



SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Sustainable Instruments Framework

Deutsche Bank AG
10 January 2024

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	<ul style="list-style-type: none">▪ Sustainable Financing Instruments
Relevant standards	<ul style="list-style-type: none">▪ Green Bond Principles, as administered by the ICMA (as of June 2021 with June 2022 Appendix 1)▪ Social Bond Principles, as administered by the ICMA (as of June 2023)
Scope of verification	<ul style="list-style-type: none">▪ Deutsche Bank AG's Sustainable Instruments Framework (as of January 9, 2024)▪ Deutsche Bank AG's Eligibility Criteria (as of January 9, 2024)▪ Pre-issuance verification
Lifecycle	<ul style="list-style-type: none">▪ 1st Update of SPO as of November 11, 2022 (https://www.isscorporatesolutions.com/file/documents/spo/spo-20221111-deutschebank.pdf)
Validity	<ul style="list-style-type: none">▪ Valid as long as the cited Framework remains unchanged.

CONTENTS

SCOPE OF WORK	3
DEUTSCHE BANK BUSINESS OVERVIEW	3
ASSESSMENT SUMMARY	4
SPO ASSESSMENT.....	5
PART I: ALIGNMENT WITH ICMA GREEN, SOCIAL BONDS PRINCIPLES	5
PART II: SUSTAINABILITY QUALITY OF THE ISSUANCE	7
A. CONTRIBUTION OF THE SUSTAINABLE INSTRUMENTS FRAMEWORK TO THE UN SDGs.....	7
B. MANAGEMENT OF ENVIRONMENTAL & SOCIAL RISKS ASSOCIATED WITH THE FINANCIAL INSTITUTION AND THE SELECTION CRITERIA.....	14
PART III: LINKING THE TRANSACTION TO DEUTSCHE BANK AG'S ESG PROFILE	18
A. CONSISTENCY OF SUSTAINABLE INSTRUMENTS FRAMEWORK WITH DEUTSCHE BANK'S SUSTAINABILITY STRATEGY	18
B. DEUTSCHE BANK'S BUSINESS EXPOSURE TO ESG RISKS	20
ANNEX 1: Methodology	23
ANNEX 2: ISS ESG Corporate Rating Methodology	24
ANNEX 3: Quality management processes	24
About this SPO	25

SCOPE OF WORK

Deutsche Bank AG (“the Issuer” or “Deutsche Bank”) commissioned ISS Corporate Solutions (ICS) to assist with its Sustainable Instruments Framework by assessing three core elements to determine the sustainability quality of the instruments:



1. Deutsche Bank’s Sustainable Instruments Framework (as of January 9, 2024) – benchmarked against the International Capital Market Association’s (ICMA) Green Bond Principles (GBP) and Social Bond Principles (SBP).
2. The Eligibility Criteria – whether the eligible categories contribute positively to the UN SDGs and how they perform against proprietary issuance-specific key performance indicators (KPIs) (See Annex 1).
3. Linking the transaction(s) to Deutsche Bank’s overall ESG profile – drawing on the issuance-specific Use of Proceeds categories.

DEUTSCHE BANK BUSINESS OVERVIEW

Deutsche Bank AG operates as a stock corporation company. It is classified in the Commercial Banks & Capital Markets, as per ISS ESG’s sector classification.

Deutsche Bank AG engages in the provision of Corporate Banking, Investment Services, Private Banking and Asset Management. It operates through the following segments: Corporate Bank, Investment Bank, Private Bank, and Asset Management. The Corporate Bank segment includes corporate and commercial clients as well as financial institutions, small corporate and entrepreneur clients. The Corporate Bank Segment provides several services, including Cash Management, Trade Finance and Lending, Foreign Exchange, Optimization of working capital & liquidity, Securing global supply chains and distribution channels to Corporates and Commercial clients. The segment also provides services related to Correspondent Banking, Trust and Agency and Securities Services to financial institutions, and business banking services to small corporate and entrepreneur clients. The Investment Bank segment is involved in origination and advisory businesses as well as fixed-income, currency, sales, and trading. The Investment Bank segment provides these services to corporate and institutional clients. The Private Bank segment focuses on Private Bank Germany, private and commercial business international, and wealth management business units. This segment also includes International Private Bank, which also caters to commercial clients. The Asset Management segment provides investment solutions to individual investors and institutions through the DWS Group GmbH & Co. KGaA brand. The company was founded on March 10, 1870, and is headquartered in Frankfurt, Germany.

ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
Part 1: Alignment with ICMA GBP and SBP	The Issuer has defined a formal concept for its Sustainable Instruments Framework regarding use of proceeds, processes for asset evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA's Green Bond Principles and Social Bond Principles	Aligned
Part 2: Sustainability quality of the Eligibility Criteria	<p>The Sustainable Financing Instruments will (re-)finance eligible asset categories which include:</p> <p>Green categories: Green Buildings, Renewable Energy, Energy Efficiency, Clean Transportation, Information and Communications Technology.</p> <p>Social categories: Affordable Housing, Access to Essential Services.</p> <p>Product and/or service-related use of proceeds categories ² individually contribute to one or more of the following SDGs:</p>  <p>Other use of proceed categories³ improve the operational impacts of Deutsche Bank's borrower(s) and mitigate potential negative externalities of its sector/their sectors on one or more of the following SDGs:</p>  <p>The environmental and social risks associated with those use of proceeds categories are managed.</p>	Positive
Part 3: Linking the transaction to Deutsche Bank AG's overall ESG profile	<p>The key sustainability objectives and the rationale for issuing Sustainable Instruments Framework are clearly described by the Issuer. The asset categories financed are in line with the sustainability objectives of the Issuer.</p> <p>At the date of publication of the report and leveraging ISS ESG Research, the Issuer is exposed to a controversy, in failure to prevent money laundering in the United States.</p>	Consistent with Issuer's sustainability strategy

¹ The evaluation is based on the Deutsche Bank's Sustainable Instruments Framework (as of January 9, 2024 version), and on the ISS ESG Corporate Rating updated on May 2, 2023 and applicable at the SPO delivery date.

² Affordable Housing, Access to Essential Services, Green Buildings, Renewable Energy, Energy Efficiency, Clean Transportation, Information and Communications Technology

³ Green Buildings (Installation, maintenance, and repair of individual measures)

SPO ASSESSMENT

PART I: ALIGNMENT WITH ICMA GREEN, SOCIAL BONDS PRINCIPLES

This section evaluates the alignment of the Deutsche Bank’s Sustainable Instruments Framework (as of January 9, 2024) with the ICMA GBP and SBP.

ICMA’S GBP AND SBPEH	ALIGNMENT	OPINION
1. Use of Proceeds	✓	<p>The Use of Proceeds description provided by Deutsche Bank’s Sustainable Instruments Framework is aligned with the ICMA’s Green Bond Principles and Social Bond Principles.</p> <p>The Issuer’s green and social categories align with the categories as proposed by the ICMA’s Green Bond Principles and Social Bond Principles. The criteria are defined in a clear and transparent manner, disclosure of distribution of proceeds by eligible category is provided and environmental and social benefits.</p> <p>The Issuer defines exclusion criteria for harmful asset categories.</p>
2. Process for Asset Evaluation and Selection	✓	<p>The Process for Asset Evaluation and Selection description provided by Deutsche Bank’s Sustainable Instruments Framework is aligned with the ICMA’s Green Bond Principles and Social Bond Principles.</p> <p>The asset selection process is defined and structured in a congruous manner. ESG risks associated with the eligible categories are identified and managed through the Environmental and Social policy framework for environmental and social risks. Moreover, the assets selected show alignment with the sustainability strategy of the Issuer.</p> <p>The Issuer involves various stakeholders in this process and identify alignment of their green assets with official or market-wide taxonomies and to reference any green standards or certifications used, in line with best market practice.</p>
3. Management of Proceeds	✓	<p>The Management of Proceeds proposed by Deutsche Bank’s Sustainable Instruments Framework is aligned with the ICMA’s Green Bond Principles and Social Bond Principles.</p>

		<p>The net proceeds collected will be equal to the amount allocated to eligible assets. The net proceeds are tracked in an appropriate manner and attested in a formal internal process. The net proceeds are managed on an aggregated basis for multiple instruments (portfolio approach). Moreover, the Issuer discloses the temporary investment instruments for unallocated proceeds.</p>
<p>4. Reporting</p>	<p>✓</p>	<p>The allocation and impact reporting proposed by Deutsche Bank’s Sustainable Instruments Framework is aligned with the ICMA’s Green Bond Principles and Social Bond Principles.</p> <p>The Issuer commits to disclose the allocation of proceeds transparently and to report in an appropriate frequency. The reporting will be publicly available on the Issuer’s website⁴. Deutsche Bank explains the level of expected reporting and the type of information that will be reported. Moreover, the Issuer commits to report annually.</p> <p>The Issuer is transparent about the information reported, frequency, scope and the level of impact reporting and provide an overview of indicative impact indicators for the respective categories to be financed. Furthermore, commits to have a third party auditing the allocation report, in line with best market practice.</p>

⁴ The report is publicly available on Deutsche Bank’s website. More information is available at <http://www.db.com/ir/>

PART II: SUSTAINABILITY QUALITY OF THE ISSUANCE

A. CONTRIBUTION OF THE SUSTAINABLE INSTRUMENTS FRAMEWORK TO THE UN SDGs⁵

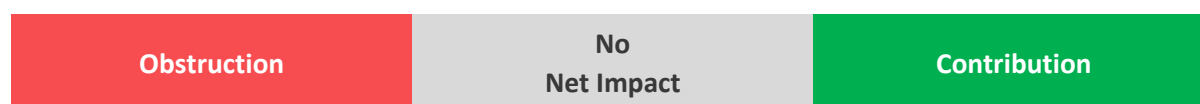
Banks can contribute to the achievement of the SDGs by financing and/or investing in specific services/products which help address global sustainability challenges, and by being responsible actors, working to minimize negative externalities in their financing/investment activities along the entire value chain. The aim of this section is to assess the SDG impact of the UoP categories financed or invested in by the Bank in two different ways, depending on whether the proceeds are used to (re)finance:

- specific products/services,
- improvements of operational performance.

1. Products and services

The assessment of UoP categories for (re)financing / invested in products and services is based on a variety of internal and external sources, such as the ISS ESG SDG Solutions Assessment (SDGA), a proprietary methodology designed to assess the impact of an Issuer's products or services on the UN SDGs, as well as other ESG benchmarks (the EU Taxonomy Climate Delegated Acts, the ICMA Green and/or Social Bond Principles and other regional taxonomies, standards and sustainability criteria).

The assessment of UoP categories for (re)financing / invested in specific products and services is displayed on 3-point scale (see Annex 1 for methodology):





Each of the Sustainable Instruments Framework Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
<p>Green Buildings</p> <p>Buildings which meet at least one of the following certifications⁶:</p> <ul style="list-style-type: none"> ▪ BREEAM “Excellent” ▪ DGNB “Gold” or higher ▪ Green Mark “Gold Plus” or higher ▪ Green Star “5 Star” or higher ▪ HQE “Excellent” or higher 	<p>Contribution</p>	

⁵ The impact of the UoP categories on UN Social Development Goals is assessed with proprietary methodology and may therefore differ from the Issuer's description in the framework.

⁶ The review is limited to certifications spelled out in the Framework.




<ul style="list-style-type: none"> ▪ LEED “Gold” or higher ▪ NABERS Energy “5 Star” or higher 		
<p>Green Buildings</p> <p>For buildings built after 31 December 2020:</p> <ul style="list-style-type: none"> ▪ Net primary energy demand of the new construction must be at least 10% lower than the primary energy demand resulting from the relevant ‘nearly zero-energy building’ (‘NZEB’) requirements. <p>For buildings built before 31 December 2020:</p> <ul style="list-style-type: none"> ▪ Buildings within the top 15% of the national or regional building stock (PED) ▪ Buildings⁷ with an Energy Performance Certificate (EPC) class of at least A or B⁸, or ▪ Buildings⁹ which satisfy the minimum requirements as defined in Energieeinsparverordnung 2009 (EnEV 2009)¹⁰ 	<p>Contribution</p>	
<p>Green Buildings</p> <p>Renovation of existing buildings that meet at least one of the following criteria:</p> <ul style="list-style-type: none"> ▪ Energy savings of at least 30% in comparison to the baseline performance of the building before the renovation, ▪ Building renovation compliant with energy performance standards set in the applicable building regulations for “major renovations” transposing the Energy Performance of Buildings Directive ▪ For buildings built before December 31, 2020, after the renovation, building within 	<p>Contribution</p>	

⁷ Only for German residential real estate buildings.

⁸ Deutsche Bank worked with the engineering consultant, Drees & Sommer to confirm that Residential Green Bond asset in Germany is within the Top 15% of its local market if the EPC class A or B is reached.

⁹ Only for German residential real estate buildings.

¹⁰ Deutsche Bank worked with the engineering consultant, Drees & Sommer to confirm that Residential Green Bond asset in Germany is within the Top 15% of its local market if the Building Energy standard is EnEV 2009 or newer.




<p>the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence.</p>		
<p>Renewable Energy</p> <ul style="list-style-type: none"> ▪ Wind (onshore/offshore) ▪ Solar (photovoltaic/ concentrated solar power) ▪ Geothermal¹¹ ▪ Hydropower¹² <100MW capacity ▪ Ocean 	<p>Contribution</p>	
<p>Renewable Energy</p> <p>Bioenergy</p> <ul style="list-style-type: none"> ▪ Biomass facilities using eligible feedstock¹³ and operating above 80% of GHG emissions reduction in relation to the relative fossil fuel comparator set out in RED II, increasing to 100% by 2050 ▪ Renewable non-fossil gaseous and liquid fuels with life-cycle emissions threshold of 100g CO₂e/kWh for electricity production 	<p>Contribution</p>	
<p>Energy Efficiency</p> <p>Development and implementation of products or technology that reduce the use of energy, including, but not limited to¹⁴:</p> <ul style="list-style-type: none"> ▪ Energy-efficient lighting (e.g., LEDs) ▪ Energy storage (e.g., fuel cells) 	<p>Contribution</p>	

¹¹ Life-cycle emissions threshold of 100 g CO₂e/kWh for electricity production from geothermal energy.

¹² The electricity generation facilities that produce electricity from hydropower meeting at least one of the following criteria: For electricity generation facility with capacity below 25MW: is a run-of-river plant without an artificial reservoir; For assets with capacity below 100MW: Power density of the electricity generation facility is above 5 W/m²; Life-cycle emissions threshold of 100 g CO₂e/kWh for electricity production.




¹³ Eligible bioenergy feedstock includes waste materials and certified sustainable crops (no reduction of biomass and soil carbon pools). Sustainable crops are defined as crops certified under the Roundtable on Sustainable Biomaterials (RSB) or ISCC Plus; soy certified under RTRS. Any bioenergy production that competes with food production, sacrifices forest areas, areas with high biodiversity or carbon pools in soil (e.g., grass or wetlands) is excluded. Biomass or biogas from palm, peat and non-sustainably produced crops is excluded.



¹⁴ The assessment is limited to the examples of assets listed in the Framework.

<p>Energy Efficiency</p> <p>Development and implementation of products or technology that reduce the use of energy, including, but not limited to¹⁵:</p> <ul style="list-style-type: none"> Improvement in energy services (e.g., smart grid meters) 	<p>Contribution</p>	
<p>Clean Transportation</p> <ul style="list-style-type: none"> Any vehicles or vessels with zero direct (tailpipe) CO₂ emissions Passenger and freight rail transport¹⁶ Other means of transportation in an urban and suburban context that conform to the respective vehicle-specific thresholds set by the EU Taxonomy Until December 31, 2025, hybrid and dual-fuel vessels that derive at least 25% (sea and coastal water transport) and 50% (inland passenger water transport) of their energy from fuels that have zero direct (tailpipe) CO₂ emissions or from plug-in power for their normal operation Other means of water transportation that conform to the respective vessel-specific thresholds set by the EU Taxonomy confirmed on an individual basis by third party 	<p>Contribution</p>	
<p>Clean Transportation</p> <p>Personal mobility or transport devices where the propulsion comes from the physical activity of the user, from a zero-emissions motor, or a mix of zero-emissions motor and physical activity, including the provision of freight transport services by (cargo) bicycles</p>	<p>Contribution</p>	

¹⁵ Ibid.

¹⁶ Trains and wagons that align with the technical screening criteria for a substantial contribution to Climate Change Mitigation of the EU Taxonomy Delegated Act (June 2021) Activity 6.1 and 6.2.

<p>Clean Transportation</p> <p>Infrastructure required for zero direct CO₂ emissions transport and low-carbon transport, including infrastructure/equipment for electric vehicles and active mobility</p>	<p>Contribution</p>	
<p>Information and Communications Technology (ICT)</p> <p>Energy-efficient data centers and equipment for data processing, hosting, and related activities that meet:</p> <ul style="list-style-type: none"> ▪ The operator of the activity has implemented all relevant practices listed as “expected practices” in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency, or in the CEN-CENELEC document CLC TR50600-99-1 “Data center facilities and infrastructures– Part 99-1: Recommended practices for energy management”; and the implementation of these practices is verified by an independent third party and audited at least every three years; and ▪ The global warming potential of refrigerants used in the data center cooling system does not exceed 675. 	<p>Contribution</p>	
<p>Information and Communications Technology (ICT)</p> <p>Energy-efficient data centers and equipment for data processing, hosting, and related activities that meet:</p> <ul style="list-style-type: none"> ▪ The data center meets the Power Usage Effectiveness (PUE) thresholds defined by the Issuer as the key metric used under the European Code of Conduct 	<p>Contribution</p>	

<p>Affordable Housing</p> <p>Financing and investments related to the development and provision of adequate and affordable housing for disadvantaged populations or communities.¹⁷</p>	<p>Contribution¹⁸</p>	
<p>Access to Essential Services</p> <p>Financing and investments related to the promotion and enhancement of access of elderly and/or vulnerable people to adequate housing with special care. Examples include, but are not limited to, elderly housing facilities, skilled nursing facilities, assisted living facilities, nursing homes, custodial care facilities, memory care facilities.</p>	<p>Contribution¹⁹</p>	

2. Improvements of operational performance (processes)

The below assessment aims at qualifying the direction of change (or “operational impact improvement”) resulting from the operational performance assets (re)financed by the UoP categories, as well as related UN SDGs impacted. The assessment displays how the UoP categories are mitigating the exposure to the negative externalities relevant to the business model and the sector of the Issuer’s clients.




Deutsche Bank finances operations/processes in third-party sectors which are not listed in the Issuer’s Framework. As such, ISS ESG is not in a position to display the exposure to negative externalities linked to the sector of the operations/processes financed. Negative externalities, if present, could have an impact on the overall sustainability quality of the issuance.

The table below aims at displaying the direction of change resulting from the operational performance improvement assets. The outcome displayed does not correspond to an absolute or net assessment of the operational performance.

¹⁷ For the United States, at least 50% of the units in the building / project are affordable, reserved for or restricted to low-income households with income that is below 80% of the area median income. In other countries/ regions, accepted country-specific approaches for defining low-income households will be assessed on a case-by-case basis. Only the percentage of the financing and investments will be included in the Green and Social Asset Pool that is equivalent to the percentage of the units being designed for low-income households.

¹⁸ Please note that this assessment is limited to the examples spelled out in the Framework.

¹⁹ The review is limited to the examples of projects spelled out in the Framework.

USE OF PROCEEDS (PROCESSES)	OPERATIONAL IMPACT IMPROVEMENT ²⁰	SUSTAINABLE DEVELOPMENT GOALS
<p>Green Buildings</p> <p>Installation, maintenance, and repair of individual measures that improve the energy efficiency of the buildings, including, but not limited to²¹:</p> <ul style="list-style-type: none"> ▪ deployment of smart meters 	<p>✓²²</p>	
<p>Green Buildings²³</p> <p>Installation, maintenance, and repair of individual measures that improve the energy efficiency of the buildings, including, but not limited to²⁴:</p> <ul style="list-style-type: none"> ▪ installation of renewable energy generation capacity 	<p>✓</p>	
<p>Green Buildings²⁵</p> <p>Installation, maintenance, and repair of individual measures that improve the energy efficiency of the buildings, including, but not limited to²⁶:</p> <ul style="list-style-type: none"> ▪ the upgrade of windows, ▪ improvement of insulation, ▪ installation of heating 	<p>✓</p>	

²⁰ Limited information is available on the scale of the improvement as no threshold is provided. Only the direction of change is displayed.

²¹ The assessment is limited to the examples of projects listed in the Framework.

²² It is noted that that the Issuer has aligned its selection criteria with the technical screening criteria for a substantial contribution to Climate Change Mitigation of the EU Taxonomy Delegated Act (June 2021).

²³ Where applicable, individual energy efficiency measures need to comply with minimum requirements set in the national measures implementing Directive 2010/31/EU and rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/ 1369).

²⁴ The assessment is limited to the examples of projects listed in the Framework.

²⁵ Where applicable, individual energy efficiency measures need to comply with minimum requirements set in the national measures implementing Directive 2010/31/EU and rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/ 1369).

²⁶ The assessment is limited to the examples of projects listed in the Framework.

B. MANAGEMENT OF ENVIRONMENTAL & SOCIAL RISKS ASSOCIATED WITH THE FINANCIAL INSTITUTION AND THE SELECTION CRITERIA

The table below evaluates the selection criteria in the Framework against issuance-specific KPIs. The entirety of the assets are and will be located in globally.

ASSESSMENT AGAINST KPIs

ESG guidelines into financing process

Deutsche Bank integrates the environmental and social due diligence provision as part of its Reputational Risk Framework. The due diligence provisions consist of cross-sectoral and sector-specific requirements that jointly form the Deutsche Bank's Environmental and Social (ES) Policy Framework²⁷.

The framework was approved by the Group Reputation Risk Committee and applies to lending and trade finance activities of Corporate Bank, lending and capital market activities of Investment Bank, as well as to Private Bank's commercial lending activities.

For purpose of asset selection under this Framework, the bank leverages the ES due diligence defined by the ES Policy Framework. During the environmental and social risk review process, the materiality of identified environmental and social risks will be evaluated, along with the associated reputational risks. If the risks are deemed to pose material reputational risks, or meet one of the mandatory referral criteria, the transaction will be referred to one of the four Regional Reputational Risk Committees. If issues are not resolved, the governance structure requires escalation to the Group Reputational Risk Committee, who's authority is delegated by the Group Risk Committee and the Management Board. Depending on the risk profile, mitigation measures will be proposed, and the clients will be engaged. Deutsche Bank will monitor progress towards agreed-upon mitigation measures.

Deutsche Bank manages environmental and social risks in line with Deutsche Bank's Code of Business Conduct and Ethics, applicable to all employees, as well as interactions with internal and external stakeholders.

Labour, Health and Safety

- ✓ Deutsche Bank is a member of the Equator Principles which apply respective labour, health and safety standards for in-scope projects. Moreover, Deutsche Bank has made formal commitments to the UN Global Compact, the OECD Guidelines for Multinational Enterprises, and the UN Guiding Principles on Business and Human Rights. Deutsche Bank requires for all projects compliance with local E&S laws and regulations, and the borrowers of project in non-designated countries to comply with the requirements of IFC Performance Standards and the World Bank Group Environmental, Health and Safety Guidelines.

²⁷Deutsche Bank Environmental and Social Policy Framework. <https://www.db.com/files/documents/csr/sustainability/Deutsche-Bank-ES-Policy-Framework-English.pdf>.

Deutsche Bank has due diligence processes in place that focus on its clients' policies and procedures to protect the health and safety of its employees and subcontractors, including having a Health and Safety Management System that is aligned with Good International Industry Practice or OHSAS 18001.

Deutsche Bank will not engage in business activities where DB has substantiated evidence of material adverse human rights impacts such as child or forced labour.

Biodiversity

The Issuer has a due diligence process in place to all financed assets, to ensure there's no material negative environmental and/or social impacts. For clients in high or enhanced environmental and social risk sector²⁸, the Issuer follows the environmental risk assessment as outlined in the Environmental and Social (ES) Policy Framework. Moreover, according to Deutsche Bank's ES Policy Framework, the Issuer will not knowingly finance the following:



- Activities that fall within close proximity to a World Heritage Site unless there is a consensus with both government and UNESCO confirming it will not affect the value of the site.
- Projects which involve clearing forests, areas of High Conservation Value (HCV) or peatlands, or illegal use of fire.

In addition, Deutsche Bank has an objective to gradually align its environmental and social due diligence approach with the EU Taxonomy requirements for those assets in scope of the EU Taxonomy requirements in regard to the Do No Significant Harm assessment and minimum social safeguards.

Community Dialogue



Deutsche Bank is an Equator Principles Financial Institution and it confirms to integrate community dialogue into part of the planning process for all in-scope projects. Deutsche Bank require its clients to represent and warrant in loan documentation that IFC Performance standards will be implemented to develop associated Environmental and Social Management Systems and Plans. Additionally, Deutsche Bank requires borrowers to report on compliance with the above systems and plans. For high-risk projects²⁹, an external environmental and social consultant is engaged to audit borrower's adherence to IFC standards. The Issuer tracks all identified corrective actions through a Borrower Corrective Action Plan, where penalties may be required if not adhered to.

For out-of-scope projects, the Issuer considers all transactions in relation to the implementation of Good International Industry Framework and in line with its Environmental and Social Risk Policy Framework.

²⁸ Agriculture and forestry, chemicals, infrastructure projects in certain countries, metals and mining, oil and gas (including hydraulic fracturing and exploration in the Arctic), utilities and other activities either with a high carbon intensity and/or potential for human rights infringements.

²⁹ Ibid.

Inclusion

- ✓ The Issuer ensures universal access, especially to vulnerable or disadvantaged populations financed under the framework. Deutsche bank refers to the national or state regulation as guideline when selecting eligible social assets, and therefore exclude luxury units. The Issuer provided that currently, the identified assets of Essential Services in the United States are all supported by a federal or/and state-run scheme³⁰.

Responsible treatment of customers with debt repayment problems

- ✓ Deutsche Bank has established processes to responsibly treat customers with debt repayment problems, that including a variety of steps to mitigate hardship in conjunction with nonperforming loans, notifies clients early if they fail to repay loans or repay late, and various measures to deal responsibly with clients having debt repayment problems.

The Issuer's Global Client Suitability and Appropriateness Policy includes minimum standards that must be met with regards to the implementing controls related to performance, the clarity of warnings and notification provided to clients along with the effectiveness.

Exclusion criteria

Deutsche Bank's due diligence assessment includes a negative screening of exclusion criteria. The Bank excludes the following:

- Controversial Weapon, conflict countries, private military security companies, along with automatic and semiautomatic firearms and human-out-of-the-loop weapon systems.
- Business associated with adult entertainment, associated branded products or service or prostitution.
- Online Gambling

Deutsche Bank will not engage in business operations where there is substantiated evidence of significant adverse human rights consequences and where it has been determined that human rights impacts cannot be prevented or properly mitigated. Additionally, Deutsche Bank shall refrain from any actions or associations where there is undeniable proof of environmental harm. Hence, the Issuer will not finance the following:

- Actions that fall under the definition of child or forced labor as defined in the International Labor Organization's basic treaties.
- Actions that fall under close proximity to a World Heritage Site unless there is a consensus with both government and UNESCO confirming it will not affect the value of the site.
- Projects which involve clearing forests, areas of High Conservation Value (HCV) or peatlands, or illegal use of fire.

³⁰ Medicare and Medicaid, U.S. Department of Health and Human Services <https://www.hhs.gov/answers/medicare-and-medicaid/what-is-the-difference-between-medicare-medicaid/index.html>.

- New coal power plants and new thermal coal mining projects or the associated infrastructure. Mining activities, that make use of Mountain Top Removal (MTR) as their extraction method and materially contributes to the total annual MTR coal production in the United States.
- Oil sands: no financing of new projects involving exploration, production, and transport/processing; Arctic region: no financing of new oil and gas projects in the Arctic region (as demarcated by the 10°C July isotherm boundary); Oil and gas extracted by means of hydraulic fracturing: no financing of projects in countries with extremely high-water stress.

Deutsche Bank has an internal process in place along with due diligence, Environmental and Social Sustainable Finance standards. Additionally, the Issuer manages risks in accordance with its Environment and Social Risk Framework.

PART III: LINKING THE TRANSACTION TO DEUTSCHE BANK AG'S ESG PROFILE

A. CONSISTENCY OF SUSTAINABLE INSTRUMENTS FRAMEWORK WITH DEUTSCHE BANK'S SUSTAINABILITY STRATEGY

Key sustainability objectives and priorities defined by the Issuer

Deutsche Bank's objective is to provide sustainable growth and drive to the transition towards a sustainable and climate-neutral economy. Deutsche Bank embed sustainability into its products, policies and processes with an aim to contribute to the achievement of the Paris Climate Agreement's targets and the United Nations Sustainable Development Goals. The sustainability principles are anchored in the Code of Conduct³¹.

Deutsche Bank has publicly disclosed the sustainability targets on its website³², including:

- Achieve cumulative sustainable financing and investment volumes since January 2020 of over € 200 billion by the end of 2022 and a cumulative € 500 billion by the end of 2025 (excluding DWS).
- Fulfill Deutsche Bank's net-zero commitments for key carbon intensive sectors by accompanying clients in their transformation (Transition Dialogue).
- Strengthen policies and controls to guide the bank's actions and ensure compliance.
- Empower employees and establish sustainability as core value of the bank's culture.
- No financing of thermal coal mining from 2025 onward for clients in scope of the policy.
- More female leadership: 35 percent of Managing Director, Director and Vice President positions are to be represented by women by 2025.

Deutsche Bank targets to achieving climate neutrality in all of its operations by 2050 and reduce 50% of scope 1 and 2 emissions on defined assets by 2030. Concerning Deutsche Bank's sustainability strategy and its commitment to the Net Zero Banking Alliance³³, the Issuer has set 2030 and 2050 net zero aligned targets³⁴, and 2030 reduction target for financed scope 3 emissions in four carbon-intensive sectors:

- Oil and gas sector: 23% reduction of Scope 3 upstream financed emissions by 2030 and 90% by 2050.
- Power generation sector: 69% reduction of Scope 1 physical emission intensity by 2030 and 100% reduction by 2050.
- Automotive sector: 59% reduction in tailpipe emission intensity by 2030 and 100% reduction by 2050.

³¹ Deutsche Bank 2022, Code of Conduct, 2022 https://investor-relations.db.com/files/documents/documents/code-of-business-conduct-and-ethics-for-deutsche-bank-group.pdf?language_id=1&kid=code-of-conduct.redirect-en.shortcut

³² Deutsche Bank Website <https://www.db.com/what-we-do/responsibility/sustainability/sustainability-strategy>

³³ Deutsche Bank 2022, Decarbonization plan https://www.db.com/news/detail/20221021-deutsche-bank-publishes-targets-for-carbon-footprint-reduction?language_id=1

³⁴ Deutsche Bank 2023, Transition Plan https://www.db.com/news/detail/20231019-deutsche-bank-publishes-initial-transition-plan-and-further-net-zero-targets-for-high-emitting-sectors?language_id=1

- Steel sector: 33% reduction in Scope 1 and 2 physical emission intensity by 2030 and 90% reduction by 2050.
- Coal mining: 49% reduction in Scope 3 financed emissions by 2030, and 97% reduction by 2050.
- Cement: 29% reduction in Scope 1 and 2 physical emission intensity by 2030, and 98% reduction by 2050.
- Shipping: Scope 1 scoring of 0% achieved and maintained by 2030 and 2050 based on the Poseidon Principles Portfolio Level Alignment Score.

Deutsche Bank joined the RE100 initiative under the Climate Group in 2022, committing to source 100% renewable electricity for its own operations by the end of 2025. Also, Deutsche Bank has joined the EP100 initiative and is committed to achieving net zero operational carbon at owned occupied assets globally by 2030.

Moreover, Deutsche Bank is a signatory to the ten principles of the UN Global Compact, a member of the UN's Environment Programme Finance Initiative (UNEP FI) and signatory to the UNEP FI Principles for Responsible Banking. It is the founding signatory to the Net-Zero Banking Alliance, committing to align the operational and attributable emissions from its portfolios with the pathways to net zero by 2050 or sooner. Furthermore, the Issuer is a signatory to the Equator Principles, who commits to report on project-related transactions that fall within the scope of the Equator Principles, and a signatory to the Paris Pledge for Action to commit accelerating the transformational changes needed to reduce global warming to within acceptable limits.

The Issuer has three fora for sustainability, namely the Group Sustainable Committee, the Sustainability Strategy Steering Committee, and the Sustainability Council. The Group Sustainable Committee, chaired by the CEO, acts as a senior decision-making body for sustainability matters on a group level. The Sustainability Strategy Steering Committee is responsible for sustainability transformation management and supervision. The Sustainability Council is responsible for the exchange of knowledge, stimulating bank-wide change, and identifying new topics.

To guide the company's sustainability target, Deutsche Bank appointed a Chief Sustainability Officer. The Chief Sustainability Officer coordinates the work of the Group Sustainability Committee as Vice Chairman, the Sustainability Strategy Steering Committee as Chairman, and the Sustainability Council as Co-Chairman. Moreover, he reports progress to the management board and supervisory board.

Deutsche Bank tests the assets categories against its Environmental and Social Policy Framework, which evaluates potential environmental and social risks that can arise from transactions with its clients, with specific principles and guidelines, and determines the best course of action. Deutsche Bank also has a climate risk management framework and uses an internal climate risk taxonomy to identify sectors impacted by climate transition risks.

The Non-Financial Report is prepared in accordance with the Global Reporting Initiative (GRI). Deutsche Bank reports climate risks following the Task Force on Climate-Related Financial Disclosures (TCFD). Over the 2020-2022 period, the cumulative sustainable financing and investments facilitated by Deutsche Bank reached €215 billion.

Rationale for issuance

By publishing the Sustainable Instruments Framework and issuing sustainable financing instruments, Deutsche Bank aims to contribute to the transition to a climate-neutral economy. Moreover, Deutsche

Bank aims to give its clients access to financing to pursue a transition to an environmentally sustainable and socially inclusive future.

Opinion: *The key sustainability objectives and the rationale for issuing Sustainable Financing Instruments are clearly described by the Issuer. The asset categories financed are in line with the sustainability objectives of the Issuer.*

B. DEUTSCHE BANK'S BUSINESS EXPOSURE TO ESG RISKS

This section aims to provide an overall level of information on the ESG risks to which the Issuer is exposed through its business activities, providing additional context to the issuance assessed in the present report.

ESG risks associated with the Issuer's industry

The Issuer is classified in the Commercial Banks & Capital Markets, as per ISS ESG's sector classification. Key challenges faced by companies in terms of sustainability management in this industry are displayed in the table below. Please note, that this is not a company-specific assessment but areas that are of particular relevance for companies within that industry.

ESG KEY ISSUES IN THE INDUSTRY
Business ethics
Labour standards and working conditions
Sustainability impacts of lending and other financial services/products
Customer and product responsibility
Sustainable investment criteria


ESG performance of the Issuer

Leveraging ISS ESG's Corporate Rating research, further information about the Issuer's ESG performance can be found on ISS ESG Gateway at: <https://www.issgovernance.com/esg/iss-esg-gateway/>.

Please note that the consistency between the issuance subject to this report and the Issuer's sustainability strategy is further detailed in Part III. A of the report.

Sustainability impact of products and services portfolio

Leveraging ISS ESG's Sustainability Solutions Assessment methodology, the contribution of the Issuer's current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs) has been assessed as per the table below. This analysis is limited to the evaluation of final product characteristics and does not include practices along the Issuer's production process.

PRODUCT/SERVICES PORTFOLIO	ASSOCIATED PERCENTAGE OF REVENUE ³⁵	DIRECTION OF IMPACT	UN SDGS
Buildings certified to a relevant sustainable building standard	1%	CONTRIBUTION	

Breaches of international norms and ESG controversies

At Issuer level

At the date of publication and leveraging ISS ESG Research, a controversy in which the Issuer would be involved has been identified:

The New York State (NY) Department of Financial Services (DFS) announced in July 2020 that it had fined Deutsche Bank AG and two of its subsidiaries, including Deutsche Bank AG/New York Branch, \$150 million over anti-money laundering (AML) compliance infringements and lax oversight of financial transactions of convicted sex offender Jeffrey Epstein, who was a client at Deutsche Bank between 2013 and 2018. The media previously reported in June 2019 that Deutsche Bank was under investigation by the United States Federal Bureau of Investigation (FBI) over potential AML compliance violations, including the Issuer's handling of so-called suspicious activity reports (SARs) in relation to former U.S. President Donald Trump. As part of a 2017 settlement with the U.S. DFS and the United Kingdom's Financial Conduct Authority (FCA), Deutsche Bank has been working with an independent compliance monitor, whose scope was widened to address the infringements mentioned in the July 2020 NYDFS consent order. At the time, the FCA noted the Issuer's cooperation and commitment to a remediation program to mitigate money laundering risks. In communication with ISS ESG in May 2022, Deutsche Bank stated that it is not legally permitted to disclose the overall status of the independent monitorship. However, the Issuer stated that its control functions and business divisions "are working hard to put the processes and structures in place to prevent a recurrence of the large number of litigation cases and regulatory investigations." ISS ESG notes the Issuer's enhancement efforts and awaits confirmation of the efficacy of its AML measures from the independent monitor.

At industry level

Based on a review of controversies over a 2-year period, the top four issues that have been reported against companies within the Commercial Banks & Capital Markets industry are as follows: Failure to mitigate climate change impacts, Failure to prevent money laundering, Anti-competitive behavior and Failure to pay fair share of taxes.

Please note, that this is not a company-specific assessment but areas that can be of particular relevance for companies within that industry.

³⁵ Percentages presented in this table are not cumulative.

DISCLAIMER

1. Validity of the Second Party Opinion (“SPO”): Valid as long as the cited Framework remains unchanged.
2. ISS Corporate Solutions, Inc. (“ICS”), a wholly-owned subsidiary of Institutional Shareholder Services Inc. (“ISS”), sells/distributes Second Party Opinions which are prepared and issued by ISS ESG, the responsible investment arm of ISS, on the basis of ISS ESG’s proprietary methodology. In doing so, ISS adheres to standardized procedures to ensure consistent quality of responsibility research worldwide. Information on ISS’s methodology is available upon request.
3. Second Party Opinions are based on data provided by the party to whom the Second Party Opinion is provided (“Recipient”). ISS does not warrant that the information presented in this Second Party Opinion is complete, accurate or up to date. Neither ISS or ICS will have any liability in connection with the use of these Second Party Opinions, or any information provided therein.
4. Statements of opinion and value judgments given by ISS are not investment recommendations and do not in any way constitute a recommendation for the purchase or sale of any financial instrument or asset. In particular, the Second Party Opinion is not an assessment of the economic profitability and creditworthiness of a financial instrument, but refers exclusively to the social and environmental criteria mentioned above. Statements of opinion and value judgments given by ISS are based on the information provided by the Recipient during the preparation of the Second Party Opinion and may change in the future, depending on the development of market benchmarks, even if ISS is requested by the Recipient to provide another Second Party Opinion on the same scope of work.
5. This Second Party Opinion, certain images, text and graphics contained therein, and the layout and company logo of ICS, ISS ESG, and ISS are the property of ISS and are protected under copyright and trademark law. Any use of such ISS property shall require the express prior written consent of ISS. The use shall be deemed to refer in particular to the copying or duplication of the Second Party Opinion wholly or in part, the distribution of the Second Party Opinion, either free of charge or against payment, or the exploitation of this Second Party Opinion in any other conceivable manner.

The Recipient that commissioned this report may have purchased self-assessment tools and publications from ICS or ICS may have provided advisory or analytical services to the Recipient. No employee of ICS played a role in the preparation of this report. If you are an ISS institutional client, you may inquire about any Recipient’s use of products and services from ICS by emailing disclosure@issgovernance.com.

This report has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While ISS exercised due care in compiling this report, it makes no warranty, express or implied, regarding the accuracy, completeness or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. In particular, the research and scores provided are not intended to constitute an offer, solicitation, or advice to buy or sell securities nor are they intended to solicit votes or proxies.

Deutsche Börse AG (“DB”) owns an approximate 80% stake in ISS HoldCo Inc., the holding company which wholly owns ISS. The remainder of ISS HoldCo Inc. is held by a combination of Genstar Capital (“Genstar”) and ISS management. ISS has formally adopted policies on non-interference and potential conflicts of interest related to DB, Genstar, and the board of directors of ISS HoldCo Inc. These policies are intended to establish appropriate standards and procedures to protect the integrity and independence of the research, recommendations, ratings and other analytical offerings produced by ISS and to safeguard the reputations of ISS and its owners. Further information regarding these policies is available at <https://www.issgovernance.com/compliance/due-diligence-materials>.

© 2023 | Institutional Shareholder Services and/or its affiliates

ANNEX 1: Methodology

Green/Social KPIs

The Green/Social Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of Deutsche Bank AG’s Sustainable Financing Instruments.

It comprises firstly the definition of the use of proceeds category offering added social and/or environmental value, and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the assets can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the assets and which can also be used for reporting. If a majority of assets fulfill the requirement of an indicator, this indicator is then assessed positively. Those indicators may be tailor-made to capture the context-specific environmental and social risks.

Environmental and social risks assessment methodology

The Environmental and social risks assessment evaluates whether the assets included in the asset pool match the eligible asset category and criteria listed in the Green/Social Bond KPIs.

All percentages refer to the amount of assets within one category (e.g. wind power). Additionally, the assessment “no or limited information is available” either indicates that no information was made available or that the information provided did not fulfil the requirements of the Green/Social Bond KPIs.

The evaluation was carried out using information and documents provided on a confidential basis by Deutsche Bank AG (e.g. Due Diligence Reports). Further, national legislation and standards, depending on the asset location, were drawn on to complement the information provided by the Issuer.

Assessment of the contribution and association to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method, the extent to which Deutsche Bank AG’s Sustainable Financing Instruments contributes to related SDGs has been identified.

ANNEX 2: ISS ESG Corporate Rating Methodology

ISS ESG Corporate Rating provides relevant and forward-looking environmental, social, and governance (ESG) data and performance assessments.

For more information, please visit:

<https://www.issgovernance.com/file/publications/methodology/Corporate-Rating-Methodology.pdf>

ANNEX 3: Quality management processes

SCOPE

Deutsche Bank AG commissioned ICS to compile a Sustainable Instrument SPO. The Second Party Opinion process includes verifying whether the Sustainable Instruments Framework aligns with the ICMA's Green Bond Principles and Social Bond Principles and to assess the sustainability credentials of its Sustainable Financing Instruments, as well as the Issuer's sustainability strategy.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles (as of June 2021 with June 2022 Appendix I)
- ICMA Social Bond Principles (as of as of June 2023)

ISSUER'S RESPONSIBILITY

Deutsche Bank AG's responsibility was to provide information and documentation on:

- Framework
- Eligibility criteria
- Documentation of ESG risks management

ISS ESG'S VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Second Party Opinion of the Sustainable Instruments Framework to be issued by Deutsche Bank AG has been conducted based on a proprietary methodology and in line with the ICMA's Green Bond Principles and Social Bond Principles.

The engagement with Deutsche Bank AG took place from April 2023 to January 2024.

ISS' BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

About this SPO

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the Issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: <https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/>

Project team

Project lead

Vittoria Favalaro
Analyst
ESG Consultant

Project support

Clara Schouler
Analyst
ESG Consultant

Project support

Kushum Mehra
Junior Analyst
ESG Consultant

Project supervision

Marie-Bénédicte Beaudoin
Associate Director
Head of ISS ESG SPO Operations