six environmental objectives: climate change mitigation, climate change adaptation, the sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems.⁴

The Technical Expert Group on Sustainable Finance, convened in spring 2018 to develop the technical screening criteria, published its final report⁵ in March 2020. The report, which includes a technical annex⁶, sets out criteria for the first two environmental objectives – climate change mitigation and climate change adaptation.

The European Commission will adopt a delegated act based on the Taxonomy Regulation(TR)⁷ and the recommendations of the TEG.

This will create the legal framework for the technical screening criteria used to define the substantial contribution of economic activities to the EU's first two environmental objectives (i.e. climate change mitigation and climate change adaptation). The technical screening criteria for the four remaining environmental objectives will be completed by the end of 2021.

The European Commission tasked the TEG with developing a proposal for the EU Green Bond Standard (EU GBS). In its final report, the TEG recommended the introduction of a voluntary EU GBS designed to improve the effectiveness, transparency, comparability and credibility of the market for green bonds. Green bonds, as defined by the EU GBS, may include any type of listed or unlisted bond or capital market debt instrument that is issued by a European or international issuer and meets the criteria of the EU GBS. It is important that the proceeds from EU GBS bonds are used in line with the EU taxonomy.⁸

EU Ecolabel

Sustainability Benchmarks

Amendment to Guidelines on nonfinancial reporting

The European Commission is currently developing criteria for applying the EU Ecolabel to financial products. The EU Ecolabel is designed to help inform retail investors and enable them to make sustainable investment decisions. It is closely connected to the EU taxonomy. The EU Ecolabel will also contain negative screening criteria. The final version of the EU Ecolabel is expected in 2021

The introduction of harmonised sustainability benchmarks through the publication of the Benchmarks Regulation⁹ will increase transparency in relation to the consideration of sustainability criteria in benchmarks and the introduction of minimum standards for sustainability benchmarks.

In addition, the EU has introduced its Climate Transition Benchmark (CTB) and Paris-aligned Benchmark (PAB).

The regulation builds on the TEG report on benchmarks.¹⁰

Another key element of the EU Action Plan is the harmonisation of disclosure requirements in relation to sustainability. In 2019, the European Commission therefore published guidelines on the reporting climate-related information. These are intended to make climate-related disclosures more comparable and more relevant for decision-making purposes.

Together with the revision of the Non-Financial Reporting Directive (NFRD)¹², these guidelines will ensure more uniform, standardised non-financial reporting by large, capital market-oriented companies in the EU. Publication of the first revised version of the NFRD is expected in the first half of 2021.

Sources:

 $^{(4) \}qquad \text{Article 9 of the Taxonomy Regulation (EU) 2020/852:} \\ \frac{\text{https://eur-lex.europa.eu/legal-content/DE/TXT/?qid=1592982765099\&uri=CELEX:32020R0852.} \\ \frac{\text{https://europa.eu/legal-content/DE/TXT/?qid=1592982765099\&uri=CELEX:32020R0852.} \\ \frac{\text{https://europa.eu/legal-content/DE/TXT/?qid=1592982765099\&uri=CELEX:32020R0852.} \\ \frac{\text{https://europa.eu/legal-content/DE/TXT/?qid=1592982765099\&uri=CELEX:32020R0852.} \\ \frac{\text{https://europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.europa.} \\ \frac{\text{https://europa.eur$

 $^{(5) \}qquad \text{TEG final report on the EU taxonomy: } \underline{\text{https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy.} \\ \underline{\text{en}}$

⁽⁶⁾ Technical annex to the TEG final report on the EU taxonomy: https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en_

⁽⁷⁾ EU Taxonomy Regulation: https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32020R0852&from=EN

 $^{(8) \}qquad \text{EU Green Bond Standard:} \\ \underline{\text{https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard_en} \\ \underline{\text{Full Green Bond Standard:}} \\ \underline{\text{https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-green-bond-standard_en} \\ \underline{\text{https://ec.europa.eu/info/business-economy-euro/banking-and-finance/eu-green-bond-standard-en-$

Disclosure Regulation

The Sustainable Finance Disclosure Regulation (SFDR)¹³ published in December 2019 makes another vital contribution to harmonised disclosure. The aim of this regulation is to reduce asymmetries of information regarding sustainability risks, the integration of opportunities and negative sustainability effects of financial products in order to ensure that financial market participants have a transparent basis for decision-making.

European Investment Bank (EIB) Climate Strategy

In November 2019, the EIB announced a new climate strategy. The Board of Directors also approved a new lending policy. The key elements of the strategy and lending policy are (i) ending financing for fossil fuels from the end of 2021, (ii) providing €1 trillion for green financing over a ten-year period, and (iii) aligning all financing activities with the goals of the Paris Agreement from the end of 2020.¹⁴

Green Deal and Green Deal Investment Plan

The announcement of the European Green Deal in December 2019 further reinforced the importance of sustainable finance in Europe. The Green Deal is a growth strategy that aims to make Europe the first climate-neutral continent by 2050. To achieve this aim, the Commission presented the European Green Deal Investment Plan in early 2020.¹⁵ This will involve €1 trillion of investment over the next ten years.

Renewed Sustainable Finance Strategy

In December 2019, the European Commission announced that it would review and renew its sustainable finance strategy in order to achieve a higher degree of harmonisation with the European Green Deal Investment Plan and the objectives of the European Green Deal. The renewed sustainable finance strategy will build on the Action Plan on Financing Sustainable Growth and the report of the High-Level Expert Group on Sustainable Finance (HLEG). In summer 2020, the European Commission conducted a public consultation to gather views on the shape of the renewed sustainable finance strategy. Publication of the strategy is expected in early 2021.

Platform on Sustainable Finance

Karsten Löffler will represent the Cluster in the Platform on Sustainable Finance. He is a member of the working group on low impact and negative taxonomy.

Activities of the ESAs

In October 2020, the European Commission appointed the members of the Platform on Sustainable Finance. The platform is an advisory body made up of experts from the private and public sector. It will have four main tasks:

- (i) Advising the Commission on the development of the technical screening criteria for the EU taxonomy,
- (ii) Advising the Commission on the review of the Taxonomy Regulation
- (iii) Monitoring and reporting on capital flows towards sustainable investments
- (iv) Advising the Commission on sustainable finance policy more broadly.¹⁷

The European supervisory authorities (ESAs), i.e. the European Banking Authority (EBA), European Securities and Markets Authority (ESMA) and European Insurance and Occupational Pensions Authority (EIOPA), play an important role in promoting sustainable finance in the EU. The ESAs actively work to harmonise reporting and supervisory obligations and to improve the transparency of sustainable financial instruments in the EU financial system.

The Transparency Regulation requires the ESAs to standardise disclosure requirements by developing regulatory technical standards (RTS) that detail the content, methodology and presentation of sustainability-related disclosures. After developing six RTS (do no significant harm, website statements, precontractual information for environmental and social characteristics, precontractual information for sustainable investments, website information, periodic reports), the ESAs launched a public consultation in April 2020. The RTS will ensure uniform, consistent reporting of relevant sustainability information by financial market participants.

Given the aim set out in the EU Action Plan of promoting longtermism in financial decision-making, the European Commission sought advice from the ESAs in early 2019 on how to reduce undue short-termism in the financial system. ¹⁹ All three institutions published reports on this topic in December 2019. ²⁰ ESMA and EBA found that most corporate and financial activities followed an investment horizon of three to five years. However, they did not find any clear evidence of undue short-termism. While investors in the insurance sector generally have a longterm focus, the EIOPA report emphasised that the lack of a commonly accepted definition of undue short-termism prevents the clear identification of potentially short-termist behaviour. The ESAs have therefore suggested evaluating whether the inclusion of sustainability factors in risk assessments could extend the investment horizon.

ECB Guide on climate-related and environmental risks

Stimulus programmes

In May 2020, the European Central Bank (ECB) published a draft guide on climate-related and environmental risks, in which it set out its expectations in relation to the management and disclosure of these risks. ²¹ The finalised version is expected to contain large parts of the TCFD's recommendations concerning risk management and to extend these to other environmental fields.

The COVID-19 pandemic poses a major challenge for society and the economy and has necessitated economic stimulus packages to head off the worst of the impact. On 21 July 2020, EU leaders agreed on a €750 billion economic recovery package²² known as NextGenerationEU (to run from 2021 to 2024) and on the multiannual financial framework (which included an additional €100 billion for the period from 2021 to 2027).²³ There are three pillars to NextGenerationEU:

- Helping Member States to recover economically
- Kickstarting the economy and incentivising private investments
- Addressing the lessons of the crisis

The comprehensive EU recovery package will also concentrate heavily on "rebuilding better" through the integration of green and digital objectives. The European Commission intends to fund the programme partly through the issue of sustainable bonds.²⁴

International Platform on Sustainable Finance

The International Platform on Sustainable Finance (IPSF)²⁵ was launched on 18 October 2019 by representatives from the European Union, Argentina, Canada, China, India, Kenya and Morocco. It aims to strengthen sustainable finance around the world by further stepping up the mobilisation of private capital for sustainable investments.

The IPSF enables the sharing of good practices and aims to boost opportunities and address challenges in relation to the design of a sustainable global financial system. The IPSF also plans to drive the harmonisation of standards and green financial instruments (e.g. taxonomies, disclosure obligations, standards and labels), taking into account the various national and regional contexts.

Sources:

- (9) Benchmarks Regulation: https://eur-lex.europa.eu/eli/reg/2019/2089/oj
- (10) TEG report on benchmarks: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190930-sustainable-finance-teg-final-report-climate-benchmarks-and-disclosures_en.pdf
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- $(17) Information about the Platform on Sustainable Finance: https://ec.europa.eu/info/publications/sustainable-finance-platform_en$
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- $(19) \hspace{0.5cm} \hbox{Call for advice on undue short-term pressure: $https://ec.europa.eu/info/publications/190201-call-for-advice-to-esas-short-term-pressure_en (19) and the contract of the con$
- (20) EBA report: https://eba.europa.eu/sites/default/documents/files/document_library/Final%20EBA%20report%20on%20undue%20short-term%20pressures%20 from%20the%20financial%20sector%20v2_0.pdf
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The **Deka-Group** has implemented a whole range of specific measures since 2019 in order to actively tackle the challenges of climate change and take advantage of related opportunities. These include greater incorporation of sustainability risks into the Deka Group's risk management, the launch of a Group-wide sustainability initiative to implement the new regulatory requirements and further intensified dialogue with companies, in which the Deka Group has called for increased corporate efforts on

climate change and sustainable development.
First and foremost, the Deka Group and its savings bank partners will continue to provide investors with a wide range of investment opportunities that take full account of the risks and opportunities of climate change and sustainable development.

1.2 | International developments in the last two years

Key developments at international level have triggered lasting change in the German financial centre, which will help sustainable finance to gain further momentum in the future. The Cluster has played an active role here, too.

Katowice Commitment

At the 24th Conference of the Parties to the UN Climate Convention (COP24), five international banks pledged to help achieve the goals of the Paris Agreement.²⁶ They committed to work towards the objective of Article 2.1c ("making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development") of the Agreement and promised to incorporate it into their activities, both in terms of de-risking and making a positive impact.

Network for Greening the Financial System (NGFS)

In April 2019, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) presented its first detailed report – a "Call for Action".²⁷

The report makes a series of recommendations for central banks and supervisory authorities. These are designed to appropriately integrate the climate crisis into the risk analysis of financial systems, thereby increasing financial market stability. For example, the NGFS calls for changes to supervisory processes, bridging of data gaps and the building of intellectual capacity in the financial sector.

Since then, the NGFS has published papers on topics such as monetary policy and macroeconomic stability as well as guides for supervisory authorities.

Financial Centres for Sustainability (FC4S)

The Cluster is an active member of FC4S and regularly contributes to its activities through contributions of sponsors as well as the managing directors.

FC4S is a UN network for organisations representing international financial centres. Its stated objective is to accelerate the global growth of sustainable finance by enabling financial centres to exchange experience and by driving convergence and prioritising shared action. The number of members has more than doubled in the last two years to 32.²⁸ Regional hubs in Asia, Africa and Europe enable FC4S members to work more closely with their peers on topics of regional significance.

Net-Zero Asset Owner Alliance (NZ AOA)

In September 2019, 30 institutional investors announced their ambition to limit global warming to 1.5°C compared to pre-industrial levels and make their portfolios climate-neutral by 2050.²⁹ Since then, the NZ AOA has been working on the technical implementation of these goals. In a first concrete commitment, the NZ AOA members declared that, by 2025, they would reduce emissions from their portfolio by between 16% and 29% from 2019 levels.³⁰ They have published their first technical paper on this decarbonisation target.³¹

UNEP FI Principles for Responsible Banking (PRB)

Several Cluster sponsors have signed the PRB.

UNEP FI introduced the Principles for Responsible Banking (PRB) in September 2019. The goal of the PRB is to make the banking sector more sustainable. To achieve this, signatory banks must analyse their current impact on the planet, set targets to reduce this impact and publicly report on their progress. Over 200 banks have so far signed up to the PRB.

Sources:

- (26) Katowice text: https://group.bnpparibas/uploads/file/katowice_commitment_letter.pdf
- (27) First comprehensive report: https://www.ngfs.net/en/first-comprehensive-report-call-action
- (28) List of FC4S members: https://www.fc4s.org/members/
- (29) Informationen on the AOA: https://www.unepfi.org/net-zero-alliance/
- $(30) \quad 2025 \ target \ of \ the \ AOA: \ http://www.climateaction.org/news/net-zero-asset-owner-alliance-sets-2025-decarbonisation-targets$
- (31) Publication of the AOA's target setting protocol: https://www.unepfi.org/wordpress/wp-content/uploads/2020/10/Alliance-Target-Setting-Protocol_Final-Consultation-Draft.pdf

Deutsche Bank has made sustainability one of its strategic priorities and is supporting the transformation to a sustainable economy.

For the first time, it has published quantifiable targets for expanding its sustainable business activities covering the ESG (environmental, social, governance) space. By the end of 2025, it will increase its volume of sustainable financing plus its portfolio of ESG investments under management to over €200 billion in total.

The bank's sustainable financing and financial products will be based on its Sustainable Finance Framework. This will allow it to achieve its ambitious sustainability targets in line with clear criteria. The framework is based on the EU taxonomy – a

first in the European financial sector according to the independent consultancy ISS ESG.

Deutsche Bank has also signed the climate pledge by the German financial sector, in which it has committed to aligning its lending and investment portfolio with the goals of the Paris Agreement.

"We are driven by a very strong conviction to help shape the global change to a sustainable, climate-neutral and social economy and to support our customers in their transformation."

Christian Sewing
CEO Deutsche Bank

1.3 | Developments in Germany in the last two years

Germany has set itself the ambitious goal of becoming a "leading sustainable finance centre". 32 This has injected strong momentum into both the public and private sector. The Cluster continues to play a central role in Germany's sustainable finance efforts.

Sustainable Finance
Committee of the
German Federal
Government

The Sustainable Finance Committee³³ of the German Government advises the federal government on the development and implementation of its sustainable finance strategy. It was appointed by the government on 6 June 2019 for the duration of the current legislative period. Its members are practitioners from the financial industry, the real economy, civil society and academia.

As the United Nations Sustainable Development Goals and the objectives of the Paris Agreement are put into practice, the sustainable finance strategy is designed to help the financial sector contribute to funding structural changes in the real economy. The intention of this is also to ensure Germany's longterm competitiveness.

BaFin Guidance Notice on Dealing with Sustainability Risks

In December 2019, the Federal Financial Supervisory Authority (Ba-Fin) published a guidance notice on dealing with sustainability risks, which is intended to serve as "orientation" for financial institutions.³⁴ This "compendium of non-binding procedures" helps financial institutions to implement a proper business organisation and an appropriate risk management system. BaFin is one of the first supervisory authorities to publish such guidance.

Deutsche Bundesbank in the NGFS

Deutsche Bundesbank plays a leading role in the NGFS. It heads the "Scaling up green finance" workstream (one of four workstreams). The workstream's objective is to set out the role to be played by NGFS members in promoting green finance. ³⁵ The workstream has so far been involved in three NGFS publications.

Voluntary climate pledge by the financial sector

In June 2020, 16 businesses in the German financial sector signed a voluntary commitment to protect the climate. They pledged to align their lending and investment policies with the objectives of the Paris Agreement and to measure and disclose their progress. Targets are based on the emissions associated with companies' lending and investment portfolios.³⁶

Sustainable Finance Research Platform

A number of German universities and the German Institute for Economic Research (DIW) have joined forces in the Sustainable Finance Research Platform to conduct research together and provide advice to German and European policy makers based on scientific expertise.

Sources:

⁽³²⁾ German government's ambition on sustainable finance: https://www.bundesregierung.de/breg-de/aktuelles/bundesregierung-will-deutschland-zu-einem-fuehrenden-sustainable-finance-standort-machen-1584002

⁽³³⁾ About the Sustainable Finance Committee: https://sustainable-finance-beirat.de/

 $^{(34) \}quad \text{BaFin Guidance Notice on Dealing with Sustainability Risks: https://www.bafin.de/SharedDocs/Downloads/DE/Merkblatt/dl_mb_Nachhaltigkeitsrisiken.html$

 $^{(35) \}qquad \text{NGFS workstream 3 Mandate: } https://www.ngfs.net/sites/default/files/media/2020/09/03/ws3_mandate_final.pdf$

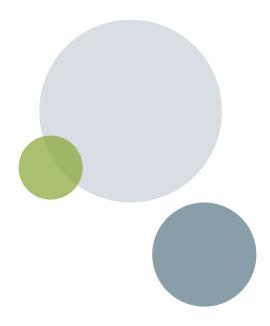
The **KfW Group** is generally associated with programmes to promote sustainability. The volume of lending awarded in recent years makes it one of the world's leading providers of climate finance, for example.

A perhaps lesser known fact is that it also conducts in-depth work on the climate risks, referred to as transition and physical risks. With the voluntary reporting initiative TCFD (Taskforce on Climate-related Financial Disclosures), there is now a standardised, internationally recognised way of disclosing these risks. As a public institution, KfW feels a duty towards its stakeholders, owners, partners and investors, and towards the general public, to present risks transparently, accept responsibility and foster trust. In 2018, it therefore became the

"As a promotional bank, we also have to closely analyse the physical and transitional climate risks of our portfolio."

Dr. Günther BräunigCEO of KfW Group

first national promotional bank in Europe to join the TCFD initiative. After an intensive period of learning – including with the help of the Green and Sustainable Finance Cluster Germany – it published its first TCFD report as part of its sustainability report on www.kfw.de



2 | A dynamic market environment – sustainable finance gathers pace

Since the publication of "Shaping the future – Green and Sustainable Finance in Germany" in August 2018, both the market environment for sustainable finance and the Cluster have evolved rapidly. To obtain a clear picture of the current progress of sustainable finance in Germany, the Cluster has therefore repeated the market survey from 2018. The latest survey involved a total of 64 market participants and revealed some exciting developments:³⁷

- Sustainable finance has entered the mainstream. This is reflected in its increased role within organisations and in the development of tools and products.
- In the German financial system, the issue of climate change is the main focus in the area of sustainable finance. While some institutions indicated that they consider multiple aspects of sustainable finance, the predominance of climate-related KPIs in measuring the sustainability of business activities and product portfolios still points to a clear focus on climate.
- The regulatory developments of the last two years have had an influence on products and processes.
 For example, half of the institutions surveyed are already beginning to use the EU taxonomy for financial instruments. Some institutions already conduct climate-related stress tests.

This section will look at the highlights and findings of the empirical market survey. The results are intended to guide market participants in their individual market positioning and will also help the Cluster find the best possible orientation for its own work over the next two years.

2.1 | Looking back at Shaping the future – Green and Sustainable Finance in Germany

Back in spring 2018, "Shaping the future – Green and Sustainable Finance in Germany" showed that sustainable finance was already gathering momentum within the German financial system. Since then, the market has evolved considerably. To better contextualise the results of the latest market survey, this section first takes a brief look back at the key findings of "Shaping the future – Green and Sustainable Finance in Germany".

With its survey for "Shaping the future – Green and Sustainable Finance in Germany", the Cluster wanted an authentic appraisal of where things stood as it began its work. In spring 2018, an empirical market survey helped gather information on the activities and competencies in green and sustainable finance in

⁽³⁷⁾ The results of the two studies do not constitute a representative sample of all financial institutions and therefore only permit indications of trends. Nevertheless, they provide an important basis for the conceptual focus of the Cluster.

Germany, the barriers to deeper integration of sustainable finance into the core business of financial institutions and possible solutions to overcome such barriers. The online survey form was completed by 27 financial institutions in Germany.

Organising capital markets that provide transparency, security and integrity is not only the public mandate and core business of the **Deutsche Börse Group**; it is also a vital contribution to society. Over the last two years, Deutsche Börse Group has created an extensive portfolio of sustainable products.

The index provider STOXX calculates and disseminates over 12,000 indices, a growing number of which are designed with sustainability aspects in mind. The range of sustainability indices includes ESG-, climate change- and carbon emission-related products. Eurex took on a pioneering role with

the introduction of an ESG product suite in 2019. This consists of futures and options on leading global, regional and local benchmarks. Clearstream Banking S.A. has also expanded its credit line with a positive incentive loan.

As sustainable finance enters the mainstream,
Deutsche Börse Group wants to continue paving
the way for it. The growing demand for sustainable
products and services is an encouraging sign, and
the Group is therefore constantly improving and
expanding its product offering accordingly.

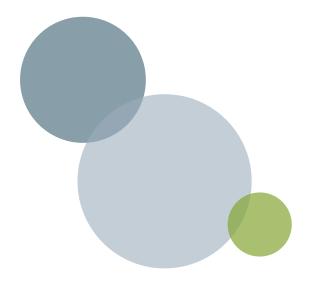
Two years ago, sustainable finance was not yet part of the core business of German financial institutions

The results showed that financial institutions in Germany were responding to the already rising demands from many stakeholders, e.g. clients, civil society and regulators. They were creating specialist central functions in the area of sustainability, stepping up reporting and allocating responsibility for sustainability issues to relatively high levels of their hierarchies. However, while financial institutions in Germany demonstrated the importance of this issue by involving the executive board and pointing out its strategic relevance in their reports, efforts to integrate the basic principles of sustainable finance into

their core business were still relatively tentative. Sustainable finance-related products were generally specialist products that made up a relatively small share of the overall portfolio. The ranking of non-product-related sustainability activities showed that the financial institutions were working in particular on integrating sustainability aspects into core processes.

Two years ago, financial institutions called for the introduction of a uniform taxonomy for sustainable economic activities

Indepth interviews were also conducted as part of "Shaping the future – Green and Sustainable Finance in Germany". These showed that the majority of respondents regarded the regulatory framework at that time as a barrier, since the lack of a uniform sustainable finance taxonomy limited the scope for marketing sustainable products. The importance of the demand aspect was also mentioned, as demand was being driven mainly by institutional investors. A number of financial institutions regarded an expanded product range and additional training of their client advisers as prerequisites for generating increased demand in the retail market.



2.2 | Findings from the market survey

The current market survey shows that sustainable finance has gained strong momentum in the last two years. The institutions surveyed are actively working to implement the new sustainability regulations. They are also making increased use of the business opportunities arising in this area. While the climate crisis is now a mainstream issue in the

financial sector, sustainable finance has room for further development in relation to other environmental issues, such as biodiversity and the stronger integration of social aspects. Fig. 5 summarises the highlights of the market survey, which are discussed in this section.



Figure 5 Highlights of the empirical market survey

Institutions are well aware of the increasing disclosure obligations

Disclosure of climate-related risks and opportunities is being driven forward at European level. Publication of the draft revised guidelines on disclosure of non-financial information is expected in the first half of 2021. Market participants already appear to be anticipating the new rules. Forty-seven percent of the institutions surveyed stated that they were already engaging to a high or moderate degree with the non-binding guidelines on climate-related disclosure and putting these principles into practice. This figure is expected to rise in the coming years, improving the quality of climate-related information disclosed.

Banking and sustainability go hand in hand at **Commerzbank**: Corporate responsibility is one of Commerzbank's guiding principles. That is why the company is committed to the Green and Sustainable Finance Cluster Germany, giving it an active role in developing sustainability in the financial centre of Germany. For Commerzbank, this includes:

More sustainable finance for its customers: Commerzbank has already issued its second green bond and offers sustainable finance and investment opportunities for retail and corporate clients. Reporting transparently on climate risks and managing portfolios in line with the Paris climate goal: The bank was one of the first signatories of the Principles for Responsible Banking (UN PRB), supports the TaskfForce on Climate-related Financial Disclosures (TCFD) and has joined the Science Based Targets initiative (SBTi).

"We want to influence sustainable
development in the economy
and society, provide fair and
competent advice to our customers and
consistently shrink our
environmental footprint"

Martin Zielke
CEO Commerzbank

Setting a good example: Commerzbank's new climate target is to reduce its own CO2 emissions by a further 15% by 2025 compared to 2018 levels. CO2 emissions were cut by 70% between 2007 and 2018.

Greater measurement of the integration of sustainable finance is needed

The market survey shows that 78% of the institutions surveyed have made progress with the holistic integration of sustainable finance since the publication of "Shaping the future – Green and Sustainable Finance in Germany". However, only 70% of the institutions said that they measure the sustainability performance. This figure needs to change in the coming years as the financial system will increasingly have to show evidence of a real, measurable sustainability impact to the public, regulators and customers. The voluntary climate pledge and new regulations will also require companies to disclose their progress.

At financial institutions, the holistic integration of sustainable finance varies from department to department

If sustainable finance were fully integrated throughout an institution, we would expect all departments to regard sustainability as a core issue and to be involved in a value-added integration process. The market survey suggests that sustainability has not been incorporated equally into every area of companies' business operations. Sustainable finance appears to play the greatest role in corporate strategy and communications/investor relations (68%, see Fig. 6). Meanwhile, in lending, the role of sustainable finance is still largely in its infancy.

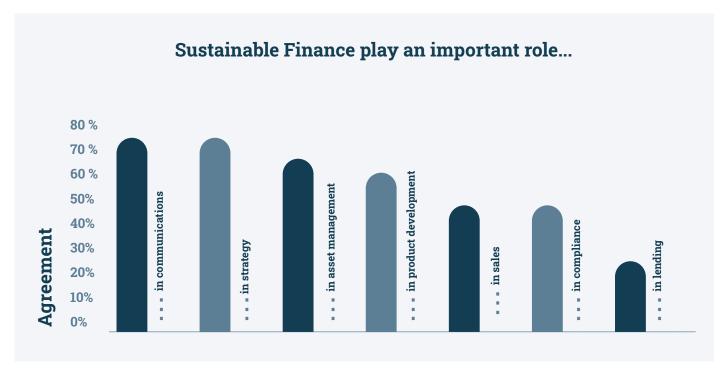


Figure 6 Importance of sustainable finance by department

Sustainability units need greater financial support

The increasing relevance of sustainable finance is reflected in the strategic growth in the budgets available to sustainability departments. Many of these units now have their own budgets, which ensures that there is sufficient personnel capacity to work on sustainable finance. Sixty-one percent of the institutions surveyed said that they have dedicated budgets for their sustainability departments. However, only half regarded the budgets as sufficient for the tasks at hand (i.e. at 29% of all institutions surveyed) – see Figure 7.

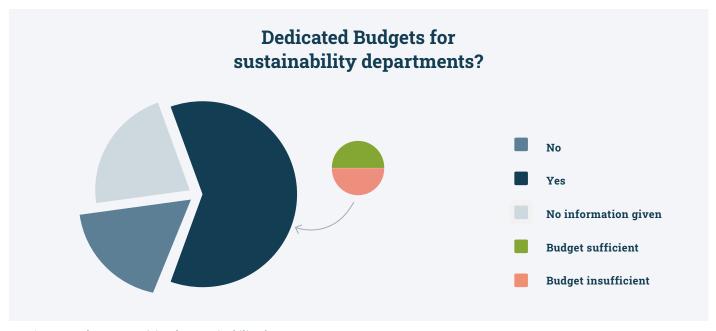


Figure 7 Budgetary provision for sustainability departments

Measurement of greenhouse gas emissions is the dominant sustainability KPI

The market has a range of KPIs at its disposal with which to measure sustainability, formulate sustainability targets and continuously monitor progress. These include climate indicators such as Scope 1, 2 and 3 emissions (i.e. emissions from own operations and the portfolio), environmental indicators such as water usage, social indicators such as the proportion of female board members and adherence to global agreements on human rights, and governance indicators such as the number of (lost) lawsuits. The market survey shows that greenhouse gases are the most frequently measured indicator (see Fig. 8). Social indicators continue to be used within companies. These involve measuring the proportions of women and men at board level. Interestingly, indicators for gender pay equality are rarely used. Only a few institutions measure the portfolio's environmental impact in areas such as biodiversity and pollution.

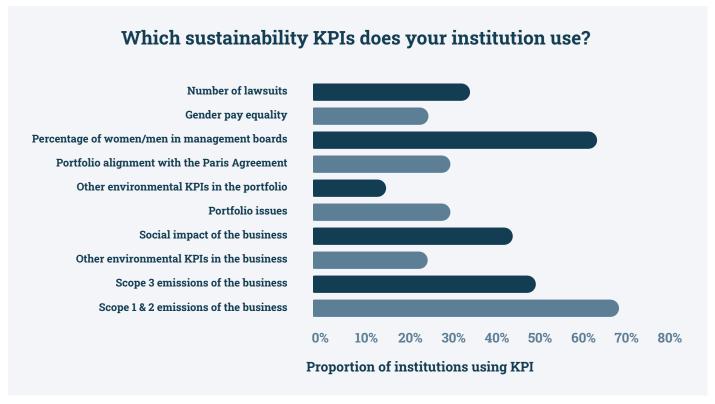


Figure 8 Use of sustainability KPIs

Progress achieved in several areas of sustainable finance at **Metzler Asset Management**. In advisory services and reporting, Metzler has consolidated sustainability activities in the Sustainable Investment Office and expanded ESG reporting to 15 pages, providing detailed information and a timeline of the ESG profile of its investments. There has also been progress in ESG integration and portfolio construction. Transparent ESG integration in portfolio management has been enhanced to improve the risk/return profile. The proprietary portfolio construction and risk management tool QbrickS® allows tangible financial elements of sustainability to be seamlessly integrated into investment processes.

The most important event has been the development of QbrickS®. This portfolio construction tool creates transparency for investors in three areas: sustainability (focus on ESG), risk premi-

ums (value drivers) and allocation (sectors and regions). The next steps in mainstreaming sustainable finance are to further develop our expertise in managing and measuring climate risks, e.g. conformity with the Paris Agreement.

"For us, customer requirements are key, guiding the way in which we integrate the different dimensions of sustainability into the investment process."

Dr. Rainer MatthesChief Investment Officier at Metzler Asset Management

Remuneration systems could be geared even more strongly towards sustainability performance

Calls to link (board members') salaries to the sustainability performance of financial institutions are growing in volume. The market is already seeing movement towards greater integration of sustainability aspects into remuneration systems. For example, 30% of the institutions surveyed indicated that they already base part of their remuneration on the sustainability performance of their business.³⁸ This trend could be further reinforced and should be considered by all market participants

Sustainable financial products are an integral part of the product portfolio

The last two years have seen a boom in the issuance of sustainable financial products. In 2020, total issuance of green and sustainable bonds surpassed €1 trillion.³⁹ This is also reflected in the market survey. Green and sustainability-linked bonds and loans are now part of many banks' product portfolios. For around 25% of the institutions surveyed, the issue or origination of such instruments is already part of their core business.

Innovative solutions from **DZ BANK** to develop the sustainable bond market: DZ BANK has successfully expanded its position as one of Europe's leading syndicate banks in the sustainable bond market over the last two years. In spring 2020, the bank supported the issuance of the world's first COVID-19 bond – a social bond issued by the International Finance Corporation (IFC). DZ BANK also

"Sustainability is a key element of our DNA as a cooperative. Therefore, sustainable finance is an integral part of our core business."

Wolfgang Köhler

Member of the Board of Managing Directors, DZ BANK AG Deutsche Zentral-Genossenschaftsbank issued a first green bond of its own at the end of 2018 and is currently planning another one. The bank is contributing to the development of this market under the motto "Sustainability meets digitalisation". With ESGlocate, an innovative allocation tool for sustainable bond issues, DZ BANK has developed its first digital solution for issuers. Other digitalisation projects, for example to assist issuers with structuring sustainable bonds, are currently in the implementation phase.

Sources

- $\begin{tabular}{ll} \begin{tabular}{ll} \beg$
- (39) BNEF blog on sustainable debt: https://about.bnef.com/blog/sustainable-debt-joins-the-trillion-dollar-club/

Helaba has the clear goal to support its customers as they transition to a sustainable future. It has therefore expanded its service range to include structuring of projects in the renewable energy and digital infrastructure segments and syndication of ESG-linked finance and bonds.

By tightening its sustainability-related lending criteria and joining the Energy Efficient Mortgage Action Plan as a pilot bank in 2020, Helaba has reinforced awareness across the group of the importance of sustainable activities for the future of the bank and of the opportunities that will arise from them.

In the next step, Helaba will implement a project that plans to reach every part of the business. This will address the further expansion of sustainability-oriented services and the development of strategic sustainability management.

Use of the EU taxonomy is gathering pace

The Taxonomy Regulation was adopted in December 2019. Final processes are currently under way to design the technical criteria. The EU taxonomy will continue to be developed on an ongoing basis over the coming years. Though these are still early days, the institutions surveyed are already beginning to develop taxonomy-related financial instruments or have already incorporated these as an important component of their product portfolio (see Fig. 9). Some institutions called for the introduction of a taxonomy in "Shaping the future – Green and Sustainable Finance in Germany". The latest survey indicates that these institutions now want to capitalise on the taxonomy's benefits

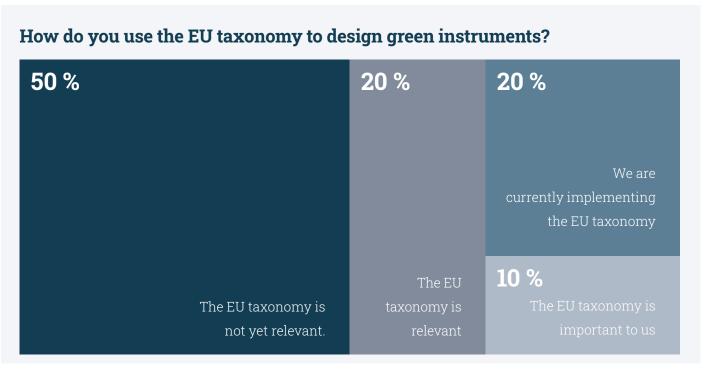


Figure 9 Relevance and use of the EU taxonomy in designing green instruments

For **BNP Paribas**, sustainability is part of the core strategy. BNP Paribas Group has aligned itself with the 17 SDGs of the United Nations and is translating these into responsible financing. In 2019, for example, €180 billion of corporate lending contributed directly to the energy transition.

BNP Paribas has been crowned the World's Best Bank for Financial Inclusion (Euromoney, 2020) and is represented in many sustainability indices. A core issue for us is our effort to analyse the environmental footprint of our entire lending portfolio – for corporates today and individuals tomorrow – and adjust it so that it is gradually aligned with the objectives of the Paris Agreement. The aim is to evaluate the impacts and environmental risks of banks and their customers on a reliable and comparable basis.

The pandemic is accelerating our recognition that the common good is of fundamental importance to the future of every company and every individual. "In a changing world, we want to be a sustainable and dependable partner to our clients. We will therefore continue to incorporate sustainable finance into our core business. We see our role in this context as assisting the transformation to a sustainable future."

Frank Vogel

VHead of Corporate and Institutional Banking Germany at BNP Paribas

The current situation itself can probably be attributed to the major decline in biodiversity caused by the acceleration of human activity over the last 50 years. Turning this trend around will be a long-drawn-out process. At BNP Paribas, we are taking responsibility for our part of the transformation, which is of decisive importance to our collective future.

ESG screening and positive/negative screening remain the main tools in risk management

BaFin and the ECB are calling for new methods of understanding and dealing with (or pricing in) sustainability risks. The market survey indicates that financial institutions have already begun to take action in this area. For example, 43% of the institutions surveyed regard stress tests at company level as an important measure. Sixty-four percent of institutions believe that appropriate, coordinated risk management at asset level is either important or very important. The most commonly used tools, however, are ESG screenings (91%) and positive/negative screenings (82%). This will probably not be sufficient to meet the requirements of the supervisory authorities. Stronger developments in risk management can be expected in the coming years.

Stakeholders' sustainable finance expertise is generally rated as low

Taking a holistic approach to mainstreaming sustainable finance means involving different stakeholder groups in the creation and use of sustainable finance products and enabling them to benefit from the resulting opportunities. The market survey shows that, in the view of the institutions surveyed, some stakeholder groups still lack sufficient knowledge of sustainable finance. Only 17% of the institutions surveyed believe that their clients are well informed about sustainable finance, while 26% rate their clients' understanding as moderate. The perceived expertise of regulators varies between the German and European levels. While 17% of respondents rated the EU regulators' expertise as high and 52% as moderate, the equivalent figures in Germany were 4% and 30%. This suggests a need to promote dialogue and greater awareness. Enabling as many stakeholders as possible to benefit from sustainable finance will depend on meeting this need in the coming years.

The Cluster is encouraged by the positive results of the market survey. These indicate that the Cluster's technical work (e.g. its involvement in developing the EU taxonomy and participation in the TCFD Think Tank) and discussion formats (e.g. the Sustainable Finance Summit) have moved sustainable finance in Germany forward. However, the need for further action is evident here, too. The Cluster will devote itself to this in the coming years. In the next two sections, this report will first examine the work of the Cluster over the last 24 months before looking ahead at what needs to be done in the next two years.



3 | Looking back at two eventful years

For the past two years, the Cluster has been working to strengthen the German financial centre as the country puts sustainable finance into practice. It has offered opportunities for networking and dialogue, worked collaboratively to develop and share knowledge, and produced a series of publications. The Cluster has also represented Germany as a financial centre at European and global level. Let us look at some of the highlights of the Cluster's work in the last two years.

The Cluster published the Sustainable Finance Policy Roadmap – a work programme for a German sustainable finance strategy

In preparation for the development of a national sustainable finance strategy, the Cluster worked with WWF Germany to present a joint discussion paper in February 2019: "For a future proof financial system as a mainstay for competitiveness and employment in Germany". 40 The paper identifies and discusses key elements of a policy roadmap. It offers suggestions on the possible content of a German policy roadmap and shows the potential timeline and link to European sustainable finance regulations. In particular, it proposes four pillars for the policy roadmap: transparency & disclosure, stability & risk management, location policy and supporting framework-setting, and the clear assignment of responsibilities. All four pillars are represented in the Interim Report of the Sustainable Finance Committee.

The Cluster's managing directors now chair the Sustainable Finance Committee of the German Federal Government

Kristina Jeromin and Karsten Löffler have been appointed to chair the German government's Sustainable Finance Committee. This means that the Cluster's managing directors are actively shaping the German sustainable finance strategy. Karsten Löffler, following his appointment as Chair of the Sustainable Finance Committee, said: "With the establishment of the Sustainable Finance Committee, the German government is putting the financing of climate and sustainability goals on the agenda. In doing so, it is highlighting their importance for the entire economy and thus for the future-proofing and international competitiveness of Germany as a financial centre."41 The Committee has so far published a position paper and an Interim Report.43

A public consultation period followed the publication of the Interim Report. The Sustainable Finance Committee is expected to present its final recommendations for the German sustainable finance strategy in the first quarter of 2021.

Sources:

 $^{(40) \}qquad \hbox{Cluster Action Roadmap: https://gsfc-germany.com/wp-content/uploads/2019/02/Finance_Roadmap_EN.pdf}$

⁽⁴¹⁾ Information page of the Sustainable Finance Committee: https://sustainable-finance-beirat.de/

 $^{(42) \}qquad {\tt Sustainable Finance Policy Roadmap: https://gsfc-germany.com/wp-content/uploads/2019/10/Sustainable-Finance-Beirat_Thesen_final_EN.pdf}$

 $⁽⁴³⁾ In terim \ Report \ of \ the \ Sustainable \ Finance \ Committee: \ https://gsfc-germany.com/wp-content/uploads/2020/03/200306_SFB-Zwischenbericht_EN.pdf$

The Cluster Action Roadmap sets the thematic focus for the next few years of work

The Cluster wants to be a transparent and approachable partner for its core actors, for Germany as a financial centre overall and for European and other international networks. In its Action Roadmap, it has therefore outlined the themes that will guide its work in the next few years.44 With the help of this plan, it aims to build further support for Germany as a financial centre and improve visibility in an international context. In the Action Roadmap, the Cluster describes itself as a network, dialogue, research and knowledge platform. The content of the Roadmap and the Cluster's strategic direction as a network, dialogue, research and knowledge platform are the product of an intensive dialogue with the Cluster's sponsors and board members. The Roadmap was published in August 2.02.0

The Cluster is actively involved in European work on sustainable finance within the Technical Expert Group on Sustainable Finance and Platform on Sustainable Finance

The European Commission is involving the general public in the efforts to develop sustainable finance at European level. The TEG and the Platform on Sustainable Finance are enabling a range of different perspectives and technical expertise to be absorbed into the development process. Karsten Löffler, the Sub-Group Co-Chair Energy within

the TEG, has helped to develop the EU taxonomy. His renewed appointment to the Platform on Sustainable Finance demonstrates that Germany's perspective as a financial centre is important to the European Commission. It also shows that the Cluster is regarded as an appropriate ambassador for the German financial sector when it comes to sustainable finance. In his role on the platform, Karsten will work on how to design taxonomies for sectors with a small environmental footprint and for environmentally harmful activities.

The Cluster is supporting the harmonisation of market standards in the TCFD Think Tank

In the 2018 market analysis "Shaping the future – Green and Sustainable Finance in Germany", respondents articulated the need for capacity building, market harmonisation and access to data. Based on these results, the Cluster founded the TCFD Think Tank in order to help Germany's financial centre implement climate and sustainability risk assessments and boost dialogue with the real economy. The first phase of the TCFD Think Tank's work looked at the fundamentals in terms of climate risks and opportunities and created a common understanding of the TCFD recommendations. The results were disseminated in a series of publications in summer 2019. 45

Sources:

 $^{(44) \}qquad \hbox{Cluster Action Roadmap: https://gsfc-germany.com/wp-content/uploads/2020/09/200924_GSFCG_Roadmap_EN.pdf} \\$

⁽⁴⁵⁾ TCFD Think Tank publications: https://gsfc-germany.com/en/tcfd/

The second phase of the Think Tank, which is currently under way, is looking at how relevant information about climate- and environment-related risks and opportunities can flow from German SMEs to financial institutions while preserving the principle of proportionality in reporting requirements. An active dialogue is being sought at sectoral level with representatives from SMEs. A market standard for such reporting is set to be created as part of this phase. The results of the second phase are due to be presented in the first half of 2021.

The Cluster has grown strongly in the last two years

The Cluster is delighted to have gained new sponsors over the past two years. The number of sponsors has almost doubled over this period. Below, the new sponsors report on their successes in sustainable finance since 2018.

The Cluster's Sustainable Finance Summit offers an opportunity for industry dialogue

The Sustainable Finance Summit has been taking place since 2017 and has been organised by the Cluster since 2018. The Summit's aim is to discuss the latest developments in sustainable finance and move things forward with stakeholders from the financial sector, real economy, political sphere, civil society and academia. In addition to stepping up dialogue in Germany on the development of sustainable finance, the Cluster's ambition is to keep enriching the summit programme with expertise from Europe and further afield. The Sustainable Finance Summit on 28 September 2020 therefore had a strong European focus, which was particularly appropriate against the backdrop of Germany's European Council Presidency. 46 The annual summits allow participants to attend informative keynote speeches and debates involving ministers and senior business figures and to share their thoughts on practical issues with their peers.

Sources

⁽⁴⁶⁾ Press release on the European Sustainable Finance Summit (in German): https://gsfc-germany.com/wp-content/uploads/2020/10/200928_EuropeanSustainableFinanceSummit.pdf

ING has managed to raise awareness of sustainability among its workforce and made it part of the corporate strategy. Sustainable finance has now become a set part of every customer consultation.

"Sustainable finance is becoming ever more important to our corporate client business, and I am convinced that we will continue applying our expertise in this area to the benefit of our customers."

Dr. Joachim von SchorlemerDeputy CEO, ING

ING has worked with Rotterdam School of Management (Erasmus University) to provide multi-day training courses on sustainable finance for many of its employees.

It has also supported many corporate clients on strategic issues and advised them on implementing sustainable financing products linked to ESG criteria. ING is already a global pioneer in sustainable finance. It aims to further build on this position by working together with corporate clients.

SEB is advising clients on the transition to a sustainable business model: SEB's mandates show that sustainable finance has arrived.

An important step was advising an automotive group on the creation of a green finance framework, which proved that credible financing for the transformation to a sustainable business model is possible even in carbonintensive industries. The independent research institute Cicero classified the framework as Dark Green, the highest possible level. The framework will be used to raise capital, for instance through sustainable bonds, notes or loans.

As a green bond pioneer and Executive Board Member of the Green Bond Principles, SEB has the ambition to continue contributing to sustainable development. The bank has committed to supporting its customers with this transformation. It firmly believes that companies which integrate sustainability into their business activities enjoy greater long-term success.

"We integrate sustainable consulting, financing and investment solutions in dialogue with our clients. By combining expert advice with sustainable products, we aim to be the partner companies trust for the transition to sustainable finance"

Jürgen Baudisch

Head of SEB AB Frankfurt Branch, Large Corporates and Financial Institutions Arabesque S-Ray has seen many defining moments over the past 24 months. Its workforce has grown considerably, with the team expanding to more than 50 employees. Dr. Todd Bridges has become global head of Sustainable Investing and ESG Research. The company has also been busy developing new metrics such as the Arabesque Temperature™ Score. This measures companies' contribution to global warming through their greenhouse gas emissions. Arabesque has also successfully completed its 'Series A' funding round with six co-investors (Allianz X, Commerz Real AG, DWS Gruppe, the State of Hesse, Helaba Digital and Accenture).

S-Ray has remained true to its core principle of sustainability. Collecting data independently for its S-Ray scores, formulating new strategic partnerships and introducing new rating systems are the three most important goals for 2020-21.

Moody's Corporation has committed to a sustainable future. We are continuously expanding our work to incorporate ESG best practices across the group and to develop and promote uniform global standards for the assessment of ESG opportunities and risks.

In recent years, the rating agency Moody's Investors Services (MIS) has further stepped up its efforts to show how ESG aspects are reflected in its credit assessments. To meet the growing demand for informative ESG analyses and products beyond credit ratings, Moody's launched its new ESG Solutions Group in September 2020.

This step followed important investments in this field in 2019, when Moody's acquired majority stakes in Vigeo Eiris, a world-leading provider of ESG data, ratings and tools, and in Four Twenty Seven, a pioneer in climate risk analysis. The ESG

"Moody's helps market participants advance strategic resilience, responsible capitalism, and the greening of the economy by identifying risks and opportunities and providing meaningful performance measurements and insights"

Robert FauberChief Operating Officer, Moody's

Solutions Group is responsible for creating a comprehensive range of independent and integrated ESG solutions using capabilities in data and analytics from across the company.

"Doing well and doing good": **Zurich** is integrating ESG criteria into the investment process, making impact investments and collaborating with other market participants. Zurich has followed through on its impact investment targets. As of 30 June 2020, total impact investments had reached USD 4.9 billion, all of which produce environmental or social benefits.

Zurich Group Germany has introduced sustainable pension products in unit-linked life insurance using managed ESG deposit schemes. As a founding member of the Net-Zero Asset Owner Alliance, Zurich also aims to achieve a climate-neutral

investment portfolio by the year 2050 and was the first insurer to join the GSFCG. Zurich plans to develop and push ahead with its decarbonisation strategy and to expand its range of sustainable products.

"We are making a significant contribution to mitigating climate change by approaching our entrepreneurial role and social responsibility with a clear focus on sustainability"

Dr. Carsten SchildknechtCEO Zurich Germany

4 | The Cluster as central actor for the bringing together of all the interest groups for the great transformation

The Cluster was founded to promote a financial system that is sustainable and fit for the future. This ambition is encapsulated in the Cluster's mission statement, which emphasises dialogue and the sharing of practical experience.⁴⁷

managing them at both institutional and systemwide level. Given the changes to which sustainability risks are subject, a forward-looking analysis is increasingly important rather than a reliance on past trends.

In 2020, the Cluster reviewed the focus of its future work. This resulted in the Cluster Action Roadmap,⁴⁸ which concentrates especially on two areas:

- (i) Data availability and data quality
- (ii) Working with the real economy

The need for data on sustainability is growing rapidly

The need for informative data on sustainability is growing rapidly. Financial institutions increasingly rely on these insights to make lending and investment decisions, e.g. in lending business and asset management. There is also growing demand for aggregated data due to the increasing transparency requirements of supervisory authorities. Both BaFin and the ECB have clearly outlined their expectations of the institutions they supervise through the publication of a guidance notice (BaFin) and draft guidelines on sustainability and climate-related/environmental risks (ECB). Knowledge of these risks is essential to identifying and

Clients and regulators are increasingly demanding impact orientation

Institutions in the financial sector are increasingly being required to report not just on how external sustainability risks affect their own business, products and services, but also on how their own funding activities impact upon sustainability. In so doing, financial market actors can ensure that their activities are compatible with internationally agreed sustainability goals. Analytical tools and commonly accepted measurement methods generally still remain in their infancy. However, the EU Disclosure Regulation⁴⁹ has already set requirements particularly for the asset management business.

Sources:

 $^{(47) \}qquad \text{The Cluster's mission statement: https://gsfc-germany.com/wp-content/uploads/2018/08/Mission-Statement-09.07.18.pdf} \\$

 $^{(48) \}qquad \text{Cluster Action Roadmap: } \\ \text{https://gsfc-germany.com/wp-content/uploads/2020/09/200924_GSFCG_Roadmap_EN.pdf} \\ \text{(48)} \qquad \text{Cluster Action Roadmap: } \\ \text{https://gsfc-germany.com/wp-content/uploads/2020/09/200924_GSFCG_Roadmap_EN.pdf} \\ \text{(48)} \qquad \text{Cluster Action Roadmap: } \\ \text{https://gsfc-germany.com/wp-content/uploads/2020/09/200924_GSFCG_Roadmap_EN.pdf} \\ \text{(48)} \qquad \text{Cluster Action Roadmap: } \\ \text{(48)} \qquad \text{Cluster Action Roadm$

 $^{(49) \}hspace{0.2in} Sustainable \hspace{0.2in} Finance \hspace{0.2in} Disclosure \hspace{0.2in} Regulation: \hspace{0.2in} https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019R2088&from=DE$

Dialogue with the real economy is essential

To improve data availability and data quality, information straight from the source – i.e. the company receiving funding – is essential. The need for information on the part of financial market actors, the availability of data for decision-making purposes at company level, the demand for simplification and standardisation, and, in some cases, the confidentiality of forward-looking information all need to be taken into account. A common understanding of the purpose of this information and of the requirements is essential. This must be achieved through dialogue and should be accompanied by minimum standards.

The Cluster is now working on these issues in depth. In the second phase of the TCFD Think Tank, the financial institutions actively involved in the Cluster will take the logical next step. The Cluster will also participate in the Financial Big Data Cluster (FBDC).⁵⁰ In 2021, together with partners from the financial sector and from academia, the FBDC will begin to make use of artificial intelligence and machine learning for certain applications in relation to sustainability data.

Portfolio decarbonisation strategies are being developed

A series of financial institutions operating in Germany have committed to developing a strategy to decarbonise their lending and investment portfolios by the end of 2022. The goal is to achieve climate neutrality by 2050. A number of the banks participating in the Cluster see benefits in the joint and precompetitive development of processes to accomplish this. The Cluster offers the ideal forum to steer this development. An open platform is planned, which will also be accessible to financial institutions that are not yet Cluster members. The diverse nature of the institutions actively participating in the Cluster will ensure that the work can also incorporate outcomes from other initiatives in Germany and other countries (e.g. the Net-Zero Asset Owner Alliance and the examples of good practice in the banking sector produced as part of the Finance-Fit-For-Paris (3fP) project).51

In this way, the Cluster also hopes to become an attractive partner for even more financial institutions.

Sources

⁽⁵⁰⁾ Information page about the FBDC: https://www.bmwi.de/Redaktion/EN/Artikel/Digital-World/GAIA-X-Use-Cases/financial-big-data-cluster-fbdc.html (Control of the FBDC) in the FBDC: https://www.bmwi.de/Redaktion/EN/Artikel/Digital-World/GAIA-X-Use-Cases/financial-big-data-cluster-fbdc.html (Control of the FBDC) in the FBDC (Control of the FBD

^{(51) 3}fP-Banks Discussion Paper: https://www.fs-unep-centre.org/wp-content/uploads/2020/09/3fP-Banks-Discussion-Paper.pdf

National level

Representatives from six of the institutions actively involved in the Cluster also participate in the Sustainable Finance Committee of the German Federal Government as members or observers. The Committee's main aim is to develop a proposal for a German sustainable finance strategy designed to make Germany a leading centre for sustainable finance. This objective, along with the European Sustainable Finance Summit, which was organised under the auspices of the German government, shows that the Cluster is strongly integrated into the national strategy. The Cluster will actively contribute to the ongoing dialogue and will provide advice and practical support to help implement the recommendations.



The Cluster was a member of the TEG and, following the conclusion of the TEG's work, became one of just 50 members selected by the European Commission to join the Platform on Sustainable Finance. ⁵² It is a member of a working group looking at a taxonomy for negative activities and low-impact activities, i.e. activities with little potential of contributing to the EU's environmental goals. The Cluster is thus continuing its successful work on a European scale. The ability to draw on the perspectives of the financial institutions in the Cluster provides valuable input.



European Sustainable Finance Summit 2020

Internationally, the Cluster will continue its membership in FC4S, representing the financial centre of Germany. More than 30 international financial centres from Europe, Asia, Africa and the Americas have joined forces to learn from each other, undertake joint initiatives and measure their progress every year. As a partner of EIT Climate-KIC, the European climate innovation hub, the Cluster is working with European partners from the FC4S network to further develop sustainable finance in Europe. One example of this is the skills agenda. As sustainability becomes ever more important, the demands on employees in the financial sector are changing fast.

Surces

⁽⁵²⁾ List of members of the Platform on Sustainable Finance: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/eu-plat-form-on-sustainable-finance-members_en.pdf

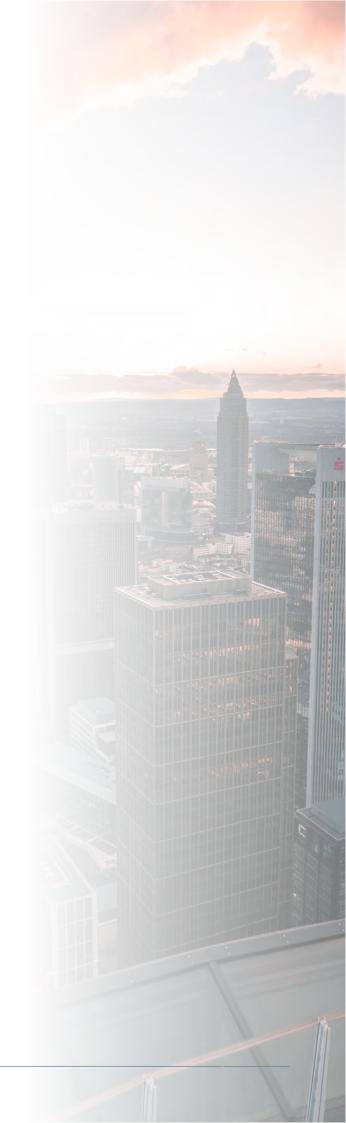
The regulatory environment will continue to change

Rapid changes in the regulatory environment can be expected in the coming years where sustainability is concerned. This will particularly affect transparency around the sustainability risks facing the financial sector and financial institutions, and will increasingly have implications for financing, too. The financial sector will increasingly scrutinise the future viability of business models as part of lending and investment decisions. This can be expected to influence the cost of capital.

The Cluster as a network for sustainable finance in Germany

The Cluster stands ready to continue playing a key role in the transformation to a sustainable economy, which will define the next few years. The transformation in the real economy will rely on a dependable financial sector that understands the risks and opportunities of the transformation and actively supports this change.

A strong network must be built beyond the financial sector institutions, which means stepping up cooperation with the real economy, civil society organisations and academia. The Cluster will use its best endeavours to achieve this



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Abbreviations

3fP Finance Fit For Paris

NZ AOA Net-Zero Asset Owner Alliance

BaFin Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority)

Cluster or GSFC Germany or GSFCG Green and Sustainable Finance Cluster Germany e.V.

COVID-19 Conferences of the Parties
COVID-19 Coronavirus disease 2019

CTB Climate Transition Benchmark

DIW Deutsches Institut für Wirtschaftsforschung (German Institute for Economic Research)

DNSH Do no significant harm

EBA European Banking Authority

EIOPA European Insurance and Occupational Pensions Authority

ESAs European supervisory authorities

ESG Environmental, social and governance

ESMA European Securities and Markets Authority

EU European Union

EU GBSEU Green Bond StandardECBEuropean Central BankFBDCFinancial Big Data Cluster

FC4S Financial Centres for Sustainability

G20 Group of 20 of the world's largest economies

HLEG High-Level Expert Group on Sustainable Finance

ICMA International Capital Market Association

IPSF International Platform on Sustainable Finance

JRC Joint Research Centre

KfW Kreditanstalt für Wiederaufbau (German promotional bank)

KPI Key performance indicator

NFRD Non-Financial Reporting Directive

NGFS Network for Greening the Financial System

PAB Paris-aligned Benchmark

PRB Principles for Responsible Banking
RTS Regulatory technical standards
SBTi Science Based Targets initiative

SFDR Sustainable Finance Disclosure Regulation

TCFD Task Force on Climate-related Financial Disclosures
TEG Technical Expert Group on Sustainable Finance

TR Taxonomy Regulation

UN United Nations

UNEP FIUNEP Finance Initiative

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