Deutsche Bank

Non-Financial Report 2019

Contents

Letter from the Chairman of the Management Board

Dear Readers,

Sustainability is finally being given the status it deserves in economic life. We experience it in our day-to-day contact with our clients and we sense it in our dialog with our investors: a bank such as ours is expected to be commercially successful, but that alone is not enough. Our stakeholders – along with the general public – are focusing increasing attention on non-financial objectives – and rightly so. Good governance as well as fulfilling our responsibility for the environment and to society as a whole are essential for a global bank's success. We see no contradiction between sustainability and profitable returns. Lasting commercial success is only possible if we do business responsibly. Only then will we secure the necessary acceptance from the societies in which we operate. That is why we have been committed to the Ten Principles of the United Nations Global Compact for many years now. In September we signed up to the UN Principles for Responsible Banking as well.

This Non-Financial Report is a key element of our review of our performance in 2019. It delivers additional, valuable, and above all, comparable information for the dialog and conversations about societal issues, covering an even broader range of topics than in previous years. As transparent communication about non-financial matters is rapidly gaining importance, we welcome that corporate reporting requirements are becoming more exacting as a whole.

The year 2019 was marked by our decision to implement the most fundamental transformation of our bank for 20 years. We are focusing rigorously on our strengths, we have restructured our business units and set ambitious financial targets for the period until 2022.

We have made a very good start to this transformation, as we detail in our Annual Report, but our transformation does not just revolve around revenue, cost, and earnings targets. It is also about a fundamentally new way of working. We have therefore set ourselves four non-financial objectives: we want our clients to always be at the center of what we do; we want to develop a new form of leadership and become more entrepreneurial; we want to make better use of new technologies, and we aim to operate more sustainably right across our business. I am convinced that making resolute progress in these areas is the only way for us to also achieve long-term financial success.

If we want to work differently than we have previously then we must focus on our employees. Only if we offer attractive and interesting prospects will we be able to continue winning the battle to recruit and retain the most talented people. Although reducing our workforce is a regrettable but unavoidable part of our transformation, we are conducting this process responsibly. At the same time, we are investing in our people worldwide, including in their training and continued professional development.

We are translating our support for diversity into action. We are committed to placing more women in leadership positions. Although the share of women in senior positions has been increasing each year since 2010 and there are lots of support programs, we are not satisfied with our progress in this area.

With our commitment to lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI) equality and inclusion, we believe we are strong advocates for greater openness. Our Human Resources Report provides more detail on diversity at Deutsche Bank.

We are also continuing to invest in strengthening our control environment, and above all in the area of anti-financial crime. We have already made considerable progress and will continue resolutely on this path. In 2019, we spent some € 600 million on protecting Deutsche Bank from non-financial risk, three times more than in 2013. We are beginning to see the benefits of successfully combining our Anti-Financial Crime, Compliance and Risk functions under a single leadership team which we announced in July – for example, through better workforce automation and more standardized risk frameworks.

We are also making progress with our digitalization initiatives. To ensure that we implement technology and digital solutions far more extensively throughout the bank, we have created a Technology, Data and Innovation function that is represented on the Management Board. With our new technology strategy, we are fundamentally changing the way we develop technological solutions: we are bringing together businesses and technology experts in agile teams. We no longer rely as much on external contractors, but are boosting internal hires to ensure that we have in-house expertise. We continue to simplify our processes and make them more flexible by modernizing our IT infrastructure and preferring cloud solutions, where these are feasible and make sense. In doing this, we will not make any compromises on data or IT security.

Our efforts over recent years have started paying off: we are regaining trust among our most important external stakeholders, namely our clients, the regulatory authorities, investors and the media.

The results of this year's in-house People Survey also showed an improvement in internal sentiment. Our employees feel more committed and rate their working environment more positively, while three out of four support our new strategy.

Another topic that is absolutely central to building trust in our bank is sustainability. We always want to consider the environmental and social impact of our actions. This is not exclusively about environmental protection and the global climate, although they are of course included. Our sustainability strategy is shaping our processes more and more markedly – be it risk management, our own refinancing processes, or just providing the right incentives for our business divisions.

What does sustainability mean for Deutsche Bank in practice?

Sustainability has four dimensions that we are promoting through our Sustainability Council that I chair: we are reducing the environmental footprint of our own business activities; we are broadening our business policies so that sustainability matters are given better attention; and we seek to be a thought leader on political and societal matters. And above all we are assisting our clients in making their own transformation to more sustainable business models – be they companies or investors. This sustainable finance business is precisely where our focus is currently trained.

We see Deutsche Bank as being strategically well positioned. Our loan book of roughly € 430 billion is a key component in this respect. Over the next few years we will increase the proportion we set aside for sustainable financing and use this to structure green bonds and other investment products. In 2019, we were involved in ESG (Environmental, Social, and Governance) bond issuance and placement for clients that amounted to over € 22 billion, two-and-a-half times as much as in 2018. And this year we plan to issue our first Deutsche Bank green bond and announce specific sustainability targets.

Across all of these activities we are determined to provide very specific and clear details. We are convinced that having a rigorously prepared and feasible sustainability strategy will enable us to make the most effective contribution to the necessary transformation of our bank and the economy.

We have traditionally delivered a strong positive impact with our corporate citizenship activities. We are proud to report that in 2019 some 1.6 million people were able to benefit from our initiatives. And last year nearly 19,000 colleagues worldwide participated in our social projects, acting as mentors for young people or as advisors to social enterprises. In the year that marks our 150th anniversary we are asking employees to spend at least 150 minutes of their working time – ideally longer – volunteering for a specific social initiative.

We have made a good start to this anniversary year, and we have a clear sense of where we are going. Our mission is to be a bank that our clients and investors can trust, a bank to rely on. And we want to be a bank where our employees are proud and enthusiastic to work.

Best regards,

Christian Sewing

Chief Executive Officer

Introduction

About Deutsche Bank

Founded in 1870, Deutsche Bank is Germany's leading bank, with a strong position in Europe and a significant presence in the Americas and Asia Pacific. For 150 years, Deutsche Bank has been connecting worlds to help people and businesses get to where they want to be.

Our purpose

What inspired the founders of this bank still drives us now: we are here to enable economic growth and societal progress by generating positive impact for our clients, our people, our investors, and our communities.

Our values

We expect all of our employees to apply our corporate values: integrity, sustainable performance, client centricity, innovation, discipline, and partnership. Our Code of Conduct articulates what our bank stands for and what we want our overall culture to be. We want to foster an environment that is open and diverse, where staff opinions and "speaking up" are valued and our employees' and the bank's success is built on respect, collaboration, and teamwork.

Our business

Deutsche Bank provides commercial and investment banking, retail banking, transaction banking, and asset and wealth management products and services to corporations, governments, institutional investors, small and medium-sized businesses, and private individuals.

Our strategy

In July 2019, Deutsche Bank announced a fundamental transformation and a profound restructuring of its businesses. The bank now consists of four strong, client-centered businesses. Alongside our Investment Bank, Private Bank (including Wealth Management), and Asset Management, we established a fourth division, the Corporate Bank, which comprises the former Transaction Bank and German commercial banking business. As part of the restructuring process, we are withdrawing from businesses in areas where we do not have a leading position and are allocating capital to businesses that show higher earnings and growth. To this end, we have reorganized assets from non-strategic businesses into a separate unit, called the Capital Release Unit. We will only refer to this unit if there is a direct link to the respective topic in this report.

The changes do not only affect our business model; we will also strive to change the way our employees work. Our declared goal is to transform Deutsche Bank into an organization that is inspired by our clients and continuously designed by our employees. We are therefore focusing on four levers that will help us to achieve our ambitions: client centricity, entrepreneurship, technology-led, and sustainability.

About this report

GRI 102-49/52

This Non-Financial Report 2019, covering developments from January 1, 2019 to December 31, 2019, communicates Deutsche Bank's group-wide management approaches for a determined set of non-financial topics, major activities, and progress made in 2019, as well as describes our governance, policies, and structures.

The reporting content complies with § 315c (1) of the German Commercial Code (*Handelsgesetzbuch, HGB*) in conjunction with § 289c (2) HGB and is aligned to the Global Reporting Initiative (GRI). In this respect, this report has been compiled in accordance with the GRI Sustainability Reporting Standards: Core option. It also serves as our Communication on Progress for the UN Global Compact (see GRI index and UN Global Compact). All information contained in this report is subject to independent assurance (see "Reports of the independent auditor"). References to information outside the Deutsche Bank Group Management Report do not form part of the Non-Financial Report and the independent assurance.

While we merged the legal entities Deutsche Postbank AG (Postbank) and Deutsche Bank Privat- und Geschäftskunden AG into DB Privat- und Firmenkundenbank AG in the previous reporting year, the integration process has not yet been fully completed. As a result, some Postbank-related content is still presented separately in this report, while other information is no longer explicitly disclosed for Postbank. Irrespective of the merger of the legal entity, Postbank continues to be present in the market as a key brand of our Private Bank.

Deutsche Bank AG's approach to non-financial topics is in line with the group-wide principles. As the parent company, Deutsche Bank AG's approach to sustainability includes our affiliated entities.

This Non-Financial Report 2019 is also available in German. The report is disclosed annually. The next report will be published in March 2021.

Stakeholder engagement

GRI 102-12/21/40/42/43/44, G4 DMA

We value an ongoing dialog with our stakeholders, helping us to understand the expectations and concerns of various groups, and to recognize the positive and potentially negative impact of our business activities. We have clearly defined responsibilities for each stakeholder group, and use various formats, including bilateral conversations with individuals or groups, as well as exchanges in the context of meetings, events, forums or working groups. We also regularly release publications on a range of topics and communicate via digital platforms.

The table below lists a cross-section of exemplary stakeholder engagements by Deutsche Bank:

Stakeholder group	Channels/ formats	Examples in 2019
Clients	In-person meetings and calls Interviews and surveys Conferences and events Publications Online communications and social media Hotlines	• Surveying clients in Germany via online banking and self-service devices, conducting client interviews with the aim of improving the service quality and client experience (see "Client satisfaction"); • Conducting more than 200 advisor and client events in order to increase ESG awareness, hosting several ESG-related events, including the ESG Engagement Conference with a focus on green bonds in New York or the Next Generation Innovation Summit on ESG investments in San Francisco (see "Sustainable finance"); and • Publishing articles in client magazines as well as structured investment and market assessments (Chief Investment Officer View, CIO View) on ESG topics (see "Sustainable finance").
Investors	In person meetings and calls Conferences and events Annual General Meeting Online communications Publications	• Organizing the Annual General Meeting, attended by around 3,900 shareholders; • Providing information about the Annual General Meeting on an dedicated website; • Regularly exchanging with shareholders on the bank's strategy and financial results as well as further topics; • Conducting an Investors' Day for analysts and investors; • Publishing presentations, financial reports, and results on the Investor Relations website; and • Transmission of investor events on the Investor Relations website.
Employees	Employee surveys Employee meetings Networks E-mails and newsletters Publications Online communications and social media Hotlines	• Conducting the annual employee survey, the quarterly surveys on feedback culture, and life-cycle surveys on joining the bank, settling in, changing jobs or leaving the bank; • Regularly communicating on employee-related, non-financial and sustainability/ESG-related topics on the internal website; and • Hosting global hackathons, e.g. "Banking on Sustainability", engaging more than 1,100 participants worldwide.
Society	Meetings Conferences and events Memberships and partnerships Participation in consultations Publications Online communications and social media Hotlines	• Participation in the Value Balancing Alliance (VBA) as a founding member, working collaboratively on the development of a standardized Impact Measurement and Valuation (IMV) model (see "ESG approach"); • Membership of the Sustainable Finance Advisory Council, inaugurated by the German federal government to support the development of a national and sustainable finance strategy; and • Giving colleagues several weeks off to implement or advance development projects in emerging markets as part of our Corporate Community Partnership (CCP) program, since 2018. In 2019, a panel discussion in Frankfurt am Main marked the end of our three-year collaboration with the Gesellschaft für Internationale Zusammenarbeit (GIZ), whose aim was to build up and professionalize the banking sector in Myanmar.

Sustainability ratings and indices

In recent years, we have observed a growing demand from stakeholders for ESG information. This trend reflects the growing importance of ESG/sustainability ratings. At Deutsche Bank we consider sustainability ratings, on the one hand, as a valuable instrument for internal benchmarking and, on the other hand, as a common basis to adjust our ESG approach. The market for ESG ratings is not a regulated market with a high number of market participants. Therefore, the bank's focus is on agencies identified as relevant with regard to their importance for the bank's investors and customers, significance for the bank's sustainability performance, and methodology transparency.

In 2019, Deutsche Bank responded, inter alia, to CDP Climate Change, ISS-oekom Corporate Rating, RobecoSAM Corporate Sustainability Assessment, Sustainalytics, Vigeo Eiris, FTSE Russel, and MSCI ESG Research. Selected results are outlined in the table below:

Selected sustainability ratings[1]

	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
CDP Climate Score (on a scale from A to D-)	C	C	n/a[2]
ISS-oekom (on a scale from A+ to D−)	C/Prime[3]	C/Prime	C/Prime
MSCI ESG Research (on a scale from AAA to CCC)[4]	BBB	BBB	BBB
RobecoSAM (on a scale from 0 to 100)	48[5]	54	69
Sustainalytics (on a scale from 0 to 100)	61[6]	62	66

[1] Industry classification according to Global Industry Classification Standard (GICS).
[2] No scoring in 2017 due to re-evaluation of our climate risks and opportunities in light of TCFD recommendations.
[3] Sector average: D+; maximum in sector: C+.
[4] Intangible Value Assessment (IVA) Rating.
[5] Sector average: 35; maximum in sector: 83.
[6] Deutsche Bank ranking in sector: 140 out of 353.

Based on sustainability ratings, Deutsche Bank continues to be listed in the FTSE4Good Index (World, Eurozone) and MSCI Sustainability Index. Our final score, particularly in RobecoSAM's assessment that defines the composition of the Dow Jones Sustainability Indices (DJSI), was largely impacted by controversies stemming from litigations and conduct-related issues. Consequently, Deutsche Bank stocks, have no longer been listed in the DJSI since September 2019. We have been interacting with the rating agency to better understand how to balance these adverse effects in order to pursue our objective to be listed in the major sustainability indices.

Combined separate non-financial report

Legal basis

GRI 102-49/50/54

The following combined separate non-financial report includes non-financial information in accordance with the requirements of §§ 315b and 315c in connection with §§ 289b to 289e of the German Commercial Code (*Handelsgesetzbuch*, HGB) and formally belongs to the Management Report of Deutsche Bank. As a framework, the GRI Sustainability Reporting Standards were used.

Materiality and risk assessment process

GRI 102-15/21/29/31/44/46, 103-1

To ensure we focus management attention and non-financial reporting on those topics that are relevant in an ever-changing global environment, we continued our materiality assessment of non-financial topics. We adopted a two-dimensional approach that considered the impact of Deutsche Bank's business activities on the respective topics, and the impacts of these topics on Deutsche Bank. This also included that expectations of stakeholders and topics addressed by peers were taken into account. We executed an evidence-based approach to uncover the material topics. We set clear thresholds for topics to be considered and always view them in a Deutsche Bank context. Just as in previous years, some of the non-financial topics identified are more mature and well regulated, while others are rather emerging topics still requiring further evaluation. The assessment is conducted from the group perspective and equally applies to Deutsche Bank AG, the parent company.

Throughout the year, we conducted desk research to identify potentially material non-financial topics. We checked for changes in global societal trends, the global sustainability agenda, and regulatory adjustments, as well as key environmental, social, and governance topics (risks and opportunities) impacting Deutsche Bank.

In 2019, we surveyed the opinions of 272 internal senior management representatives regarding the relevance of non-financial topics for Deutsche Bank. Furthermore, we held a group discussion with ten internal subject matter experts. The results of both stakeholder engagements were merged with the results of our desk research.

To ensure we report in accordance with § 315c (2) in conjunction with § 289c (3) of the German Commercial Code (*Handelsgesetzbuch,* HGB) we complemented our assessment of the impact of Deutsche Bank's activities on a non-financial topic and of the importance of a non-financial topic to stakeholders by an analysis of whether a non-financial topic is relevant to understand Deutsche Bank's development, performance, or position. The results of all three assessment steps were combined in a materiality matrix which was the basis for our validating meeting with the Non-Financial Report Steering Group.

In accordance with § 315c (1) in conjunction with § 289c (3) no. 3 and 4 HGB, Deutsche Bank also evaluates all potential significant risks that are very likely to have or will have a severely negative impact on material non-financial topics with respect to its own business activities and business relations, as well as its products and services. No such risks were identified.

Materiality results for 2019

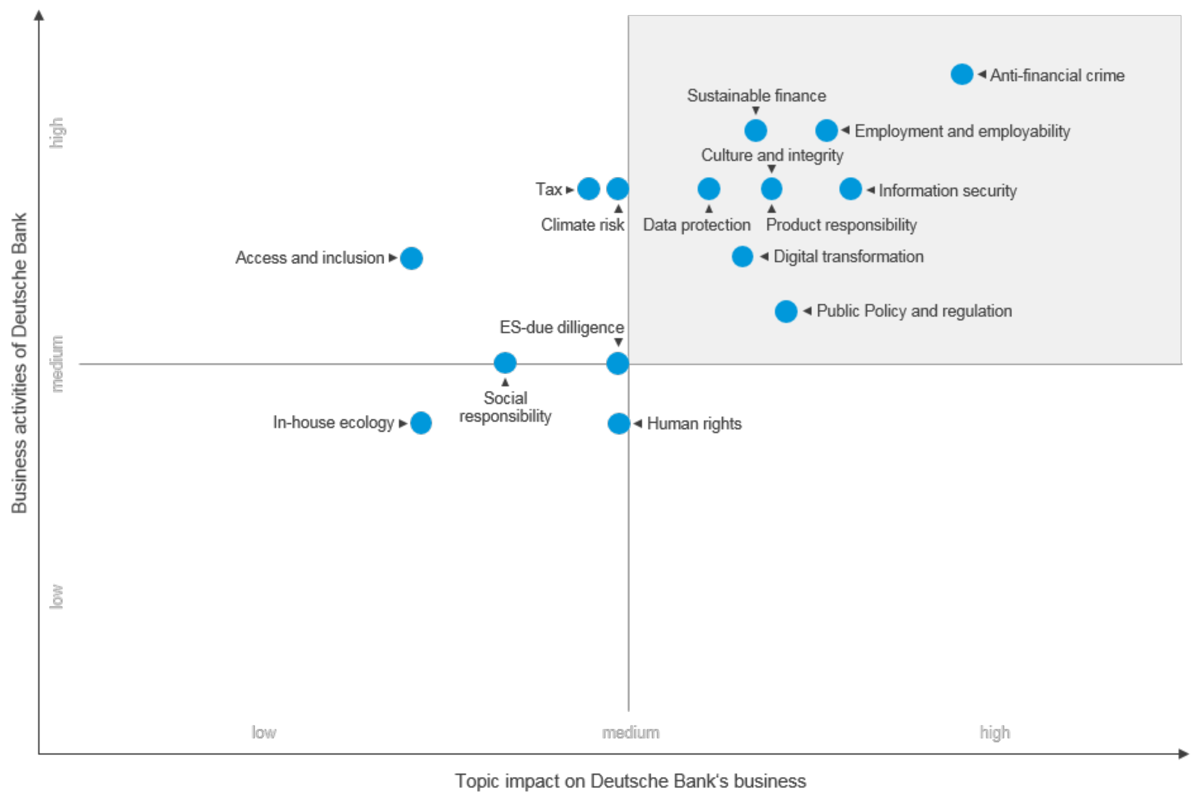
GRI 102-44/47/48, 103-1

Compared to the previous year, sustainable finance and climate risk gained in importance. We also included the topics of access and inclusion as well as digital transformation in our materiality matrix. Digital activities which were part of other chapters of the Non-Financial Report in previous years are presented in a separate chapter in this Non-Financial Report 2019 to provide for the increasing importance of this topic.

Moreover, we merged the topics of diversity, attracting talents and employee development into the topic cluster Employment and employability. This is to ensure that all material details linked to our human resources work are covered. The business integrity topic cluster has been renamed Culture and integrity.

The materiality matrix reflects the requirement in § 315b (2) in conjunction with § 289c (3) HGB to assess (a) the relevance of a non-financial topic to understand Deutsche Bank's development, performance, or position, which also includes the relevance of a non-financial topic to stakeholders (x-axis) and (b) the relevance of Deutsche Bank's business activities on the non-financial topic (y-axis).

Materiality matrix



The topics in the top right quadrant of the matrix are the ones that in accordance with § 315c (2) HGB, are both necessary to understand Deutsche Bank's development, performance, or position and the impact of Deutsche Bank's activities on the topic. These topics are part of this section "Combined separate non-financial report" and are formally part of the Deutsche Bank Group Management Report.

Further information on non-financial topics not in the top right quadrant of the matrix is disclosed in the section "Additional information according to GRI".

As human-rights-related matters and in-house ecology do not fulfill the materiality criteria of § 315c (2) in conjunction with § 289c (3) HGB, we continue to disclose relevant information, such as our management approach, and results relating to these matters in the section "Additional information according to GRI".

Report limits and further information

This report is a supplement to the Annual Report of Deutsche Bank. A description of the business model of Deutsche Bank in accordance with § 315c (1) in conjunction with § 289c (1) HGB is part of this Non-Financial Report and can be found in the Deutsche Bank Group Management Report. In addition to the information in this report, information on our key economic data is disclosed in our Annual Report. For the parent company, please refer to the Deutsche Bank AG Annual Financial Statements and Management Report.

Deutsche Bank's system for data generation and aggregation of greenhouse gas (GHG) emissions is based on the GHG Protocol and ISO 14064.

In addition to our annual reporting, we strive for transparency throughout the year by providing additional information to sustainability rating organizations (see "Sustainability ratings and indices" in this report) and by publishing information on our corporate responsibility website.

Material topic index

Reported topics	Chapter
Access and inclusion	Access and inclusion
Anti-financial crime[1]	Anti-financial crime
Climate risks	Climate risks
Culture and integrity[1]	Culture and integrity
Data protection[1]	Data protection
Digital transformation[1]	Digitization and innovation
Employment and employability[1]	Employment and employability
ES Due diligence	Reputational risk
Human rights	Human rights
Information security[1]	Information security
In-house ecology	In-house ecology
Product responsibility[1]	Product responsibility
Public policy and regulation[1]	Public policy and regulation
Social responsibility	Corporate social responsibility
Sustainable finance[1]	Sustainable finance
Tax	Tax

[1] Material in accordance with HGB.

Culture and integrity

GRI 103-1

Integrity is the basis of everything we do. Without it, we cannot thrive as a business. Deutsche Bank expects its employees to operate to the highest standards of integrity and conduct. Without this, we can neither build trust and protect our reputation, nor serve our clients and stakeholders.

Code of Conduct

GRI 102-16/17, 404-2

The Code of Conduct (the Code) articulates the bank's key values and the standards of conduct to which employees should adhere. The Code seeks to foster an open and diverse environment in which employees understand what the bank expects of them. This includes, among other things, acting ethically, responsibilities as a manager, risk awareness, protection of confidential information, identification and management of conflicts of interest, financial crime prevention and detection, fair and free markets, treating clients fairly. Also included is an expectation that employees have a responsibility to speak up and challenge poor practices and behaviors, especially where actions or failures to act are inconsistent with the Code. Employees are actively encouraged to escalate, without fear of retaliation, any potential misconduct, inappropriate behavior, or any serious potential conduct risk to their supervisors, Compliance, Legal, or Human Resources, in line with the Code and other bank policies and procedures (including the Whistleblowing Policy). Additionally, employees can also report concerns or suspicions, including anonymously, using the Integrity Hotline. In 2019, the bank introduced a new permanent Report a Concern button on the bank's intranet. The information provided here helps employees to identify the right channel to report a concern and gives them the relevant contact details.

As the Code articulates the bank's key values and standards of conduct, internal and external employees were required to complete an e-learning course specifically focused on the Code and the bank's values. That training was launched in late 2018 and continued in 2019. By the end of 2019, more than 68,000 employees had enrolled in the training, with a completion rate of 99.9 %. Employees in scope for Compliance Attestation must attest, among other things, to their understanding of the Code on an annual basis. The Compliance Attestation completion rate was 100.0 % of internal employees and 90.4 % of external employees.

Failure to adhere to the Code and the bank's policies and procedures can result in referrals to Human Resources as a part of the bank's disciplinary processes.

Culture, Integrity, and Conduct program

GRI 102-16/18/20/26, 103-2/3, 412-2, G4 DMA

Objectives and governance

Deutsche Bank also drives culture and ethical conduct through its Culture, Integrity, and Conduct (CIC) program. The objective of the program is to reinforce the bank's values, as articulated in the Code of Conduct, and desired outcomes, and to deliver enhanced conduct and integrity across all geographies, businesses, and infrastructure functions within Deutsche Bank.

The Management Board and CEO have overall responsibility for achieving the desired cultural outcomes. Each Management Board member is accountable for culture in their respective business division or infrastructure function. The culture-related initiatives to support the CIC objectives are developed and implemented in the individual business division and infrastructure function culture plans.

The CIC Committee oversees the implementation and management of the CIC program. The Committee establishes group-wide CIC initiatives and drives the CIC topics and messages that are to be embedded in business division and infrastructure function culture plans.

This formal Management Board committee is chaired by the Chief Risk Officer and the Senior Group Director responsible for Legal and Regulatory Affairs. This committee comprises representatives from each business division, infrastructure function, and region who are nominated by the respective Management Board member. Group-wide coordination of conduct and integrity-related initiatives is supported by the CIC Operating Forum (CIC OpFo), which reports to the CIC Committee.

The CIC Committee reports to the Integrity Committee of the Supervisory Board at the Integrity Committee's request. The chairs of the CIC OpFo updated members of the Group Management Committee (GMC) on the CIC agenda and progress of various CIC initiatives in the fourth quarter of 2019 and will continue to do so periodically. The GMC is designed to more closely link the Management Board to the divisions and comprises Management Board members as well as leaders of the business divisions.

2019 CIC focus values and mandatory initiatives

GRI 102-44

In 2019, the CIC Committee focused on three of the bank's six values, with a special emphasis on the value integrity:

- Integrity: Focus on enhancing positive conduct and reducing misconduct, ethical decision-making, and a "speak-up" culture;
- Discipline: Focus on individual accountability and fiscal responsibility; and
- Client Centricity: Focus on treating clients fairly as a top priority for client-facing employees, and the creation of products that provide value to clients.

In the context of the specific emphasis on integrity in the year under review, the CIC Committee identified three group-wide mandatory initiatives that were incorporated into the 2019 CIC Book of Work as well as in the annual business division and infrastructure function culture plans:

- Speak Up: Encouraging employees to speak up if they see something that feels wrong;
- Listen- Up: Educating managers on how to listen to concerns and respond when people raise issues to them, and to create an environment conducive to speaking up; and
- Gray areas in ethical decision-making: Fostering a culture where structured conversations can be held on potential gray areas in ethical decision-making as part of creating a Speak Up and Listen Up environment.

The group-wide focus values and mandatory initiatives are incorporated into:

- CIC Book of Work: A set of centrally led initiatives focused on group-wide frameworks and processes (e.g. reviewing HR employee life cycle processes), training, and campaigns (e.g. Be on the Right Side Speak Up Campaign); and
- Annual business division and infrastructure function culture plans: Annual culture plans of each business division and infrastructure function tailored to their specific needs and incorporating the global topics and messaging to better embed the CIC objectives.

Key CIC initiatives in 2019

GRI 102-16

The key initiatives implemented in 2019 included:

- An integrated Conduct and Speak Up awareness campaign and training program was launched in July 2018 and continued through 2019. The integrated campaign promoted a culture where employees could feel comfortable to express their concerns, including those that might be conduct-related, with no fear of reprisal or retaliation. A robust Speak Up culture – focusing on being on the "right side" – is intended to increase employee awareness and responsibility. Such a culture should also increase the likelihood that problems will be identified at an early stage before they can become more serious. The campaign also focused on educating managers on how to encourage speaking up, and how to listen to and respond when people raise issues to them. April 2019 saw the launch of the Speak Up Navigator to guide employees through Speak-Up and Listen Up training resources. The results of the People Survey showed a clear link between the impact of managers and employees giving and receiving feedback, mutual appreciation and attendance rates for team meetings on commitment to the bank, enablement and confidence to speak up. Appreciation is particularly critical in helping people voice their concerns and take the right actions in line with the bank's values, beliefs and principles. Five questions focused on the Speak Up culture were included in our 2019 People Survey. The results for each of these questions showed an improvement on the previous year's results. For further details about the 2019 People Survey, please refer to the 2019 Human Resources Report;
- The Whistleblowing Policy, which was revised in 2019, sets forth the framework for employees to report concerns or suspicions regarding possible violations of laws, rules or regulations, or possible violations of internal policies or procedures, including the bank's Code of Conduct. Any reports received are reviewed to establish their nature, content, and priority. If necessary, an internal investigation of the incident will be initiated. This may result in a number of outcomes, for example disciplinary actions against employees or changes to the relevant processes. One of the channels employees can use to report such concerns or suspicions is the bank's Integrity Hotline which can also be used on an anonymous basis. An important feature of the Whistleblowing Policy is that retaliation of any kind is prohibited against employees who make a report internally or externally to any regulatory, investigatory or other agency or authority, or to self-regulatory agencies;
- While we are fully aware that culture is difficult to measure, we report a number of metrics from various group-wide sources to evaluate progress against our culture objectives in the Culture and Conduct Metrics Dashboards. The Dashboards are produced at a group, divisional, and regional level and reported quarterly to the CIC Committee. The metrics are aligned to the bank's values and include, for example, data on investigation processes, disciplinary and consequence management processes, gender diversity, the number of employee hours attributed to corporate social responsibility, and client satisfaction, as well as escalations through whistleblowing channels. The metrics also incorporate results from the bank's annual People Survey, which can provide a more in-depth view of employees' engagement with the bank's values. Some of the culture metrics are included in the Management Board balanced scorecard. In 2019, as part of our continued efforts to enhance the Culture and Conduct Metrics Dashboards, we undertook a review of the existing suite of culture and conduct metrics. This included looking across the industry to identify best practices and any gaps in our metrics compared to other firms. Based on the industry review, our Culture and Conduct Metrics Dashboards report metrics in line with common industry practice;
- The Market Conduct and Integrity Classroom training program launched in 2018 was completed in 2019. More than 4,000 primarily front office employees were trained in small class-room settings; employees not able to attend in person received an online version of the classroom training. Since its launch, the training reached a completion rate of 99.6 % by the end of 2019. The training consisted of two video scenarios designed to explore good conduct and inappropriate behaviors in connection with securities and investment-banking-related businesses. The scenarios were intended to create some gray areas, in which the learners could explore and discuss the facts about appropriate and inappropriate behaviors. They also gave them the chance to learn how to make decisions, exercise judgment, reach out for help in resolving gray areas, and escalate where necessary. A total of 99 % of the attendees strongly agreed or agreed that the course objectives had been met; and
- Targeted communications to business divisions and infrastructure functions on culture and conduct topics were delivered across the bank. This included embedding key messages in senior management communications, articles, and video interviews on the dbnetwork homepage, as well as in town hall meetings.

While the emphasis of many of the initiatives was on integrity, there were a number of business division and infrastructure function culture plans initiatives focused on the values client centricity and discipline, including:

- Redesigning the client on-boarding process to increase speed, improve the client user experience and promote behavioral change across the bank;
- Creating client value metrics on client satisfaction; and
- Improving the speed of decision-making through clearer accountability.

Client-related matters

Product responsibility

GRI 102-16/42, FS4

Product responsibility at Deutsche Bank is defined by the principles of our Code of Conduct, which lay down the guidelines to ensure that all our business divisions – Corporate Bank (CB), Investment Bank (IB), Private Bank (PB), and Asset Management (AM) – behave responsibly and with integrity towards clients. As these business divisions are responsible for implementing the Code of Conduct, they are accountable for treating clients fairly at every stage – from the development to the sale of our products and services. Specific control functions support the business divisions in living out their responsibility. Processes and controls set up as a result of legislation and regulations, for example MiFID II, help us to recognize relevant topics in good time and define action areas, including market screenings of products to identify those that best fit our specific client needs. The bank's internal guidelines address these topics and regulate important aspects of them. For further details on product governance please refer to our Annual Report 2019 - Risk and capital overview - Risk governance as well as Operational risk management - Operational risk type frameworks.

In view of the differing profiles of our client groups, our business divisions enjoy varying degrees of freedom in implementing these guidelines. Their interpretation is determined, for example, by a specific client group's touch points with the bank, the need for client protection, or how much a client group knows about financial transactions. In order to ensure we are acting with integrity in a client-centric manner, we regularly train all employees involved in client relationships. The topics we pay particular attention to include a responsible attitude towards new products and dealing with new product-related requirements, advising clients responsibly, helping clients to avoid becoming heavily indebted, and knowing how to deal with conflicts of interest.

Product design and approval

GRI 102-11/15, 103-1/2/3, 417-1, G4 DMA

A group-wide New Product Approval (NPA) and Systematic Product Review (SPR) process defines the design and approval of new products and services. Regional or divisional NPA councils also express their opinions on new products and material developments affecting existing products, such as new risk factors or businesses. We also systematically review our products throughout their life cycles to ensure they remain fit for purpose and consistent with the needs, characteristics, and objectives of the respective client groups. Additionally, any features causing concern, such as a potential reputational impact on the bank from environmental or social issues, are referred to the relevant management approval committees, such as our Regional Reputational Risk Committees or, ultimately, the Group Reputational Risk Committee.

Our investment activities are based on a process designed to ensure decisions are taken in our clients' best interests. To provide products and advice that match our clients' specific needs in a given market environment, our analysis of market conditions is conducted separately from sales planning. For current and prospective clients, this process provides transparency on the bank's views on specific investment topics, asset classes, and market events. In our AM and PB, for example, this investment process leads to the formulation of structured investment and market assessments by the Chief Investment Officer (CIO Views), which draw on the expertise of senior employees and are used to inform both our portfolio managers and our client advisors. In order to take into account the different cultural, and regional backgrounds of our clients in client portfolios, we adapt our CIO Views to regional conditions.

Product and advisory principles

GRI 102-16

Minimum standards for our product lines commit us to offering ethically justifiable and transparent products and services based on processes and principles designed to ensure compliance with legal and regulatory requirements. For example, our guidelines on product oversight governance require frequent monitoring as to whether specific products have only been sold to the appropriate client group. Moreover, we strive to offer clients responsible and foresighted advice that fulfills their needs and reveals the respective benefits and risks. To ensure the suitability and appropriateness of our products, we assess a variety of parameters, including the complexity of a product, a client's knowledge of and experience with a product, and a client's regulatory classification and investment objectives. Then we select the product that matches the desired client demand.

Our basic principles require us not to sell any product or service if it becomes obvious that a client does not need the product, cannot afford it in the mid-term, and has not understood it, or that a product does not meet the client's risk profile. Furthermore, our products must be designed in such a way that their potential returns exceed the cost of investing in the product.

The principles we apply also state that our products should be beneficial to the individual but not have detrimental side effects on society at large. This rules out products or investments that, for example, involve the manufacturing or sale of nuclear weapons, cluster munitions, and landmines, promote or use child labor, violate human rights, or in any way support drug trafficking or money laundering.

In our Investment Advisory business, we advise on and offer both Deutsche Bank and third-party products, which enables us to only provide products that best fit specific client needs. Our Product Guidelines for Investment and Insurance Products also define products that are not to be advised to clients, such as investments in contracts for difference (CFDs). Furthermore, we do not launch new products based on momentum strategies in soft commodities.

Prevention of excessive indebtedness

GRI 102-11

In granting loans, particularly to private clients, we strive to protect them from over-indebtedness. Therefore, each loan application must be accompanied by an obligatory analysis of the client's personal situation. A loan engagement will only be set up if sufficient financial leeway is left after the deduction of interest and repayment amounts. The stated aim is to protect clients against over-indebtedness and, in particular, loss of property. We fully reflected these requirements in our loan processes and regularly train our sales employees in this respect.

For non-performing loans the bank deploys a series of measures to mitigate hardship. In cases of late or nonpayment, we contact our clients at an early stage. In the event of a financial emergency due to unemployment, illness, or insolvency, for example, or in other justified exceptional cases, our PB Germany Deutsche Bank brand business has a separate hardship process and employs individualized strategies to provide the necessary financial solutions, for example moratorium of payments or reduced repayment rates.

Communications and marketing

GRI 103-1/2/3, 417-1, G4 DMA

We are dedicated to marketing our products and services responsibly and to providing information our clients can trust. All information contained in marketing material as well as product information, must be transparent, clear, fair, accurate, and not misleading. All our client communications – irrespective of format, medium, or audience – must meet the minimum standards and requirements set out in our internal policies, such as our Business Communications Policy. While advertising our products and services, we do not guarantee a particular outcome or result.

Conflicts of interest

GRI 102-25

Conflicts of interest are inherent in all business activities and can arise in conjunction with employee trading, outside business interests, transactions performed by deal teams, or family and close personal relationships. Failure to recognize and appropriately manage conflicts of interest can result in inappropriate or adverse consequences for clients, the bank, and employees. Our employees are required to notify their supervisor and/or Compliance if they identify such a conflict. Every business division has implemented a conflict-of-interest framework to identify actual and potential conflicts, mitigate them, or manage them fairly and appropriately for all involved parties. Senior managers are required to sponsor systems and controls to document, track, manage, and mitigate any conflicts of interest and regularly review their effectiveness. The bank's Business Selection and Conflicts Office is an independent control function responsible for group-wide oversight of management activities relating to conflicts of interest and reports at least once a year to the Management Board.

Client satisfaction

GRI 102-42/44

As loyal and satisfied clients are vital for our ongoing success, we work to improve our products and services and to ensure compliance with the legal requirements for such advice. We apply business-division-specific approaches to assess client satisfaction, including client satisfaction surveys, test purchases, mystery shopping[1], and third-party assessments. We integrate client feedback into quality assurance and optimization measures. The results are communicated internally to relevant internal stakeholders, for example senior management. Based on the respective feedback, steps for improvement are formulated and, where appropriate, incorporated.

In our Investment Bank (IB) we employ broker reviews as an approach to ensure client satisfaction. This dialog puts us in a position to take educated decisions on proposed changes by key stakeholders. In 2019, our Corporate Bank (CB) and IB teams jointly engaged in our Voice of the Client process, which covers our global corporate client activities across coverage and sales/implementation, as well as service activities. We used the feedback from key decision makers and service recipients to create client-specific action plans and initiate product developments. In 2019, 81 % of our clients stated they were mainly or fully satisfied with how we dealt with their feedback.

Client surveys, interviews, and test purchases are key tools for measuring client satisfaction and loyalty in our Private Bank (PB) Germany and Private & Commercial Business International. Overall, the level of satisfaction in 2019 changed little from 2018. However, our clients' feedback revealed, for example, some room for improvement in our advisory processes. Our sales employees get in touch with dissatisfied clients to discuss the reason for their dissatisfaction.

In 2019, we received responses on the degree of satisfaction with PB Germany, Deutsche Bank brand business, from around 170,000 clients in Germany via self-service devices and online banking. We use mystery shopping to check that our advisory processes meet our clients' needs. In 2019, an independent market research institute conducted interviews with around 8,000 clients. This gave us feedback on their satisfaction with our advice. Additionally, a total of 1,993 test purchases took place in Germany. In our Private & Commercial Business International, 328 test purchases were conducted in 2019. The results have been integrated into our branches' sales management processes.

Client satisfaction index Private Bank (excl. Wealth Management, WM)

In % (unless stated otherwise)	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
Client satisfaction Private Bank Germany (excl. WM), Deutsche Bank brand[1]			
Index Private Bank Germany (excl. WM), Deutsche Bank brand	69.4	68.2	70.2
With our services	70.3	69.3	71.5
With our advice	70.5	69.2	71.4
With actively offered products and services	65.0	63.7	65.6
Willingness to recommend Deutsche Bank	71.5	70.6	72.3
Number of clients taking part in the survey	**171,053**	192,207	237,095
Client satisfaction Private & Commercial Business International[2]			
Index Private & Commercial Business International	78.4	79.5	77.4
Willingness to recommend Deutsche Bank	84.9	76.5	75.5
Number of clients taking part in the survey	**19,200**	20,510	24,272

[1] Comparative values for prior years 2017 and 2018 have been restated to reflect the transition of commercial clients from our PB to our CB division in Germany.
[2] The figures for Private & Commercial Business International include numbers for Spain and Italy and are based on country-specific survey methods with different scales. The results have been converted to a uniform scale of 0-100 %.

Mystery Shopping index Private Bank (excl. WM)

In % (unless stated otherwise)	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017
Private Bank Germany (excl. WM), Deutsche Bank brand[1]			
Mystery Shopping Index	82.6	81.1	78.5
Private & Commercial Business International[2]			
Mystery Shopping Index	84.7	79.8	74.5
Private Bank Germany (excl. WM), Postbank brand			
Mystery Shopping Index	67.2	67.0	68.8

[1] Comparative values for prior years 2017 and 2018 have been restated to reflect the transition of commercial clients from our PB to our CB division in Germany.
[2] In 2019, Private & Commercial Business International conducted test purchases in Spain, while Belgium, India, and Italy did not participate in the mystery shopping program. Therefore, the Mystery Shopping Index for 2019 consists only of results from Spain. The index value for 2018 contains test purchases from Poland, Portugal, and Spain. The figures for Private & Commercial Business International are based on country-specific survey methods with different scales. The results have been converted to a uniform scale of 0 – 100 %.

[1] Mystery shopping is only used in our Private Bank.

Postbank, which remains present in the market as a key brand, measures not only the degree of satisfaction with its services as a whole but also the willingness to recommend its services as well as other detailed aspects of the client-bank relationship (including client satisfaction with central service processes and client contact points). In 2019, overall client satisfaction was lower than the previous year. The various reasons included the closure of branches, pricing measures, availability problems, and some changes in the online banking application, for example a modified security process. In 2019, Postbank conducted 2,048 test purchases. Its Mystery Shopping index rating was essentially flat in comparison to 2018 despite the impact of strikes and the conversion of the online banking access to the two-factor authentication process.

Various measures were initiated to improve the client experience and quality of advice, such as the ongoing development of sales software. Additionally, Postbank uses the self-developed online tool Competence Quiz to improve the quality of sales and advice. The tool offers sales employees the possibility to test and expand in a playful manner their client-related knowledge about products, processes, and regulations based on relevant and up-to-date customer use cases. In 2019, Postbank employees used the online Competence Quiz more than 100,000 times.

In 2019, Wealth Management (WM) in Germany continued using its Net Promoter Scores (NPS) and Client Satisfaction Survey for the majority of eligible clients[2]. In 2019, the NPS in Germany was 75 %. In 2019, we started working on a Voice of the Client survey in collaboration with Scorpio Partnership. This client survey is scheduled to be piloted in the Americas region in Q1/2020 before a broader rollout takes place later in the year. Ongoing measures to enhance client satisfaction include process improvements, such as the optimization of client onboarding within Global Markets and the digitization of the client onboarding process.

Since 2008, an external service provider has been commissioned to conduct client satisfaction surveys with the aim of improving service quality and the client experience in our AM. The annual client satisfaction survey among AM clients focuses on perceived service quality, professionalism, and service process transparency. Clients and advisors can rate their satisfaction on topics, such as staff friendliness, response rate, professional competence, comprehensibility, solution orientation, and sales-specific questions. The degree of advisor satisfaction with, for example, recommended solutions, professional competence, and friendliness was again evaluated, and we regard the fact that advisors stated they were “likely to recommend our telephone services to colleagues” as proof of customer loyalty. For AM’s U.S. insurance and institutional business, an annual client satisfaction survey is conducted with a focus on investment performance and other areas of improvement, such as relationship management, innovation, and overall satisfaction. The intention here is to embed client feedback into AM’s senior management sessions and U.S. Fund Board meetings. Regular surveys covering knowledge, sincerity, problem-solving, and overall client satisfaction are also conducted on a monthly basis by a third-party vendor who services the direct retail client base in the U.S.

[2] Eligible clients are those who meet each of the following criteria: the client is German speaking; the client has an email address registered with Wealth Management and; the client has positively acknowledged an opt-in email.

Complaint management

GRI 102-15/17/31/44, 418-1

We have a defined set of core values for dealing with complaints fairly, impartially, and without undue delay. How we address complaints is governed by the Group Policy on Minimum Requirements for Handling and Recording of Complaints, which applies to all our businesses and complies with the EU Guidelines on Complaints Processing for Securities Trading (ESMA) and Banking (EBA) and their interpretation by the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin*). Our business divisions are responsible for developing and implementing procedures incorporating the objectives and minimum requirements set out in the Group Policy. We strive to anticipate and avoid potential complaints before they arise or solve them, whenever possible, during the initial client contact. To achieve this, a robust and consistent client complaint handling and reporting process helps to facilitate the improvement of client satisfaction by identifying and remedying poor client outcomes. This enables us to learn from mistakes and thus reduce their incidence and any related costs, as well as to enhance risk transparency and improve management information. Clients who are dissatisfied with a product, service, or decision can contact the bank in any local branch, by e-mail, online, by calling our client service center, or through authorized third parties. We immediately acknowledge receipt of complaints and work to resolve them quickly and transparently by regularly training our complaint managers. Client complaints are reported to the bank's senior management and Compliance function and are subject to periodic review. Complaint metrics also feed into our Non-Financial Risk Report oversight reporting. We screen new complaints for recurring noticeable problems. Management information provides an oversight of the type of complaints (clustered by group-wide non-financial risk-type taxonomy), materiality, severity, and time to closure.

In 2019, we continued our efforts to comply with a consistent complaint-handling framework. As we realign our businesses into the newly established CB and IB, our focus continues to be on integrating the complaint-handling processes. These processes are regularly enhanced, while staff training ensures consistent capturing and reporting of complaints, as well as improved oversight and governance. As a result, the number of complaints handled by IB was over 40 % lower in 2019 than in 2018. The focus here was on transaction processing.

In our PB, the number of client complaints rose sharply in 2019. Despite a decline in the Private & Commercial Business International, triggered by the discontinuation of the private client business in Portugal and Poland, the overall number increased due to complaints related to PB Germany, Postbank brand business. This was particularly due to the deactivation of the mobile TAN procedure in the course of the Payment Services Directive 2 (PSD2) implementation. In our PB, we participate in all applicable dispute resolution schemes run by national ombudsmen, which offer a free, fair and easily accessible service to consumers who prefer to resolve a dispute not directly with the bank.

For complaints from WM clients, our complaint indicator revealed that there were fewer complaints in 2019 than in 2018. A Global Product Governance Forum (GPGF) reviews quarterly the output of product life cycle analysis and management processes, including product-related client complaints, and in particular global trends.

In 2019, AM observed an increase in complaints. This is almost exclusively due to a delay in the distribution of tax filings and declaration of profits in Germany and Luxembourg respectively. We have taken an important governance measure by initiating a globally responsible complaint management function, assumed within the Divisional Control Office of AM. This function coordinates complaints across regions and business areas. In this capacity, this function also reports to regulatory bodies. Furthermore, complaint filing, logging, and reporting have been centralized in a new system known as Salesforce. The relevant employees were trained for both measures in 2019.

Sustainable finance

GRI 102-15/43

In 2019, the public debate about the urgent need to transition to a sustainable and low-carbon economy and the discussion about the role the financial sector plays in this – above all, the call for sustainable finance – gained a new level of importance worldwide. Climate protection was also a major topic of discussion with politicians and supervisory authorities. When Deutsche Bank signed the Paris Pledge for Action in 2015, we demonstrated our commitment to contribute to the goals of the Paris Agreement. This commitment continues unabated.

As a global financial intermediary, we have a role to play in facilitating the transition of economies towards sustainable and low-carbon growth. In this context, we understand sustainable finance to be business activities that support this transition by directing financial flows towards more sustainable and climate-friendly solutions. We use our market expertise, products, and solutions to drive our customers' transformation towards this direction. Our increased focus in this field was reflected in the results of our 2019 materiality assessment (see “Legal basis“). Sustainable finance also includes questioning our involvement in certain business areas, such as the financing of new coal-fired power plants.

The transition to a more sustainable and low-carbon economy and the physical effects of climate change will also lead to risks. Our approach to managing climate risk and a summary of the steps we are taking to enhance our framework in alignment with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations are outlined in the GRI supplement of this report (see “Climate risk“). It contains a summary of how Deutsche Bank manages exposures to carbon-intensive industries, risks from commodity price volatility, and physical risks to infrastructure, employees, and key processes.

We offer a range of sustainable finance solutions geared towards our clients’ specific needs. In doing so, we can play to our strength as a universal bank. For our commercial and corporate clients, we create individual lending offerings to advance their own business transformation to low carbon models. Our Investment Bank (IB) assists companies and governments in gaining access to sustainable financing on the capital markets. In our Asset Management (AM), we are focusing on mainstreaming ESG by integrating ESG aspects into our investment strategies, as well as the respective product portfolio and services. We are continuously growing the number of sustainable investment products available for institutional and private investors. Some of our offerings seek to directly or indirectly contribute to the Sustainable Development Goals (SDGs) of the United Nations Global Agenda 2030.

Governance

GRI 102-12/16/18, 103-2/3

Our group-wide Sustainability Council is mandated by the Management Board to drive the integration of sustainability throughout the bank (see “Approach to sustainability“). In 2019, the focus was on developing the bank’s approach to sustainable finance. The discussions focused on, among other things, the establishment of a consistent group-wide definition of sustainable finance for our lending and capital market activities. To support these discussions, the bank joined the pilot project led by the United Nations Environment Programme Finance Initiative (UNEP FI) and the European Banking Federation (EBF) to draw up guidance on the voluntary application of the EU taxonomy to core banking products. Furthermore, we focused on assessing the bank’s opportunities across various business lines and initiated steps to set targets for sustainable finance, which we expect to adopt in 2020.

We address sustainable finance opportunities through divisional ESG governance structures to ensure that we generate appropriate answers to client demands, and to continually expand our ESG product portfolio and services. International standards, such as the UN Global Compact and the OECD Guidelines for Multinational Corporations, are examples of the guiding principles for our business. In 2019, Deutsche Bank committed itself to the newly established Principles for Responsible Banking. Furthermore, we are governed by several internal policies, such as our publicly available Environmental and Social Policy Framework, and the Responsible Investment (RI) Statement, ESG Integration Policy for Active Investment Management, and ESG Engagement Policy that are specific to our AM. We regularly review our policies and procedures.

Training and awareness

GRI 102-21/43, 103-1, 404-2, G4 DMA

To develop and complement our in-house competences, we collaborate with industry experts and external service providers. We also invest in ESG research, engage with our stakeholders, and participate in a variety of initiatives to foster sustainable finance. In our Private Bank Germany, we conducted more than 200 advisor and client events in the year under review in order to increase ESG awareness. To further develop our capabilities in Wealth Management (WM), we built up a network of ESG Ambassadors in each region to serve as first points of contact on ESG-related financial matters. The European Federation of Financial Analysts Societies (EFFAS) was also engaged to roll out a Web-based Certified Environmental Social Governance Analyst (CESGA) training course for all our 4,000 WM employees worldwide. In-person training sessions were conducted in Europe and the U.S. In AM, we continued our regular training for investment professionals across AM in Active, Passive, and Alternatives on the assessment of ESG risks and opportunities in order to support ESG integration across the entire investment platform. In 2019, we continued the engagement of AM investment professionals towards environmental and social issues in Active and ran mandatory internal training sessions for Active investment experts. This included offering the optional EFFAS ESG Certification Program. In 2019, a total of 36 current and permanent employees across AM registered for the exam and have become certified ESG analysts. At the end of 2019, AM counted a total of 123 CESGA-certified employees.

Deutsche Bank also recognizes its responsibility as a convener for multi-stakeholder engagements towards sustainable financing. As such, our Corporate Bank (CB) and Investment Bank (IB) hosted various events on the key topic of green bonds and sustainable finance in 2019, for example an ESG Engagement Conference in Frankfurt am Main co-hosted by the Green and Sustainable Finance Cluster Germany and the International Capital Market Association (ICMA), the Next Generation Innovation Summit held in San Francisco in November, and an ESG engagement conference in New York focusing on green bonds. We also co-initiated the Conscious Capitalism European Conference in Berlin. To increase education and client discussions in WM, the September 2019 issue of our German client magazine WERTE was dedicated to sustainability topics. Moreover, our outreach included key client events, such as dedicated ESG-themed sessions at Wealth with Responsibility in Germany, as well as smaller-scale ESG-focused client events in Milan and Napa Valley in October. We are also working to improve our clients’ understanding of ESG-based investment approaches and ESG-related market developments. In 2019, we continued publishing CIO Insights on ESG topics, including “The E in ESG”, which took an in-depth look at the environmental aspect of ESG, and “The S in ESG”, which highlighted the importance of social sustainability.

Lending and advisory

GRI 102-16, 201-2, 404-2, G4 DMA, FS8

ESG and green bonds

In our IB division, a dedicated debt capital market product team helps our clients around the world to achieve their sustainability strategies and to make environmental and social contributions while meeting their financing needs. We advise clients holistically on broader sustainable finance aspects as well as on how to successfully issue ESG bonds, including all the strategic and operational preparation required. In 2019, we partnered with a number of global clients in supporting them with their ESG bond transactions and helped them to raise more than € 22 billion funding in various instruments, such as green, social, sustainability, and sustainability-linked bonds. Besides advancing the ESG bond market, these transactions were of high strategic importance to Deutsche Bank's issuers. For example, we helped the Italian utility company Enel to introduce a new format known as sustainability-linked bond, which was the first-ever public bond format to attach contractual consequences to the fulfilling of certain pre-defined sustainability key performance indicators. We also provided support to Assicurazioni Generali in issuing the first green-subordinated benchmark transaction by a financial institution in Europe, to Standard Chartered in issuing their inaugural sustainability bond, and to the Republic of Indonesia in issuing their second green sukuk bond. These exemplary transactions illustrate how Deutsche Bank drives the development of sustainable finance, and how we facilitate the flow of capital into sustainable projects in alignment with the SDGs set by the United Nations.

Renewable energy

Our IB became involved in financing renewable energy projects in the mid-2000s when projects reached industrial scale. In 2019, we arranged full or partial project finance totaling around € 2.5 billion for renewable energy projects generating over 2,200 megawatts.

Corporate loans

The European corporate loan market saw green or ESG incentives become a regular component of refinancing transactions in 2019, although the total volume remained relatively small. Sustainability-linked loans are being issued by companies irrespective of their size, industry, or sustainability score and highlight an issuer's commitment to its sustainability targets. This trend is being supported by the Sustainability Linked Loan Principles issued by the Loan Markets Association in March 2019.

In 2019, Deutsche Bank acted as coordinator for eight sustainability-linked loans. Five of these closed in December 2019, including the German companies Continental, LANXESS, and Zeppelin, the U.K. company NEPI Rockcastle, as well as the U.S. company Crown, where Deutsche Bank led the first leveraged sustainability-linked loan agreement in the U.S. market. Overall, Deutsche Bank has participated in over 20 sustainability-linked loans with a total deal volume of more than € 50 billion in 2019.

Infrastructure development

In 2019, our CB arranged or participated in more than € 3.4 billion of financing for infrastructure projects with strong developmental credentials and a positive contribution to the development of local communities in sectors like education, agriculture, and power, as the following examples show:

- Mandated lead arranger and sole rates hedge arranger for the NTD 82 billion (€ 2.3 billion equivalent), 640 megawatt Yunlin offshore wind farm project financing developed by a consortium led by Wpd AG: This project was the largest offshore wind project in Asia Pacific at deal closure and has provided a viable financing template for large-scale offshore wind projects to facilitate the gradual phase-out of nuclear energy and coal-fired power generation in Taiwan;
- € 96 million of financing for the Province of Cordoba, Argentina, to support part of Governor Schiaretti's social program: The financing addresses two different plans: first, the construction of a primary care hospital in the southwest of the province to enable access to public health for its most needy inhabitants; and second, the construction of 34 schools as part of the Advanced Program for Education in Information and Communications Technology;
- US$ 150 million of financing in two Sinosure 95 %-covered 13-year buyer's credit facilities for the Ministry of Finance of the Republic of Angola to support two national tax collection infrastructure improvement projects: the Integrated Computer Systems for Tax Project (SIGT) and the Customs Management Project (SIIAT). This project will help to strengthen domestic and import taxation compliance and to improve tax collection in Angola, which suffers from an inefficient and unreliable IT infrastructure; and
- Financing the upgrade and modernization of 34 vocational training institutes across Ghana, worth € 123.5 million in all: One of the key projects in the 2019 budget is to address the unemployment and skill gap in Ghana. By targeting region-specific requirements, the project will support the government's objective of creating a sustainable vocational education system.

Subsidized loans (KfW)

In 2019, we again collaborated closely with KfW, Germany's nationwide development bank, to support private and corporate clients across all business divisions through government-subsidized loans or procurement of guarantees with an overall volume of € 1.6 billion (2018: € 1.6 billion). Of this amount, more than 41 % was provided for various corporate investments in energy efficiency, environmental protection, or renewable energies, as well as in private clients' projects to build, purchase, renovate, or modernize residential properties (2018: 38 %). Additional subsidized financing volume was enabled in collaboration with regional promotional banks belonging to Germany's federal states, as well as with the European Investment Bank and the European Investment Fund.

A broad range of financing solutions with subsidized components is offered to corporate clients. In addition to general corporate financing, more specific financing opportunities, such as energy transition measures or innovations, are also eligible. In all, we arranged 550 KfW loans for our corporate clients with a volume of more than € 400 million in 2019 (2018: 800 loans totaling € 700 million). Of this, € 180 million was for energy transition measures (2018: € 240 million).

Through our mortgage facilities, we support our private clients in the acquisition of residential real estate and contribute to wealth creation. Through our cooperation with KfW, more than 18,000 clients obtained state-subsidized mortgages totaling € 1.2 billion in 2019. This sum included about € 490 million for financing agreements of low-energy houses or for construction and modernization projects that meet higher energy standards than those required by Germany's Energy Saving Ordinance (2018: € 360 million).

Investment products

GRI 102-16, 201-2, 417-1, G4 DMA, FS8

Private Bank

Retail business

In line with our product principles, we apply exclusion criteria to our entire product offering, for example by ruling out investment products with agricultural speculation. As exemplified by the collaboration of our Private Bank Germany with third-party product providers for mutual funds, we expect product providers to demonstrate their commitment to responsible investing by being a signatory to the UN Principles for Responsible Investments (PRI). When selecting dedicated ESG investment products for our retail clients, we take additional ESG criteria into account, which we develop over time.

In 2019, we also began offering an equity fund that invests in companies that contribute to the objectives set out in the SDGs. After the launch of the equity fund, we generated gross inflows of approximately € 248 million (equivalent to around 22 % of total gross flows into equity theme funds). Additionally, we started offering a green bond fund whose target is to invest into bonds to support environment-related projects. For Private & Commercial Business International, four new thematic ESG funds were actively recommended to clients in Belgium, which took the total number of recommended ESG funds to nine. In Italy, we launched an ESG model portfolio to enhance the focus on sustainable investment solutions within the advanced advisory service and two discretionary lines within the standard DPM solutions' offering. Furthermore, ESG fund solutions were offered to clients, such as DWS ESG Multi Asset Defensive Fund and Nordea Sustainable Global Stars. In early 2020, Postbank will offer two sustainable VZI portfolios and there will be five ESG funds available for this purpose.

Wealth Management

In 2019, WM launched an accelerated ESG strategy to expand its ESG investment services, as a new generation of wealthy clients is increasingly focusing on adding purpose to investment performance. The strategy, approved by our WM Executive Committee (ExCo), focuses on three key pillars: incorporating ESG ratings into WM portfolio construction and reporting systems, extending our ESG product offering, and creating ESG awareness. Our ESG investments are handled within the established WM investment processes, with governance primarily implemented through existing structures within our discretionary portfolio management services. To walk the talk in our commitment to expand our ESG product offering and increase investment, WM has formally entered into an agreement with MSCI to access enhanced ESG ratings in support of Wealth Discretionary (WD) and Wealth Advisory solutions. This will empower WM to better advise clients on ESG investments and allow portfolio managers and the funds team to select appropriate ESG securities and products. To address the growing importance of ESG to WM clients and deliver on our ESG strategy, we formed a dedicated ESG team that works in an agile way and is supported and overseen by our wider WM ExCo. The ESG team is staffed cross-functionally to combine a range of skills and knowledge in order to accelerate the implementation of the ESG strategy across the three aforementioned pillars.

As of year-end 2019, WD managed assets under ESG mandates of nearly € 500 million, utilizing a variety of methodologies to support our global client base. Utilizing MSCI ESG ratings data, our WD offering is based on a best-in-class approach, with certain sectoral exclusions implemented to ensure consistency with our clients' values. Our WD ESG offering generally requires that a minimum MSCI ESG rating of 6 (on a scale of 10) be applied to instruments utilized in the construction of WD mandates. In 2019, we expanded our WD ESG offering to serve our clients in the Americas and emerging markets, and we will continue to increase the availability of offerings into 2020 for our European clients.

Our ESG product offering in Wealth Advisory covers funds as well as private and capital markets. When considering funds to approve for addition to our dedicated product platform, our Global Funds Group (GFG) concentrates on three areas in selecting and on-boarding suitable ESG funds for WM clients via their due diligence process: products identified as investing with an ESG approach, impact investment products, and products that invest according to specific themes correlating to ESG challenges. We prefer managers and boutiques that are PRI signatories, support ESG integration and shareholder engagement, and clearly incorporate ESG principles into their investment philosophy, idea generation, and investment process. Since 2019, we have been utilizing MSCI ESG ratings as a key reference to complement our qualitative assessment. Our offering includes asset managers like Candriam (an early ESG adopter), DWS (a dedicated best-in-class ESG offering), and Pictet (a leading thematic provider). Currently, we have 19 ESG funds on our global approved list. Client assets in ESG funds grew markedly over the year (56 % at year-end 2019).

In capital markets, we now offer recommended lists for both equity and fixed income that include ESG leaders, i.e. companies with an MSCI ESG Rating of AA or AAA. These lists enable clients to construct narrow or broad portfolios with exposure to companies displaying strong ESG criteria. ESG & Impact Investing are one of four anchor themes for the Private Markets platform that answers both the investors' demand for ESG-friendly investment solutions and the need to offer solutions that address the climate crisis. We currently have two live funds in the ESG Space: the Princeville Climate Technology fund and the Closed Loop Leadership Fund. The Princeville Climate Technology fund focuses on growing tech-enabled companies that have a positive climate impact. The Closed Loop Leadership Fund focuses on companies operating in the circular economy, i.e. companies that can bridge the last link in the production value chain and generate value out of disused goods.

Asset Management

GRI 102-15/31/44, 305-5, FS11, FS12

In our AM, we continue to pursue ESG integration as part of our duty as a fiduciary partner. We see ESG as a value-enhancing development for clients, as it enables a more comprehensive analysis for risk–return expectations. In September 2019, we announced the creation of a Group Sustainability Office in AM to integrate ESG capabilities across our platform with the aim of positioning AM as a leader in the industry. Through the DWS Group, we are a signatory to the UN PRI and a Responsible Investment Statement guides our ESG approach. AM's progress in ESG integration has been recognized by the annual PRI ratings, which can be seen on the AM website: PRI Assessment Report

Our ESG Engine continues to enable data-driven ESG analysis based on input from six leading ESG data vendors: ISS-Ethix, MSCI, ISS-oekom, RepRisk, Sustainalytics, and Trucost. As a proprietary software system, it is the centerpiece of our commitment to integrating ESG into our investment process and our Active and Passive portfolios. The structured ESG information is embedded into portfolio management, thus supporting our due diligence process and enabling us to offer clients bespoke ESG solutions. As the ESG Engine is fully integrated into the global portfolio management system and research architecture for listed securities, all portfolio managers and research analysts who are responsible for liquid investment strategies have access to a 360-degree assessment of issuers and investees. Both the availability and coverage of ESG data enables ESG integration for our portfolios. For certain types of asset classes, we acknowledge challenges[3] with the data coverage but are working to increase the coverage. In August 2019, AM announced it was entering into a strategic partnership with Arabesque S-Ray®. Going forward, we plan to use S-Ray as an additional data vendor for our ESG Engine.

If required, our investment professionals regularly engage with the senior management of our investee companies to discuss ESG topics, as well as a company's fundamentals, strategy, and outlook. In 2019, the key engagement topics were corporate governance issues (e.g. supervisory board independence or remuneration), but also environmental topics, such as deforestation. For our European-domiciled funds, we have a quality approach to our governance engagements with companies on our Proxy Voting Focus List. This is based on a thorough analysis of the independence and composition of boards, executive compensation practices, auditors, overall company structure, and transparency. The analysis is based on available information on governance quality, including documents on the investees' websites, governance research, historic voting, and engagement outcome. In cases where we identify gaps between our expectations on governance and a company's attitude towards it, we may decide to directly engage with the company representatives.

Our AM is committed to timely corporate governance topics and therefore reviews its Corporate Governance and Proxy Voting Policy on an annual or ad-hoc basis. We also challenge whether our understanding of good corporate governance still prevails

[3] As expected, ESG data availability for e.g. United States municipal bonds, high-yield bonds, small-cap issuers, or emerging market issuers is more heterogeneous, resulting in lower coverage for portfolios pursuing these strategies.

in light of global market developments. Since 2019, this policy has put a stronger focus on companies' adherence to responsible investment or ESG standards, such as CDP or PRI. Participants of this review include the CIO for Responsible Investments, the ESG Thematic Research Team, and the Head of Equity Research, as well as the Corporate Governance Center and Communications. Greater emphasis is now placed on the respective board's responsibility for ESG. According to a recently published report by the U.K. campaign group ShareAction, AM also finished among the leading asset managers globally in voting on shareholder resolutions linked to climate change. In a separate report published by majority action, "Climate in the Boardroom: How Asset Manager Voting Shaped Corporate Climate Action in 2019", AM was among the leaders with over 95 % support of climate-critical shareholder proposals in 2019. These results confirm our AM's strong record on corporate engagement relating to ESG matters.

In 2019, we voted at a total of 2,043 meetings in 57 countries, an increase of 64 % on 2018 for our portfolios domiciled in Europe and Japan. These meetings represented approximately 78 % of our equity assets under management in Europe and Japan. We aim to gradually increase the number of meetings per year we vote at, while ensuring not to compromise on the quality of our analysis. The results of our proxy voting and engagement are reported annually on our website. For the mutual funds domiciled in the U.S., we strive to exercise the voting rights for all equity holdings. In 2019, we voted at a total number of 9,466 meetings in 66 listing markets.

In classifying our ESG assets under management (AuM) we follow the methodology of the Global Sustainable Investment Alliance (GSIA). In order to provide additional transparency, we decided to additionally break down our assets into the categories as shown in the tables ESG and sustainable AuM and ESG in Alternatives.

As of December 31, 2019, we reported € 69.7 billion of ESG AuM, made up of € 51.6 billion of ESG and sustainable AuM in Active and Passive, € 715 million of sustainable investment funds/impact investments, € 16.5 billion of real-estate investments in certified green-labeled buildings, and € 862 million of infrastructure assets in renewable assets, within an overall asset management volume of € 767.4 billion.

As of December 31, 2019, our Active portfolio management teams were responsible for € 40.7 billion of ESG AuM within an overall Active AuM volume of € 515 billion. Our Passive portfolio management teams were responsible for € 10.9 billion of ESG AuM within an overall AuM volume of € 155.8 billion. The growth of ESG AuM in Active and Passive reflected the launch of a series of new ESG-focused ETFs, a series of conversions of retail and institutional funds, and net flows into our dedicated ESG strategies. In 2019, the Alternatives portfolio management teams expanded the initiatives to integrate ESG into investment processes across the various asset classes and were responsible for € 18.1 billion of ESG AuM (comprising sustainable investments funds and individual real estate and infrastructure assets) within an overall Alternatives AuM volume of € 96.2 billion.

ESG and sustainable AuM

In € m.	Dec 31, 2019	Dec 31, 2018
ESG within Active investments	40,686	28,922
Portfolios based on client-specific exclusions for institutional clients	24,662	N/A
Retail and institutional assets managed according to uniformly defined investment standards or client-specific derivations	13,090	N/A
Particular sustainability themed ESG products	591	N/A
Third-party initiated mutual funds applying external ESG approach	2,343	2,270
ESG within passive investments	10,869	3,313
Exchange traded funds or products	2,452	N/A
Passively managed mandates for institutional clients	8,417	N/A
Total dedicated sustainable AuM within Active and Passive investments	**51,555**	34,505

ESG in Alternatives

In €	Dec 31, 2019	Dec 31, 2018
Sustainable investment funds / Impact Investments		
Private equity or debt funds focused on sustainable/impact investing, including public–private “blended finance” funds with environmental or social objectives	715	595
ESG within Real Estate investments		
Certified green-labelled buildings (Energy Star, LEED, BREEAM, etc.)	16,527	13,436
ESG within Infrastructure investments[1]		
Renewable assets, both in debt and equity investments, including solar, wind and waste-to-energy	862	862
Total sustainable AuM in sustainable investment funds, real estate and infrastructure within Alternative investments	**18,104**	14,893

[1] Valuations of € 612 million of equity investments made within two of AM’s major infrastructure funds are per September 30, 2019. Equity investments are revalued each quarter. Year-end 2019 figures will be made available in the context of Q4/2019 reporting to investors on March 30, 2020 and April 30, 2020 for the two funds. Debt investment amounts are set and do not change unless debt is repaid.

We were able to successfully distribute dedicated ESG mutual funds founded on SDG contribution or analysis of green bonds to retail investors through our Private Bank branch network in Germany. In 2019, we enhanced our passively managed product portfolio by adding two U.S.-domiciled exchange-traded funds (ETFs) to our portfolio and an Xtrackers ESG MSCI Emerging Markets UCITS ETF tracking, an index of companies meeting defined ESG criteria and low-carbon requirements based on MSCI’s ESG research. The underlying index is part of the MSCI ESG Leaders Low Carbon ex Tobacco Involvement 5 % Index series.

Several of our actively managed funds were also converted into dedicated ESG funds by adopting our internal ESG investment standards (MESGS). The MESGS are built on the various pillars of ESG, apply market-common exclusions on controversial sectors and violations of the UN Global Compact, and implement best-in-class methodologies, including the assessment of climate transition risks and opportunities. In the first half of 2020, we plan to roll out our Climate Transition Risk and Opportunities (CTRR) score to sovereigns and extend our assessment of climate risk with the incorporation of physical climate risk through an additional data vendor. In 2019, we also tightened our evaluations of norm violations that now take human rights violations more strictly into account. The new norm methodology now seeks severity reconfirmation across vendors, includes non-strictly UN Global Compact controversies, aggregates multiple “less severe” controversies to treat them equally as one severe controversy, and considers multiplicity of controversies. Last but not least, the approach puts more emphasis on environmental- and human rights topics while comparatively putting less emphasis on governance topics, unless very severe and reconfirmed controversies in this category are present. As a consequence of the recalibration, the number of F-rated (i.e. firms with severe and reconfirmed violation of international norms) issuers now stands at 33 instead of 19 prior to the recalibration. F-rated issuers in that category are not investable for AM mutual funds using our uniform ESG investment standards.

We have piloted our derived ESG Key Performance Indicators (eKPIs, for example on CO_2 emissions or information on climate change indicators of a fund) to give our investors transparency on the ESG contributions of the DWS Invest SDG Global Equities fund on our website. A key insight from the pilot is that AM aims at rolling this out to additional dedicated ESG funds in 2020. We continue to develop our ESG methodology, especially with regard to carbon and climate risk sensitivity, opportunities from impact investing, and the SDGs, by integrating them into the ESG Engine.

Real-estate investments

To further our commitment to ESG in real-estate investments, we announced the goal of halving carbon emissions by 2030 against the reference year 2017 for our entire portfolio of European office properties held by funds managed by the European real-estate business. In setting this goal, we are furthering AM’s decade-long support (through our Global Investor Statement to Governments on Climate Change) in the topic of climate change and our commitment to the investors’ call on global leaders to achieve the Paris Agreement climate goals. Cutting carbon emissions across the entire Europe office portfolio is estimated to result in an annual reduction of 61,000 metric tons of carbon dioxide emissions – the equivalent of taking approximately 24,000 diesel cars off the road and saving around 23 million liters of diesel.

Sustainable investment funds

Our Sustainable Investments (SI) team within AM creates solutions for institutional investors, private investors, development banks, and governments that share common social and environmental investment objectives and seek attractive financial returns. SI operates investment initiatives ranging from financial inclusion and microfinance to sustainable agriculture, renewable energy, and clean urban transportation. In 2019, we managed eight sustainable and impact funds with a combined volume of € 715 million. Our ongoing partnership with a significant corporate client demonstrates the strength of our ESG franchise. Moreover, AM has been highlighted for its key role in completing its first three acquisitions on behalf of its China Renewable Energy Fund (CREF). The funds comprise a 75 % equity interest in three operational wind farms in the Hubei and Hunan provinces for an overall installed generation capacity of 134 megawatt. This contributes to CREF's plan of achieving almost half a gigawatt of acquisitions for completion by the end of the year under review.

Sustainable investment funds

Fund	Mission/Information
Africa Agriculture and Trade Investment Fund (AATIF)	Improve food security and end poverty through sustainable investment along the entire agricultural chain in Africa
SDGs	1, 2, 8, 9, 13, 14, 15
European Energy Efficiency Fund (EEEF)	Energy efficiency and renewable energy in the public sector in Europe
SDGs	11, 13
Essential Capital Consortium B.V.	Debt financing to health, energy, and financial service providers in low in-come communities in the developing world (closed in 2019 and will be repaid)
SDGs	1, 3, 4, 5, 7, 8
Global Microfinance Funds III	Senior and subordinated debt financing for microfinance institutions and banks in the developing world, to increase access to high-quality financial services
SDGs	1, 2, 3, 4, 5, 8
China Renewable Energy Fund (CREF)	The fund's objective is to generate investment returns and offset investors' carbon emissions in their global supply chain
SDGs	7, 13
Clean Energy and Environment Fund (CEEF)	The fund intends to fund the growth of private companies that focus on developing clean energy and clean technology sectors in China
SDGs	7, 13
Global Commercial Microfinance Consortium II	Senior and subordinated debt financing for microfinance institutions and banks in the developing world, to increase access to high quality financial services (closed in 2019 and will be repaid)
SDGs	1, 2, 3, 4, 5, 8
Microcredit Development Fund	Senior and subordinated debt financing for microfinance institutions and banks in the developing world, to increase access to high-quality financial services
SDGs	1, 2, 3, 4, 5, 8

Organizational matters

Anti-financial crime

GRI 103-1

Deutsche Bank is a leading European bank with a global footprint that provides a broad suite of products and services across its Corporate Bank (CB), Investment Bank (IB), Private Bank (PB), Asset Management (AM), and Capital Release Unit. The bank is exposed to diverse financial crime risks, including money laundering, terrorism financing, and sanctions, as well as other criminal activities, such as fraud, bribery, and corruption. In line with its legal and regulatory obligations, Deutsche Bank believes it is vital to combat financial crime in order to ensure the stability of banks and the integrity of the international financial system. Failure to manage financial crime risks exposes Deutsche Bank and its employees to potential criminal and/or regulatory liability, civil lawsuits, and a loss of reputation. Although it is not possible to eliminate these financial crime risks entirely, commensurate controls must be in place to minimize these risks.

Given the strict and challenging regulatory and legal environment in which it operates, Deutsche Bank continually invests in controls to enhance its management of financial crime risks. The media, authorities, and the general public have shown interest in the perceived or actual control gaps, while the evolution of global market structures poses new challenges, for example the emergence of new payment methods or fintechs. Deutsche Bank continues to be subject to various enforcement actions at its main locations, requiring ongoing focus and disciplined execution. Deutsche Bank is currently subject to increased levels of regulatory scrutiny and activities over its financial crime risk management. These regulatory activities have led to the appointment of a number of external monitors, one of them being KPMG as the Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, BaFin) Special Representative to oversee the implementation of the measures ordered by the BaFin.[4] If Deutsche Bank is unable to improve its infrastructure and control environment within given timelines, its business operation, financial condition and reputation could be materially and adversely affected. In response to these challenges, Deutsche Bank continued to actively improve its control environment during 2019.

Governance

GRI 102-15/17/20/29/31, 103-2/3

Deutsche Bank's Management Board is ultimately responsible for the management and mitigation of financial crime risks. The Management Board delegates tasks relating to these obligations to the Anti-Financial Crime (AFC) function. Since the announcement of the new Management Board structure in July 2019, the Chief Risk Officer (CRO) has been the Management Board member responsible for the AFC function. AFC is a second-line-of-defense (2LoD) control function, overseeing the management and mitigation of the financial crime risks assigned as per the bank's non-financial risk type taxonomy. The business divisions as first line of defense are responsible for designing and implementing controls to mitigate the financial crime risks emerging from their respective business activities and processes.

4 For further details on specific regulatory activities incl. the order issued by BaFin, see the Annual Report 2019, Notes to the Consolidated Balance Sheet, Note 27 – Provisions.

The financial crime risks managed by AFC are defined as and grouped in the risk themes described below:

- Risk of money laundering: If Deutsche Bank knowingly or despite reasonable suspicion employs an inadequate framework of controls leading to Deutsche Bank products and services being misused to facilitate money laundering, terrorist financing, and/or tax evasion;
- Risk of violating sanctions or embargoes: If Deutsche Bank knowingly or despite reasonable suspicion engages in a sanctioned financial activity, including sectorial sanctions or project-based financing, or fails to take adequate measures to prevent or detect circumvention of existing controls;
- Risk of bribery and corruption: If Deutsche Bank engages in bribery either as a company or via an employee, third party, vendor, supplier, or intermediary, or provides products and services to clients in the public or private sector who abuse a position of power for an improper or business advantage, thus directly or indirectly facilitating the misuse of funds or financing by corrupt individuals or entities;
- Risk of fraud: If, either as a company or via an employee, Deutsche Bank performs any intentional act or omission, including a misrepresentation that misleads or conceals, or attempts to mislead or conceal, in order to gain a personal or business advantage, or to avoid a personal or business disadvantage; and
- Risk of failing to prevent “other criminal activities” that might jeopardize the institution’s assets (derived from section 25h, German Banking Act).[5]

Two of these risks – money laundering, and sanctions and embargoes – are classified as group-wide Top Risks. Failing to manage any of these risks may have serious consequences for employees and Deutsche Bank. Hence, Deutsche Bank has set up the AFC function as follows in order to handle specific areas of financial crime risk:

- To prevent money laundering and combat the financing of terrorism, AFC, through various functions, undertakes measures to comply with rules and regulations regarding identification and verification of clients, including financial crime risk reviews of clients and transactions; to develop, update, and execute internal policies, procedures, and controls; and to detect and report suspicious transactions. In this way, valuable information is provided to regulatory and government bodies in line with existing legal and regulatory requirements to support the fight against financial crime;
- The Sanctions and Embargoes (S&E) function is accountable for performing measures to comply with finance and trade sanctions and embargoes, especially detecting, evaluating, and, if required, ensuring the observance of sanctions, law-related publications, and binding requirements in connection with the financial and trade sanctions of the respective authorities;
- The Anti-Fraud, Bribery, and Corruption (AFBC) function monitors and advises relevant functions, and administers controls and safeguards to mitigate fraud, bribery, and corruption risks, for example with respect to vendor fraud, joint ventures, offering and accepting gifts and entertainment, hiring practices, high-risk client relationships, transactions, and new products;
- AFC Investigations (AFCI) is mandated to centrally and consistently manage and/or coordinate the bank’s response to fraud and internal misconduct-related investigations allocated to AFCI, and to facilitate decision-making and escalation processes via the AFC Governance Framework. After becoming fully operational at the end of 2018, AFCI acts to protect Deutsche Bank’s integrity by ensuring it provides an impartial investigative response to fraud and internal misconduct in a holistic and effective manner;
- As the Head of AFC is responsible for having an adequate risk management framework in place for all “other criminal activities” that are not directly managed within the AFC function, a Global Financial Crime Governance Committee was additionally established to provide governance and oversight of all financial crime risks mentioned above; and
- In addition, AFC works closely with various groups of experts and financial crime networks (e.g. the Joint Money Laundering Intelligence Taskforce in the U.K. and the Wolfsberg Group of Banks) to assist its fight against financial crime.

From an organizational perspective, Deutsche Bank continuously developed the AFC function towards lean and sustainable governance structures in 2019. In line with Deutsche Bank’s commitments to further strengthen the AFC function and in response to regulatory requirements, the AFC function had approximately 1,400 employees (FTE) by the end of December 2019. An additional approximately 200 employees (FTE) were supporting AFC in a Shared Services function for controls testing and quality assurance, risk management, management information, and training.

[5] The “other criminal activities” are derived by and large from the German Penal Code and include, for example, theft, damage to property, robbery, cybercrimes, and antitrust. Due to the thematic context and specific subject matter expertise relating to these risks, they remain with other infrastructure functions.

Targets and measures

AFC has built the foundations across all risk types AFC is responsible for. Although Deutsche Bank continues to face severe pressure across jurisdictions on financial crime matters, it can now focus on strategic investments and establish better connectivity with the business and other control functions to further increase effectiveness. In order to execute this strategy, AFC developed a holistic five-year plan for 2019 until 2024. By the end of the five-year planning cycle, Deutsche Bank intends to have stabilized the environment for all core controls so that all AFC risks are constantly identified and assessed, employees across the bank understand their role in fighting financial crime, risk appetite is well-defined and fully embedded across business areas, client information is updated and of good quality, transactions are monitored across all relevant businesses, locations and products to generate early risk insights, and Deutsche Bank deploys technology to move from detective to preventative controls, wherever possible. This five-year plan will involve the following:

- Providing active support in designing and implementing better front-to-back Know Your Client (KYC) and monitoring processes across the business, Operations, and AFC;
- Investing in a more focused manner in technology and modeling to improve the quality of transaction alerts and deliver superior risk insights;
- Reducing reliance on external expertise, consultancy, and manual intervention in operational processes;
- Improving decision-making within AFC, and better aligning accountability and delivery by combining responsibility for change and daily risk management; and
- Leveraging the community of Risk, Compliance, and AFC practitioners to improve risk management, change delivery, and business engagement.

Deutsche Bank's Risk & Control Assessment (RCA) process comprises a series of bottom–up assessments of the risks generated by business divisions and infrastructure functions (1LoDs), the effectiveness of the controls in place to manage them, and the remediation actions required to bring the risks outside of risk appetite back into risk appetite. This enables both the 1LoD and 2LoD to have a clear view of the bank's material operational risks. In 2019, Deutsche Bank launched an integrated risk and control assessment that combined the risk assessments led by AFC, Compliance, and NFRM in a coordinated way. The coordinated approach aims to improve visibility across various risk types and to streamline risk assessment processes, tools, and reporting across the three risk control functions, creating efficiencies and improving engagement. Alongside the integration of risk assessments, Deutsche Bank further enhanced its central control inventory and started the development of a new control assurance framework to enhance the transparency of control assurance activities across various levels of Deutsche Bank.

Policies

The AFC Charter sets out the mandate and responsibilities of AFC across Deutsche Bank. Global AFC policies set the minimum standards for the management of financial crime risks, which are supplemented by further, country-specific policy requirements. All AFC policy documents are reviewed at least once a year to ensure that relevant new or revised legislation and regulations are properly reflected, and to take into account any lessons learned. All Deutsche Bank employees are required to comply with global and local requirements relating to internal policies.

The progress made in 2019 included materially upgraded KYC, AML, and Sanctions Policies that reflect the latest legal and regulatory standards. A special focus for AFC in 2019 was to ensure regulatory adherence with the fifth Anti-Money Laundering Directive (5AMLD) of the European Union[6]. Major progress has been made in reflecting all the respective requirements and, generally speaking, in ensuring 5AMLD adherence is on track for Deutsche Bank. AFC successfully coordinated the implementation and publication of the new KYC Policy and AML Policy in July 2019, as appendices to the existing policies. Both policies replaced previous versions and became fully effective on January 1, 2020. The Group Sanctions Policy was revised in May 2019 in order to comply with the group-wide requirements for policies.

[6] 5AMLD introduces: (i) Additional due diligence requirements for client relationships and transactions involving high-risk third countries; (ii) creation of beneficial ownership registers for corporates and trusts as well as central bank account registers; (iii) AML regulations that will now apply to virtual currencies providers, real-estate agents, auditors, external accountants, tax advisors, and art dealers; and (iv) lifting of the anonymity of electronic money products, such as pre-paid cards, and restricting the use of these when the country of issuance is outside of the EU and regulation is not EU-equivalent.

Training and awareness

GRI 103-1, 404-2

AFC Training & Awareness forms part of the AFC risk and governance frameworks to govern, mitigate, and report on financial crime risks. Here, training is a key control measure in raising employee awareness to identify AFC-related risks and understand how and when to escalate.

To ensure employees have the necessary technical knowledge and skills, and to keep pace with a constantly changing regulatory environment, Deutsche Bank delivered a mandatory AFC curriculum developed via a robust year-on-year Annual Training Needs Analysis process. This process engages key stakeholders across the second line of defense (2LoD) to identify where training can help to mitigate AFC risks and identify training requirements arising from regulation, policy, and legislation. Course development is managed via Training Advisory Groups comprised of internal subject matter experts. To support a continuous cycle of improvement, training evaluations are conducted to improve course quality and assess the impact on employees' awareness. The 2019 AFC mandatory curriculum included updated courses on anti-money laundering, anti-fraud, bribery and corruption, and sanctions. The course completion rate is very high, with minimal overdue ratios for late or non-completion of mandatory training. Participation is monitored and delayed completion is escalated to an employee's line manager. This can result in red flags for employees or their managers, which are taken into account in annual promotion and compensation decisions.

Through Deutsche Bank's partnership with the Association of Certified Anti-Money Laundering Specialists (ACAMS), AFC employees themselves have access to a wide range of learning resources and tools dedicated to AFC professionals.

Risk monitoring processes

GRI 102-15/31

Know Your Client

Know Your Client (KYC) is an ongoing process throughout the life cycle of a client relationship. As such, Deutsche Bank not only needs to know the client (including their ownership structure, ultimate beneficial owners, and source of funds where applicable), but also the anticipated nature of the client relationship. AFC and the business divisions continued to pro-actively address KYC matters in 2019, especially by further improving the control environment via the various projects undertaken. The New Client Adoption process governs the onboarding of potential clients with the intention that no funds or assets may be accepted or transacted, nor any legal commitment entered into (e.g. operation of an account, sale of a product, or rendering of a service), until this process has been completed, barring very limited circumstances (e.g. certain corporate finance mandates and block transactions). As part of its regular client due diligence, Deutsche Bank screens its client relationships against internal and external criteria, for instance relating to politically exposed persons, terrorism, or sanctions. As a consequence, a client relationship may be declined or subject to monitoring or conditions imposed on accounts, transactions, or product usage. In addition, payments are screened prior to being made (see below).

The High Risk Clients Review was completed as required in ten months, while simultaneously making improvements in core aspects of the KYC process. In the Investment Bank (IB), Corporate Bank (CB) and Wealth Management (WM) divisions, significant efforts were invested in KYC file quality improvement, with the IB and CB activities conducted under the BaFin order covering KYC. However, further improvements in quality are still required. Significant progress has been made in delivering the future IB and CB KYC client file management application. A new Client Financial Crime Risk Council, composed of AFC, other 2LoD and business representatives, was set up to identify, monitor, and manage adherence to global risk appetite at the client level, including periodic reporting on material client financial crime risks with the goal of de-risking the bank's portfolio by exiting clients of concern. This also contributed to the work undertaken to address the BaFin order regarding correspondent banking.

A consistent Client Risk Rating Methodology (CRRM), which makes use of quantitative measures to calculate the individual risk of every client, was rolled out to IB, CB, Capital Release Unit, and AM. Deployments for other businesses are currently ongoing. Furthermore, AFC reviewed the CRRM in line with 5AMLD and incorporating correspondent banking-specific risks, which will be rolled out in 2020. AFC also continues to work towards an enhanced methodology design that reflects the specifics of the retail business.

Anti-money laundering and prevention of terrorism financing

Despite AFC being able to enhance its control environment during 2019, media attention on Deutsche Bank, which mostly related to legacy AML issues, remained high. Major improvements have been made to key technology controls such as Name List Screening (NLS) and Transaction Monitoring (TM). NLS has been rolled out globally to ensure all clients are screened on a daily basis against the applicable regulatory lists. A new TM system has been implemented in the U.S. and Germany focusing on correspondent banking, which provides coverage of 95 % of the corresponding banking volumes globally. This tool will be further rolled out as necessary to cover additional risks. Further, Deutsche Bank is continuously enhancing its TM capabilities across all business lines and regions which includes the development of money laundering detection scenarios and rollout of new systems.

By utilizing the AFC control environment, Deutsche Bank provided information that led to a successful raid on one of Europe's largest dark net money laundering infrastructures.

AFC also partnered with IB, CB, and the Capital Release Unit to enhance their account activity review process. This control requires client coverage leads to assess whether transaction activity was consistent with the expected nature of the client's business and the purpose for which it maintains a business relationship with Deutsche Bank.

Sanctions and embargoes

The inherent risk regarding the complexity of sanctions regimes increased in 2019 due, for example, to sanctions against Russia, Venezuela, and (temporarily) Turkey. In order to manage the intrinsic risk, Deutsche Bank has implemented several measures, one example being the Russian Oligarchs Framework using a risk-based approach for clients who are or have a nexus to Russian oligarchs. All relevant relationships have to be presented to the Regional Reputational Risk Committee for a decision to maintain or exit.

Deutsche Bank implemented daily screening across its customer base and monitors all transactions against different sanctions' lists. This enables Deutsche Bank to stop transactions, end customer relationships, and avoid forbidden customer relationships.

Anti-fraud, bribery, and corruption

GRI 103-2/3, GRI 205-1

The Anti-Bribery and Corruption (ABC) Policy, which was revised in 2019, sets out Deutsche Bank's arrangements in connection with the identification, escalation, and management of bribery and corruption risk, and the behavior expected by all employees and with respect to associated persons and other third parties. In turn, the Anti-Fraud Policy sets out the bank's minimum standards in line with the identification, escalation, and management of internal and external fraud in compliance with applicable obligations and within the risk appetite scope detailed in Deutsche Bank's Financial Crime Risk Appetite Statement.

Over the past two years, AFBC has made progress in improving controls and monitoring. For example, a tool was implemented to manage the life cycle of business development consultants (BDCs), standardized request and monitoring processes were implemented to manage gifts and entertainment (G&E) for 95 % of the total G&E volume, and monitoring was delivered for BDCs and joint ventures. From a fraud perspective in 2019, the Fraud Monitoring Capability delivered improvements particularly for online banking. Further enhancements apply to the areas of Risk Appetite Statement, Management Information Strategy and Reporting, and enhancements through the Global Conduct and Internal Fraud Risk Management Framework Policy.

Data protection

GRI 103-1, 102-15, 418-1, G4 DMA

Data protection has become a significant issue in societal awareness. As almost all Deutsche Bank's business involves processing personal data, protecting such data is a matter of special concern to the bank because of its commitment to legal requirements, such as the EU General Data Protection Regulation (GDPR), as well as increasing expectations from clients, employees, partners, and regulators.

Governance

GRI 102-16/20, 103-2/3

Deutsche Bank's Group Data Privacy (GDP) department is a specialized and independent function controlling the collection, processing, and use of personal data, and is complemented by a Data Protection Unit at Postbank. The team reports directly to the Management Board and is supported by local Data Protection Officers in the countries where the bank conducts business. The Management Board member responsible for Legal receives quarterly reports, inter alia, about new legal developments and potential audit issues or incidents. Furthermore, it is ensured that regular exchanges on data protection topics within our centralized and decentralized organization take place. In response to the increased controls required to ensure compliance with the EU's GDPR provisions, the bank is expanding its GDP department to ensure enough personnel to monitor, test, and assess Deutsche Bank's data privacy and protection processes.

Our data protection organization is set out in our GDP policies and procedures, which comprise data protection principles and requirements, such as confidentiality, the need-to-know principle, or access rights requests. Since 2019, we have developed a monitoring and testing framework to ensure an ongoing improvement process.

Deutsche Bank also contributes to the development and interpretation of industry-specific and prevailing standards on data privacy and protection by participating in data protection committees and working groups, such as the Federal Association of German Banks, IBM Guide Share Europe, and Bitkom. Developments in data protection regulations are regularly analyzed and control processes revised accordingly. The same applies to technical developments and new digital business models.

A prominent example is the GDPR program, which involves a catalog of measures to meet the GDPR requirements. In 2019, we also assessed and, where required, implemented measures derived from new data protection legislation, such as the California Consumer Privacy Act in the U.S. or comparable legislation in Brazil and Japan.

Training and awareness

GRI 404-2

Employee training on the implications of privacy laws for the bank's day-to-day business is a key factor in ensuring effective data protection in all operational processes. The most noteworthy training measure is the GDPR e-learning program, which was successfully rolled out and provided to our employees in 2018. After having reevaluated needs and the content of the training programs across the bank in 2019, the data protection e-learning program was transferred to a new concept and now includes requirements not only set out by the GDPR but also by other data protection regulations. With the development of this new training concept, our previous year's goal regarding training coverage has changed and we are now aiming to achieve 100 % data protection training coverage globally by 2020 in all countries where we conduct business – and thus even in countries where GDPR is not applicable.

Current initiatives

In view of the changes currently taking place across the bank – the integration of Postbank and the establishment of the Corporate Bank – organizational changes involving the processing of personal data have necessitated particular guidance by our GDP department. In this context, the adoption of new technologies and digitalization have become rather important topics. Against this backdrop, our GDP department accompanied the development of new digital products and initiatives along with data-driven models. Our GDP department also provides legal advice across the bank and all its divisions whenever personal data are being processed.

Furthermore, we are in the process of analyzing potential requirements from upcoming legislative or factual new tendencies on an ongoing basis. Such trends include the EU ePrivacy regulation, which could have an impact on the design of corporate websites and, in particular, their tracking mechanisms. Additionally, we are assessing the data protection implications of political developments, such as the U.K.'s Brexit, or technical undertakings, such as cloud computing.

No substantial data breaches observed

Various reporting and escalation processes from our business to GDP were implemented to ensure that potential data breaches could be assessed and handled in a timely manner. This approach, which was also outlined in a global data protection procedure, entails analyzing potential data breaches in collaboration with other Deutsche Bank departments. Should a data breach occur, coordinated follow-up actions would consist of communications to data subjects impacted and information to the relevant data protection authorities. No data breaches of systemic relevance were observed in 2019.

Information security

GRI 102-15

Clients expect access to their bank's services anytime, anywhere, and through a variety of channels. At the same time, cyberattacks on businesses are increasing in scale, speed, and sophistication. Preserving the confidentiality, integrity, and availability of clients' and partners' data and the bank's information assets is essential for upholding the trust placed in Deutsche Bank by clients, shareholders, employees, and society.

As the external threat landscape continues to evolve, information security remains a top risk for a bank. Deutsche Bank acknowledges its responsibility to maintain and contribute to a stable and resilient global financial ecosystem and therefore continues to invest significantly in its ability to mitigate security risks. In 2019, Deutsche Bank again strengthened its cyber and physical security capabilities to keep pace with such threats.

Deutsche Bank's group-wide information security strategy determines the bank's activities, which are geared to protecting the ability to deliver suitable products and services to clients, and thereby protecting revenue. In light of both internal and external drivers, such as changes to the threats' landscape, corporate strategy, technology, and the regulatory landscape, Deutsche Bank's strategic direction towards information security is regularly reviewed, confirmed, and underpinned by our information security governance model. The current areas of focus for strategy development include the delivery of layered protection mechanisms (defense in depth), enablement of secure cloud adoption, and transition to further strengthening the threat-driven approach. This will provide a targeted, threat-based methodology to effectively maintain and continually update the bank's defenses. These strategic pillars are, supported by efforts to enhance the frictionless user experience through streamlined processes and controls as well as automation.

In 2019, we continued to further enhance the security offered to our clients. The measures included the rollout of new strong, two-factor authentication controls for more than 90 % of our online banking services worldwide with continuation of the roll-out into 2020. Two-factor authentication requires our clients to provide two different forms of verification when accessing the online banking systems. The solution offered by Deutsche Bank comprises secure mobile application using biometrics and push notifications to provide our clients with a quick and secure way to access Deutsche Bank's online services. Besides greatly reducing the risk of fraudulent access to client accounts, the solution also ensures compliance with the EU's Payment Services Directive (PSD2).

Governance

GRI 102-20, 103-2/3

The Chief Security Office (CSO) is responsible for the bank's security matters and for implementing technology and physical security protection in accordance with the group's risk appetite. CSO develops and drives the global implementation and operationalization of the group-wide information security strategy, protecting the bank's employees and assets. An IT Security Committee with delegated authority from the Management Board's Representative oversees all IT security activities, including potential escalations. The Management Board receives a quarterly information security risk posture report as a comprehensive status update on Deutsche Bank's information security risk via a set of information security core topics presented by the Chief Security Officer.

International standards and best practices are employed to structure Deutsche Bank's information security policy landscape and its implementation. The bank's Information Security Management System has been certified to ISO 27001 since 2012 and is regularly re-certified. The governance framework and cybersecurity programs are regularly enhanced to ensure that security policies and standards continue to keep pace with evolving business requirements, emerging cyber threats, and regulatory guidance. Information security policies support Deutsche Bank in complying with these parameters and form the basis for actively managing and governing information-security-related implementation processes.

Following the appointment of Divisional Chief Information Security Officers (Divisional CISOs) in 2018, the information security management set-up was further strengthened in 2019 through the appointment of Principal Technical Information Security Officers (P-TISOs). As the senior accountable officers for information security, the Divisional CISOs and P-TISOs are responsible for ensuring alignment to Deutsche Bank policies and standards and strengthen the relationship between business divisions, IT, and the Chief Security Office.

The mandate for Deutsche Bank's CSO is complemented by a dedicated governance and operations unit at former Postbank AG (with its own ISO 27001-aligned policy framework), now forming part of DB Privat- und Firmenkunden AG. The year 2019 saw further progress made in the integration of IT security activities within DB Privat- und Firmenkunden AG. The information security framework was harmonized in various areas, in particular with regard to policies, processes and roles. A dedicated Information Security reporting has been setup to enable a holistic overview on the information security posture across DB Privat- und Firmenkundenbank AG. The alignment of security awareness measures leveraged synergies for Deutsche Bank as a whole. Moreover, an analysis of consolidation opportunities for several information security services forms the foundation for further functional and technical integration activities of these services.

Third-party risk

GRI 103-3

Reliance on vendors as well as all the outsourced products and services that support critical IT operations can increase the bank's risk posture. As new and evolving cyberattack vectors target vendors, this is leading to additional requirements for oversight and continuous monitoring of vendor security, as well as increased regulatory activity in this space. Deutsche Bank manages third-party risk through its vendor management program. This includes management of Information Security risks at Deutsche Bank vendors.

In 2019, Deutsche Bank ratified its cloud strategy as part of its IT strategy. To support secure cloud adoption, a dedicated cloud security function was implemented.

Defense against cyber threats

GRI 404-2

To protect its information and systems, Deutsche Bank takes a multi-layered, defense-in-depth approach to building information security controls into every layer of technology, including data, devices, and applications. This delivers end-to-end protection, while also providing multiple opportunities to detect, prevent, respond, and recover from cyber threats. This approach is a key facet of the group-wide information security strategy to increase the security and stability of the technology platforms.

In addition to prevention methods and controls, such as threat intelligence, data leakage prevention, vulnerability management, and continuous employee awareness programs, high priority is also given to detection, backed by a robust incident response process. Deutsche Bank's security incident management covers unwanted or unexpected events affecting the confidentiality, integrity, and availability of information assets, which may have an impact on Deutsche Bank, its clients, or employees. The related management and escalation processes are designed to enable Deutsche Bank to respond effectively to cyberattacks or information security threats, to minimize loss, leakage, or disruption, and to enable the use of information gained through incident handling to continuously improve our processes.

The Cyber Intelligence and Response Centers (CIRCs) in Singapore, Germany, and the U.S. have been set up to provide global 24/7 coverage across different time zones – a follow-the-sun model – and have thus improved the bank's ability to detect threats and respond to incidents worldwide. Through 24/7 monitoring, the CIRCs handle upwards of 2,500 items of new intelligence every month, including alerts about potential cyberattacks. In 2019, the CIRCs did not detect any successful cyberattack, such as Distributed Denial of Service (DDoS) attacks, phishing mails, or malware attacks that materially impacted our systems, information assets, or client information.

Training and awareness

GRI 404-2

In 2019, we continued to roll out to all Deutsche Bank employees the global multichannel awareness campaign “Time to be aware – the target is you”. This campaign covers a broad range of information and corporate security topics, including the 2019 Information Security Month featuring a month of activities at several Deutsche Bank locations. The goal of the campaign is to help employees understand common yet significant security threats and their individual responsibility and contribution in helping to protect the bank against these threats. The campaign therefore focuses on tips and relevant basic practices to help employees protect themselves and the bank in their daily working life, both in the office and on the go.

Besides awareness measures, Deutsche Bank employees are regularly educated through mandatory training measures that are complemented by specific training for individuals in specialist roles. In 2019, the Information Security Officer (ISO) and Technical Information Security Officer (TISO) role holder training was substantially reworked and rolled out to all active role holders in September 2019. This training equips these role holders with the skills and knowledge required to perform their important security roles and is a pre-requisite for nominees to hold this designation.

Client awareness on cyber threats and how the bank protects their data and assets is a continuous area of focus. To this end, we supply information material, e.g. explanatory videos, and stage events in all regions.

Dialog and collaboration

GRI 102-21

Deutsche Bank works closely with regulators to understand and collaborate on their requirements. At the same time, the bank regularly engages with national and international security organizations, government authorities, and peer organizations to share best practices and threat information. One such body is the Financial Services Information Sharing and Analysis Centre (FS-ISAC), where Deutsche Bank is a member of the board. In Germany, Deutsche Bank was a founding member of Cyber Security Sharing & Analytics (CSSA). This alliance of major companies across various industries that enables the exchange of information to better detect and understand threats, and to enhance response actions.

As sharing relevant indicators of compromise (e.g. forensic data that identifies malicious activity in a system or network) and further intelligence with other companies reduces the risk for all involved parties, Deutsche Bank has a dedicated team to coordinate this exchange and further develop these relationships. Engaging stakeholders helps to ensure that we apply the most up-to-date information security approaches and technology.

Public policy and regulation

GRI 102-15

As today's operating context is confronted by an unprecedented level of policy and regulation, the risk of changing rules and regulations is inherent in a bank's daily business. Deutsche Bank uses a systematic approach that prioritizes significant regulatory risks to the bank and allocates clear accountability for the identification, impact assessment, and implementation of regulatory changes.

Governance

GRI G4 DMA

Deutsche Bank has a clearly structured framework that governs how it manages regulatory change risk and helps to build the bank's profile in regulatory policy debates. This enables Deutsche Bank to constructively engage with regulatory stakeholders. It also ensures informed strategic decision-making, provides oversight and control over how key initiatives are implemented, and delivers insights for senior management on upcoming public policy issues. The Regulatory Management Council (RMC) supports this process by focusing on cross-bank issues in each stage of the regulatory adherence life cycle. To further contribute to the policymaking process, Deutsche Bank provides political and regulatory stakeholders (e.g. governmental organizations, policymakers, and supervisory authorities) with information and data that set out our business strategy and determinants. Our global policy on engagement with supervisory authorities ensures consistent communications with Deutsche Bank's supervisory authorities. All employees must adhere to our global Gifts, Entertainment, and Business Events Policy, which regulates the conduct and recording of any gifts and event participations offered by or accepted by Deutsche Bank representatives.

Our Global Head of Government & Regulatory Affairs directly reports to the Chief Administrative Officer. A dedicated Government & Regulatory Affairs team manages Deutsche Bank's day-to-day relationships with its core authorities, identifies relevant political and regulatory developments at an early stage, and coordinates group policy positions accordingly. In doing so, Deutsche Bank aims to ensure compliance with the relevant political and regulatory requirements (inbound) and include industry-relevant topics in public discussions (outbound). Deutsche Bank's Government & Public Affairs offices in Berlin, Brussels, and Washington, D.C., manage the relationships with key policy makers and provide them with information and data, while setting out the bank's business strategy and its determinants. We also liaise with our Country Management in Beijing to cover China.

Employee–stakeholder interaction

GRI 102-21

Deutsche Bank sets clear rules and procedures for interactions between employees and external political and regulatory stakeholders. The interaction with core regulators in the U.S., Europe, Hong Kong, and Singapore is governed by the Supervisory Authorities Engagement Policy, which obliges all interactions to be logged and minuted by the relevant Regulatory Management team. For interactions with EU institutions, the mandatory policy on Pre-Clearance of All Communications with EU Institutions to Discuss Policy Issues sets standards for consistent communication at an EU level and centralized clearance of all contacts with EU officials. In the U.S., Deutsche Bank acts in line with the internal policy on Political Contributions in the U.S. and U.S. Lobbying Activities.

Financial transparency

Deutsche Bank is a signatory to the EU Transparency Register, which requires the bank to disclose certain financial data and comply with the underlying code of conduct. In the U.S., Deutsche Bank is registered with the Office of the Clerk of the Senate and Clerk of the U.S. House of Representatives, and files a quarterly disclosure on all relevant legislative issues with the Office of the Clerk of the House of Representatives. Furthermore, Deutsche Bank America's Political Action Committee (PAC) is regulated by the U.S. Federal Election Commission (FEC) and the bank makes both monthly and annual public filings to the FEC. All contributions to the PAC are made voluntarily by Deutsche Bank employees and no funding or contributions from the bank are allowed by law. Furthermore, Deutsche Bank does not permit direct or indirect donations to political parties. Pre-approval from Anti-Bribery and Corruption is required for donations to political-party-affiliated organizations or involvements referring to the governmental or political party arena.

Key topics in 2019

GRI 102-12/44

Our Government & Regulatory Affairs team regularly defines a set of key topics that will determine Deutsche Bank's focus for the period of one year. In 2019, these topics related, inter alia, to the digitalization of banking and society, the renewal of the Eurozone, Brexit, the European elections, and the sustainable finance agenda. On each issue, Deutsche Bank convened and participated in seminars, public panels, and individual conversations with policy makers. As sustainable finance and the digital agenda were topics of particular interest throughout 2019, a more detailed overview on both topics is provided below.

Sustainable finance

GRI G4 DMA

The political and regulatory agenda in many jurisdictions delivers clear supervisory expectations for banks to manage sustainability risks with a focus on climate-related risks. One of the main topics that accompanied us through 2019 was sustainable finance, along with the associated opportunities for and impact on Deutsche Bank. In March 2018, the European Commission published their action plan on sustainable finance. The focus of this action plan is on the reorientation of capital flows towards investments, taking environmental, social, and governance considerations into account. This action plan aims to manage financial risk and, to tackle climate change and related demands in order to foster the transparency of products and corporate strategies.

Legislation on sustainable finance of relevance to Deutsche Bank is mainly driven at EU level, with the EU action plan on sustainable finance continuously evolving. In 2019, Deutsche Bank monitored its progress and its effect on the bank's operations. Deutsche Bank welcomes the activities of the European Commission as an important milestone to help the EU deliver on its Paris Agreement climate goals and wider sustainability agenda.

In 2019, we noted several central bank initiatives, which we deem relevant for the future of sustainable finance regulation. The Network for Greening the Financial System (NGFS), which is made up of 40+ central banks and supervisors, issued a report to coordinate their work on risk management, stress tests, and scenario analyses, as well as the central banks' own portfolio management and assets. The German financial supervisor BaFin published a draft Guidance Notice on Dealing with Sustainability Risks, which aims to set non-binding standards for German financial firms. The U.K.'s Prudential Regulation Authority (PRA) published a Supervisory Statement in April 2019, laying down supervisory expectations for supervised firms to take a strategic, board-driven approach to managing climate risks.

As part of a broad sustainable finance network, Deutsche Bank is in a position to identify, assess, and react to material developments globally. We take part in a number of sustainable finance working groups in several trade bodies, on a global, regional/EU, and German national level. We are also a member of the Sustainable Finance Advisory Council, which was inaugurated by the German Federal Government in June 2019 to support the development of a national sustainable finance strategy. By engaging with this council, Deutsche Bank discusses developments in sustainable finance with trade associations, such as the Association for Financial Markets in Europe (AFME), the European Banking Federation (EBF), and the Association of German Banks (*Bundesverband deutscher Banken, BdB*), and regularly responds to consultation and discussion papers. For example, Deutsche Bank responded directly to consultations from the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), the Network for Greening the Financial System (NGFS), and the Technical Expert Group (TEG). The topics covered were sustainable finance on alleged short-termism in financial markets, on the assessment of "green" (sustainable) and "brown" (conventional) financial assets, and a detailed EU sustainability taxonomy.

Digital agenda

In addition to sustainable finance, a great deal of interest has been directed to digitalization and fintechs. Following the publication of the European Commission's Fintech Action Plan in 2018, regulatory bodies and policymakers within the EU and its member states have started to set the groundwork for responsible technological innovation.

After an initial phase with a strong emphasis on research and monitoring, there have been regulatory and policy proposals on artificial intelligence (AI), cyber and operational resilience, virtual assets, as well as data and online platforms. In particular, these proposals include, but are not limited to, the following:

- EU Commission High-Level Expert Group's Ethics Guidelines for Trustworthy AI, including a comprehensive assessment list;
- EBA Guidelines on outsourcing (incl. outsourcing to cloud service providers);
- Consultation on proposed amendments to requirements in relation to outsourcing arrangements by the Monetary Authority of Singapore (MAS);
- EBA draft Guidelines on ICT and security risk management;
- EU Regulation on online intermediaries, aiming to address power imbalances between platform providers and their business clients; and
- Discussion papers by the German government on electronic securities and initial coin offerings recommendations by the Expert Groups on competition law, data, and algorithmic systems.

Deutsche Bank participated in the EU piloting process on the AI Ethics Guidelines and Assessment list, its contributions to the above-mentioned EBA Guidelines, and its engagement in the Fintech Taskforce of the European Central Bank (ECB). This helped in understanding the relevance those topics have for the bank and in working towards a regulation that does not create obstacles to innovation. Together with trade associations, such as AFME, the European Banking Federation (EBF), the BdB, or the European Financial Services Roundtable (EFR), Deutsche Bank actively partakes in the public debate and develops industry-wide positions, for example with regard to the creation of an effective data economy, which from our perspective requires a cross-sectoral framework for data access, based on client consent and standard formats and timing.

Employee-related matters

Employment and employability

GRI 103-1

In this chapter, we describe the management approaches, targets, and results relating to workforce management and an inclusive work environment. Information on further employee-related aspects, such as employee engagement, performance management, and health management, is published in our separate Human Resources Report.

People strategy

GRI 103-1/2/3

Deutsche Bank's success largely depends on the ideas, competence, commitment, and health of its employees. That is why the bank attaches great importance to offering its employees an attractive working environment so they can help the company to become more innovative. The bank's Human Resources (HR) agenda seeks to create an environment where people can work in partnership and are enabled to deliver sustainable organizational performance.

Workforce trends are driving the people practice roadmap:

- New working practices: Agile working practices accelerate innovation and are leading to greater customer focus, iteration, and consultation;
- New behavior patterns: To stay attractive Deutsche Bank needs to ensure work flexibility, a sound work–life balance, and investment in the working environment;
- Demographic change: In 2025, 72 % of the bank's workforce will be millennials (those born between about 1980 and 2000). Career paths have been redefined. Freelance and interim roles are increasingly becoming a preferred form of employment; and
- Changing skill requirements: Strong up-skilling or reskilling requirements need to keep pace with the trends, driving the bank's business model across the divisions.

These workforce trends are reflected by individual Management Board objectives, which have been agreed with the Supervisory Board. They include:

- Investing in workforce management by implementing restructuring measures, changing the way of working, and strengthening the talent and development agenda; and
- Further embedding diversity and inclusion in all people processes.

Governance

GRI 102-16/20, 103-2/3

HR has a clear governance structure, with global priorities and standards defined and monitored by the Global HR Executive Committee. This includes the Global Heads of HR, the business divisions, infrastructure functions, and entities sharing responsibility for HR management, as well as the HR Heads responsible for processes and products in the regions. The bank's Code of Conduct is designed to ensure that Deutsche Bank as a whole conducts itself ethically – with integrity, and in accordance with outlined policies and procedures as well as the laws and regulations in all operating regions. The Code is a general guide, underpinning a basic principle that we should do what is right and proper. Deutsche Bank also takes external frameworks, standards, and principles into account, such as the new guidelines for Human Resource Management – Guidelines for Internal and External Human Capital Reporting issued by the International Organization for Standardization (ISO 30414) in December 2018.

Policies are a fundamental part of the bank's internal control environment. The global HR policies cover a wide range of HR topics, such as hiring, managing, and developing performance and careers, the assessment of the suitable members of management bodies and key function holders, international assignments, diversity and inclusion, compensation, offboarding, termination, and employee-related incident management. Additionally, there are guidelines and policies for performance management procedures, disciplinary and dismissal procedures, grievance, and anti-harassment and bullying procedures, for example.

HR-related topics are presented to the Management Board, Supervisory Board, and senior management on a regular basis. For example, the Management Board receives monthly updates on FTE development and the progress of restructuring measures, while the Supervisory Board receives monthly reports on employee turnover.

The monthly HR Controls Dashboard was implemented in late 2018 and serves as a detective control measure to monitor HR's operational performance in managing employee life cycle risk. It provides an overview of the results of a total of 51 HR-owned controls that are listed in the Non-Financial Risk Management Controls Inventory and thereby allows for identification of potential risks in HR's control environment. The results are presented to the HR Performance Review Council, which decides upon necessary follow-up activities or escalations if control results are outside of risk appetite. For example, the HR Controls Dashboard triggered a process change relating to candidate background screening in Germany, which helped to reduce the number of missing prior work experiences by an average of 36 % in the first half of 2019 (due to the implementation at the end of 2019, the year-on-year development cannot be assessed). The HR Controls Dashboard thus helps to strengthen the control environment of HR.

Workforce management

GRI 103-2/3, 404-2

Restructuring

GRI 102-8/10/41, 103-2/3, 401-2, 404-2

Restructuring is a topic that spans the entire banking sector, not least due to the pace of digitalization. Deutsche Bank is no exception. On May 29, 2018, the Management Board announced that the number of full-time employees would be reduced to less than 90,000 by the end of 2019. On July 7, 2019, the Management Board announced moves to improve efficiency and infrastructure, which included reducing the workforce to approximately 74,000 by 2022.

As of December 31, 2019, Deutsche Bank had reduced its number of employees by approximately 4,100 (-4,5 %) to 87,600. Reductions across all regions driven by Capital Release Unit[7] (-1,329; -52.4 %), Private Bank[7] (-1,149; -3.0 %), Infrastructure (-1,784; -6.1 %), and Asset Management[7] (-88; -2.2 %) offsetting by Corporate Bank[7] (+75; +1.0 %), and Investment Bank[7] (+135; +1.4 %). In 2019, business-critical external roles, especially in IT, were again insourced.

In executing this strategy, Deutsche Bank remains committed to carrying out staff reductions in a transparent and socially responsible manner, with the close and constructive cooperation with employee representatives and social partners marked by mutual trust.

The bank cooperates with employee representatives and their bodies on the basis of the relevant national legal regulations. Germany's Works Constitution Act (*Betriebsverfassungsgesetz*, BetrVG) governs the involvement of works councils by stipulating their rights and duties and by prescribing the cases and form in which employers are required to involve a works council. With members elected every four years, these councils represent the employees' interests through entering into discussions and negotiations with Deutsche Bank as an employer. The bank's executive employees have their own representative body, which is also governed by German law *(Sprecherausschussgesetz).*

On the basis of the agreement on cross-border information and consultation of Deutsche Bank employees in the EU, concluded on September 10, 1996, all employees in the EU are represented by the European Works Council. This adds up to around two thirds of the bank's total workforce. As German law prohibits us from asking our employees whether they are members of labor unions, there is no record of how many of the bank's employees are union members.

Deutsche Bank's holistic change concept, which is embedded in the bank's social plan, provides support to employees affected by restructuring measures by promoting employability and offering individual coaching in change scenarios. A comprehensive set of measures and systematic assistance is available to employees, managers, members of the works council, and HR advisors involved in change processes. Furthermore, the concept supports the bank's strategy to fill open jobs with suitable internal candidates as well as to utilize a dedicated network of external partners to identify job opportunities outside the organization. In 2019, approximately 2,000 employees made use of the various offerings (2018: 1,500 employees).

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[7] Employees (Front office full-time equivalent)

Recruiting and talent development

GRI 401-1, 103-1/2/3

Even in the context of implementing the above-mentioned restructuring measures, recruiting talent continues to be a key priority for Deutsche Bank. Thus, filling front office roles in growth areas (e.g. Global Transaction Banking, Wealth Management and Asset Management), replace voluntary staff turnover in operation centers vacancies was again a priority in 2019, as was hiring talent to meet the growing demand in regulatory roles (e.g. Anti-Financial Crime, Audit, and Compliance). Additionally, talent acquisition focused on insourcing 881 external roles (2018: 1,207), particularly in IT, as well as hiring 1,622 graduates and vocational trainees (2018: 1,517).

The average time required to fill vacant positions was 56 days (2018: 61 days) and the average time required to fill critical vacant business positions 15 days (2018: 24 days).

Graduates and vocational trainees

Deutsche Bank remains committed to the strategic priority of hiring graduates, as they contribute to the bank’s change agenda by building a skills’ set that better aligns to the needs of the future workforce and clients, and to diversifying the organization. In 2019, 955 graduates were hired (2018: 910 graduates). This increase was due to additional investments in the Corporate Bank (CB) and PB and the bank’s Technology function as part of the efforts to reinforce the bank’s capability and engineering culture in this space. For the second time, the bank ran two separate orientation and training programs, one regionally in India for the bank’s local Technology cohort and one in London, as in previous years.

Vocational training and dual studies are an important component of the bank’s junior staff strategy. Particularly in Germany they offer an additional opportunity to attract young talent to Deutsche Bank. Thanks to a targeted marketing strategy (#dbKarrierestart) and the bank’s Insider Initiative, implemented in 2018, more qualified applications were attracted than in previous years and 667 new vocational trainees hired in 2019 (2018: 607).

Internal career mobility

As the bank works toward its headcount targets, a new process for hiring was implemented to restrict external hiring to positions that are viewed as critical to the bank’s success and future growth, with a greater emphasis on internal mobility and identifying tasks that can be discontinued. The selective hiring guidelines have to be seen in the context of the bank’s cost and people development targets. Managing headcount through natural attrition has the potential to save jobs. The bank also becomes more efficient as managers are challenged to identify tasks that can be discontinued or where technology can be utilized more effectively. Finally, the development opportunities for existing talent have to be maximized.

Internal mobility plays a vital role in developing and retaining qualified and talented employees and in keeping their expertise and experience within the bank. In 2019, Deutsche Bank continued to develop and embed its internal mobility strategy and uphold its commitment to filling vacant positions with suitable internal candidates. Reflecting the changing skill requirements (see above), the goal is still to replace a third of all vacant positions with internal candidates.

All vacant positions are first advertised to internal staff for at least two weeks. Prioritizing internal candidates helps employees affected by restructuring to find new roles at the bank. Cross-divisional mobility is also promoted to enable employees to expand their skills and experience for rounded careers. Furthermore, internal mobility helps to reduce the bank’s redundancy and recruitment costs.

In 2019, 37.6 % (2018: 37.2 %) of all job vacancies were filled internally (excluding Postbank). Particularly at the Managing Director (MD) and Director (D) levels the internal fill rate was above average at 40.2 % (2018: 40.5 %). This was also true at the experienced Vice President (VP) level, with 47.5 % of vacancies filled internally (2018: 47.8 %). In Germany, the figure was 67.7 % (2018: 65.4 %) due to redundancies caused by restructuring measures as well as changes resulting from digitalization and control functions. Filling positions internally through proactive redeployment efforts resulted in savings of € 32 million in 2019 (2018: € 39 million). In all, 76.9 % of business-critical positions were filled internally (2018: 61.5 %).

Leadership development

For several years, leadership development programs have been successfully run across Deutsche Bank. As part of the commitment to keep the bank's leaders "fit for the future of work", 2019 saw significant changes and improvements in how leaders who are a key part of the organization's culture and transformation are developed.

Deutsche Bank's Leadership Capability Model and its values and beliefs define what is expected from leaders. They also provide a shared view of the capabilities that are vital to leading employees and ensuring business success in line with the bank's strategy and culture. In 2019, this model was updated and refreshed to reflect the changing future of work, the requirements of a leader in this digital age, and the new strategy. All leadership and talent development programs are aligned to this model.

October 2019 saw the launch of the new approach to leadership development based on a more flexible, user-focused model. Panels of leaders across the organization helped to design learning content that comes in a more bite-sized format, replacing large long-term programs with short learning workshops, including virtual learning alternatives for small locations. These alternative forms are embedded in learning journeys that include articles, videos, podcasts, and other online resources. Leadership development needs to be available at the moment of need and HR is working on more ways to deliver this, including piloting virtual coaching for leaders of complex teams.

A key focus is on new leaders and helping them to grow into a new role (or to acclimatize themselves to the leadership philosophy if hired externally). To this end, HR created an interactive tool for leaders to help them understand the bank's processes, culture, and key regulatory requirements – as well as how to support and develop their teams.

A key part of the content of this new leader guide relates to the bank's commitment to creating a climate where employees are encouraged to speak up. In 2019, all employees were provided with a digital guide focusing on behavior that underpins a speak-up culture. This guide aims to signpost the employees to learning paths of digital resources, including facilitated virtual classrooms covering topics such as listening and feedback.

The bank's leaders are now in a position to take care of their own development and select whatever learning content is appropriate to them. The new approach means that learning content can now be offered to all the bank's leaders (including those leading in a project context) rather than just a selected cohort chosen by hierarchical criteria. Furthermore, employees aspiring to a leadership role can access this learning, too.

Talent acceleration

To help employees develop professionally and personally and advance their careers, Deutsche Bank's talent acceleration programs follow a cross-divisional approach. In 2019, Postbank was fully integrated into Deutsche Bank's acceleration programs.

The Accomplished Top Leaders Advancement Strategy (ATLAS) is a highly visible acceleration program for senior female MDs. Since its launch in 2009, there have been five programs and the 2018–2019 cohort was the largest to date with 21 participants. The program follows a twelve-month structured development journey with bespoke individual development and is aimed at increasing the number of women in senior positions across the bank. A full 100 % of active alumnae have moved into more senior roles.

The bank-wide Director Acceleration Program launched in 2017 had 169 participants in 2019, with 42 % of them women (2018: 152 participants with 36 % women). This twelve-month program includes classroom modules and individual coaching elements.

The VP Acceleration Program completed its fourth year in 2019 and had 490 participants, with 39 % of them women (2018: 494 participants with 41 % women). The VP program is delivered across five regions.

A third of the Director Acceleration Program's participants are now MDs and 40 % of VP Acceleration Program's participants have been promoted to Director. Overall, the retention and mobility rates for both Director and VP Acceleration Programs are higher than the benchmark population.

Future-oriented work environment

GRI 103-1, 401-2, 404-2

In July 2019, Deutsche Bank embarked on its journey to transform the bank into an organization that is inspired by clients and continuously designed by employees. To achieve this aim, it is necessary to change the way we work, not least by taking into account demanding and even disruptive developments.

The continuous need to make decisions in this environment not only demands knowledge and experience from employees, but also a high degree of willingness and the ability to adapt to new and hitherto unknown circumstances.

Designing effective and future-oriented HR work therefore means explaining to existing and future employees the sense, direction, and orientation of Deutsche Bank's path and strategy in a fast-moving business environment. The speed with which internal and external changes are recognized and the effectiveness of the response in creating added value for stakeholders will be critical for success in the future.

When it comes to innovation, employees are the key to success. This is why Deutsche Bank encourages their intellectual curiosity, focus on lifelong learning, and courage to try things out. The bank promotes a corporate culture that rewards innovative, agile, and creative work.

Furthermore, the outcome of demographic and cultural change, generation diversity, and increased mobility (to mention just three factors) will be a change that requires completely new approaches. As an employer, Deutsche Bank can only stay competitive if it proactively shapes its response to these challenges.

Today, Deutsche Bank is already preparing its employees for these changing requirements – both professionally and mentally. In addition to contemporary learning opportunities and coaching, this includes a wide range of health-care offerings and opportunities to combine personal and professional life.

Inclusive culture and work environment

GRI 103-2/3, 405-1

We are committed to an inclusive culture that respects and embraces the diversity of employees, clients, and communities, as demonstrated by a continuing focus on:

- Building talented and diverse teams to drive business results;
- Creating a respectful and inclusive environment where people can thrive; and
- Strengthening relationships with clients, partners, regulators, communities, and potential employees.

We aim to attract, develop, and retain the best people from all cultures, countries, races, ethnicities, genders, sexual orientations, abilities, beliefs, backgrounds, and experiences. To this end and to prepare for opportunities and challenges arising from changing demographics, digitalization, and the future of work, the bank follows an integrated and multi-dimensional approach to diversity and inclusion.

Throughout 2019, we continued our journey to embed diversity and inclusion in our people practices. The key focus areas were as follows:

- Renewing the bank's commitment to improve gender diversity: Given that the previous voluntary declaration to substantially raise the proportion of all female managers globally ended at the end of 2018, the Management Board agreed to set voluntary next-level goals that became one of the Balanced Scorecard KPIs of the Management Board members and of the management level below (see "Gender diversity");
- Improving diversity through talent attraction: Embedding diversity into the renewed Employee Value Proposition, targeted campaigns to attract more women to the bank, and projects to attract and retain people across generations (see "Gender diversity");
- Strengthening cross-generational collaboration and dialog: Regional Employee Resource Group-driven Reverse Mentoring programs and wider platform-based Reverse Mentoring offerings (see "Inclusive work environment"); and
- Advancing LGBTQI (Lesbian, Gay, Bisexual, Transgender, Queer, Intersex) inclusion worldwide: Honoring 50 years of LGBTQI Pride worldwide and taking the bank's responsibility to both business and society seriously by, for example, intensifying collaboration with coalitions and influential platforms advocating a more inclusive and just world (see "Inclusive work environment").

Gender diversity

GRI 103-2/3, 405-1

Throughout 2019, Deutsche Bank continued its efforts to advance women in the workplace.

With seven women on the Supervisory Board, the figure stood at 35 % at the end of 2019 (2018: 30 %). This met the statutory requirement of 30 % for listed and co-determined German companies under the gender quota legislation introduced in 2015.

The Supervisory Board's latest target for the Management Board was set in 2017 as at least 20 % female members by June 30, 2022. Given a Management Board size of between eight and twelve members, two women are required to achieve this goal. At the end of 2019, there was no woman on the Management Board. On January 1, 2020 one woman responsible for the bank's businesses in the Americas joined the Management Board. Within the Diversity Principles of the Suitability Guidelines for selecting the members of the Management Board, the Supervisory Board is working towards the 2022 target.

As of year-end 2019, 19.7 % of executive positions at the first management level below the Management Board were held by women (2018: 20.8 %). At the second level below the Management Board, the figure was 19.5 % (2018: 20.9 %). In accordance with the legal requirement in Germany, the bank set targets of 20 % (at first management level) and 25 % (at second management level) for December 31, 2020.

While women's representation at Deutsche Bank is not where the bank wants it to be, HR continues to monitor and report on progress made to the Management Board. The variety of measures already in place includes talent development programs, manager training, best practices on people-related decisions, internal monitoring, and significant support for grassroots, employee-driven initiatives.

The Management Board remains committed to increasing the representation of women in leadership positions. In March 2019, the Management Board decided to restate the voluntary group-wide aspirational goals for the representation of women. Since transparency facilitates change, the goals for December 2021 have been disaggregated to focus on the top three corporate titles individually (in headcount terms): MD (21 %), Director (D) (28 %), and VP (35 %, excluding Postbank). This will also strengthen the internal pipeline for the two levels below the Management Board. Deutsche Bank firmly believes that an improved gender balance in leadership roles will meaningfully contribute to its future success.

As of year-end 2019, women made up 18.3 % of MDs, 25.1 % of Ds and 31.4 % of VPs. Monitoring against Diversity goals also include promotions at the beginning of 2020. Including promotions, we have achieved 18.9 % for MDs, 25.9 % for Ds and 32.6 % for VP (excluding Postbank).

Inclusive work environment

GRI 102-12, 103-1

We recognize the importance of effective collaboration across generations in the workforce to benefit from multiple ideas and every perspective. We know it is important to recognize the different needs of generations, too. This involves providing the benefits and support for each stage in life and opportunities for employees at every stage of their career. For details of the age structure please see the table of key employee figures.

As well as our reverse mentoring program, in which younger employees coach older colleagues, that continues to expand across the globe, our Employee Resources Groups remained active on generation topics throughout the year under review:

- dbGeneration: Its Future of Work series continued in 2019 with an event exploring how we ready ourselves for the changing face of the job and working environment. Experts on longevity, social justice, and work patterns explored the impact on different generations and an aging population;
- NextGen groups in the U.S.: In New York, leaders are actively engaged in becoming mentees on their reverse mentoring program, with high-touch matching activity and follow-up on pairings continuing; and
- dbFamily initiative in the U.K.: Support and information to members continued with generation-spanning events on coping with long-distance caring, and mental health, well-being, and resilience in young people.

Employees continue to receive support throughout the working life cycle, such as family responsibilities from childcare to elder care, a range of flexible working options, and employee benefits to suit different career stages.

As one of many activities to support LGBTQI inclusion and support the bank’s LGBTQI colleagues, Deutsche Bank has a long-standing Allies program. These visible Allies, who themselves do not self-identify with a particular LGBTQI group, play a key role in fostering a culture of inclusion across the bank. As leaders and advocates of change at all levels of the organization, they are helping LGBTQI employees to feel safe at work, bring their whole self to work, and subsequently also be more productive.

During almost 20 years of experience in diversity and inclusion, a number of key external partnerships have been built across the globe. These partnerships not only help Deutsche Bank to drive its internal agenda. They also enable good practices to be shared and boost the bank’s positive impact on the societies it operates in. Deutsche Bank is convinced that this helps to strengthen relationships with clients, partners, and communities.

- In Germany, the bank is a founding member and currently management board member of the Charta der Vielfalt (Charter of Diversity), an association under the patronage of Chancellor Angela Merkel that actively fosters diversity in the workplace; and
- Elsewhere, Deutsche Bank is a founding signatory of the U.K. Treasury’s Women in Finance Charter, promoting a more gender-balanced financial services industry. It is also partnering with Open for Business, a coalition of global companies that presents and promotes the business and economic case for LGBTQI rights.

Key employee figures

GRI 102-7/8, 103-3, 401-1, 405-1

Key employee data are shown below. For full details as well as our strategic HR priorities and achievements, please refer to the 2019 Human Resources Report.

	2019		2018	
	Deutsche Bank Group	Thereof: Deutsche Bank AG	Deutsche Bank Group	Thereof: Deutsche Bank AG
Employees (FTE)[1,2]	87,597	25,326	91,737	26,728
Recruitment and talent management				
Hired global graduates and vocational trainees (headcount)	1,622	437	1,517	416
Hired global graduates	955	404	910	382
Hired vocational trainees	667	33	607	34
Average length to fill vacant positions (in days)[3,4]	56	53	61	57
Internal job vacancy fill rate (in %)[4]	37.6	27.1	37.2	32.9
thereof Managing Director and Directors (in %)	40.2	38.7	40.5	38.5
thereof Vice Presidents (in %)	47.5	35.8	47.8	39.0
Critical business positions (in %)	76.9	80.0	61.5	80.0
Savings from redeployment (in € m)[4]	32	20	39	22
Participation in cross divisional talent acceleration programs (headcount)				
ATLAS acceleration program for senior female Managing Directors	21	20	21	20
Director acceleration program	169	104	152	94
thereof women (in %)	42.0	45.2	35.5	37.2
Vice President acceleration program	490	245	494	265
thereof women (in %)	39.0	41.6	41.1	41.1
Diversity (headcount)[2]				
Women on Supervisory Board (in %)	35.0	35.0	30.0	30.0
Women on Management Board	0	0	1	1
Women at Management Board level - 1 (in %)[5]	19.7	19.7	20.8	20.8
Women at Management Board level - 2 (in %)[5]	19.5	19.5	20.9	20.9
Female staff by corporate title (headcount) [2,6]				
Managing Directors (in %)	18.3	20.4	18.1	20.1
Directors (in %)	25.1	24.9	24.5	24.5
Vice Presidents (in %)	31.4	32.2	31.2	32.1
Assistant Vice Presidents and Associates (in %)	40.6	43.8	40.2	43.0
Non-Officer (in %)	59.6	55.0	59.8	55.9
Total female staff (headcount, in %)[6]	46.3	39.5	46.2	39.5
Age (headcount)				
Up to 29 years (in %)	15.1	11.6	15.5	11.5
30 - 39 years (in %)	28.6	28.7	29.3	30.2
40 - 49 years (in %)	27.1	33.1	27.6	33.8
Over 49 years (in %)	29.2	26.6	27.6	24.5

1 In 2019, Deutsche Bank company health insurance aligned its FTE definition, which decreased the group number as of December 31, 2019 by 81 (prior period not restated).
2 Status at year-end.
3 Time to offer from job opening creation to offer date.
4 Excluding Postbank.
5 2018 adjusted for Postbank.
6 Disclosure adjusted from FTE to headcount given the new approach of voluntary group-wide aspirational goals set in March 2019. Postbank included in 2018 and 2019; declared corporate titles of Postbank (incl. subsidiaries) are only alternative, technically derived, and not contractually defined or agreed.

Numbers may not add up for rounding reasons
Note: International standards for "Human resource management" (ISO 30414) also suggest disclosing metrics reflecting lost time for injury, the number of occupational accidents, and the number of people killed during work. These health and safety-related metrics are primarily relevant for manufacturing industry, not material here, and consequently not disclosed.

Digital transformation

Digitization and innovation

GRI FS14

Emerging technology continues to shift client expectations, and new competitors are exploring traditional banking services. Structural changes and business-model-impacting digital trends, such as the accelerating pace of artificial intelligence (AI), are continuing to force banks to rethink and adjust their models. The increasing influence of millennial clients, who demand more transparent offerings and pricing models, alongside increasingly stringent regulatory norms and competition from emerging fintechs, have urged a rethink by banking sector incumbents. Banks need to respond to and take advantage of the disruption the industry is currently experiencing. New technologies are enabling us to offer innovative products and services. And they are helping us to improve the way we operate by becoming simpler and more efficient.

Governance

GRI 102-20, 103-2/3

The bank's digitization vision focuses on the transformation of its core businesses through fully digitized, end-to-end banking processes. We are thus creating a digital ecosystem that enables us to reach new audiences through innovative business models and to generate revenue growth through platforms that offer the best possible products, including those from third parties. At the same time, we want to use our database to better understand and serve our clients and their needs.

In 2019, Deutsche Bank's Management Board agreed on a new technology strategy focused on strengthening engineering expertise, introducing an agile delivery model, reducing administrative overheads, de-coupling assets within our IT estate for faster, cheaper deployment, as well as modernizing the bank's IT infrastructure with long-term investments and benefiting from cloud computing.

To ensure an integrated IT, data, and security agenda across the bank, we established a separate group-wide Technology, Data and Innovation function headed by a member of the Management Board.

Research and development

To foster innovation, Deutsche Bank has established professional research and development capabilities that include five innovation labs worldwide, a data lab in Dublin (Ireland), the Digital Factory in Frankfurt am Main (Germany), and software development centers of excellence in Moscow and St. Petersburg (Russia), Bucharest (Romania), Pune (India), and Cary (U.S.). Our labs identify, evaluate, and support the adoption of emerging technologies to enhance, improve, and reimagine the way clients can be served. The most promising ideas are developed and brought to market maturity via divisional technology teams or delivery platforms, such as the Digital Factory in Frankfurt am Main.

Partnership

Collaboration with start-ups is an integral part of the development process of many of our new and innovative online and mobile banking features. We have also been selectively investing in start-ups, for example Modo (digital payments), Quantiguous Solutions (open banking), dwins (the creators of Finanzguru), TrustBills (receivables auction platform), and Zeitgold (accounting for small businesses). In 2019, we also acquired a 5 % stake in the fintech Deposit Solutions.

Open innovation

Banks have traditionally created products and services mainly without involving external parties to achieve a competitive edge and protect their intellectual property. While this remains true in some areas, the need to become more open is now essential, as clients demand industry standards. We are one of the first banks to support SWIFT's Global Payment Innovation, an industry-wide initiative that connects parties in the payment chain via a cloud solution, allowing clients to obtain real-time information on the status of their payments. Since 2017, we have contributed to the open source movement in financial services by releasing parts of our computer code into the public domain. In doing so, we help client applications to work together and better understand IT environments. In 2019, we introduced an Open Source Software Governance Program, which implements a formal process for the usage and contribution of open source software, enabling the bank to maximize innovation opportunities while mitigating risk through robust controls. We are also partnering with the Fintech Open Source Foundation (FINOS) to drive industry collaboration around common challenges and thus reduce the cost of non-differentiating capabilities.

In November 2019, we announced the integration of the Chinese instant messaging provider WeChat into the collaboration platform Symphony, backing a partnership between Symphony and Tencent to connect Symphony's community of 450,000 global market professionals with the WeChat network. It allows the bank to communicate with clients on WeChat in real-time while maintaining adherence to compliance and governance policies. Deutsche Bank was a founding investor in Symphony in 2014, and in July 2019 increased its investment as Symphony expands beyond messaging to become the industry standard for collaboration. In 2020, the bank will make an open source contribution of new software libraries to enable developers to quickly construct new bots and applications using the popular Spring Boot framework. This will save many hours of developmental effort, enabling greater focus on value-adding functionality.

We are involved in a number of projects to explore the potential of block chain technology and build out the required market infrastructure. In September 2019, we joined the Interbank Information Network (IIN), a peer-to-peer platform based on block chain technology. This network operated by JPMorgan, allows member banks to exchange information on cross-border payments in real time to minimize friction in the ancillary payments process. More than 300 banks have joined the network, and more than 50 banks are already using the service.

New ways of working

To become technology-led, we are creating an environment that encourages our employees to actively participate in shaping the bank's digital transformation. We organize talks and discussions on the latest technology trends for our employees to hear from internal and external experts. And we host global hackathons, the last of which was in October 2019 on the topic of "Banking on Sustainability" and attracted over 1,100 employees from more than 20 locations worldwide.

Our industry-leading Fabric platform enables our developers to focus on developing business software instead of dealing with the infrastructure needed to run their applications. It essentially provides an easy way for developers to source computing power and storage on demand from our cloud infrastructure. This allows our developers to deploy apps in minutes rather than the months it took in the past. In 2019, Fabric won a Red Hat Innovation Award in Boston, one of the most respected awards in the technology industry.

We are also making better use of our data. Experts at our data lab in Dublin are helping our business and infrastructure units to analyze their data, generate new business, protect assets, offer better services and products, and streamline operations. For example, this data lab helped our Anti-Financial Crime department to develop a system to recognize and analyze trends, patterns, and exceptions in the search for criminal behavior.

As part of the effort to optimize the efficiency of our IT estate and accelerate our pace of change, the bank is increasingly focusing on improving its architecture. This means reducing customization and duplication, while increasing adoption of bank-wide standards and solutions. In 2019, this resulted in the decommissioning of more than 300 legacy applications, with work underway to identify more in 2020. Additionally, all applicable change programs were assessed prior to investment to ensure they moved the bank towards a strategic, more agile, and lower cost IT estate – avoiding reactive deployments, which address immediate issues but would add complexity that requires costly remediation in the long term.

Further developments in 2019

Throughout 2019, we made significant progress in digitalization across all the bank's business divisions and infrastructure functions.

As part of its migration to the public cloud, Deutsche Bank became one of the first companies (and the only financial services firm) to move into the new Microsoft Azure cloud data center in Frankfurt am Main. This significant development will enable the bank to transfer certain applications to Azure while complying with local regulations, safeguarding data, and improving efficiency. This will also give us the opportunity to benefit from a range of advanced tools offered by Microsoft, such as AI and machine learning models.

For our investment banking clients we launched a new mobile app for foreign exchange (FX) trading known as Autobahn FX. This app gives institutional clients round-the-clock access to trade on currency pairs, wherever they may be. As the latest addition to the bank's Autobahn trading platform, which is used by around 7,000 institutional clients worldwide, this app allows clients to make trades on around 200 pairs of currencies, 24 hours a day, six days a week. We have also gone live with Cobalt, the FX infrastructure based on shared ledger and high-performance technology and developed to re-engineer post-trade FX infrastructure and processes.

In our Corporate Bank (CB), we have made significant progress in digitizing our solutions for our clients to enable them to conduct their current and future business in a streamlined and efficient manner. With the launch of our digital signature offering as well as the development of our e-Vault solution (a secure digital repository for the exchange of documents), we support our clients on their journey to become paperless. Furthermore, in order to allow our clients to make better treasury and investment decisions, we have built out a Push Notification service that delivers real-time streams of cash account updates and running balances. As part of our overall automation program, we also continue to develop our Intelligent Document Recognition (IDR) and Optical Character Recognition (OCR) technology to keep improving the speed and quality of our documents handling.

In 2019, Deutsche Bank also announced the integration of CloudMargin into its collateral management platform and thus became the first Tier 1 bank to use a public cloud-based service for a critical piece of infrastructure.

With Postbank FYRST, we have introduced a new digital bank offering for corporate clients who are looking for a bank account with all the functions of a normal account, which can be accessed by smartphone, tablet or a desktop computer, and is also favorably priced and tailored to their needs. In the first three months of operation, FYRST received two awards from the German business paper *Handelsblatt*.

Private Bank (PB) is moving to paper-less client communications to the extent local legal requirements permit and clients agree/or do not disagree. Around six million core clients regularly receive client information on paper; around four million of them are registered online banking users. As of 2019, half of them have activated their eSafe, but our aim is that all clients migrate to this solution for online banking along with the Deutsche Bank Mobile app (including Digital Postbox Personal Safe and Password Safe). To emphasize our ambition to contribute to the conservation of natural resources, we plant a tree for each recently activated digital mailbox for private clients in co-operation with the German nonprofit association Trinkwasserwald e.V.

On the technical side, the new dbAPI (Application Programming Interface), which is currently being expanded, provides external technology and business partners with an efficient interface that exceeds the PSD2 regulation standards. With the help of this platform, the advantages of a clear and readily available range of services are combined with the necessary efficiency targets to enable both the integration of beyond-banking services and networking with selected external partners. The products, which have initially been offered purely digitally, can be activated across Germany for existing and new clients in branches and our Regional Advisory Centers. The dbAPI was further developed in key areas and additional cooperation agreements were concluded in order to offer clients more digital value-added services. In the early part of 2020, dbAPI will release an open source code based around a tutorial and simulation to facilitate the onboarding of new third parties.

In stationary sales, we are pushing ahead with the automation of work processes in branches. Manual tasks, control activities, and processing steps are being significantly reduced throughout the process chain. The focus here is on forward-looking concepts, for example designing the digital workplace in branches, optimizing service provision with client contact and standardized service processes, reducing control and support tasks for sales, and achieving a more efficient design of interfaces between sales units and service areas through end-to-end processes.

GRI supplement

In the following section of this Non-Financial Report, we address the issues that our stakeholders and we consider important - even without regulatory provisions (see “Legal basis“). These topics form part of our broader strategic agenda on sustainability and corporate social responsibility.

Approach to sustainability

GRI G4 DMA/102-27

Our purpose is to enable economic growth and societal progress by generating a positive impact for our clients, employees, investors, and communities. This purpose serves as a guideline for all our actions. Together with our commitment to sustainability, this guideline is anchored in our Code of Conduct (the Code).

In 2019, the Code was amended, among further things, to include an articulation of our group-wide sustainability principles:

- We commit to balancing economic success with environmental and social responsibility;
- We address the environmental and social impacts across our business activities;
- We foster business that enables sustainable growth;
- We follow internationally recognized principles and standards;
- We build our sustainability approach on robust governance;
- We encourage transparent communication and open dialog with stakeholders.

The Code sets out the standards of behavior and conduct to which we expect us as a bank and all of our people to adhere to. Its principles are reflected in our management structures, policies, processes, and control systems.

In July 2019, Deutsche Bank announced its strategic plans to transform and restructure its businesses. In this context, sustainability was defined as one of the four priorities next to our financial plan (see “About Deutsche Bank“). This development reflects the increasing importance of sustainability in the public dialog and in discussions with politicians.

In line with our sustainability principles, we are continuously working to strengthen our sustainability efforts in both our own operations (including our corporate social responsibility activities) and our core business. As our key impact results from our core business, we continue to strengthen our responsible banking practices and foster sustainable finance by becoming a strategic partner of choice for our clients to support their transition and the overall transformation towards sustainable growth.

Governance

GRI 102-15/16/18/20/26

Deutsche Bank's governance structure ensures that the diverse aspects of sustainability are discussed and taken into account in decisions by the appropriate functions and committees. Established in 2018, our group-wide Sustainability Council is responsible for advising the Management Board on sustainability topics and helping to drive the integration of sustainability into day-to-day business practice. The Council is composed of executives from across our business divisions and infrastructure functions. Underpinning the relevance of sustainability, our Chief Executive Officer (CEO) assumed the role of the Council's chairman in 2019. The Council met eleven times in 2019, predominately discussing sustainable business opportunities as well as measures necessary to position Deutsche Bank in this field and grow its sustainable finance-related products and services.

Group Sustainability (GS), is centrally responsible for developing the bank's strategic approach to sustainability, proposing group-wide policies and guidelines, assessing upcoming topics, and engaging with stakeholders with a focus on civil society, investors, and clients in close cooperation with our business divisions and Investor Relations. Furthermore, GS assumes responsibility for advising on client transactions from a sustainability perspective and disclosing non-financial information in close collaboration with the bank's finance function. Additional sustainability-related governance structures, policies, and processes have been established in our business divisions to meet their specific requirements.

Deutsche Bank's Management Board, the Group Management Committee, and other senior management bodies such as the Group Reputational Risk Committee and the Enterprise Risk Management as well as the Supervisory Board's Integrity Committee are regularly informed about current sustainability topics and developments.

Our sustainability approach considers global agreements, such as the United Nations (UN) Sustainable Development Goals (SDGs) and the Paris Agreement on climate change. We voluntarily participate in international principles, including the Ten Principles of the UN Global Compact and the UN Guiding Principles on Business and Human Rights. In 2019, Deutsche Bank added to these commitments by signing the UN Principles for Responsible Banking as a founding signatory. We reinforce our commitment to contribute to climate protection – for example by officially supporting the European Union (EU) action plan on sustainable finance. We are also committed to the protection of human rights, as can be seen from our published Human Rights Statement.

Engagement

GRI 102-12

We engage in pioneering initiatives. As a founding member of the Value Balancing Alliance, Deutsche Bank supports the development of a standard on how to measure and publish the contribution companies make to society. We also publish ESG-related research and regularly involve our employees through communication and engagement. We do this through regular internal communications on sustainable products, initiatives, finance solutions, and best practice approaches, as well as by offering our employees platforms for exchange and dedication.

In 2019, it was important for us to engage our employees as multipliers for our commitment to sustainability. At a panel discussion in February 2019, a climate researcher and a philosopher discussed the role of banks and in particular our role in tackling climate change with employees in Frankfurt am Main (Germany). On our #PositiveImpact hub a #MyGreenImpact campaign enabled employees worldwide to share their best practices, advice, and tips for reducing our individual and corporate carbon footprints. In a global "Banking on sustainability" hackathon, more than 1,100 employees worked to create digital solutions to help Deutsche Bank contribute to a sustainable future. Other employee-driven initiatives included a #lessplastic campaign, the Save Birkie project to reduce our paper consumption, and roughly 70 individual tree planting campaigns.

Impact measurement and SDGs

GRI 102-12

Deutsche Bank's business activities make a positive as well as a potentially negative economic, environmental and societal impact. In the year under review, we reiterated our efforts to align with global agreements, such as the SDGs, and continued to explore impact identification and measurement.

UNEP FI Positive Impact Initiative

In collaborations with peers, we are contributing to the SDG impact discussion within the financial community. We are a member of the working group set up by the UNEP FI Positive Impact Initiative to focus on mainstreaming impact analysis in the financing of SDGs. The working group made up of representatives from banks, investors, and advisors is developing and testing the methodology for impact analysis in corporate finance with unspecified use of proceeds. The working group aims to produce a tool intended as a resource for banks and investors seeking to develop, or redevelop, their own proprietary methodologies for impact identification, and to identify potential areas of impact target setting.

Value Balancing Alliance

In August 2019, Deutsche Bank became one of the founding members of the Value Balancing Alliance (VBA). Together with seven other corporations and the support of the four global accounting firms, we have committed ourselves to working collaboratively on the development of a standardized Impact Measurement and Valuation (IMV) model. It is intended to increase transparency about the value companies generate for society. The external effects are to be measured and reported as costs or social value contributions. Experts from the bank are in regular contact with VBA and contribute their experience to the development of the model. This should also ensure that the results of the VBA are applicable in practice. Additionally, Deutsche Bank is conducting an internal pilot project to identify its main areas of impact and to test approaches to evaluate them.

Sustainable Development Goals

Through our business activities in various industries, we contribute to the achievement of the SDGs. All our social responsibility initiatives directly contribute to certain SDGs (see "Corporate social responsibility"). Our Asset Management includes some SDGs in ESG and sustainable investment funds. In other areas, we have not yet systematically mapped out the bank's contribution to SDGs.

Deutsche Bank's contributions are detailed in this report, with some examples outlined below:

- SDG 7 (Affordable and clean energy) and SDG 13 (Climate action): Financing renewable energy and issuing green bonds (see "Sustainable finance");
- SDG 9 (Industry, innovation and infrastructure): Investing in vital infrastructure addresses (see "Sustainable finance");
- SDG 12 (Responsible consumption and production), SDG 11 (Sustainable cities and communities), SDG 13 (Climate action): Operating investment initiatives ranging from financial inclusion and microfinance to sustainable agriculture, renewable energy, and clean urban transportation (see "Sustainable finance");
- SDG 4 (Quality education) and SDG 5 (Gender equality): The CSR programs *Born to Be* and Made *for Good* help to ensure inclusive, equitable education and to empower women and girls (see "Corporate social responsibility"); and
- SDG 13 (Climate action): Purchasing and retiring high-quality emission reduction certificates to offset unavoidable carbon emissions covering GHG Scopes 1 and 2 as well as business travel (see "In-house ecology").

Reputational risk

GRI 103-1

The diversity of our business model requires us to identify, assess, measure, aggregate, and manage our risks, and to allocate our capital among our businesses accordingly. Risk and capital are managed via a framework of principles, organizational structures, and measurement and monitoring processes that are closely aligned with the activities of the business divisions and business units. Asset Management (AM) specific matters are reviewed by an AM-dedicated reputational risk committee and escalated to the AM Executive Board where required.

The Reputational Risk Framework (RepRisk Framework), which contains the specific global policies and guidelines, defines the appropriate level for potential reputational risk issues based on the materiality of the risk identified. Primary reputational risk is risk originating from active decisions regarding a relationship, transaction, action, or inaction, knowing it may pose reputational risk. All employees are responsible for the identification of potential reputational risk matters and initial referral through the Unit Reputational Risk Assessment Process (Unit RRAP). Matters deemed to pose moderate reputational risk are reviewed through the relevant Unit RRAP. In the event of a matter being deemed to carry a material reputational risk and/or meeting one of the mandatory referral criteria, it is referred for further review to one of the four Regional Reputational Risk Committees (RRRCs), which are sub-committees of the Group Reputational Risk Committee (GRRC). The GRRC receives quarterly updates and reviews specific reputational-risk-related issues. If issues cannot be resolved at the GRRC level, they will be referred to the Group Risk Committee or the Management Board. A dedicated Reputational Risk Function oversees and manages the RepRisk Framework, the reporting, and look-back process, as well as provides training.

Deutsche Bank has deemed that certain issues and matters have to be reviewed by subject matter experts. These matters are discussed in more detail in the following two chapters.

Matters assessed through the Reputational Risk Framework

	Dec 31, 2019	Dec 31, 2018
Number of matters reviewed (on which final decisions have been made)		
To Unit Reputational Risk Assessment Processes only	81	119
Thereof with ES issues	2	2
Thereof with gaming-related issues	1	7
Thereof with defense-related issues	4	19
To Regional Reputational Risk Committees	35	48
Thereof with ES issues	3	1
Thereof with gaming-related issues	2	6
Thereof with defense-related issues	4	8
To Group Reputational Risk Committee or above	6	9
Thereof with ES issues	1	0
Thereof with gaming-related issues	0	0
Thereof with defense-related issues	0	3
Total	**122**	176
Thereof with environmental and social issues	6	3
Thereof with gaming-related issues	3	13
Thereof with defense-related issues	8	30

Environmental and social due diligence

GRI 102-11/12/15/16/18/20/26/29/31, 103-2/3, 412-2, G4 DMA

Our Environmental and Social (ES) Policy Framework formulates the set of rules and guidance for our daily business. A summary is publicly available. Internally, the ES Policy Framework is an integral part of the Reputational Risk Framework.

As it is applicable globally for our Corporate Bank (CB) and Investment Bank (IB), as well as commercial lending activities in our Private Bank, the ES Policy Framework defines procedures and responsibilities for risk identification, assessment, and decision-making. It also covers deal-independent risk-screening and the identification of companies with a controversial ES profile, and specifies the requirements for ES due diligence. Our due diligence process regarding project finance is based on the IFC Performance Standards underlying the due diligence under the Equator Principles.

Furthermore, our approach refers to global frameworks, such as:

- UN Guiding Principles on Business and Human Rights;
- International Finance Corporation (IFC) Performance Standards;
- International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work;
- International Labor Organization (ILO) Core Labor Standards.

In line with the requirements of the ES Policy Framework, employees in our business divisions are initially responsible for identifying ES risks. We have defined sensitive sectors to focus on, as well as criteria for mandatory referral to Group Sustainability (GS), our sustainability team. Detailed sector-related guidelines are available for all sectors requiring mandatory involvement of GS. For all transactions where ES issues are deemed to pose at least a moderate reputational risk, the reputational risk assessment process also applies (see “Reputational risk”).

Sector-related guidelines

We have defined the following sectors based on their inherent elevated potential for negative ES impacts. There were no changes in our sector focus between 2018 and 2019:

- Metals and mining;
- Oil and gas;
- Energy utilities;
- Industrial agriculture and forestry;
- Chemicals;
- Infrastructure projects in certain countries; and
- Other activities either with a high carbon intensity and/or potential for human rights’ infringements.

We regularly review and update the scope of sectors. In 2019, we worked on an updated Oil and Gas guideline, which is currently going through the internal approval process.

We also review existing sector-related standards and industry best practices to assist in our decision-making on environmental and social topics. Our internal assessment is informed by internationally recognized standards. We also monitor global developments, such as climate change or human rights protection.

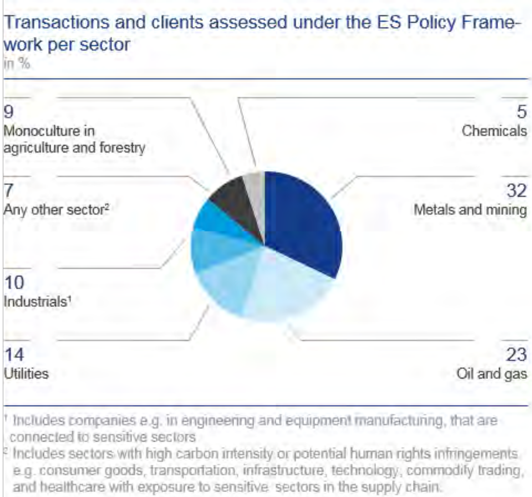
Targets and key measures

We always strive to manage all types of risk as effectively and efficiently as possible. To this end, we prioritize the adequate identification of transactions and/or clients involving potential ES risks, and the robust and effective due diligence of these. In this context, our overarching goal is to constantly improve our performance, in particular by:

- Verifying the effectiveness of our processes and guidelines and carrying out amendments, if required, to increase review robustness in sectors with elevated ES risk potential in line with our internal definition; and
- Increasing risk awareness and focus by conducting training sessions for all relevant employees.

Transactional reviews

In 2019, 310 transactions and clients were reviewed under our ES Policy Framework, approximately 22 % fewer than in 2018. Despite fewer reviews, our overall review ratio remains roughly the same at 16 % in 2019 (2018: 17 %), mainly because of fewer deals in the focus sectors. In order to concentrate our attention and focus on transactions with elevated ES risk potential, we further specified the referral criteria for deals requiring ES due diligence by GS. For example, we expanded our review scope to include offshore windfarms. Of the 310 assessed transactions and clients in 2019, six were declined directly. Seven more were discussed in the respective committees in line with our reputational risk process. Of these, one was ultimately declined and six were approved.



We are continuing to work on developing a more systematic approach to assessing clients' ES profiles to increase the efficiency of ES due diligence and allow early-stage client engagement. In 2019, for instance, we created a guideline to help our teams to identify and evaluate negative client news on environmental and social issues. Also, we updated instructions for business teams on how to search for relevant soft commodity certifications of our clients.

Furthermore, we particularly focused on client engagement sessions in the mining and utilities sectors. As a member of the Banking Environment Initiative and an adopting institution of the Soft Commodities Compact, we published a report outlining our approach and progress in helping our soft commodity clients to achieve zero net deforestation. As a result of this portfolio review, we launched an engagement process in 2019 for our critical soft commodity clients, which we will continue and complete in 2020.

Training and awareness

Employee training enables our businesses to better identify ES risks and consequently assess and refer transactions with an enhanced risk profile to Group Sustainability. In 2019, we continued our employee training program for our CB and IB with a particular focus on selected business teams in our Brazil office They received dedicated training covering topics, such as climate protection, human rights (incl. the UK Modern Slavery Act), and protection of World Heritage Sites and primary forests. We have continued to enhance the timeliness of transactional referrals by using reminders within our internal deal logging system.

Defense industry

Deutsche Bank has established a dedicated due diligence framework for clients and transactions linked to the defense industry. This framework covers the manufacturing and sales of weapons and military technology, and includes hardware, related software, their major components, and services for military, security, and police purposes. These matters are reviewed by a dedicated control function and referred to the bank's Reputational Risk Framework, where appropriate.

Our aim is to continuously review the type of business carried out in this sector to help ensure we conduct business responsibly and protect the bank from reputational risk. One outcome of the continuous review of the approach in 2019 was the formalization of a restrictive approach for transactions with a nexus to conflict countries and primary military protagonist countries (as defined by the 1949 Geneva Convention), unless the parties are acting under an internationally recognized mandate. Furthermore, the dedicated control function monitors emerging issues in the defense space, such as arms export regulations and new technologies (e.g. lethal autonomous weapon systems).

In 2019, the dedicated control function reviewed, from a reputational risk perspective, 1,356 matters linked to the defense industry. This was a 29 % decline from 1,902 transactions in 2018, a reduction primarily driven by clarifications in the defense policy. For example, we exclude certain transactions where the end user is using the underlying goods for civil purposes only.

Gaming industry

The gaming industry involves specific legal, social, and reputational risks that warrant specific guidance with respect to Deutsche Bank's involvement. Gaming is illegal in certain jurisdictions, with the consequence that even the processing of payment transactions (e.g. depositing bets and disbursing winnings) may be viewed as a prohibited activity. Even in jurisdictions where gaming, or some form(s) thereof, may be legal, Deutsche Bank does not want to be connected to counterparts in this industry who show signs of proximity to problematic areas (e.g. prostitution) or are likely to serve as a basis for illegal activities (e.g. money laundering and fraud). These matters are reviewed by a dedicated control function and referred to the Reputational Risk Framework, where appropriate.

In 2019, this dedicated control function reviewed, from a reputational risk perspective, 144 matters linked to the gaming industry. This is a 1 % increase on 2018.

Emerging risks and recently identified topics

GRI 102-44

In 2019, Deutsche Bank initiated a more formal monitoring of high-level topics receiving attention from non-governmental organizations (NGO) in order to obtain a broader view of current and emerging reputational risks. This aims to improve the identification of topics that would require further enhanced due diligence to prevent or minimize reputational risk.

Throughout 2019, a dedicated control function reviewed several sensitive topics. One common theme identified was that several of these topics were related to the topic of health. All three of the issues discussed below – opioids, cannabis, and electronic cigarettes – have an impact on the well-being and health of clients and end users. Further analysis revealed that marketing practices, limited regulation, and other unethical business practices were common concerns.

Opioids

The U.S. opioid crisis in 2019 has already led to over 2,000 lawsuits against opioid manufacturers and distributors. Current settlements have resulted in the bankruptcy of one major manufacturer. Other companies are now being directly affected by litigation and the costs of settlements, as they are alleged to have contributed to the opioid crisis through marketing strategies and encouraging increased prescription of opioids. Deutsche Bank applies enhanced due diligence regarding potential business activities with connections to this topic.

Cannabis

The legalization of recreational cannabis in Canada and the continued legalization of medical cannabis in other countries have triggered discussions within the financial industry. A key aspect is the differentiation between medical and recreational usage. Most concerns in the public debate center on the legalization of recreational cannabis, which involves greater reputational risks. Deutsche Bank will act cautiously with regard to business activities relating to cannabis, and enhanced due diligence is performed on any business with entities involved in the production or distribution of recreational cannabis.

Electronic cigarettes

Once heavily marketed as an alternative to traditional smoking products, e-cigarettes have been subject to criticism during the past twelve months. This ranges from accusations of causing increased numbers of under-age smokers through marketing practices to investigations by the U.S. regulatory authority over health concerns about lung diseases identified in frequent users of e-cigarettes. A specific example of this criticism is the production, distribution, and sale of fruit or sweet-flavored e-cigarettes.

The U.S. regulatory authority, the Food and Drug Administration, has now officially warned manufacturers of e-cigarettes for violating marketing laws and issued warnings about potential lung diseases related to these products. These health concerns have led some U.S. states, India, and Thailand to introduce restrictions or bans on e-cigarettes. Consequently, Deutsche Bank has placed additional governance requirements on certain transactions and relationships linked to e-cigarettes.

Human rights

GRI 102-16, 103-1/2/3

“Human dignity is inviolable” – this principle is the foundation for respectful cooperation. That is why respect for human rights is a guiding principle embedded in Deutsche Bank’s Code of Conduct.

We endorse international standards and guidelines such as the UN Guiding Principles on Business and Human Rights, the International Bill of Rights, and the Core Labor Standards of the International Labor Organization (ILO).

Our Human Rights Statement reinforces this commitment and outlines the approach we take to address this important issue. We also publish Deutsche Bank’s U.K. Modern Slavery Statement. Our approach covers all dimensions of the business from client transactions and interaction with vendors and service providers to how we treat our own employees. Our principle is not to engage in any activities or business relationships where there is clear evidence of human rights’ violations.

We actively participate in the Thun group, discussing current banking and human rights focus areas. Special attention is paid to key legal and regulatory issues as well as evolving developments.

Developments in 2019

GRI 102-15/16, 103-1/2/3, 412-2, FS5

In recent years, Deutsche Bank has taken a proactive approach to safeguarding respect for human rights, as demonstrated by the integration of human rights due diligence into the bank’s own operations, business activities with clients, and relationships with vendors and suppliers. We focus on identifying the most salient risks for rights holders and developing targeted action plans. To implement this, Deutsche Bank established a Human Rights Working Group (HRWG) at the end of 2018, which became fully operative in 2019.

On a monthly basis, the HRWG brings together decision-makers from different business and infrastructure units from across the bank. One of HRWG’s key objectives is to improve our procedures, guidelines, and communication on human rights topics. HRWG also gives due consideration to the definitions of “cause”, “contribute”, and “directly linked” linked’ in the UN Guiding Principles on Business and Human Rights in order to understand the potential and actual impacts the bank has on rights holders.

In 2019, a scoping and analysis exercise helped to define areas of strength and areas where Deutsche Bank could improve its human rights performance. The discussions within HRWG led to agreed objectives for the working group members, which were summarized in a human rights action plan. These actions target the most salient human rights impacts on and risks for rights holders that Deutsche Bank faces and allocate business unit responsibility and deadlines for implementation. An overview of the agreed action items is provided in the following sections.

Clients

There were 18 client-related actions, with responsibility allocated to the Corporate Bank (CB) and Investment Bank (IB), Asset Management (AM), Anti-Financial Crime, Financial Crime Operations (FCO), and Group Sustainability (GS). These actions ranged from deepening the scope of respective human rights due diligence processes with clients and embedding explicit rules on human rights in the investment process to broadening the target audience for our human rights training.

In 2019, we reviewed 310 clients and transactions in line with our Environmental and Social (ES) Policy Framework. Those reviews resulted in seven refusals. None of them were refused specifically due to severe human rights issues. But in various cases specific actions were agreed on to avoid or mitigate negative impacts on rights holders.

Furthermore, in the course of our FCO unit’s ongoing work with the Joint Money Laundering Intelligence Taskforce (JMLIT), 23 requests were received for information on funding flows that were potentially linked to potential human rights’ violations in 2019. The FCO unit reviewed all of them and responded to the law enforcement agencies in each and every case.

Supply chain

GRI 102-9, 103-2/3, 414-2

Six priority actions relating to our supply chain were defined in the above-mentioned action plan. They include the development of a stand-alone Vendor Code of Conduct and the enhancement of the vendor risk management and screening process. Procurement and Group Sustainability are responsible for implementing these measures.

In 2019, Deutsche Bank implemented a new vendor screening process that now includes more specific human rights controls for our new vendors or a review of our existing vendors. This process manages ES risks relating to the vendors Deutsche Bank works with globally. The focus is on vendors that provide services often associated with human rights risks and provided in countries with an elevated risk of human rights violations. If a vendor meets certain criteria for more detailed ES analysis, the vendor will have to fulfill specific environmental and social vendor control requirements (VCRs). The vendor will then have to explain their approach to the different VCRs and provide adequate evidence for their responses. If the vendor does not or cannot provide sufficient information or evidence, we discuss internally how to deal with this incompliance with our ES standards and whether measures can be agreed with the vendor to achieve compliance within a reasonable time. If that is not possible, it can ultimately lead to a termination of the business relationship with the vendor in question.

In initiating the new vendor screening process, we wanted to ensure that existing vendors who trigger a more detailed ES analysis also meet our ES standards. In reviewing the ES performance of existing vendors, which is expected to be finalized by mid-2020, we will be supported by an external service provider. Due to the implementation of the new vendor screening process, we have rescheduled our human rights training for Procurement colleagues, initially scheduled for 2019, to be rolled out at the beginning of 2020.

Employees

GRI 412-2

The four priority actions relating to our employees were allocated to Human Resources and GS. One of these priority actions has been to develop a training course for employees. The aim here is create awareness for the importance of respecting human rights in all the bank’s business activities. The other topics covered are the individual responsibilities of employees and the policies, procedures, and measures the bank has already implemented and will continue to do so going forward.

Although we have to incorporate location-based cultural nuances into employee policies, we place a high priority on granting all our employees the same rights worldwide. Here, a more detailed analysis will help us to determine areas of improvement.

Climate risk

GRI 102-15

Climate change is one of the most important issues facing society today, and Deutsche Bank welcomes the fact that it has moved to the top of the social, regulatory, and political agenda.

As a key component of the group's wider response to climate change (see Sustainable finance), Deutsche Bank has started to develop a holistic risk management framework for climate risks. We have set up an internal working group to combine existing risk management practices – parts of which already consider climate-related risks – with innovative approaches to ensure that we understand, and are well protected against, potential negative impacts, including:

- Increased default risk and/or valuation losses on exposures to clients and assets that may be impacted by climate-related physical and/or transition risks, such as climate-related developments in policy and regulations, the emergence of disruptive technology or business models, shifting market sentiment, and societal preferences;
- Reputational risks from a failure to adapt to climate risks that may also drive litigation claims from parties who are seeking compensation after suffering loss or damage; and
- Business disruption risks to our offices, employees, and processes in locations that may be affected by physical climate-related risks, such as extreme weather events and/or disruptive longer-term shifts in climate.

At the same time, multiple stakeholders, including clients, investors, employees, and society at large, expect us to provide transparent disclosure of our exposures to, and management of, climate risks.

The development of this risk management framework for climate risks can also support the identification of opportunities to grow our sustainable finance business (see Sustainable finance).

The year 2019 saw intensified regulatory activities relating to climate change. Deutsche Bank contributed to climate-related legislative initiatives and participated in industry-wide consultations at EU and national levels including via direct engagement and via contributions to consultation responses/policy papers by banking associations. The beneficiaries included the European Commission (EC) in certain components of the EU action plan on sustainable finance.

With the publication of the Prudential Regulation Authority's (PRA) Supervisory Statement (SS3/19) and the Comprehensive Bulletin on Sustainability by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzaufsicht*, BaFin), the recommendations by the Task Force on Climate-related Financial Disclosure (TCFD) have become further embedded as key elements of future regulatory expectations regarding the disclosure of climate-related risks.

TCFD recommendations

GRI 102-12

The G20 Financial Stability Board mandated the TCFD in December 2015 to propose a reporting framework for companies (including financial institutions) to provide investors, clients, and other stakeholders with consistent, comparable, and useful information on climate-related risks and opportunities. In June 2017, the TCFD published its recommendations for voluntary climate-related financial disclosures that should comprise relevant information on the following:

- Governance relating to climate-related risks and opportunities;
- Actual and potential impacts on the companies' business, strategy, and financial planning;
- Risk management processes to identify, assess, and manage climate-related risks; and
- Metrics and targets used to assess, and manage relevant climate-related risks and opportunities.

The TCFD expects that companies will develop their approaches over time and that climate-related disclosures will evolve correspondingly. Deutsche Bank is working towards implementation of TCFD recommendations through internal efforts, as well as external industry initiatives. In 2020, our internal working group will focus on (i) implementation of an internal climate risk taxonomy, (ii) refinement of scenario analysis – including expansion of sector coverage, (iii) approaches to define climate risk appetite and better integrate climate risks into decision-making, and (iv) review of roles and responsibilities within our organization.

UNEP FI working group

GRI 102-12

In 2019, Deutsche Bank joined the second phase of the UNEP FI pilot project – a collaborative effort by 36 international banks, supported by the UNEP Secretariat and external consultants – to further develop risk management practices and ultimately move towards implementation of TCDF recommendations. This phase is scheduled to run until mid-2020, with the group of banks focusing on the following aspects:

- Scenario analysis: Developing a deeper understanding of how risk factor pathways can be derived from reference scenarios and how these can be used to assess portfolio risks;
- Data and methodology: Reviewing and understanding the availability and application of climate-relevant data; the group of banks will agree on a set of best practices regarding sectoral and geographic assessments; and
- Reporting and governance: Building a common understanding of regulatory expectations, developing a reporting template, and agreeing industry best practices regarding climate risk governance.

Deutsche Bank's participation in this initiative is accompanying the internal working group to further develop risk management practices and fully align disclosures.

Governance

GRI 102-20/26, 103-2/3, G4 DMA

As highlighted in the chapter "Sustainable finance", Deutsche Bank's group-wide Sustainability Council, chaired by the CEO, is responsible for advising the Management Board on sustainability topics, including climate change, and helping to drive the integration of sustainability into day-to-day business practice. The group's risk management function is represented on the Council.

The Group Risk Committee, co-chaired by the Chief Risk Officer (CRO) and Chief Financial Officer (CFO) has delegated formal responsibility for the management of climate risks to our Enterprise Risk Committee (ERC). This includes: (i) oversight of risk management framework developments; and (ii) approval of specific sectoral risk appetite limits and other restrictions to manage risks to the bank.

While the ERC is responsible for the holistic management of climate risks, the day-to-day management and approval of climate-related reputational risks, and physical risks to our staff, infrastructure, and processes will continue to be managed via other committees:

- Transactions with a potential reputational risk from a climate-risk perspective are identified via the Group Reputational Risk Framework and based on the risk assessment referred to one of four Regional Reputational Risk Committees, which are sub-committees of the Group Reputational Risk Committee and report to the Group Risk Committee; and
- Risks to Deutsche Bank's infrastructure, employees, and key processes in locations that may be affected by physical climate-related risks are monitored and approved by the Non-Financial Risk Committee, a sub-committee of the Management Board.

Risk management strategy and processes

GRI 102-15/29/31, 201-2, 305-5, G4 DMA

The bank's overall strategy towards developing a holistic sustainable finance product suite, including those addressing climate change, are detailed in the chapter "Sustainable finance". In this section, we describe how we now manage climate risks and summarize, going forward, the steps we are taking to improve our climate risk management, in alignment with the TCFD requirements.

Transition risks to carbon-intensive industries

Deutsche Bank's principal tool for managing sectoral exposures is our industry risk management framework. A key input into industry risk assessment, risk appetite setting, and frequency of review is our short and long-term internal industry risk ratings. Incorporated within the ratings is an assessment of an industry's vulnerability to climate risks.

Industry risk ratings are also included as an input into our internal rating model for the probability of default (PD) of counterparties with higher industry risks translating to lower counterparty PD ratings and risk appetite.

The bank's loan exposure to the oil and gas, utilities (electricity and natural gas), as well as steel, metals, and mining industries, is relatively low as a proportion of our total exposure. The relative shares of each industry have fallen compared to year-end 2016 as we reduced our risk appetite thresholds, partly due to elevated climate-related transition risks. As of year-end 2019:

- Loan exposure to the oil and gas industry: € 8.4 billion or the equivalent of 2 % of Deutsche Bank's overall loan volume, plus revocable and irrevocable lending commitments of € 6.9 billion. The majority of the exposure to the oil and gas industry is to investment-grade-rated diversified majors and national oil and gas companies;
- Loan exposure to the utilities (electric power and gas) sector: A moderate € 4.2 billion or 1 % of Deutsche Bank's overall loan volume, plus revocable and irrevocable lending commitments of € 7.9 billion. The majority of the utilities' portfolio is with large incumbents in the EU and the U.S. that benefit from diversification across the value chain (including transmission and distribution businesses) and/or a balanced energy mix; and
- Loan exposure to the steel, metals and mining sector: A moderate € 4.0 billion or 1 % of Deutsche Bank's overall loan volume, plus revocable and irrevocable lending commitments of € 4.4 billion. Exposure to coal-mining groups[8] is negligible since the bank has tightly managed and reduced its exposures in recent years. These loan exposures have fallen by 31 % since year-end 2016.

Scenario analysis

Scenario analysis is a key tool to assess the potential impacts of policy and behavioral changes required to support the transition to a low-carbon economy. Companies undertaking scenario analysis today face challenges in translating the long-term macroeconomic, demographic, and demand projections underpinning climate scenarios to industry and client-specific financial impacts. The UNEP FI initiative mentioned above has work streams dedicated to translating these impacts, which going forward will be a core component of our scenario analysis development.

In 2019, Deutsche Bank piloted transition scenario analysis for the bank's loan portfolios to the most carbon-intensive industries: oil and gas, utilities (electric power and natural gas), as well as steel, metals, and mining, with the following approach taken:

- Scenario selection: We used the International Energy Agency "Sustainable development" scenario as a basis for the analysis. The scenario is consistent with the Paris Agreement's objective of holding the increase in global average temperatures to well below 2°C above pre-industrial levels and contains energy demand projections across key sources in line with that objective;
- Portfolio impact assessment: We applied downward PD rating migrations to portfolios with the number of downgrades dependent on (i) clients' sensitivity to transition risk based on their current business models, such as energy mix; (ii) estimates of clients' financial capacity to absorb the required investment to transition to a low-carbon economy (based on internal PD rating and market capitalization); and (iii) assessment of environmental performance, exposure to transition risks and transparency by external experts' surveys (where available);
- An increase in loss given default (LGD) ratios was also assumed across all clients; and
- The results were translated into estimates of how expected loss (EL) would develop over the medium-to-long term for the selected portfolios.

[8] Client groups with the majority of sales from coal mining.

While we do see meaningful downward rating migrations for our carbon-intensive portfolios under the “Sustainable development” scenario (before any mitigating actions), the overall impact on the bank’s balance sheet quality would remain contained, supported by our focus on well-rated and diversified clients.

Risks from commodity price volatility

Innovation and changes in the regulatory environment aimed at a meaningful reduction of carbon-dioxide emissions can also have a profound impact on commodity prices, especially for crude oil, and volatility in the medium to long term. To ensure that downside risks are manageable, Deutsche Bank regularly stresses its trading portfolios under a range of severe scenarios, whereby commodity price shocks are included in the macroeconomic stress scenarios. At year-end 2019, Deutsche Bank’s exposure to commodity price fluctuations via its trading books was modest in size and well contained.

Physical risks to our assets

Our Enterprise Risk Management (ERM) unit comprises an in-house intelligence team that measures and tracks country and selected city-specific risks, including natural hazard risks to our assets and operations. These risk assessments inform strategic location planning and scenario design for testing and exercising crisis management in order to ensure robust business continuity and crisis management plans. They also inform corporate security plans, notably health and safety, staff duty of care, and building resilience.

Physical risks to our clients and assets are considered in the assessment of credit and market risk exposures that may be heavily impacted by acute events, such as insurance companies who underwrite climate-related risks. Where specific transactions or counterparties are assessed as having substantial exposure to such risks, Credit Risk Management (CRM) and Market Risk Management (MRM) take this into account in risk decision-making.

ES-led climate risk restrictions

GRI G4 DMA

In addition to our sectoral risk appetite limits the following restrictions are applied under our Environmental and Social (ES) Policy Framework in order to reduce our support for fossil fuels:

- No financing for new coal-power facilities and a reduction in existing exposures to power companies heavily dependent on coal;
- No financing of new thermal coal mines. We have met our 2016 commitment to reduce our existing exposure to thermal coal mines by 20 % by 2020. Residual exposures are extremely small, and we will continue to review our portfolio in this area;
- ES due diligence required for climate-intensive sectors, such as oil and gas, metals, and mining, as well as utilities (see “Reputational risk”). This process includes a review and sign-off by the control function Group Sustainability; and
- In 2019, the industry concentration thresholds for the oil and gas, utilities and steel, metals, and mining sectors were lowered, with inherent long-term climate risks taken into account.

Future developments

We recognize the need to further develop our risk management understanding and approach to climate risk. Which is why Deutsche Bank’s Enterprise Risk Management function has been mandated by the Group Risk Committee to further develop our processes and frameworks in alignment with the TCFD requirements. This includes:

- Further development of our approach to transition risk scenario analysis and physical risk analysis, including extension of scenario analysis to a broader range of sectors;
- Deeper integration of sustainability factors into our client-level risk analysis, including PD ratings/assumptions on the loss given in default (LGD); and
- Development of climate-specific risk appetite limits/targets and controls;
- Development of our climate risk disclosures.

A number of challenges will need to be overcome in order for us to achieve this. These include the ability to accurately model climate change impacts and translate them to portfolio risk developments, improved climate risk disclosures at client level, and the establishment of a climate risk taxonomy. We are working with peers via UNEP FI and other engagements to remediate these challenges.

Access and inclusion

Accessibility

GRI FS14

In line with the requirements of the EU Accessibility Act, Deutsche Bank has implemented a variety of measures to ensure unhindered mobility, self-service, and online banking for anyone who involuntarily has no, or only limited, access to financial services.

Many of the bank’s branches offer disabled access. Details of the step-free access to self-service terminals as well as cash and advisory functions are published for each branch in the Deutsche Bank branch finder. Where possible, new branches are at ground level or in handicapped-accessible buildings. The arrangement of furniture ensures unhindered passage for wheelchair clients. Moreover, branches are designed in such a way that people of all heights and wheelchair clients can easily use them. The self-service devices are equipped with keyboard support for the visually impaired. Cash devices are equipped with an additional voice output via headphones to guide a client through the menu and device input functions. Non-cash devices offer direct dialing of individual services through special key combinations. Self-service device components, such as card input, print output, cash input, and cash output, feature Braille lettering.

To ensure online banking is accessible to visually impaired people, the readability of pages via a screen reader is now an explicit requirement in Postbank’s switchover to a new content management system, which is due to be completed by the end of 2020. Deutsche Bank supports the voice-over feature in the banking app on iOS. This feature is designed to increase accessibility for blind or low-vision users, as well as for dyslexic users.

Financial inclusion

GRI FS14

Deutsche Bank recognizes the transformative power of financial inclusion, in particular to underserved communities who often lack access to financial services. To broaden access to such segments of the society, low-cost, fair and safe financial products and services have been made available to the bank’s clientele through a variety of measures undertaken under its commitment to financial inclusion. These measures include:

Microfinancing

Our Corporate Bank (CB) and Investment Bank (IB) divisions are committed to facilitating access to long-term financing for microenterprises and SMEs. As such, they continue to provide support in establishing microfinance funds by raising private debt capital for microenterprises and SMEs. In 2019, a new fund launched with a focus on fostering agricultural development in Africa raised € 25 million as a contribution to the total of € 70 million capital raised in this area.

In our Asset Management (AM), the Sustainable Investment (SI) Funds include the Global Microfinance Funds III and Global Commercial Microfinance Consortium II, which provide senior and subordinated debt financing for microfinance institutions and banks in the developing world in order to increase their access to high-quality financial services. Each SI investment fund is tracked and reported on the basis of the investees’ social and/or environmental performance. The indicators are sector-specific and monitored using fund-specific tools. The Global Microfinance Funds III, for example is marketed to MiFID II professional investors by the Institutional Wealth Partners (IWP) team in the bank’s Wealth Management (WM).

Blocked accounts

Deutsche Bank offers non-EU students the opportunity to open a bank account that is blocked in favor of the Federal Republic of Germany. This enables them to start studying in Germany by fulfilling the visa requirements.

Financial literacy

GRI FS14

Ignorance of financial matters can lead to financial distress, especially for young people. Conversely, acquiring a basic understanding of economic and financial issues, instruments, and mechanisms can therefore help people to become independent, informed citizens. By utilizing the bank's expertise and its employees' commitment, initiatives to improve financial literacy and inclusion are supported via the bank's *Born to Be* youth engagement program.

In Germany, the *FinanzTuber* project encourages sixth to eighth graders to learn more about money and financial topics by producing short peer-education video clips on financial topics close to their heart. *So geht Geld* (That's How Money Works) offers Deutsche Bank and Postbank employees the opportunity to teach financial literacy to fifth graders upwards in all types of schools. In Spain and the Netherlands Deutsche Bank volunteers teach pupils and foster financial literacy in the *Your Finance, Your Future*, and *Bankers in front of the classroom* programs.

Pathways to Banking and Finance is a pioneering U.K. program that seeks to improve social mobility in the financial services sector. Founded in 2017 by Deutsche Bank and the Sutton Trust, this program aims to increase access to banking and finance and provides 300 high-achieving students from less advantaged backgrounds with industry insights through relevant skills building, work placements, and guidance over a four-year period.

For over 25 years in the U.S., the Deutsche Bank Americas Foundation has been partnering with the non-profit-organization Accion to catalyze equitable financial services and education for entrepreneurs. In 2019, multi-level support reached 2,100 small business owners. In addition to the partnership in New York, the Foundation was instrumental in Accion's expansion to Jacksonville, Florida. On top of that, 150 colleagues in four U.S. cities took part in a hackathon to create a financial literacy app for the education program Working in Support of Education (W!se).

In cooperation with Plan India, Deutsche Bank has provided vocational training courses for more than 3,000 young people since 2016. Almost 80 % of the participants have found a job.

Tax

GRI 102-16

In the management of our tax affairs we apply the principles set out in our tax strategy document. These tax principles, which have been embedded in the bank's control framework, have been approved by our Management Board. To summarize, we manage our tax affairs in a way that aims to generate sustainable value for all stakeholders and to ensure that the tax consequences of our business operations are appropriately aligned with their economic, regulatory, and commercial consequences, with due regard being given to the potential perspective of the relevant tax authorities.

We aim for our dealings with tax authorities to be undertaken in a proactive, transparent, professional, courteous, and timely manner. We seek to develop and foster good working relationships with tax authorities.

We operate a control framework and governance to ensure that in all material aspects we are compliant with applicable tax laws, file accurate tax returns, and pay the amount of tax due.

Tax evasion is illegal and goes against our culture, values, and beliefs. Consequently, our policies strictly prohibit aiding or abetting tax evasion. We are prepared to discontinue, and have discontinued, relationships with clients to safeguard our bank against the risk of tax evasion.

Our income tax expenses and benefits across the jurisdictions in which we operate are disclosed in our Annual Report 2019, Note 43 – Country by Country Reporting.

In-house ecology

GRI 103-1/2

At Deutsche Bank we see it as an integral part of our responsibility as a corporate citizen to manage and, where possible, minimize the environmental impact of our business operations, such as in our offices and during business travel.

As a signatory to the Paris Pledge for Action, Deutsche Bank is committed to playing its part in achieving the overall targets set by the Paris Agreement. With regard to in-house ecology, we have been doing this by reducing our carbon footprint, using energy and other resources as efficiently as possible, buying renewable power, and offsetting the remaining emissions. Last but not least, we are striving to use water and paper responsibly, to minimize the supply chain impact of our business operations, and to reduce the amount of waste we generate. A new focus in our waste strategy has been to reduce consumption of disposable plastics and use reusable materials, starting in Germany and the U.K.

Governance

GRI 103-1/2/3

We apply ISO 50001 in our energy management strategy in Germany. Across the 20 EU countries in which we operate, we follow the European Energy Directive (EED) and base our efforts on the respective national energy audit requirements. In applying the international GHG standard ISO 14064, we have developed an internal governance framework to manage data collection and define our management approach to quantifying and reporting emissions. Additionally, in compliance with ISO 50001, we assess our progress annually against energy and cost targets.

Within our Corporate Real Estate and Services function, the Eco-Performance Management Office (EcoPMO) Utility Management key operating procedure defines how energy reduction initiatives are evaluated and approved. Facility Management teams propose and implement energy, water efficiency, waste and recycling projects, and the EcoPMO measures and verifies outcomes. We collect data from all these sources to monitor our environmental performance, and produce monthly regional reports for energy and water measurements. These reports are reviewed by division managers to continually monitor progress against targets.

We measure and report our Scope 1, Scope 2, and emissions of greenhouse gas (GHG) on business travel based on the reporting boundary defined by the GHG Protocol operational control approach. Reporting scopes are defined according to the GHG Protocol and also reported according to the GHG Protocol's Scope 2 Guidance. We disclose to the CDP all the relevant fuel type, energy, and emission sources, with the exception of Scope 3 investments, which are a significant source of emissions "Climate risk").

Our reporting scopes are defined as follows:

- Scope 1: Direct emissions from on-site combustion (liquid/gaseous fossil fuels, owned and leased vehicles, and refrigerant leakage from cooling equipment);
- Scope 2: Indirect emissions from delivered energy (electricity, district heating, steam, and chilled water); and
- Scope 3: Indirect emissions from business travel (air, rail, taxis, and rented vehicles).

Environmental measures

GRI 103-2/3, G4 DMA

The most relevant measures we have taken to minimize the environmental impact of our business operations are detailed below.

Energy efficiency and conservation

GRI 302-4

According to the International Energy Agency (IEA), buildings and building construction are responsible for at least 36 % of global energy consumption, and nearly 40 % of all energy and process-related GHG emissions in 2018. We have put a particular emphasis on buildings in striving to improve our overall energy efficiency and reduce our energy consumption. Against this background, we are continually enhancing our buildings' energy efficiency and reducing our energy consumption by using new and more efficient technology. For 2019, we set ourselves the goal of reducing energy consumption worldwide by 2 % (excluding Postbank locations). Through purchasing renewable electricity in eleven countries, 78 % of all our electricity worldwide was from renewable sources by year-end 2019. To date, 30 buildings or projects continue to have LEED certification from the U.S. Green Building Council, and a further five have certification in progress.

For example, when refurbishing infrastructure in one of our Bangalore offices, we replaced ductable packaged air conditioning units with highly energy-efficient variable refrigerant volume (VRV) units, and installed a power-over-ethernet intelligent lighting system using LED lights, which has reduced the lighting load by 50 %. To date, this project has saved 1.45 gigawatt hours (GWh), and reduced energy costs by € 180,000 annually.

Over the past three years, our energy consumption has been reduced by 9 %. In 2019, the actual reduction achieved was 5.5 %. Each year, our EcoPMO conducts an in-depth analysis to evaluate the performance of savings initiatives against targets, and to leverage synergies between our geographical regions. Energy reductions achieved in offices total 8.6 GWh from 220 initiatives (in-year savings, i.e. a saving completed in June only gets six months of savings towards 2019). The types of energy included in the reductions are electricity, district cooling, district heat, and natural gas. These totals exclude savings made by Postbank.

Carbon neutrality

GRI 201-2, 305-5

One of the most important environmental targets is the endorsement by the Deutsche Bank Management Board of our commitment to carbon neutrality, which we achieved in 2012 and have maintained since then. In 2019, we continued to offset unavoidable carbon emissions covering GHG Scopes 1 and 2 and business travel by purchasing and retiring high-quality emission reduction certificates. The carbon credits purchased in 2019 reveal investments in a diversified product portfolio supporting climate change mitigation and economic development in Africa, Latin America, and Asia. All offsetting projects comply with well-recognized global standards, including the Gold Standard (62 %) and the Verified Carbon Standard.

CO_2 offsetting portfolio – supported projects and regional split

				Dec 31,2019
	Africa	Americas	Asia	Share
Wind energy		35,000		15 %
Biomass/biogas				–
Efficient cook stoves	45,000			20 %
Geothermal energy			45,000	20 %
Hydropower				–
Sustainable forest management/REDD[1]	15,000	25,000		18 %
Solar energy/photovoltaics			60,834	27 %
Share	26.57 %	26.57 %	46.86 %	100 %
Total	60,000	60,000	105,834	225,834

[1] Reducing Emissions from Deforestation and Forest Degradation.

Eco-efficiency tables

GRI 302-1/3/4, 305-1/2/3/4/5

GHG emissions[1]

in t of CO2e (unless stated differently)	Variance from previous year (in %)	Dec 31, 2019[1]	Dec 31, 2018[2]	Dec 31, 2017[2]
Total GHG emissions (market-based)[3]	(6.1)	**201,201**	214,322	220,215
Market-based emissions from building energy use	(2.3)	133,316	136,505	138,968
Emissions from business travel	(16.3)	61,108	72,975	77,290
Scope 1, direct GHG emissions	(3.4)	**49,712**	51,473	52,071
Natural gas consumption	(5.0)	28,855	30,358	30,670
Liquid fossil fuels[4]	(25.1)	453	605	753
HFCs[5]	39.9	6,777	4,843	3,956
Owned/leased vehicles	(13.0)	13,627	15,667	16,692
Scope 2, indirect GHG emissions	(1.5)	**104,009**	105,541	107,546
Market-based emissions from electricity consumption[6]	0.6	68,308	67,901	67,717
Steam, district heating and cooling	(5.2)	35,701	37,640	39,829
Scope 3, other indirect GHG emissions	(17.1)	**47,480**	57,308	60,598
Air travel	(17.9)	43,782	53,341	56,284
Rented vehicles and taxis[7]	6.9	2,484	2,324	2,684
Rail travel	(26.1)	1,214	1,643	1,630
Emissions reductions	N/M	**0**	0	0
Off set of market-based GHG emissions by retirement of high-quality carbon certificates[8]	0	100	100	100
Market-based GHG emissions (incl. renewables, excluding carbon credits)/rentable area per sqm[9]	(3.2)	0.06402	0.06615	0.06463
Market-based GHG emissions (incl. renewables, excluding carbon credits) per FTE[10]	(1.0)	2.22351	2.24653	2.25709
Total energy consumption in GJ[11]	(5.5)	**3,148,899**	3,331,138	3,455,721
Total energy consumption in GWh[11]	(5.5)	**875**	925	960
Electricity consumption in GWh	(4.9)	508	534	552
Energy from primary fuel sources (oil, gas, etc.) in GWh	(7.0)	204	219	226
Delivered heat and cooling in GWh[12]	(5.2)	163	172	181
Electricity from renewables in GWh[11]	(5.2)	396	417	440
Space-normalized energy consumption in kWh per sqm	(2.5)	278	286	282
Normalized energy consumption in kWh per FTE	(0.3)	9,666	9,699	9,839

1 Data reported under 2019 relates to the period October 1, 2018 to September 30, 2019. Q4/2018 is used to represent activity of Q4/2019, with an average uncertainty of +/- 5% across all KPIs.
2 Changes to the reported figures in previous years can be attributed to the following: a. updated power grid factors b. historic data updates (e.g. billing updates), and c. methodology changes.
3 Total emissions are based on actual, estimated, or extrapolated data. All assumptions and calculation methodologies are in line with the ISO 14064 Standard Guidelines with supporting documentation. The most appropriate emission factors have been used for each activity data type, from internationally recognized sources, e.g. DEFRA (2018 and 2019), GHG Protocol, eGRID (2016), 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.
4 Emissions from liquid fossil fuels decreased in 2019, largely driven by the closure of accounts in Asia Pacific and the U.S.
5 Emissions from HFCs increased in 2019. The increase is in the expected range factoring in maintenance work conducted.
6 Emission factors from IEA (2019) for electricity were used for the countries where Deutsche Bank operates (except for the U.S. where the eGRID (2016) factors were used). The former set of factors is only available in tons of CO_2, while eGRID factors are specified in CO_2e. However, as the proportion of non-CO_2 GHG emissions is minute compared to CO_2, we are reporting all emissions from electricity in CO_2e.
7 Emissions from rented vehicles and taxis have increased, driven by an increase in the distance traveled in rented vehicles in Germany.
8 For 2019, carbon neutrality was accomplished by the purchase and retirement of verified emissions' reduction units.
9 All floor area metrics use an annual average derived from October 2018 to September 2019 data (3,14 million m^2).
10 All FTE metrics use an annual average for 2019 (90,488).
11 Total energy consumption in GWh comprises all sources used in Scopes 1 and 2: natural gas, liquid fossil fuels (mobile and stationary), renewable and grid electricity, district heating, cooling, and steam. Standard joule to kWh conversion factors were used. The only renewable energy source used is electricity and equals 395,694,776 GWh. There was no sale of electricity, heating, cooling, or steam.
12 Calculated electricity and heating intensities are used to estimate electricity and heating demand where data is not available. Calculated intensities from refrigerant gas loss are also used to extrapolate where data is not available.

In 2019, total emissions from market-based reporting (including the effect of buying renewable electricity) amounted to 201,200 metric tons of CO_2e, while emissions from location-based reporting (excluding renewables) were 356,086 metric tons of CO_2e. The difference between market and location emissions is due to the renewable energy contracts, most significantly in our three largest electricity-consuming countries: Germany, the U.K., and the U.S.

The electricity contracts with zero-carbon, supplier-specific emission factors are used in countries with renewable electricity, and include Renewable Electricity Certificates (RECs) in the U.S. and Canada, Renewable Energy Guarantees of Origin (REGOs) for selected sites in the U.K., Guarantees of Origin (GOs) in Germany, and International Renewable Energy Certificates (IRECs) in Spain. Austria, Italy, Belgium, Luxembourg, the Netherlands, and Switzerland also have zero-carbon electricity contracts.

Business travel

Deutsche Bank is reducing business travel (particularly by air) to reduce both emissions and cost. Our travel approval policy focuses on limiting the number of business flights by Deutsche Bank employees. As a result, the volume of air travel continues to decline. In 2019, we achieved a 17.8 % reduction in air travel in a year-on-year basis. The reductions in travel indicators ranging from 9 % to 18.3 % are mostly the result of a more disciplined approach to travel. The average number of FTEs declined 5.2 % during this period.

Distance traveled

in km (unless stated differently)	Variance from previous year (in %)	Dec 31, 2019[4]	Dec 31, 2018[5]	Dec 31, 2017[5]
Total distance travelled	(16.0)	**532,099,332**	633,103,924	667,184,227
Total air travel[1]	(17.8)	**396,726,240**	482,841,207	508,925,234
Short-haul air travel	(17.5)	16,006,857	19,401,142	20,865,472
Medium-haul air travel	(14.7)	53,269,978	62,470,252	61,841,447
Long-haul air travel	(18.3)	327,449,404	400,969,812	426,218,316
FTE-normalized travel in km per FTE	(13.4)	4,384	5,061	5,216
Total rail travel[2]	(12.0)	**41,067,476**	46,665,754	47,162,896
Total road travel[3]	(9.0)	**94,305,616**	103,596,964	111,096,096
FTE-normalized total distance travelled in km per FTE	(11.4)	**5,880**	6,636	6,838

[1] Domestic and international air travel is derived from 99.86 % of actual flight data; the remaining 0.14 % is extrapolated based on cost. Air Travel uses GHG Protocol emissions factors. No radiative forcing factor is applied.
[2] Rail travel is derived from 96.76 % of actual rail travel data; the remaining 3.24 % is extrapolated based on cost.
[3] Taxi data reported includes data for countries based on cost, and is calculated using a country-level taxi tariff. For Czech Republic, France, Germany, Israel, Russian Federation, U.S., United Arab Emirates and U.K., actual distance traveled and fuel data is used. Road travel uses DEFRA (2018 and 2019) emission factors.
[4] Data reported under 2019 relates to the period October 1, 2018 to September 30, 2019. Q4/2018 is used to represent activity of Q4/2019, with an average uncertainty of +/- 5 % across all KPIs.
[5] Changes to the reported figures in previous years can be attributed to the following: a. historic data updates (e.g. billing updates, refunds), and b. methodology changes.

The publishing date of this report and the availability of data, such as energy bills, necessitated minor extrapolations to produce the data for 2019. Whether this makes a material difference to the data is under continual assessment.

Waste, water, and paper consumption

GRI 301-1/2, 303-5, 306-2

We are also striving to reduce the amount of waste we produce, and to cut back on our water, paper, and plastic consumption, particularly in preparation for the EU plastic reduction legislation.

Waste and paper

in t (unless stated differently)	Variance from previous year (in %)	Dec 31, 2019[1]	Dec 31, 2018[2]	Dec 31, 2017[2]
Waste				
Waste disposed[3]	(17.0)	7,596	9,157	9,276
Normalized waste disposed in t per FTE	(12.5)	0.08395	0.09599	0.09507
Waste produced	(16.8)	16,614	19,958	21,683
Normalized waste produced in t per FTE	(12.2)	0.18361	0.20920	0.22224
Waste recycled[4]	(16.5)	9,018	10,801	12,407
Normalized waste recycled in t per FTE	(12.0)	0.09966	0.11321	0.12717
Waste recycled in %	0.3	54.3	54.1	57.2
Waste composted[5]	(12.4)	3,999	4,565	3,440
Waste with energy recovery[6]	(29.2)	2,377	3,358	4,539
Waste incinerated (without energy recovery)[6]	(14.6)	722	845	982
Waste landfilled	28.2	498	389	314
Hazardous waste[7]	(86.4)	34	253	189
Nonhazardous waste	(15.9)	16,580	19,705	21,493
Paper				
Copy/print paper consumed[8]	(6.8)	3,289	3,528	3,681
Recycled paper[9]	81.6	247	136	172
Recycled content in %	94.7	7.5	3.9	4.7
Normalized paper consumption in t per FTE	(1.7)	0.03635	0.03698	0.03773

1 Data reported under 2019 relates to the period October 1, 2018 to September 30, 2019. Q4/2018 is used to represent activity of Q4/2019, with an average uncertainty of +/- 5% across all KPIs.
2 Changes to the reported figures in previous years can be attributed to the following: a. historic energy data updates (e.g. billing updates), and b. methodology changes.
3 Waste data, incl. the disposal method and hazardous/non-hazardous split, has been determined by information provided by the waste contractor. Waste data is extrapolated based on FTEs from Germany, the U.K., the U.S. and from seventeen other countries, covering 84.1% of FTEs. Waste data does not include project waste, e.g. from refurbishments.
4 The 16.5% decrease in waste recycled was driven by waste reduction campaigns in the Americas, APAC and EMEA.
5 In 2019, there was a 14% decrease in composted waste in Germany which was driven by improved waste and resource management.
6 The decrease in incinerated waste was largely driven by the U.K., where there has been an overall 33 % reduction in waste generated due to office closures.
7 Hazardous waste quantities were significantly high in the previous reporting period due to a battery-recycling scheme at the Jacksonville, 5022 Gate Parkway, 32256 Florida site.
8 Copier paper data ("materials used" in GRI G4 reporting terminology) is extrapolated based on consumption per FTE from 23 countries covering, on average, 83 % of FTEs.
9 The 6.8% decrease was mainly driven by a decrease in paper consumption across the Postbank portfolio, driven by portfolio restructuring and office closures. Average Postbank FTEs decreased 17% compared to the previous reporting period.

Plastic

To significantly reduce single-use plastics Deutsche Bank has started to remove all plastic cups, utensils, straws, and sachets from catering facilities, vending machines, and kitchens with cleaning facilities, and replaced them with reusable alternatives, such as reusable cutlery and crockery. This initiative has been rolled out in sites across Germany and the U.K., and is part of the bank's waste reduction strategy. Posters, e-mail banners, and Corporate Services' intranet have promoted the initiative and educated staff on current challenges, with the focus on plastic disposal, much of which cannot be recycled due to poor segregation and contamination of waste streams.

Paper

As key resources are consumed in making paper, we have worked to cut our paper consumption by using pull-print technology, which has enabled the deployment of fewer printers, as well as introducing changes to staff printing habits, such as using desktop-on-demand technology in meetings. This gives users a quick and easy login to access and view their files on screen while in meeting rooms, and thus saves printouts of any documents required.

Water

in m³ (unless stated differently)	Variance from previous year (in %)	Dec 31, 2019[1]	Dec 31, 2018[2]	Dec 31, 2017[2]
Total water consumed (potable)[3]	(6.3)	**1,614,603**	1,723,236	1,965,340
Normalized water consumption in cbm per FTE	(1.2)	17.8	18.1	20.1
Space-normalized water consumption in cbm per sqm	(3.4)	0.51	0.53	0.58

1 Data reported under 2019 relates to the period October 1, 2018 to September 30, 2019. Q4/2018 is used to represent activity of Q4/2019, with an average uncertainty of +/- 5 % across all KPIs.
2 Changes to the reported figures in previous years can be attributed to the following: a. historic energy data updates (e.g. billing updates), and b. methodology changes.
3 Actual water consumption data is based on meter readings and invoices. Water figures are extrapolated on a site level, based on rentable area, and refer to potable (municipal) water only.

Water

As water is a scarce commodity in many countries around the world, we have introduced a variety of measures to save water. Our water reduction initiatives include aeration faucets and water-efficient products being installed whenever new services are required, or when facilities are refurbished. We have modified the set-point value of the absolute humidity rate for common air conditioning systems from 8.5 to 7.0 grams per kilogram at our Frankfurt am Main location DBC South. This small change reduced the volume of water used by over 2,000 cubic meters a year (about 0.1 % of total annual consumption), and reduce our energy consumption.

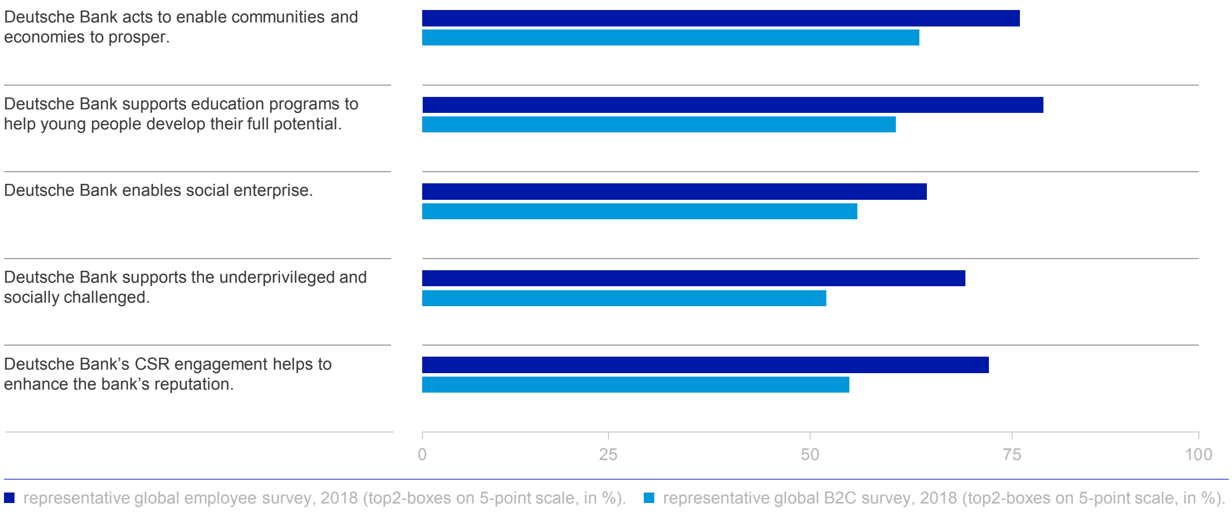
Corporate social responsibility

Deutsche Bank's social engagement contributes to the bank's stated purpose of enabling economic growth and societal progress. It does so by creating a positive impact on the communities we operate in. In spite of continued budget pressures, we impacted 1.6 million lives through the bank's corporate citizenship initiatives in 2019.

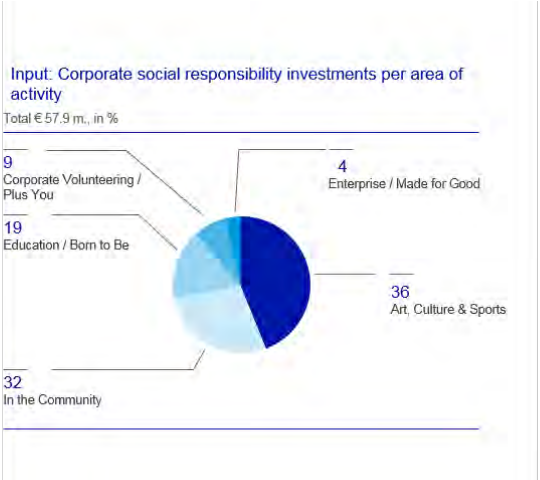
Deutsche Bank's corporate social responsibility (CSR) mission is to enable communities and economies to prosper. Our initiatives have a strategic focus on education, enterprise, and community, and we encourage our employees to underpin the bank's citizenship activities with their professional expertise, whenever they can. Postbank's CSR initiatives are focused on Germany and bundled under the motto "We for children".

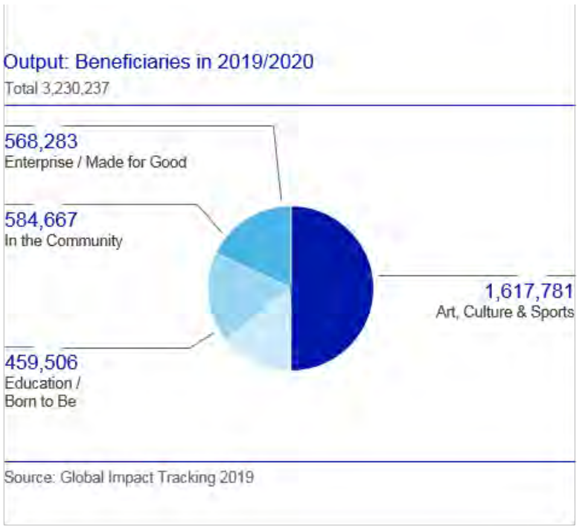
All of these programs help to build trust, employee and client loyalty, as well as to strengthen our reputation as a socially minded enabler, reliable partner, and catalyst for societal change. To drive our CSR agenda and initiatives forward, we foster employee involvement, interact with stakeholders, seek long-term partnerships with charities, and support advocacy initiatives and intercompany efforts to promote impact orientation.

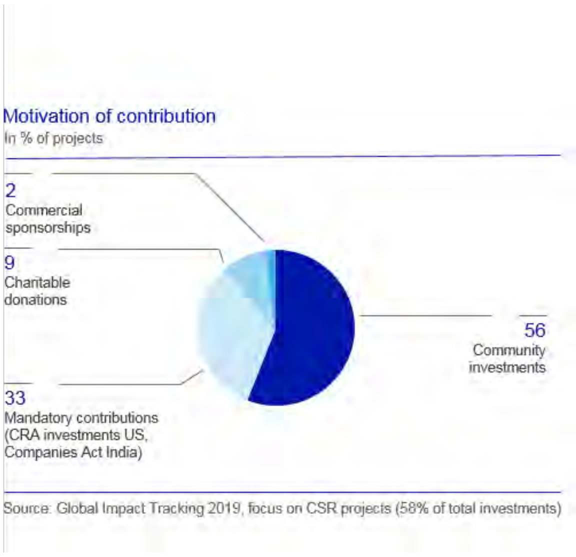
Stakeholder relevance of Deutsche Bank's CSR commitment

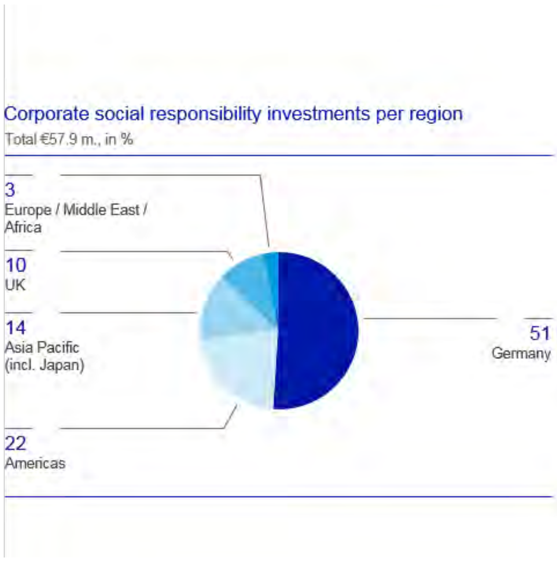


The consistent impact we make in society was evident again in 2019. We reached more than 3.2 million people in all – 1.6 million through our CSR programs and another 1.6 million via our Art, Culture & Sports projects – and invested € 57.9 million in our initiatives. Almost 19,000 Deutsche Bank employees (25 % of staff worldwide) and 140 Postbank employees in Germany engaged in civic projects as corporate volunteers.









CSR key performance indicators

	2019	2018	2017
Total CSR investments, in € m.	57.9	53.7	64.2
External perception of Deutsche Bank as a responsible corporate citizen (global B2B market) / (in %)[1]	68	60	65
People reached with CSR initiatives in m.	3.2	4.2	5.2
thereof:			
Born to Be, Made for Good, In the Community	1.6	1.8	2.1
Art, Culture & Sports	1.6	2.4[2]	3.1

[1] Representative global B2B survey in 14 countries; top2 ratings on 5-point scale.
[2] Different assessment methodology.

This report highlights some of our CSR activities. For details of other activities, please visit our Deutsche Bank or Postbank CSR websites.

Governance and impact tracking

Deutsche Bank's Communications & CSR team reports directly to the CEO. Dedicated policies and procedures, such as the Donations, Memberships, Sponsorships (DMS) Policy and CSR Cornerstones, constitute the mandatory operating framework for Deutsche Bank, and external partners acting on their behalf. Our social engagement is implemented by our regional units and endowed foundations. New CSR project proposals can be evaluated along a standardized framework and are subject to sign-off by local CSR teams, regional CSR councils, and/or Board members, depending on the value of the investment. In markets with defined legal or regulatory demands on social commitment, our CSR initiatives go beyond the minimum regulatory requirements, as, whenever possible, we enhance our financial support with the professional expertise and networks of the bank and its employees. We welcome the Companies Act 2013 in India, fully embrace the Black Economic Empowerment (BEE) legislation in South Africa, and for over 25 years have received a consistent Outstanding rating for our Community Reinvestment Act (CRA) performance from the Federal Reserve Bank of New York.

To ensure that resources are deployed efficiently and projects fully aligned with the strategic objectives of our CSR agenda, we annually monitor the direct impact of our investments and systematically collect feedback from our community partners via the Global Impact Tracking (GIT) tool. We also measure our projects' social return on investment (SROI) according to the London Benchmarking Group (LBG) methodology, as it is our bank's aim to move from mere charitable donations to strategic community investments. What we learn from these analyses has enabled us to improve our CSR portfolio over time. Our assessment of the focus and efficiency of our programs is based on three steps. The first step (Input) looks at the cash or in-kind donations, time, knowledge, and expertise invested in a project. The second step (Output) reflects the output numbers, such as the number of beneficiaries, project partners, corporate volunteers, and workshops held, as well as the leverage we activate from other sources, for instance. via fundraising contributions. Step three (Impact) documents the mid- to long-term impacts on the various stakeholders, based on project achievements and satisfaction with the project objectives/cooperation. It also assesses a project's awareness rating and relevance along with its brand-building potential among all key stakeholders (beneficiaries, project partners, society, company, and employees).

Impact: How do our projects impact the beneficiaries?
Projects in total, in %

	Total	Born to Be	Made for Good	In the Community
Projects	n=349	n=122	n=52	n=123
Lives touched/ low impact	48	48	21	42
Lives enhanced/ medium impact	37	53	23	22
Lives changed/ high impact	42	48	75	27

Source: Global Impact Tracking 2019, focus on CSR projects

Born to Be – our youth engagement program

Deutsche Bank believes in the power of education. That is why *Born to Be* supports efforts to enable children and young people to fulfill their potential and secure gainful and rewarding employment later on. After all, education is key to both social and economic development and to social cohesion, as it empowers people from disadvantaged backgrounds to earn a decent income and achieve a better quality of life. *Born to Be* does this by raising aspirations, attitudes, and progression, by developing technical, academic, and employability skills, and by enabling access and pathways to education and employment. Postbank focuses on supporting marginalized children with the help of fundraising contributions from employees and clients. In 2019, our education programs reached some 460,000 children and young people via 122 projects in 25 countries. Since 2014, there have been 4.7 million *Born to Be* beneficiaries, so we are well under way to reaching our target of 5 million in 2020.

Born to Be – facts and figures

	2019	2018	2017
Born to Be			
Born to Be projects supported by corporate volunteers (in %)	62	62	65
Cumulative Born to Be beneficiaries in m. (since 2014)	4.7	4.4	3.9

Born to Be – a U.S. project highlight

As part of our long-standing partnership with StreetWise, Deutsche Bank employees have provided volunteer leadership and mentorship to CUNY community college students in the U.S. and have helped to build skills, resources, and access to networks to advance their careers. The bank is also working with the Center for Urban Future to illuminate a leading cause of low graduation rates at NYC's community colleges. We funded a new study entitled Overcoming Non-Tuition Financial Barriers for Community College Students. This advocacy piece examines how challenges, such as food insecurity, transportation, and child care, can impact the ability of students from low-income communities (more than 70 % earn less than $ 30,000 per year) and makes recommendations to overcome these barriers to graduation.

Made for Good – our enterprise program for social good

Entrepreneurship plays a vital role in the growth and prosperity of economies and societies worldwide. Nowadays, more and more entrepreneurs are opening up new ways to tackle poverty, unemployment, inequality, deprivation, and other socioeconomic challenges. One in four start-ups in Europe is estimated to be a social business. Yet recent research by Small Business Trends showed that 90 % of start-ups fail, and the hurdles are even greater for businesses with social goals. The business skills, networks, and sources of funding we provide can help start-ups, microenterprises, nonprofits and the like to scale their offers.

In line with Deutsche Bank's commitment to championing initiatives that drive positive societal change, the *Made for Good* program was set up four years ago to build the capacities of start-ups and early-stage enterprises that create social good. Since 2016, *Made for Good* has supported over 19,200 social enterprises and reached nearly 940,000 people. 5,735 enterprises and social entrepreneurs in ten countries benefited from almost 14,000 hours of support provided by Deutsche Bank employees in 2019. We have thus made substantial progress towards achieving our goal of reaching a total of 20,000 enterprises by 2020.

Together with the Thomson Reuters Foundation, we conducted the second global experts' poll on The best countries to be a social entrepreneur 2019. Our findings highlight areas of strength and weakness in the world's 45 biggest economies – and how this has changed in the past three years. The poll's results give social entrepreneurs, policymakers, and investors the research findings they need to further discuss, explore, and pursue innovative ways of doing business for good. For the first time, the survey highlights countries where women and young social entrepreneurs are playing a bigger role and identifies the cities deemed to be hotspots for new-style businesses seeking to have social impact.

Made for Good – facts and figures

	2019	2018	2017
Made for Good			
Made for Good enterprise projects supported by corporate volunteers (in %)	40	48	38
Cumulative number of participating social enterprises (since 2016)	19,232	14,733	11,754
Cumulative number of Made for Good beneficiaries (since 2016)	939,424	564,022[1]	229,696[1]

[1] Prior-year numbers adjusted.

Made for Good – a German project highlight

Aligned to the UN Sustainable Development Goals, our Global Goals Lab connects the dots between the bank's *Made for Good* and its commercial start-ups programs. The program supports early-stage enterprises with a social mission via coaching by Deutsche Bank employees and expert advice to develop their business plan, scale their offerings, access new networks, or tap sources of funding. In March 2019, the Impact Fund donated a total of € 35,000 to three social enterprises working towards greater equality of opportunity and more inclusion (SDGs 4, 10, and 11). In the year under review, the Global Goals Lab focused on climate action and responsible consumption (SDGs 12 and 13).

In the Community – strengthening neighborhoods

Deutsche Bank's strategy for alleviating poverty extends beyond philanthropy to include high-level field leadership in the form of coalition building, advocacy, and employee engagement. This broadens the scope of our programs and enhances our help for the disadvantaged or disenfranchised. Through investments of both financial and human capital, we tackle issues like poverty, joblessness, homelessness, and forced migration. We also provide relief in emergencies and encourage forward-thinking on emerging challenges. In 2019, we supported 123 community projects in 21 countries, impacting the lives of almost 585,000 people. Since 2015, our community initiatives have impacted 3.1 million lives, and we are well on the way to making a positive impact on 4 million people by 2020.

In the Community – facts and figures

	2019	2018	2017
In the Community			
Community projects supported by corporate volunteers (in %)	48	53	52
Cumulative number of beneficiaries of community projects in m. (since 2015)	3.1	2.8	2.4

In the Community – an Asia Pacific/India project highlight

In India, we collaborate with Swades Foundation, a grassroots organization focusing on rural empowerment, and support a water harvesting initiative to revive 2,000 villages in drought-prone Raigad, in Maharashtra, by providing access to drinking water on tap and creating access to water for agricultural irrigation purposes. But the benefits extend far beyond these measures, as the project seeks to achieve a wholesale revival of the ailing local economy through ongoing interventions. Since 2016, the project has impacted nearly 39,000 villagers and provided 200 liters of potable tap water per day. The bank's intervention has resulted in the villagers gaining access to 100 government water schemes, infrastructure development for irrigation, and reservoir structures for rainwater harvesting, as well as economically uplifting 7,633 households. Additionally, under the *Plus You* program, some 400 Deutsche Bank employees have volunteered their time with Swades to contribute to the cause.

Plus You – our volunteering and giving community

For more than 25 years, Deutsche Bank has engaged employees in its corporate citizenship. Our people's commitment to helping others reflects the values Deutsche Bank lives by as well as our commitment to create a positive impact on society. With a wide range of volunteering opportunities and giving schemes available, Deutsche Bank and Postbank employees can take time out to share their professional and life skills or offer hands-on support to local community projects. Corporate volunteering not only boosts the impact of our CSR programs, but also has a positive impact on the personal development, motivation, and loyalty of our employees.

In 2019, almost 19,000 Deutsche Bank employees were engaged in volunteer projects, a participation rate of 25 %. And 140 Postbank employees supported 40 team challenges in Germany. A total of almost 220,000 hours – 52% during and 48 % outside of office hours – were spent on volunteer work and around € 8.4 million generated through matched giving programs and fundraising initiatives. The matched giving and payroll giving schemes extend the reach and impact of initiatives close to the hearts of our people.

Despite the challenging environment, we were able to engage more colleagues in our *Plus You* volunteering and giving community than last year. Going forward, we aim to keep volunteering participation above 20 %, while continuing to focus on skills-based opportunities and engaging our colleagues in an increasing share of projects. We will carry on encouraging fundraising for charities and aim to maintain our annual matched giving totals at more than € 5 million. In the light of our upcoming 150th anniversary, we hope to further boost engagement levels in spite of restructuring efforts and continued budget restrictions.

Plus You – facts and figures

	2019	2018	2017
Plus You - Volunteering and Giving (excl. Postbank brand)			
Employees participating in the bank's volunteer programs	18,963	17,946	17,417
in % of total staff	25	23	22
Hours invested by corporate volunteers	219,517	209,122	235,783
Total employee donations and matching by Deutsche Bank, in € m.	8.4	7.6	10.5

Plus You – a UK project highlight

The Charities of the Year program in the U.K. supports small charities chosen by our employees for two years at a time. Through fundraising and by sharing our resources and the skills of our people, we help these organizations to grow sustainably and have more impact. In 2019, we raised nearly £ 2.1 million for the Charities of the Year, Cure Leukemia and Rays of Sunshine, with £900,000 coming from the Donate One Day initiative. Cure Leukemia offers hope to patients with currently incurable forms of blood cancer via potentially life-saving treatment and funding for specialist research nurses. The Rays of Sunshine children's charity brightens up the lives of courageous children with a serious or life-limiting illness, as well as their families, by putting their illnesses on hold and fulfilling their greatest wishes. The funding will help both organizations to create transformational change and ensure a legacy beyond the 24-month partnership. Since 1999, we have raised £ 24.6 million for 26 Charities of the Year. In 2020 and 2021, Deutsche Bank will partner with Hospice U.K. for two years to revolutionize hospice care and change the conversation around death, bereavement, and grief.

Alfred Herrhausen Gesellschaft

The Alfred Herrhausen Gesellschaft works to promote a free and open society and its cohesion. Its work addresses individuals in positions of responsibility – present and future decision-makers and thought leaders in politics, the economy, media, and society, both in Germany and across the world. The Alfred Herrhausen Gesellschaft currently works in two specific project areas, Europe and Cities, and in one more flexible area entitled Free Thinking. In the latter the multimedia project entitled Think. Order. Form. Forwards. is continuing Alfred Herrhausen's intellectual work by taking his essays and speeches as a starting point and enabling more than 30 prominent contributors to reflect on issues like social market economy, democracy, entrepreneurship, sustainability, and education, as well as European and international politics.

Yad Vashem

In May 2019 the foundation stone was laid for the new Shoah Heritage Collections Center at the Yad Vashem World Holocaust Remembrance Center in Israel. The new building will house and display artefacts that Holocaust survivors have donated to Yad Vashem. As a sign of our commitment to remembering the past and fighting anti-Semitism and racism we donated one million euros.

Art, culture and sports

With our Art, Culture & Sports commitment we are investing in the future of society by making our initiatives and projects accessible to as many people as possible and supporting promising talent. Our Art, Culture & Sports policy defines control principles and responsibilities for art-, culture-, and sports-related activities at Deutsche Bank.

PalaisPopulaire

PalaisPopulaire is our interdisciplinary and innovative forum for art, culture, and sports at a prime location in Berlin. Changing exhibitions with different international partner institutions and works from the Deutsche Bank Collection are on display here. Furthermore, we invite the public, clients, and employees to interactive cross-thematic talks and cultural evenings, such as concerts, readings, or dynamic sports workshops. Additionally, PalaisPopulaire offers a broad educational program for children and adults, as well as special barrier-free offerings for blind and visually impaired visitors. Free admission for everyone on Mondays is part of our philosophy of an “open house for open minds”.

Art

For 40 years, we have been offering access to contemporary art to employees, clients, and the general public through exhibiting our collection at more than 600 Deutsche Bank premises, PalaisPopulaire, and international exhibitions, as well as through our educational programs. Deutsche Bank supports joint projects with museums, art fairs, and other institutions to award and encourage emerging artists.

ArtWorks, our global art program, aims to make art accessible to everybody. Our headquarters in Frankfurt am Main is the heart of our global art activities. In 2019, nearly 2,300 art enthusiasts visited our selection of some 1,800 artworks, with each floor of the “Towers” dedicated to one artist.

Cultural commitment

Promoting culture is an essential pillar of our corporate responsibility activities. Here, the focus is not only on long-term partnerships and important cultural institutions, such as the Berlin Philharmonic Orchestra, but also on the promotion of young talents.

By partnering with the Berlin Philharmonic Orchestra, we have enabled educational programs that have introduced classical music to nearly 65,000 children and young people. In 2019, we not only celebrated the 30th anniversary of our partnership, but also announced the extension of our cooperation with the orchestra for a further five years. To mark these celebrations, Deutsche Bank supported the free open-air concert at the Brandenburg Gate, which was attended by around 35,000 people. Young musicians profit from Deutsche Bank’s partnerships with the Young German Philharmonic Orchestra and Schloss Belvedere Music Academy. Whereas the Young German Philharmonic Orchestra prepares music students for careers in orchestras, Schloss Belvedere Music Academy supports some 120 students who enjoy a highly qualified music education while teaching them the skills needed for university.

Talent in competitive sports

Sports connect people across borders and motivate them to be fair and perform to the best of their ability, regardless of the discipline. In accordance with this belief, Deutsche Bank has promoted competitive sports for decades.

Since 1955, we have supported the renowned World Equestrian Festival, CHIO Aachen. Additionally, we support young riders through the Deutsche Bank Equestrian Sport Academy. Up to ten exceptional young dressage talents selected by the trainer of the German national equestrian team receive targeted training, access to selected tournaments, and advice from Deutsche Bank mentors. Academy participants will also become tutors themselves and train talented amateur riders to encourage as broad a spectrum of young riders as possible.

Since 2001, we have supported the German Sports Aid Foundation, the most important privately funded sports initiative in Germany. In 2019, we again sponsored Sports Aid athletes through the Deutsche Bank Sports Scholarships. We also sponsored the initiative Sprungbrett Zukunft (Springboard to the Future) to help young top athletes to advance their careers.

In 2019, we cooperated with the German Sports Aid Foundation to launch the fundraising campaign #GripForGold in order to promote and support German top athletes and young talents.

Appendix

Reports of the independent auditor

Limited Assurance Report of the Independent Auditor regarding the combined separate non- financial report[9]

To the Supervisory Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main

We have performed an independent limited assurance engagement on the combined separate non-financial report of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, (further “Deutsche Bank” or “Company”) and Deutsche Bank Group as well as the by reference qualified part “Our Organization” (further „non-financial report”) according to §§ 315b, 315c in conjunction with 289b to 289e of the German Commercial Code (HGB) for the period from January 1 to December 31, 2019.

Management’s Responsibility

The legal representatives of Deutsche Bank Aktiengesellschaft are responsible for the preparation of the non-financial report in accordance with §§ 315b, 315c in conjunction with 289b to 289e HGB.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the non-financial report and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances.

Furthermore, the responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the non-financial report in a way that is free of – intended or unintended – material misstatements.

Independence and Quality Assurance on the Part of the Auditing Firm

We are independent from the company in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the legal provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

Practitioner’s Responsibility

Our responsibility is to express a conclusion performed on the non-financial report based on our work performed within a limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. This standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the non-financial report, has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB. We do not, however, issue a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor’s own judgement.

[9] Our engagement applied to the German version of the combined separate non-financial report. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

Within the scope of our engagement, we performed amongst others the following procedures:

- Inquiries of personnel at Group level who are responsible for the materiality analysis to get an understanding of the process for identifying material topics and respective report boundaries for Deutsche Bank
- A risk analysis, including a media research, to identify relevant information on Deutsche Bank's sustainability performance in the reporting period
- Evaluation of the design and implementation of the systems and processes for the collection, processing and control of disclosure on environmental, employee and social matters, respect for human rights as well as combatting corruption and bribery matters, and further matters including the collection and consolidation of quantitative data
- Inquiries of personnel who are responsible for determining disclosures on concepts, due diligence processes, results and risks, the conduction of internal controls and consolidation of the disclosures
- Evaluation of selected internal and external documents
- Analytical evaluation of data and trends of quantitative disclosures which are reported by all sites on group level
- Assessment of the overall presentation of the disclosures

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial report of Deutsche Bank Aktiengesellschaft for the period from January 1 to December 31, 2019 is not prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

Restriction of Use/Clause on General Engagement Terms

This report is issued for purposes of the Supervisory Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, only. We assume no responsibility with regard to any third parties.

Our assignment for the Supervisory Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Frankfurt am Main, March 13, 2020

KPMG AG

Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Laue	Glöckner
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Limited Assurance Report of the Independent Auditor

To the Management Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main[10]

We have performed an independent limited assurance engagement on the disclosures on sustainability performance in the Non-Financial Report 2019 (further „Report"), of Deutsche Bank Aktiengesellschaft, Frankfurt am Main (further „Deutsche Bank") for the period from January 1 to December 31, 2019.

It was not part of our engagement to review product or service related information, references to external information sources, expert opinions and future-related statements in the Report.

Management´s Responsibility for the Report

The legal representatives of Deutsche Bank are responsible for the accurate preparation of the Report in accordance with the principles and standard disclosures of the Standards of the Global Reporting Initiative in combination with the Corporate Accounting and Reporting Standard (Scope 1 and 2) and the Corporate Value Chain Standard (Scope 3) of World Resources Institute/World Business Council for Sustainable Development and the ISO 14064- 3 for the calculation of the greenhouse gas emissions for scope 1, 2 and 3, as described in the chapters "About this report" and "Reporting transparently" (further: "Reporting Criteria").

This responsibility includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual sustainability disclosures, which are reasonable in the circumstances. Furthermore, the responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Report in a way that is free of – intended or unintended – material misstatements.

Independence and Quality Assurance on the Part of the Auditing Firm

We are independent from the company in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the legal provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDW QS 1).

Practitioner's Responsibility

Our responsibility is to express a conclusion based on our work performed of the Report within a limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements other than Audits or Reviews of Historical Financial Information" and the International Standard on Assurance Engagements (ISAE) 3410: "Assurance Engagements on Greenhouse Gas Statement" of the International Auditing and Assurance Standards Board. These standards require that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the Report has not been prepared, in all material respects in accordance with the aforementioned Reporting Criteria. We do not, however, issue a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor's own judgement. This includes the assessment of the risk of material misstatement in the Report under consideration of the reporting criteria.

[10] Our engagement applied to the German version of the Non-Financial Report 2019. This text is a translation of the Independent Assurance Report issued in German, whereas the German text is authoritative.

Within the scope of our engagement, we performed amongst others the following procedures:

- Inquiries of personnel at Group level who are responsible for the materiality analysis to get an understanding of the process for identifying material topics and respective report boundaries for Deutsche Bank
- A risk analysis, including a media research, to identify relevant information on Deutsche Bank's sustainability performance in the reporting period
- Evaluation of the design and implementation of the systems and processes for the collection, processing and control of the sustainability disclosures, including the collection and consolidation of quantitative data
- Inquiries of personnel who are responsible for providing the data and information, carrying out internal control procedures and consolidating the data and information
- Evaluation of selected internal and external documents
- Analytical evaluation of data and trends of quantitative disclosures which are reported by all sites on group level
- Assessment of the overall presentation of the disclosures in the Report

Conclusion

Based on the procedures performed and the evidence received to obtain assurance, nothing has come to our attention that causes us to believe that the Non-Financial Report 2019 of Deutsche Bank Aktiengesellschaft for the period from January 1 to December 31, 2019 is not prepared, in all material respects, in accordance with the Reporting Criteria.

Restriction of Use / Clause on General Engagement Terms

This report is issued for purposes of the Management Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, only. We assume no responsibility with regard to any third parties.

Our assignment for the Management Board of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, and professional liability is governed by the General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (Allgemeine Auftragsbedingungen für Wirtschaftsprüfer und Wirtschaftsprüfungsgesellschaften) in the version dated January 1, 2017 (https://www.kpmg.de/bescheinigungen/lib/aab_english.pdf). By reading and using the information contained in this report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Frankfurt am Main, March 13, 2020

KPMG AG

Wirtschaftsprüfungsgesellschaft

[Original German version signed by:]

Laue	Glöckner
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

GRI and UN Global Compact

GRI 102-55

Our Non-Financial Report provides a comprehensive disclosure of our material topics for our non-financial performance. Information on financial data is available in our Annual Report 2019. Disclosures included in the report were selected based on a materiality analysis conducted in 2019. Information on in-house ecology and information regarding corporate social responsibility activities are not material based on the materiality assessment.

In order to give a better overview, the Non-Financial Report 2019 has been prepared in accordance with the GRI Standards: Core option, including the specific Sector Disclosures for the financial service sector. Information can either be found on the referenced pages in the report, via links, or directly in this table. The information outside the Non-Financial Report, for instance information in our 2019 Human Resources Report, is not part of the external limited assurance.

Furthermore, the Non-Financial Report also serves as our Communication on Progress for the UN Global Compact (UNGC), references are made in the index as well. By participating in the UNGC, we have committed ourselves to preserving internationally recognized human rights, creating socially acceptable working conditions, protecting the environment, and fighting corruption.

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
GRI 102: General Disclosures				
Organization profile				
102-1	Name of the organization		Deutsche Bank Group	
102-2	Activities, brands, products, and services	AR – Deutsche Bank Group		
102-3	Location of headquarters		Frankfurt/Main, Germany	
102-4	Location of operations	AR – Note 43 “Country by Country Reporting”		
102-5	Ownership and legal form		Deutsche Bank Aktiengesellschaft	
102-6	Markets served	AR – Deutsche Bank Group AR – Note 43 “Country by Country Reporting”		
102-7	Scale of the organization	Employment and employability - Key employee figures AR – The Group at a glance AR – Consolidated Financial Statements		
102-8	Information on employees and other workers	Employment and employability – Workforce management Employment and employability – Key employee figures AR – Employees HRR – Delivering on our Strategy – the role of HR – Workforce development	Unavailability of information. Standards for steering have been established. The material KPIs are tracked and reported in Deutsche Bank’s HR Report.	SDG 8 UNGC 6
102-9	Supply chain	Human rights – Supply chain	Partially reported. As a financial services provider, the main elements of the supply chain are related to products that support our core operations. These include but are not limited to: facility services, logistics, building maintenance, IT software and hardware, Insurance, lease cars and business travel, marketing and communication	
102-10	Significant changes to the organization and its supply chain	Employment and employability – Workforce management AR – Combined Management Report – Operating and Financial Review – Deutsche Bank Group		
102-11	Precautionary Principle or approach	Product responsibility – Product design and approval Product responsibility – Prevention of excessive indebtedness Reputational risk – Environmental and social due diligence		
102-12	External initiatives	Public policy and regulation – Key topics in 2019 Reputational risk – Environmental and social due diligence Sustainable finance – Governance Climate risks – TCFD recommendations Climate risks – UNEP FI working group Stakeholder engagement Approach to sustainability – Engagement Approach to sustainability – Impact measurement and SDGs Employment and employability – Inclusive work environment		
102-13	Membership of associations		db.com/cr/memberships	
Strategy				
102-14	Statement from senior decision-maker	Letter of the chairman of the Management Board		

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
102-15	Key impacts, risks, and opportunities	About this combined separate non-financial report – Materiality and risks assessment process Approach to sustainability – Governance Public policy and regulation Reputational risk – Environmental and social due diligence Reputational risk – Industry risk Reputational risk – Emerging risks and recently identified topics Sustainable finance Sustainable finance – Investment products – Asset management Climate risks Climate risks – Risk management strategy and processes Human rights – Developments in 2019 Product responsibility – Product design and approval Anti-financial crime – Governance Anti-financial crime – Risk monitoring processes Client Satisfaction – Complaint management Information security Data protection		
Ethics and integrity				
102-16	Values, principles, standards, and norms of behavior	Culture and integrity – Code of Conduct Culture and integrity – The Culture, Integrity and Conduct program Product responsibility Product responsibility – Product and advisory principles Sustainable finance – Governance Sustainable finance – Lending and advisory Sustainable finance – Investment products Data protection – Governance for data protection management Employment and employability – Governance Approach to sustainability – Governance Due diligence of Reputational Risk – Environmental and social due diligence Human rights Tax	db.com/ir/code-of-conduct	UNGC 10
102-17	Mechanisms for advice and concerns about ethics	Client satisfaction – Complaint management Culture and integrity – Code of Conduct Anti-financial crime – Governance		UNGC 10
Governance				
102-18	Governance structure	AR – Management Board AR – Report of the Supervisory Board AR – Supervisory Board AR – Corporate Governance Statement according to Sections 289f and 315d of the German Commercial Code/Corporate Governance Report – Management Board and Supervisory Board Reputational risk Culture and integrity – The Culture, Integrity, and Conduct program Sustainable finance – Governance Approach to sustainability – Governance		

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
102-20	Executive-level responsibility for economic, environmental, and social topics	Culture and integrity – The Culture, Integrity and Conduct program Anti-financial crime – Governance Data protection – Governance for data protection management Reputational risk – Environmental and social due diligence Information security – Governance Employment and employability – Governance Employment and employability – Inclusive culture and work environment – Gender diversity Digital transformation – Governance Approach to sustainability – Governance Climate risks – Governance		
102-21	Consulting stakeholders on economic, environmental, and social topics	Legal basis – Materiality and risks assessment process Stakeholder engagement Public policy and regulation –Employee-stakeholder interaction Information security – Dialog and collaboration Sustainable finance – Training and awareness		
102-22	Composition of the highest governance body and its committees	AR – Management Board AR – Report of the Supervisory Board AR – Supervisory Board AR – Management Board and Supervisory Board		SDG 5
102-23	Chair of the highest governance body	AR – Management Board AR – Report of the Supervisory Board AR – Supervisory Board AR – Management Board and Supervisory Board		
102-24	Nominating and selecting the highest governance body		db.com/ir/en/supervisory-board.htm db.com/ir/en/management-board.htm db.com/ir/en/download/ToR_Nomination_Committee._25_07_2019pdf.pdf	SDG 5
102-25	Conflicts of interest	Product responsibility – Conflicts of interest	Partially reported. Whether conflicts of interest are disclosed to stakeholders, including cross-board memberships and cross-shareholding with suppliers and other stakeholders are not reported.	
102-26	Role of highest governance body in setting purpose, values, and strategy	Culture and integrity – The Culture, Integrity and Conduct program Reputational risk – Environmental and social due diligence Approach to sustainability – Governance Climate risks – Governance	db.com/ir/committees-of-the-supervisory-board	
102-27	Collective knowledge of the highest governance body	Approach to sustainability – Governance		
102-29	Identifying and managing economic, environmental, and social impacts	Legal basis – Materiality and risks assessment process Reputational risk – Environmental and social due diligence Climate risks – Risk management strategy and processes Anti-financial crime – Governance		
102-31	Review of economic, environmental, and social topics	About this combined separate non-financial report – Materiality and risks assessment process Reputational risk – Environmental and social due diligence – Transactional reviews Reputational risk – Emerging risks and recently identified topics Climate risks – Risk management strategy and processes Anti-financial crime – Governance Sustainable finance – Investment products – Asset management Anti-financial crime – Risk monitoring processes Client Satisfaction – Complaint management		

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
102-32	Highest governance body's role in sustainability reporting		The Non-Financial Report Steering Group has reviewed and pre-approved the contents of the report. The CFO Disclosure Review meeting chaired by the CFO approves the Non-Financial Report. The final responsibility lies with the board of directors. The Supervisory Board reviews the content of the NFRep.	
102-35	Remuneration policies	AR – Compensation report HRR – Rewarding performance		
Stakeholder engagement				
102-40	List of stakeholder groups	Stakeholder engagement		
102-41	Collective bargaining agreements	Employment and employability – Workforce management – Restructuring AR – Employees	Not reported. We work with works councils that represent our employees' interests in negotiations with Deutsche Bank as employer, but details remain confidential.	SDG 8 UNGC 3
102-42	Identifying and selecting stakeholders	Stakeholder engagement Client satisfaction Product responsibility	We do not explicitly report on the identification of stakeholders. However, as a listed company, bank and financial services provider, our business model is particularly geared towards clients, shareholders, employees, regulators and civil society.	
102-43	Approach to stakeholder engagement	Stakeholder engagement Sustainable finance Sustainable finance – Training and awareness		
102-44	Key topics and concerns raised	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Stakeholder engagement Culture and integrity – Culture, Integrity, and Conduct program – 2019 CIC focus values and mandatory initiatives Client satisfaction Client satisfaction – Complaint management Sustainable finance – Investment products – Asset management Public policy and regulation – Key topics in 2019 Reputational risks – Emerging risks and recently identified topics		
Reporting practice				
102-45	Entities included in the Consolidated Financial Statements	AR – Note 37 "Information on Subsidiaries" AR – Note 38 "Structured Entities" AR – Subsidiaries AR – Consolidated Structured Entities		
102-46	Defining report content and topic Boundaries	Legal basis – Materiality and risks assessment process	The boundary internal and external (client, shareholders, society) applies for: Anti-Financial Crime, Culture and integrity, Climate risks, Digital transformation, ES due diligence, Information security, In-house ecology, Public policy and regulation, Sustainable Finance, and Tax. The boundary internal and external (client, society) applies for: Data protection, Product responsibility, Social responsibility. The boundary internal applies for: Employment and employability. The boundary external (client, society) applies for: Human rights.	
102-47	List of material topics	Legal basis – Materiality results for 2019		
102-48	Restatements of information	Legal basis – Materiality results for 2019 In-house ecology – Environmental measures – Eco-efficiency tables Employment and employability – Diversity AR – Risk assessment		

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
102-49	Changes in reporting	Legal basis About this report		
102-50	Reporting period	Legal basis		
102-51	Date of most recent report		The 2018 Non-Financial Report was published in March 2019.	
102-52	Reporting cycle	About this report		
102-53	Contact point for questions regarding the report	Imprint/Publications		
102-54	Claims of reporting in accordance with the GRI Standards	About this report		
102-55	GRI content index	GRI and UN Global Compact		
102-56	External assurance	Limited assurance report of the independent auditor	The information contained in this report is subject to additional external assurance. Information in the HR Report are not part of the external assurance.	
Topic specific standard disclosures				
GRI 200 Economy				
GRI 201: Economic performance				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019		SDG 8
103-2	The management approach and its components	Sustainable finance – Governance Anti-financial crime – Governance Climate risks – Governance		
103-3	Evaluation of the management approach	Sustainable finance – Governance Anti-financial crime – Governance Climate risks – Governance		
201-1	Direct economic value generated and distributed	AR – The Group at a glance AR – Consolidated Financial Statements		SDG 5, 7, 8, 9
201-2	Financial implications and other risks and opportunities due to climate change	Sustainable finance – Lending and advisory Sustainable finance – Investment products Climate risks – Risk management strategy and processes In-house ecology – Environmental measures Carbon neutrality DWS Report – Clients and Products: Sustainable Finance, ESG Products and Responsible Investing	Partially reported. We have not identified substantial changes required in operations, revenue or expenditure posed by climate change. Therefore, financial implications or costs of actions are not reported for 2019.	SDG 13 UNGC 7
GRI 205: Anti-corruption				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Anti-financial crime		SDG 16
103-2	The management approach and its components	Anti-financial crime – Governance Anti-financial crime – Anti-fraud, bribery and corruption		
103-3	Evaluation of the management approach	Anti-financial crime – Governance Anti-financial crime – Anti-fraud, bribery and corruption		
205-1	Operations assessed for risks related to corruption	Anti-financial crime – Risk monitoring processes – Anti-fraud, bribery, and corruption	Not reported. Due to confidentiality reasons, the number and percentage of operations assessed are not disclosed. We only report with regard to business areas that are assessed for corruption risks.	UNGC 10
GRI 300 Environment				
GRI 301: Materials				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 In-house ecology – Governance		SDG 8, 12
103-2	The management approach and its components	In-house ecology – Governance		
103-3	Evaluation of the management approach	In-house ecology – Governance In-house ecology – Environmental measures		

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
301-1	Materials used by weight or volume	In-house ecology – Environmental measures – Waste, water, and paper consumption	Partially reported as reported data is not distinguished between non-renewable and renewable materials.	SDG 8, 12 UNGC 7, 8
301-2	Recycled input materials used	In-house ecology – Environmental measures – Waste, water, and paper consumption		SDG 8, 12 UNGC 8
GRI 302: Energy				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 In-house ecology – Governance		SDG 7, 8, 12
103-2	The management approach and its components	In-house ecology – Governance In-house ecology – Environmental measures		
103-3	Evaluation of the management approach	In-house ecology – Governance In-house ecology – Environmental measures		
302-1	Energy consumption within the organization	In-house ecology – Environmental measures – Eco-efficiency tables	We do not report total fuel consumption from non-renewable sources. We report total energy consumption (in GJ and GWh) and electricity from renewables.	SDG 7, 8, 12, 13 UNGC 7, 8
302-3	Energy intensity	In-house ecology – Environmental measures – Eco-efficiency tables		SDG 7, 8, 12, 13 UNGC 8
302-4	Reduction of energy consumption	In-house ecology – Environmental measures – Energy efficiency and conservation In-house ecology – Environmental measures – Eco-efficiency tables		SDG 7, 8, 12, 13 UNGC 8, 9
GRI 303: Water				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 In-house ecology – Governance		SDG 8, 12
103-2	The management approach and its components	In-house ecology – Governance In-house ecology – Environmental measures		
103-3	Evaluation of the management approach	In-house ecology – Governance In-house ecology – Environmental measures		
303-5	Water consumption	In-house ecology – Environmental measures – Waste, water, and paper consumption	Partially reported. It is not considered material as none of our sites are significant consumers in any catchment area under water stress.	SDG 6, 12 UNGC 7,8
GRI 305: Emissions				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 In-house ecology – Governance		SDG 8, 12
103-2	The management approach and its components	In-house ecology – Governance In-house ecology – Environmental measures		
103-3	Evaluation of the management approach	In-house ecology –Governance In-house ecology – Environmental measures		
305-1	Direct (Scope 1) GHG emissions	In-house ecology – Environmental measures – Eco-efficiency tables	We do not report on biogenic CO2 emissions, because we don't have any.	SDG 3, 12, 13, 14 UNGC 7,8
305-2	Energy indirect (Scope 2) GHG emissions	In-house ecology – Environmental measures – Eco-efficiency tables		SDG 3, 12, 13, 14, 15 UNGC 7,8
305-3	Other indirect (Scope 3) GHG emissions	In-house ecology – Environmental measures – Eco-efficiency tables	We do not report on biogenic CO2 emissions, because we don't have any.	SDG 3, 12, 13, 14, 15 UNGC 7,8
305-4	GHG emissions intensity	In-house ecology – Environmental measures – Eco-efficiency tables		SDG 13, 14, 15 UNGC 8

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
305-5	Reduction of GHG emissions	In-house ecology – Environmental measures – Carbon neutral commitment In-house ecology – Environmental measures – Eco-efficiency tables Sustainable finance – Investment products – Asset management Climate risks – Risk management strategy and processes	Emission reduction from 2018 to 2019 is - 6.1%.	SDG 13, 14, 15 UNGC 8,9
GRI 306: Effluents and waste				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 In-house ecology – Governance		SDG 8, 12
103-2	The management approach and its components	In-house ecology – Governance In-house ecology – Environmental measures		
103-3	Evaluation of the management approach	In-house ecology –Governance In-house ecology – Environmental measures		
306-2	Waste by type and disposal method	In-house ecology – Environmental measures – Waste, water, and paper consumption	We do not report on reused waste, on-site storage, other, deep well injection, and the missing split up of these amounts into hazardous and non-hazardous, because we don't have any of those.	SDG 3, 6, 12 UNGC 8
GRI 400 Social				
GRI 401: Employment				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 – Employment and employability Employment and employability – People strategy HR Report – Fostering a Sustainable Performance Culture		SDG 5, 8
103-2	The management approach and its components	Employment and employability – People strategy Employment and employability – Governance Employment and employability – Workforce management HR Report – Delivering on our Strategy – the role of HR – Effective workforce management		
103-3	Evaluation of the management approach	Employment and employability – Governance Employment and employability – Workforce management Employment and employability – Key employee figures HR Report – Delivering on our Strategy – the role of HR – Workforce development		
401-1	New employee hires and employee turnover	Employment and employability – Workforce management – Recruiting and talent development Employment and employability – Key employee figures AR – Employees HR Report – Delivering on our Strategy – the role of HR – Staff turnover	Partially reported due to confidentiality constraints. Although we report voluntarily staff turnover in %, assessment and tracking of numbers related to turnover by age group and gender are for internal use only. The HR Report discloses staff turnover by region.	SDG 8 UNGC 6
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employment and employability – Workforce management – Future-oriented work environment Employment and employability – Workforce management – Restructuring HR Report – Benefits & Wellbeing	Partially reported: Benefits provided to employees depend on country, region, and jurisdiction. Therefore, not all benefits are available to each employee.	SDG 8
GRI 404: Training and education				

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Employment and employability Employment and employability – People strategy Employment and employability – Workforce management – Recruiting and talent development Sustainable finance – Training and awareness Anti-financial crime – Training and awareness HR Report – Developing our People – Learning culture		SDG 4, 5, 8
103-2	The management approach and its components	Employment and employability – Workforce management – Recruiting and talent development HR Report – Developing our People – Learning culture		
103-3	Evaluation of the management approach	Employment and employability – Workforce management – Recruiting and talent development Employment and employability – People strategy Employment and employability – Governance Employment and employability – Key employee figures HR Report – Developing our People – Learning culture		
404-1	Average hours of training per year per employee	HR Report – Developing our People – Learning culture – Training	We do not report average hours of training in 2019 per employee, and do not distinguish based on gender or employee category. Our HR Report discloses both training expenses (in € million) and training attendance.	SDG 4, 5, 8
404-2	Programs for upgrading employee skills and transition assistance programs	Employment and employability – Workforce management Employment and employability – Workforce management – Future-oriented work environment Sustainable finance – Training and awareness Information security – Defense against cyber threats Information security – Training and awareness Data protection – Training and awareness Culture and integrity – Code of Conduct Anti-financial crime – Training and awareness HR Report – Developing our People – Learning culture		SDG 5, 8
404-3	Percentage of employees receiving regular performance and career development reviews	HR Report – Rewarding performance – Compensation strategy and framework	Not reported. Our HR Report discloses our performance management processes; however, it does not include percentages of employees receiving performance and development reviews.	SDG 5, 8 UNGC 6

GRI 405: Diversity and equal opportunity

103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Employment and employability – People strategy Employment and employability – Workforce management – Inclusive culture and work environment Employment and employability – Workforce management – Future-oriented work environment HR Report – Diversity & Inclusion – HR priorities for a better employee experience – Inclusive culture and environment	We do not report percentage of individuals within the organization's governance bodies in each of the following diversity categories: Age group: under 30 years old, 30-50 years old, over 50 years old	SDG 5, 8, 10

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
103-2	The management approach and its components	Employment and employability – People strategy Employment and employability – Inclusive culture and work environment Employment and employability – Inclusive culture and environment – Gender diversity		
103-3	Evaluation of the management approach	Employment and employability – Inclusive culture and work environment Employment and employability – Inclusive culture and environment – Gender diversity Employment and employability – Key employee figures HR Report – Diversity & Inclusion – HR priorities for a better employee experience – Cultivating an inclusive culture and environment		
405-1	Diversity of governance bodies and employees	Employment and employability – Inclusive culture and work environment – Gender diversity Employment and employability – Key employee figures AR – Management Board AR – Supervisory Board		SDG 5, 8, 10 UNGC 6
GRI 412: Human rights assessment				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Human rights Human rights – Developments in 2019 Reputational Risk Culture and integrity	The boundary external (client, society) applies for: Human rights.	SDG 8, 16
103-2	The management approach and its components	Human rights Human rights – Developments in 2019 Reputational risk – Environmental and social due diligence Culture and integrity – Culture, Integrity and Conduct program		
103-3	Evaluation of the management approach	Human rights Human rights – Developments in 2019 Reputational risk – Environmental and social due diligence Culture and integrity – Culture, Integrity and Conduct program		
412-2	Employee training on human rights policies or procedures	Human rights – Employees Reputational risk –Environmental and social due diligence Culture and integrity – Culture, Integrity, and Conduct program	Partially reported. We report the business teams that receive training and the number of training sessions; not the number of hours or percentage of employees trained. Due to the nature of our business, human rights is also only primarily addressed through the Code of Conduct and training.	UNGC 1
GRI 414: Supplier social assessment				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Human rights		SDG 5, 8, 16
103-2	The management approach and its components	Human rights – Supply chain		
103-3	Evaluation of the management approach	Human rights – Supply chain		
414-2	Negative social impacts in the supply chain and actions taken	Human rights – Supply chain	Partially reported. We do not yet report the significant actual and potential negative human rights impacts in the supply chain and actions taken, but continue to identify vendors who might have potential negative human rights impacts. A percentage of identified vendors is not collected.	SDG 5, 8, 16 UNGC 2

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
GRI 417: Marketing and labeling				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis – Materiality results for 2019 Product responsibility – Product design and approval Product responsibility – Communications and marketing		
103-2	The management approach and its components	Product responsibility – Product design and approval Product responsibility – Communications and marketing		
103-3	Evaluation of the management approach	Product responsibility – Product design and approval Product responsibility – Communications and marketing	Partially reported.	
417-1	Requirements for product and service information and labeling	Product responsibility – Product design and approval Product responsibility – Communications and marketing Sustainable finance – Investment products	We follow product and advisory principles in designing and selling products, but we do not report the percentage of significant product or service categories covered by and assessed for compliance. The sourcing of product components and their disposal are not applicable to our business.	
GRI 418: Customer privacy				
103-1	Explanation of the material topic and its Boundary	Legal basis – Materiality and risks assessment process Legal basis– Materiality results for 2019 Data protection		SDG 8
103-2	The management approach and its components	Data protection – Governance for data protection management Information security – Governance Digital transformation – Governance		
103-3	Evaluation of the management approach	Data protection – Governance for data protection management Information security – Governance Information security – Third party risk Digital transformation – Governance	Partially reported. There have been new technologies and initiatives undertaken across our various product houses towards digital transformation; however, risk and privacy of data linked to innovations have not been reported.	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Client satisfaction – Complaint management Data protection	In 2019, there were no substantial breaches of data observed. However, complaints on data protection aspects are covered in our regular complaint management procedures; they are not filtered specifically. We do not report absolute data regarding complaints.	
Financial Services Standard Disclosures				
Product responsibility disclosures				
G4 DMA	Product and service labeling	Product responsibility – Product design and approval Product responsibility – Communications and marketing Culture and integrity – Culture, Integrity, and Conduct program	db.com/cr/en/concrete-responsible-marketing-responsible-sales.htm	
Product portfolio				
G4 DMA (formerly FS1)	Policies with specific environmental and social components applied to business lines	Public policy and regulation – Key topics in 2019 – Sustainable finance Sustainable finance – Investment products Climate risks – Risk management strategy and processes – ESG- led climate restrictions Approach to sustainability Reputational risks – Environmental and social due diligence DWS Report – Clients and Products: Sustainable Finance, ESG Products and Responsible Investing	db.com/cr/en/docs/DB-ES-Policy-Framework-English.pdf	SDG 10

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
G4 DMA (formerly FS3)	Processes for monitoring clients' implementation of and compliance with environmental and social requirements included in agreements or transactions	Approach to sustainability Reputational risks – Environmental and social due diligence Sustainable finance – Lending and advisory Sustainable finance – Investment products Climate risks – Risk management strategy and processes Data protection Public policy and regulation – Governance		SDG 10
G4 DMA (formerly FS4)	Process(es) for improving staff competency to implement the environmental and social policies and procedures as applied to business lines	Sustainable finance – Training and awareness Sustainable finance – Investment products Product responsibility – Training and awareness Public policy and regulation – Key topics in 2019 – Sustainable finance Climate risks – Governance DWS Report – Clients and Products: Sustainable Finance, ESG Products and Responsible Investing		
G4 DMA (formerly FS5)	Interactions with clients/ investees/business partners regarding environmental and social risks and opportunities	Stakeholder engagement Reputational risks – Environmental and social due diligence Sustainable finance – Lending and advisory Sustainable finance – Investment products Public policy and regulation –Sustainable finance Climate risks – Risk management strategy and processes Human rights – Developments 2019 DWS Report – Clients and Products: Sustainable Finance, ESG Products and Responsible Investing		SDG 10
FS7	Monetary value of products and services designed to deliver a specific social benefit for each business line broken down by purpose.	Sustainable finance – Investment products – ESG real estate and infrastructure investments	Partially reported: Where relevant we have reported the associated monetary value. A disclosure on the associated monetary value of every product and service designed to deliver a specific social benefit broken down by business line does not yet exist. We are investigating possibilities to expand the tracking methodology and have started to run a first impact assessment pilot.	SDG 8, 9, 10, 11
FS8	Monetary value of products and services designed to deliver a specific environmental benefit for each business line broken down by purpose.	Sustainable finance – Investment products Sustainable finance – Lending and advisory	Partially reported: Where relevant we have reported the associated monetary value. A disclosure on the associated monetary value of every product and service designed to deliver a specific environmental benefit broken down by business line does not yet exist. We investigate possibilities to expand the tracking methodology and started to run a first impact assessment pilot.	
Active ownership				
FS11	Percentage of assets subject to positive and negative environmental or social screening.	Sustainable finance – Investment products – Asset management – Sustainable investment funds Sustainable finance – Investment products – Asset management – ESG and sustainable assets under management	Partly reported. We do not report percentages and if positive or negative screening is required by law.	SDG 10
G4 DMA (formerly FS12)	Voting policy(ies) applied to environmental or social issues for shares over which the reporting organization holds the right to vote shares or advises on voting.	Sustainable finance – Investment products – Asset management DWS Report – Clients and Products: Sustainable Finance, ESG Products and Responsible Investing	www.dws.com/globalassets/cio/dam-us/pdfs/resources/dws-proxy-voting-policy-and-guidelines.pdf	
Society disclosures				
Local communities				

GRI Standards and Disclosures		Non-Financial Report and/or Link to Source	Remarks/Omissions	SDG and UNGC Reference
FS14	Initiatives to improve access to financial services for disadvantaged people	Access and inclusion – Accessibility Access and inclusion – Financial Inclusion Access and inclusion – Financial literacy	Partly reported: We do not indicate the availability of documents that address the degree to which we have adapted facilities and methods of providing standard service offerings to support disadvantaged people.	SDG 8, 10

Abbreviations

AATIF	Africa Agriculture and Trade Investment Fund
ABC	Anti-Bribery and Corruption
ACAMS	Anti-Money Laundering Specialists
AFBC	Anti-Fraud, Bribery, and Corruption
AFC	Anti-Financial Crime
AFCI	Anti-Financial Crime Investigations
AFME	Association for Financial Markets in Europe
AI	Artificial intelligence
AM	Asset Management
AML	Anti-Money Laundering
AMLD	Anti-Money Laundering Directive
APAC	Asia-Pacific
API	Application Programming Interface
ATLAS	Accomplished Top Leaders Advancement Strategy
AuM	Assets under Management
BaFin	Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority)
BdB	Bundesverband deutscher Banken (Association of German Banks)
BEE	Black Economic Empowerment
BREEAM	Building Research Establishment Environmental Assessment Methodology
CB	Corporate Bank
CCP	Corporate Community Partnership
CDP	Former Carbon Disclosure Project
CEEF	Clean Energy and Environment Fund
CEO	Chief Executive Officer
CESGA	Certified Environmental Social Governance Analyst
CFD	Contract for Difference
CFO	Chief Financial Officer
CIC	Culture, Integrity and Conduct
C&I OpFo	Conduct & Integrity Operating Forum
CIO	Chief Investment Officer
CIRC	Cyber Intelligence and Response Centers
CISO	Chief Information Security Office
CO_2	Carbon dioxide
CRA	Community Reinvestment Act
CREF	China Renewable Energy Fund
CRO	Chief Risk Officer
CRU	Capital Release Unit
CRM	Credit Risk Management
CRRM	Client Risk Rating Methodology
CSO	Chief Security Office
CSR	Corporate social responsibility
CSSA	Cyber Security Sharing & Analytics
CTRR	Climate Transition Risk and Opportunities
DDoS	Distributed Denial of Services
DMS	Donations, memberships, sponsorships
EBA	European Banking Authority
EBF	European Banking Federation
EC	European Commission
ECB	European Central Bank
EcoPMO	Eco-Performance Management Office
EED	European Energy Directive
EEEF	European Energy Efficiency Fund
EFFAS	European Federation of Financial Analysts Societies
EFR	Financial Services Roundtable
ERM	Enterprise Risk Management
ERC	Enterprise Risk Committees
ES	Environmental and social
ESG	Environmental, social and governance
ESMA	European Securities and Markets Authority

ETF	Exchange-traded-fund
EU	European Union
FCO	Financial Crime Operations
FS-ISAC	Financial Services Information Sharing and Analysis Centre
FTE	Full-Time Equivalent
G20	Group of Twenty, an international forum that brings together the world's 20 leading industrialized and emerging economies
GDP	Group data privacy
GDPR	General Data Protection Regulation
G&E	Gifts and entertainment
GFG	Global Funds Group
GHG	Greenhouse gas
GIT	Global Impact Tracking
GIZ	German Development Agency
GMC	Group Management Committee
GPGF	Global Product Governance Forum
GRI	Global Reporting Initiative
GRRC	Group Reputational Risk Committee
GS	Group Sustainability
GSIA	Global Sustainable Investment Alliance
HGB	German Commercial Code (Handelsgesetzbuch)
HR	Human Resources
HRWG	Human Rights Working Group
IB	Investment Bank
ICMA	International Capital Market Association
IFC	International Finance Corporation
IIN	Interbank Information Network
ILO	International Labor Organization
IMV	Impact Measurement and Valuation
IREC	International Renewable Electricity Certificate
ISO	International Organization for Standardization
IT	Information Technology
JMLIT	Joint Money Laundering Intelligence Taskforce
KfW	Kreditanstalt für Wiederaufbau (Germany's national promotional bank)
KPI	Key Performance Indicator
KYC	Know Your Client
LBG	London Benchmarking Group
LEED	Leadership in Energy and Environmental Design
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex
LGD	Loss given default
LoD	Lines of Defense
MESGS	Minimum ESG Investment Standards
MiFID II	Markets in Financial Instruments Directive II
MW	Megawatt
NFRep	Non-Financial Report
NGFS	Network of Greening the Financial System
NGOs	Nongovernmental organizations
NPA	New product approval
NPS	Net Promoter Score
OECD	Organisation for Economic Co-operation and Development
PB	Private Bank
PD	Probability of Default
PRA	Prudential Regulation Authority
PRI	Principles for Responsible Investment
PSD	Payment Service Directive
REC	Renewable Electricity Certificate
RE-DISS	Reliable Disclosure Systems for Europe
REGO	Renewable Energy Guarantee Origin
RI	Responsible Investment
RMC	Regulatory Management Council
RRAP	Reputational Risk Assessment Process
RRRC	Regional Reputational Risk Committee
SDG	Sustainable Development Goal

S&E	Sanctions and embargoes
SI	Sustainable Investments
SME	Small and medium-sized enterprises
SPR	Systematic Product Review
SROI	Social return on investment
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TCFD	Task Force on Climate-related Financial Disclosures
TEG	Technical Expert Group
TM	Transaction monitoring
UCITS	Undertakings for Collective Investments in Transferable Securities
UK	United Kingdom
UN	United Nations
UNEP	United Nations Environment Programme
UNEP FI	United Nations Environment Programme Finance Initiative
UNGC	United Nations Global Compact
U.S.	United States
VBA	Value Balancing Alliance
VCR	Vendor control requirements
VP	Vice President
WD	Wealth Discretionary
WM	Wealth Management

Imprint/Publications

Deutsche Bank Aktiengesellschaft
Taunusanlage 12
60325 Frankfurt am Main
Germany
Tel.: +49 69 91 00 0
deutsche.bank@db.com

Contact

Group Finance

Group Sustainability
corporate.responsibility@db.com

Feedback from our stakeholders improves further development of our non-financial reporting. We look forward to new impetus and your opinion.

Publications

Publications relating to the financial statements

Annual Report 2019
(German / English)

Annual Financial Statements and Management Report of Deutsche Bank AG 2019
(German / English)

Non-Financial Report 2019
(German / English)

Human Resources Report 2019
(German / English)

List of Advisory Council Members
(German)

Online

All publications relating to our financial reporting are available on our homepage.

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Deutsche Bank AG

Editorial comment

All the information in this report has been compiled in good faith and with the greatest care from various sources. To the best of our knowledge, the information and data contained in this report reflect the truth. Nevertheless, we cannot assume liability for the correctness or completeness of the information provided herein.

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Insofar as the masculine form is used in the contents of this report, it is assumed that this refers to both genders on equal terms.

We would like to thank all colleagues and external partners for their friendly support in making this report possible.

Forward-looking statements

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 Deutsche Bank. 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, potential defaults of borrowers or trading counterparties, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of 20 March 2020 under the heading “Risk Factors”. Copies of this document are readily available upon request or can be downloaded.

Our Purpose

This is why we're here. This is what we do.

We are here to enable economic growth and societal progress, by creating positive impact for our clients, our people, our investors and our communities.