

SECOND PARTY OPINION (SPO)

Verification of the Sustainability Quality of the Issuer and Green Asset Pool

Deutsche Bank AG
23 December 2020

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	<ul style="list-style-type: none">• Green Bond, Green Loan, Green Commercial Paper, Green Repurchase Agreement, and Green Deposits
Relevant standards	<ul style="list-style-type: none">• ICMA Green Bond Principles
Scope of verification	<ul style="list-style-type: none">• Deutsche Bank A.G. Green Financing Framework (as of 24.09.2020)• Deutsche Bank A.G. Green Instrument Portfolio (as of 07.10.2020)
Lifecycle	<ul style="list-style-type: none">• Pre-issuance verification
Validity	<ul style="list-style-type: none">• Until material changes are made to the Green Financing Framework or to the Issuer's ESG Corporate Rating

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SCOPE OF WORK

Deutsche Bank A.G. (Deutsche Bank) commissioned ISS ESG to assist with its green financing instrument by assessing three core elements to determine the sustainability quality of the instrument:

1. Deutsche Bank 's Green Finance Framework (September 2020 version)– benchmarked against the International Capital Market Association's (ICMA) Green Bond Principles (GBPs).
2. The asset pool – whether the projects contributes positively to the UN SDGs and perform against ISS ESG's issue-specific key performance indicators (KPIs) (See Annex 2).
3. Deutsche Bank 's sustainability performance, according to the ISS ESG Corporate Rating.

ISS ESG ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
Part 1: Alignment with GBPs	The issuer has defined a formal concept for its green financing instruments regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the Green Bond Principles.	Positive
Part 2: Sustainability quality of the asset pool	The overall sustainability quality of the asset pool in terms of sustainability benefits, risk avoidance and minimisation is good based upon the ISS ESG assessment. The green financing instrument will (re-)finance eligible asset categories which include: renewable energy, green buildings and energy efficiency. Those use of proceed categories have a significant contribution to SDGs 7 'Affordable and clean energy', 11 'Sustainable cities and communities' and 13 'Climate action'. The environmental and social risks associated with those assets have been well managed.	Positive
Part 3: Issuer sustainability performance	The issuer has been given a rating of C, which classifies it as 'Prime' by the methodology of the ISS ESG Corporate Rating. It is rated 14 th out of 285 companies within its sector as of 23.12.2020. This equates to a high relative performance, with a Decile Rank ² of 1.	Status: Prime Rating: C Decile Rank: 1

¹ ISS ESG's evaluation is based on the Deutsche Bank's Green Financing Framework (September 2020), on the analysed portfolio as received on the 07.10.2020, and on the ISS ESG Corporate Rating applicable at the SPO delivery date (updated on the 02.11.2020). ISS ESG underwent a controversy screening of the asset pool on the 02.10.2020.

² Rank relative to industry group. 1 indicates a high relative ESG performance, while 10 indicates a low relative ESG performance.

ISS ESG SPO ASSESSMENT

PART I: ALIGNMENT WITH THE GREEN BOND PRINCIPLES

1. Use of Proceeds

An amount corresponding to the net proceeds from any Green Financing Instrument issued under the Framework shall be used to finance Deutsche Bank's Green Asset Pool (the Green Asset Pool). The pool is composed of both loans to and investments in corporations, assets or projects, which supports the transition to a clean, energy-efficient and environmentally sustainable global economy and are in line with the requirements of this Framework (Eligible Green Assets). Deutsche Bank commits on a best efforts basis to reach full allocation within one year following each Green Financing Instrument issuance.

In order to be eligible for inclusion in the Green Asset Pool, the loan or investment must fall in at least one of the sectors described in the table below (Eligible Sectors). In case of general corporate loans, at least 90% of the turnover of the corporation needs to be attributable to Eligible Sectors and fulfil the respective requirements. In addition to outlining the required eligibility criteria, the table below also maps the Eligible Sectors to the relevant GBP category.

GBP CATEGORY	ELIGIBILITY CRITERIA	SHARE OF THE ASSET POOL
Renewable Energy	<p>Loans or investments in corporations, assets or projects related to renewable energy projects, including, but not limited to, wind (onshore/offshore), solar (photovoltaic/concentrated solar power) and bio-mass.</p> <p><u>Eligibility requirements under current version of the EU Taxonomy to be considered:</u></p> <ul style="list-style-type: none"> - Asset / Project loans: Over-arching, technology-agnostic emissions threshold of 100g CO_{2e} / kWh declining to 0gCO_{2e}/kWh by 2050 for all sorts of electricity production (life cycle impact for producing 1 kWh of electricity) - Biomass specific: facilities 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 	15%
Energy Efficiency	<p>Loans or investments in corporations, assets or projects related to the development and implementation of products or technology that reduce the use of energy. Examples include but are not limited to: energy efficient lighting (e.g. LEDs), energy storage (e.g. fuel cells), improvement in energy services (e.g. smart grid meters).</p> <p><u>Eligibility requirements under current version of the EU Taxonomy to be considered:</u></p> <ul style="list-style-type: none"> - Energy efficiency is mentioned across various activities, as such no general threshold can be applied, and decisions need to be made on a case-by-case basis depending on the sector and activity specific background 	2%

Green Buildings	<p>Loans or investments in assets or projects related to the construction of new buildings, operation of existing buildings or renovation of existing buildings (with a minimum energy efficiency upgrade) in the commercial real estate sector.</p> <p>Construction of new commercial buildings which meet at least one of the following criteria:</p> <ul style="list-style-type: none"> - Certification with a minimum of LEED “Gold”, BREEAM “Excellent”, or where needed, any other certification that is comparable to the above thresholds - Buildings in the top 15% of low carbon buildings in the respective country (if benchmarks exist) <p>Renovation of existing buildings which meet 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 <p>Buildings that are used for the purpose of occupation by fossil fuel extraction or manufacturing of fossil fuel activities are explicitly excluded.</p> <p><u>Eligibility requirements under current version of the EU Taxonomy to be considered:</u></p> <ul style="list-style-type: none"> - New buildings (initially): net primary energy demand of the new construction must be at least 20% lower than the primary energy demand resulting from the relevant ‘nearly zero-energy building’ requirements. - Renovation: when compliant with energy performance standards set in the applicable building regulations for major renovations transposing the Energy Performance of Buildings Directive or achieving energy savings of at least 30% in comparison to the baseline performance of the building before the renovation. 	83%
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Exclusions

Deutsche Bank explicitly excludes non-committed or non-performing exposures, as well as loans to businesses or projects that are involved in the following operations from being eligible for the Green Asset Pool:

- Activities related to the exploration and production of fossil fuels
- Nuclear and nuclear related technologies
- Weapons, alcohol, tobacco, gambling, and adult entertainment
- Deforestation and degradation of forests

In addition to the requirements specific to the Eligible Sectors, all loans originated by Deutsche Bank that are potentially eligible for inclusion in the Green Asset Pool are tested against the bank’s Environmental and Social Policy Framework (ES Policy Framework). The ES Policy Framework evaluates potential environmental and social risks that could arise from transactions or interactions with clients, and with specific principles and guidelines determine the best course of action.

Opinion: ISS ESG considers the Use of Proceeds description provided by Deutsche Bank's Green Financing Framework aligned with the GBPs and with the activity-specific Technical Screening Criteria defined by the EU Taxonomy³. Environmental benefits are defined and described. Additionally, the sustainability objectives defined in the framework align with the sustainability strategy of the issuer.

2. Process for Project Evaluation and Selection

To identify Eligible Green Assets that are in line with the Eligible Sectors and related criteria defined in the "Use of proceeds" section, Deutsche Bank follows a three-step process: i. green asset screening and pre-selection, ii. internal validation, and iii. external verification.

Step 1: Green asset screening and pre-selection

For each of the Eligible Sectors, Deutsche Bank has put in place category-specific selection criteria that are used by the respective originating business areas to identify eligible items in their portfolio. The selection criteria are in accordance with conditions outlined in section 2.2 Use of proceeds and might be extended by the currently still evolving criteria around the do-no-significant-harm assessment as proposed through the EU Taxonomy in the future.

Step 2: Internal validation

Assets that are pre-selected through the respective originating business areas subsequently need to be validated by the Deutsche Bank Green Financing Forum (the Forum). The Forum acts to ensure compliance of pre-selected assets with the Framework and has full discretion to object to the inclusion of any asset, ultimately blocking them from being included in the Green Asset Pool in case of relevant concerns.

The Forum consists of selected representatives from Group Sustainability, Treasury and Origination/Front Office and convenes in at least quarterly intervals to vote unanimously on the inclusion of newly added green assets, as well as potential adjustments to the Framework's selection criteria. Potential future changes of the framework's selection criteria will not affect the treatment of Eligible Green Assets retroactively, i.e. Eligible Green Assets that went successfully through the pre-selection and validation steps will not be affected by ex-ante framework changes and will remain in the Green Asset Pool. Ex-post removal (other than through maturity or sale of the asset) or substitution of assets from the Green Asset Pool is generally possible if new information concerning Eligible Green Assets emerge which warrant their removal from the Green Asset Pool. A process for such removal will also be overseen by the Forum, again requiring unanimous voting by its members before any actions are permitted.

Step 3: External verification

A reputable verifier is mandated to evaluate on an annual basis the compliance of the Green Asset Pool with the requirements set by this Framework. Any issue regarding one or multiple green assets in the pool raised by the verifier in this process can lead to the ex-ante exclusion of the respective

³ Based on the [Taxonomy Technical Report](#) as of March 2020. ISS ESG did not conduct an in-depth review of the alignment of the projects to be financed under this framework against the activity-specific Do No Significant Harm and Minimum Social Safeguards criteria defined in the EU Taxonomy.

asset(s), following the exclusion process through the Green Financing Forum as described in step two.

Opinion: *ISS ESG considers the Process for Project Evaluation and Selection provided by Deutsche Bank's Green Financing Framework as aligned with the GBPs. Deutsche Bank has a documented step by step process to determine that projects fit within defined categories. Additionally, assets need to be validated by the Deutsche Bank Green Financing Forum to ensure compliance of pre-selected assets with the Framework, reflecting best market practice.*

3. Management of Proceeds

An amount corresponding to the net proceeds of any Green Financing Instrument issued by Deutsche Bank under the Framework, irrespective of the legal form of the instrument, will be used to finance Deutsche Bank's Green Asset Pool. The Eligible Green Assets stem from all different Eligible Sectors as defined in section 2.2 Use of proceeds, subject to the asset selection and evaluation process. The Green Asset Pool is expected to grow in size over time as further sectors are added to the Framework.

Eligible Green Assets selected and validated by the Forum are documented in the Deutsche Bank Green Asset Inventory (the Inventory), which represents the technical mapping of the Green Asset Pool. The Inventory is populated based on information provided by all parties involved in the asset selection process. Flagging assets to be documented in the Inventory is a mere designation and does not imply any change in ownership, pledge or lien for benefit of third parties or change in assignment to legal entity, branch or division.

Deutsche Bank strives, at any point in time, to maintain a larger total amount of Eligible Green Assets than the total net proceeds of all Green Financing Instruments outstanding. To maintain a buffer of Eligible Green Assets in the Inventory over net proceeds of Green Financing Instruments, Deutsche Bank is dedicated to substitute maturing loans or other financings with an appropriate alternative as timely as practically possible. The Inventory is routinely monitored by Deutsche Bank's Treasury unit to detect potential shortfalls. Should a shortfall occur, Treasury will direct, at its own discretion, the shortfall amount towards its liquidity portfolio, consisting of cash and/or cash equivalents, and/or other liquid marketable instruments.

Opinion: *ISS ESG finds that Management of Proceeds proposed by Deutsche Bank aligns with the GBPs, as Deutsche Bank strives to maintain a larger total amount of eligible green assets than the total net proceeds of all green instruments outstanding. Additionally, the issuer commits to reach full allocation within one year after issuing, reflecting best market practice.*

4. Reporting

As long as there is any Green Financing Instrument outstanding, Deutsche Bank is committed to publish relevant information and documents regarding our Green Financing Instruments' activities in a dedicated Green Financing Report, which will be made available on the investor relation website

on an annual basis⁴. The report is split in two parts (i) the allocation reporting and (ii) the impact reporting, whereby each report will contain details including, but not limited to:

Allocation reporting

- Confirmation that the use of proceeds of Green Financing Instruments outstanding are in alignment with the eligibility criteria set by the Framework
- The total amount of outstanding Green Financing Instruments and the share of proceeds used for financing or re-financing purposes
- The amount of net proceeds allocated within each Eligible Sector, as well as the balance of net proceeds not yet allocated to Eligible Green Assets (if any)
- Illustrative examples describing Eligible Green Assets to which Green Financing Instruments net proceeds have been allocated, which are subject to confidentiality commitments to clients

Impact reporting

Subject to feasibility and data availability, the impact reporting will focus on the following information:

- Asset-specific results (where possible) and related environmental impact indicators (such as CO₂ emissions avoided)
- Asset category aggregated results and related environmental impact indicators (such as CO₂ emissions avoided)

An overview of selected impact indicators for the respective categories to be financed are outlined in the appendix of the Framework. In case other Eligible Sectors will be added in the future, the Framework update would also include the addition of the respective impact reporting indicators for those asset categories.

Opinion: *ISS ESG finds that the reporting proposed by Deutsche Bank Green Financing Framework is in line with the GBPs. Deutsche Bank is transparent on the expected level of use of proceeds reporting and has defined clear targets for its impact reporting.*

External review

The Second Party Opinion will be made available on Deutsche Bank's investor relations webpage⁵.

In order to ensure sustained compliance of all issued Green Financing Instruments with the methodology set out in this Framework, Deutsche Bank will further appoint ISS Corporate Solutions or any other party as successor for ISS Corporate Solutions as an annual verifier.

⁴ www.db.com/ir/

⁵ www.db.com/ir/

PART II: SUSTAINABILITY QUALITY OF THE ISSUANCE










A. CONTRIBUTION OF THE ASSET POOL TO THE UN SDGs

Based on the assessment of the sustainability quality of the asset pool and using a proprietary methodology, ISS ESG assessed the contribution of the Deutsche Bank’s green instrument to the Sustainable Development Goals defined by the United Nations (UN SDGs).

This assessment is displayed on 5-point scale (see Annex 2 for methodology):

Significant Obstruction	Limited Obstruction	No Net Impact	Limited Contribution	Significant Contribution
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Each of the asset pool’s Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Commercial Green Buildings	Significant contribution	
Solar P.V.	Significant contribution	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"></div> <div style="text-align: center;"></div> </div>
Wind Energy	Significant contribution	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"></div> <div style="text-align: center;"></div> </div>
Biomass Energy	Limited contribution	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"></div> <div style="text-align: center;"></div> </div>
Energy Efficiency	Limited contribution	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"></div> <div style="text-align: center;"></div> </div>

B. MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS ASSOCIATED WITH THE ASSET POOL

Green commercial real estate

As a Use of Proceeds category, green commercial real estate has a significant contribution to the SDG 11 “Sustainable cities and communities”, when obtaining high sustainability certification. The table below presents the findings of an ISS ESG assessment of the assets (re-) financed against ISS ESG KPIs.

ASSESSMENT AGAINST ISS ESG KPI

Prerequisite for Green Buildings

- ✓ 100% of assets underwent an appropriate and detailed selection process that ensures good standards regarding energy efficiency. All assets achieved a high score in the energy efficiency category in LEED certification scorecard.
- ✓ 100% of assets are not located in key biodiversity areas (Ramsar sites, IUCN protected areas I-IV).
- ✓ 100% of the assets are located within 1 km from one or more modalities of public transport.

Construction standards

- 6% of assets provide for high labour and health and safety standards for construction and maintenance work (e.g. in line with the ILO Core Conventions). The remaining assets are located in the United States, which does not fully align with the ILO Core Conventions. The United States is exposed to risk of child labour and breach of minimum age of employment.
- 31% of assets provide for sustainable procurement regarding building materials (e.g. recycled materials, third-party certification of wood-based materials). The remaining assets do not provide enough information for sustainable procurement regarding building materials.

Water use minimization in buildings

- ✓ 92% of assets provide for measures to reduce water consumption (e.g. water metering, high-efficiency fixtures and fittings, rainwater harvesting). The remaining assets do not provide enough information regarding the measures to reduce water consumption.

Safety of building users

- ✓ 100% of assets have safety of users’ policy such as emergency exits, fire sprinklers, alarm systems.

Sustainability certification

- ✓ 64.1% of assets received a “Gold” certification, and more than 35% of assets received a “Platinum” LEED standard certification.

Controversy assessment

The controversy assessment did not reveal any controversial activities or practices that could be attributed to the issuer.

Solar Energy

As a Use of Proceeds category, solar energy has a significant contribution to the SDG 7 “Affordable energy and clean energy” and SDG 13 “Climate action”. The table below presents the findings of an ISS ESG assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS ESG KPI

Site selection

- 40% of assets are not located in key biodiversity areas (Ramsar sites, IUCN protected areas I-IV). For the remaining assets, no information is available.
- 40% of assets provide for high labour and health and safety standards in the supply chain of solar modules (e.g. ILO Core Conventions). For the remaining assets, no information is available.

Environmental aspects of solar power plants

- ✓ 98% of assets feature a conversion efficiency of at least 15%. For the remaining assets, no information is available.
- ✓ 82% of assets provide for high environmental standards regarding take-back and recycling of solar modules at end-of-life stage (e.g. in line with WEEE requirements). For the remaining assets, no information is available.
- ✓ 95% of assets provide for high standards regarding the reduction or elimination of toxic substances within solar panels (e.g. in line with RoHS requirements or other relevant standards). For the remaining assets, no information is available.

Working conditions during construction and maintenance work

- 41% of assets provide for high labour and health and safety standards for construction and maintenance work (e.g. ILO Core Conventions). The remaining assets are based in the United States, which does not fully align with the ILO Core Conventions. The United States is exposed to risk of child labour and breach of minimum age of employment.

Controversies

The controversy assessment did not reveal any controversial activities, practices or events that could be attributed to the issuer.

Wind Energy

As a Use of Proceeds category, wind energy has a significant contribution to the SDG 7 “Affordable energy and clean energy” and SDG 13 “Climate action”. The table below presents the findings of an ISS ESG assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS ESG KPI

Site selection

- ✓ 100% of assets are not located in key biodiversity areas (Ramsar sites, IUCN protected areas I-IV).
- ✓ 100% of assets underwent environmental impact assessments at the planning stage.

Community dialogue

- ✓ 52% of assets feature community dialogue as an integral part of the planning process (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes). For the remaining assets, no information is available.

Environmental aspects of construction and operation

- ✓ 63% of assets meet high environmental standards during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work). For the remaining assets, no information is available.
- ✓ 73% of assets provide for measures to protect habitat and wildlife during operation of the power plant (e.g. measures to protect birds and bats). For the remaining assets, no information is available.

Working conditions during construction and maintenance work

- ✓ 52% of assets provide for high labour and health and safety standards for construction and maintenance work (e.g. ILO Core Conventions). The remaining assets are based in the United States which does not fully align with the ILO Core Conventions. The United States is exposed to risk of child labour and breach of minimum age of employment.

Controversies

A controversy assessment was conducted on included projects and revealed one controversy related to one of the assets. This asset triggered a protest in 2010 by environmentalists because the project is located in an area habited by Species of Special Concerns. As a result, the direct impacted area has been reduced and some turbines eliminated, resulting that the project will not be unduly adverse.

Biomass

As a Use of Proceeds category, biomass has a limited contribution to the SDG 7 “Affordable energy and clean energy” and SDG 13 “Climate action”. The table below presents the findings of an ISS ESG assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS ESG KPI

Consideration of environmental aspects during planning and construction

- ✓ 100% of assets are not located in key biodiversity areas (Ramsar sites, IUCN protected areas I-IV).
- ✓ 100% of assets underwent environmental impact assessments at the planning stage.
- ✓ 100% of assets meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimization of environmental impact during construction work).

Environmental aspects of waste to energy plants

- ✓ 100% of assets provide for high standards regarding environmentally safe operation of plants (e.g. air emissions, disposal of residues).
- ✓ 100% of assets apply cogeneration technology.

Safety aspects of waste to energy plants

- ✓ 100% of assets provide for high safety standards (e.g. regarding fire, explosions).

Community dialogue

- ✓ 100% of assets feature community dialogue as an integral part of the planning process and construction phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

Working conditions during construction and maintenance work

- ✓ 67% of assets provide for high labour and health and safety standards for construction and maintenance work (e.g. ILO Core Conventions). The remaining asset is located in Chile, which does not fully align with the ILO Core Conventions.

Controversies

The controversy assessment did not reveal any controversial activities, practices or events that could be attributed to the issuer.

Energy efficiency (LED lighting)

As a Use of Proceeds category, energy efficiency for Led lighting has a limited contribution to the SDG 7 “Affordable energy and clean energy” and SDG 13 “Climate action”.

Additionally, when considering the deeper ESG management, energy efficiency for LED lighting can be associated to other SDGs.

The table below presents the findings of an ISS ESG assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS ESG KPI	
Improvement in energy efficiency	
✓	100% of assets provide an improvement in energy efficiency as they are being purchased under Energy Saving Agreements.
✓	70% of assets do not contain substances of concern. For the remaining assets, no information is available.
○	35% of assets can be recycled at the end of their lives. For the remaining assets, no information was available.
○	No information is available whether assets apply good and binding environmental standards within the supply chain.
Safety measures	
○	No information is available whether assets ensure operational safety (i.e. control centre, electrical flow and consumption monitoring).
Working conditions during construction and maintenance work	
○	100% of assets are located in the Unites States, which does not fully align with the ILO Core Conventions. The United States is exposed to risk of child labour and breach of minimum age of employment.
Controversies	
The controversy assessment did not reveal any controversial activities, practices or events that could be attributed to the issuer.	

PART III: ASSESSMENT OF DEUTSCHE BANK'S ESG PERFORMANCE

The ISS ESG Corporate Rating provides material and forward-looking environmental, social and governance (ESG) data and performance assessments. The overall analysis is graded on a twelve-point scale from A+ (the company shows excellent performance) to D- (the company shows poor performance or fails to demonstrate any commitment to appropriately address the topic). “Prime” status is granted to industry leaders who fulfill demanding performance expectations. Industry leaders are considered the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

COMPANY	STATUS	RATING	DECILE RANK	TRANSPARENCY LEVEL
DEUTSCHE BANK A.G.	PRIME	C	1	VERY HIGH

ESG performance

As of 23.12.2020, this rating places Deutsche Bank 14th out of 285 companies rated by ISS ESG in the Financials/ Commercial Banks & Capital Markets sector.

Key Challenges faced by companies in term of sustainability management in this sector are displayed in the chart on the right, as well as the issuer's performance against those key challenges in comparison to the average industry peers' performance.

Key Issue Performance



Sustainability Opportunities⁶

Deutsche Bank aims to facilitate EUR 200 billion of sustainable financing and investments by 2025. Deutsche Bank offers its clients several SRI mutual funds, impact investments as well as SRI portfolio management services. Additionally, Deutsche Bank has a long-standing tradition of supporting micro entrepreneurs.

Deutsche Bank arranges project finance to renewable energy projects. In 2019, total ESG related assets under management, encompassing a broad range from lenient to strict approaches, amounted to EUR 69.7 billion. This included ESG and sustainable assets under management, real estate investments in certified green-labeled buildings, as well as infrastructure assets in renewable assets, representing about 9% of total assets under management.

⁶ Please note that this section of the SPO is building on the ISS ESG Corporate Rating of Deutsche Bank. For the purpose of this SPO, the *Sustainability Opportunities* section reflects certain recent developments and clarifications collected through the SPO process and hence differs from the ESG Corporate Rating.

Furthermore, the bank has joined the German Financial Sector's collective commitment to Climate Action and supports the European Union's ambition of becoming carbon neutral.

Sustainability Risks

In the financial sector, the main sustainability challenges are in the lending and investment banking as well as asset management businesses. Deutsche Bank has implemented an environmental and social policy framework addressing corporate finance, including project finance, trade finance and investment banking. Deutsche Bank will not finance e.g. activities and/or clients that use child or forced labour; projects or activities located in or involving the clearing of primary tropical moist forests, illegal logging or uncontrolled and/or illegal use of fire; or activities of mining companies which materially use mountain top removal in the United States. In addition, the company does not provide financing for new coal-fired power plants or new greenfield coal mining projects.

Deutsche Bank's sustainability department is responsible for assisting business units in assessing environmental and social issues and associated risks. In asset management, Deutsche Bank has set up an investment portal through which analysts have access to the latest results of ESG ratings and can include them in their decision-making. Companies which manufacture cluster munitions and landmines are excluded from its investment universe. In the field of customer and product responsibility, the results of client satisfaction surveys, mystery shopping as well as customer satisfaction indexes influence the assessment of success of Deutsche Bank's sales teams. Sales staff are trained on responsible sales practices and their performance is monitored on a regular basis.

As announced in July 2019, Deutsche Bank is in the process of cutting about 18,000 jobs until 2022, mainly in the UK and the US. The company tries to avoid compulsory redundancies and provides outplacement services. Yet, it remains unclear whether all affected employees will be covered by these measures. A group-wide health and safety management system is in place and the company has implemented some measures to prevent mental health problems. Deutsche Bank has established group-wide codes and policies covering in varying levels of detail all important issues in the field of business ethics, such as corruption, antitrust violations, insider dealings and conflicts of interest. The company conducts compliance trainings as well as compliance risk assessments and audits. In addition, Deutsche Bank has implemented non-compliance reporting channels for whistleblowers. In recent years, Deutsche Bank has been involved in numerous major controversies such as price fixing in the market for credit default swaps and noncompliance with anti-money laundering regulations. Further controversies include allegations of failures to control business practices in its foreign exchange trading operations.

Governance opinion

Regarding Deutsche Bank's governance structure, the independence of the company's chairman, Mr. Paul Achleitner (as at June 4, 2020), is ensured and the majority of board members are independent. However, only a minority of the directors of the audit and the remuneration committees are considered independent. The nomination committee consists of a majority of independent directors.

The remuneration policy for executives is publicly disclosed and includes long-term incentive components, which could incentivize sustainable value creation. Deutsche Bank has set up a board committee tasked with the supervision of its sustainability strategy, which is composed of 67% independent members (as at May 8, 2020). Additionally, sustainability performance objectives are to

some extent integrated into the variable remuneration of members of the executive management team.

Deutsche Bank has established group-wide codes and policies covering many important issues in the field of business ethics, such as corruption, antitrust violations, insider dealings and conflicts of interest. The company conducts compliance trainings as well as compliance risk assessments and audits. In addition, Deutsche Bank has implemented non-compliance reporting channels for whistleblowers.

In recent years, Deutsche Bank has been involved in numerous major controversies such as price fixing in the market for credit default swaps and non-compliance with anti-money laundering regulations. Further controversies include allegations of failures to control business practices in its foreign exchange trading operations.

Breaches of international norms and ESG controversies

The company is facing one severe controversy in failing to prevent money laundering in Russia. Currently, in September 2019 media reported that United States (U.S.) congressional investigators found possible failures in Deutsche Bank AG's money laundering (ML) controls concerning business transactions with Russian clients during an undisclosed time period. It remains unclear whether findings of the probe will lead to any actions against the bank.

DISCLAIMER

1. Validity of the SPO: Until material changes are made to the Green Financing Framework or to the Issuer's ESG Corporate Rating.
2. ISS ESG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
3. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of ISS ESG in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.
4. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations. In particular, the SPO is no assessment of the economic profitability and credit worthiness of a bond but refers exclusively to the social and environmental criteria mentioned above.
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ANNEX 1: Methodology

ISS ESG Green KPIs

The ISS ESG Green KPIs serves as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of Deutsche Bank 's green instrument.

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.

To review the KPIs used in this SPO, please contact Federico Pezzolato (details below) who will send them directly to you.

Asset evaluation methodology

ISS ESG evaluates whether the assets included in the asset pool match the eligible project category and criteria listed in the Green 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 to ISS ESG or that the information provided did not fulfil the requirements of the ISS ESG Green KPIs.

The evaluation was carried out using information and documents provided to ISS ESG on a confidential basis by Deutsche Bank (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, ISS ESG identifies the extent to which Deutsche Bank 's green instrument contributes to related SDGs.

ANNEX 2: ISS ESG Corporate Rating Methodology

The following pages contain ISS ESG Corporate Rating Methodology.

Deutsche Bank AG

Methodology - Overview

The ESG Corporate Rating methodology was originally developed by Institutional Shareholder Services Germany (formerly oekom research) and has been consistently updated for more than 25 years.

ESG Corporate Rating - The ESG Corporate Rating universe, which is currently expanding from more than 8,000 corporate issuers to a targeted 10,000 issuers in 2020, covers important national and international indices as well as additional companies from sectors with direct links to sustainability and the most important bond issuers that are not publicly listed companies.

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance indicators per sector, selected from a pool of 800+ proprietary indicators. All indicators are evaluated independently based on clearly defined performance expectations and the results are aggregated, taking into account each indicator's and each topic's materiality-oriented weight, to yield an overall score (rating). If no relevant or up-to-date company information with regard to a certain indicator is available, and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the indicator is assessed with a D-.

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company as well as information from reputable independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

Analyst Opinion - Qualitative summary and explanation of the central rating results in three dimensions:

- (1) Opportunities - assessment of the quality and the current and future share of sales of a company's products and services, which positively or negatively contribute to the management of principal sustainability challenges.
- (2) Risks - summary assessment of how proactively and successfully the company addresses specific sustainability challenges found in its business activity and value chain, thus reducing its individual risks, in particular regarding its sector's key issues.
- (3) Governance - overview of the company's governance structures and measures as well as of the quality and efficacy of policies regarding its ethical business conduct.

Controversial Business Practices - The assessment of companies' sustainability performance in the ESG Corporate Rating is informed by a systematic and comprehensive evaluation of companies' ability to prevent and mitigate ESG controversies. ISS ESG conducts research and analysis on corporate involvement in verified or alleged failures to respect recognized standards for responsible business conduct through Norm-Based Research.

Norm-Based Research is based on authoritative standards for responsible business conduct such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles for Business and Human Rights and the Sustainable Development Goals.

As a stress-test of corporate disclosure, Norm-Based Research assesses the following:

- Companies' ability to address grievances and remediate negative impacts
- Degree of verification of allegations and claims
- Severity of impact on people and the environment, and systematic or systemic nature of malpractices

Severity of impact is categorized as Potential, Moderate, Severe, Very severe. This informs the ESG Corporate Rating.

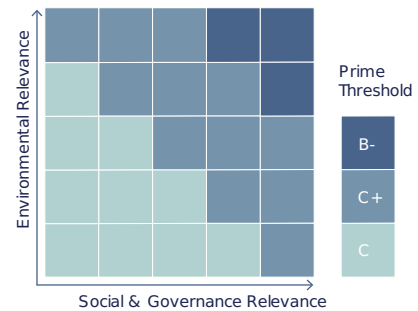
Decile Rank - The Decile Rank indicates in which decile (tenth part of total) the individual Corporate Rating ranks within its industry from 1 (best – company's rating is in the first decile within its industry) to 10 (lowest – company's rating is in the tenth decile within its industry). The Decile Rank is determined based on the underlying numerical score of the rating. If the total number of companies within an industry cannot be evenly divided by ten, the surplus company ratings are distributed from the top (1 decile) to the bottom. If there are Corporate Ratings with identical absolute scores that span a division in decile ranks, all ratings with an equal decile score are classified in the higher decile, resulting in a smaller number of Corporate Ratings in the decile below.

Deutsche Bank AG

Methodology - Overview

Industry Classification - The social and environmental impacts of industries differ. Therefore, based on its relevance, each industry analyzed is classified in a Sustainability Matrix.

Depending on this classification, the two dimensions of the ESG Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the ISS ESG Prime Status (Prime threshold) are defined (absolute best-in-class approach).



Industry Leaders - List (in alphabetical order) of the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

Key Issue Performance - Overview of the company's performance with regard to the key social and environmental issues in the industry, compared to the industry average.

Performance Score - The ESG Performance Score allows for cross-industry comparisons using a standardized best-in-class threshold that is valid across all industries. It is the numerical representation of the alphabetic ratings (D- to A+) on a scale of 0 to 100 with 50 representing the prime threshold. All companies with values greater than 50 are Prime, while companies with values less than 50 are Not Prime. As a result, intervals are of varying size depending on the original industry-specific prime thresholds.

Rating History - Development of the company's rating over time and comparison to the average rating in the industry.

Rating Scale - Companies are rated on a twelve-point scale from A+ to D-:

A+: the company shows excellent performance.

D-: the company shows poor performance (or fails to demonstrate any commitment to appropriately address the topic).

Overview of the range of scores achieved in the industry (light blue) and indication of the grade of the company evaluated in this report (dark blue).

Distribution of Ratings - Overview of the distribution of the ratings of all companies from the respective industry that are included in the ESG Corporate Rating universe (company portrayed in this report: dark blue).

Sources of Information - A selection of sources used for this report is illustrated in the annex.

Status & Prime Threshold - Companies are categorized as Prime if they achieve/exceed the sustainability performance requirements (Prime threshold) defined by ISS ESG for a specific industry (absolute best-in-class approach) in the ESG Corporate Rating. Prime companies are sustainability leaders in their industry and are better positioned to cope with material ESG challenges and risks, as well as to seize opportunities, than their Not Prime peers. The financial materiality of the Prime Status has been confirmed by performance studies, showing a continuous outperformance of the Prime portfolio when compared to conventional indices over more than 14 years.

Transparency Level - The Transparency Level indicates the company's materiality-adjusted disclosure level regarding the environmental and social performance indicators defined in the ESG Corporate Rating. It takes into consideration whether the company has disclosed relevant information regarding a specific indicator, either in its public ESG disclosures or as part of the rating feedback process, as well as the indicator's materiality reflected in its absolute weight in the rating. The calculated percentage is classified in five transparency levels following the scale below.

0% - < 20%: very low

20% - < 40%: low

40% - < 60%: medium

60% - < 80%: high

80% - 100%: very high

For example, if a company discloses information for indicators with a cumulated absolute weight in the rating of 23 percent, then its Transparency Level is "low". A company's failure to disclose, or lack of transparency, will impact a company's ESG performance rating negatively.

ANNEX 3: Quality management processes

SCOPE

Deutsche Bank commissioned ISS ESG to compile a green instrument SPO. The Second Party Opinion process includes verifying whether the Green Finance Framework aligns with the Green Bond Principles and to assess the sustainability credentials of its green instrument, as well as the issuer's sustainability strategy.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles
- ISS ESG KPI set:
 - Commercial Buildings
 - Solar P.V.
 - Wind Energy
 - Biomass
 - Energy Efficiency

ISSUER'S RESPONSIBILITY

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

- Framework
- Asset pool
- Documentation of ESG risks management at the asset level

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.

ISS ESG has conducted this independent Second Party Opinion of the green instrument to be issued by Deutsche Bank based on ISS ESG methodology and in line with the ICMA Green Bond Principles.

The engagement with Deutsche Bank took place from September to December 2020.

ISS ESG'S 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 behaviour 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 ISS ESG 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.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

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/>

For Information about SPO services, contact:

Federico Pezzolato

SPO Business Manager EMEA/APAC

Federico.Pezzolato@isscorporatesolutions.com

+44.20.3192.5760

Miguel Cunha

SPO Business Manager Americas

Miguel.Cunha@isscorporatesolutions.com

+1.917.689.8272

For Information about this SPO, contact: SPOOperations@iss-esg.com

Project team

Project lead

Marine Durrieu
Analyst
ESG Consultant

Project support

Melanie Comble
Associate
Head of SPO Operations

Project supervision

Viola Lutz
Associate Director
Deputy Head of Climate Services

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Annex

Information Sources – Company Sources

Publicly available company documentation, such as annual reports, social and environmental reports and sustainability reports, as well as company web pages. In addition, internal documents or other company information (e.g. obtained through interviews with company representatives), if provided.

Information Sources – External Sources (examples only)

Amazon Watch	Institute for Global Labour and Human Rights
Amnesty International	International Labor Organization (ILO)
Asahi Shimbun	International Rivers
BankTrack	International Trade Union Confederation (ITUC)
BBC	Organisation for Economic Co-operation and Development (OECD)
Business & Human Rights Resource Centre	Oxfam
CDP Responses	Principles for Responsible Investment
Centre for Research on Multinational Corporations (SOMO)	Responsible Investor
China Labour Watch	Reuters
Competition Authorities (e.g. US Federal Trade Commission)	S&P Capital IQ
CorpWatch	Taipei Times
ECA Watch	The Economist
Electoral Commissions (e.g. UK Electoral Commission)	The Guardian
Environmental Agencies (e.g. European Environment Agency)	The Washington Post
Environmental Defense Fund	Transparency International
Equator Principles	UK Financial Conduct Authority
Erklärung von Bern	UN Global Compact
European Restructuring Monitor	UNEP Financial Initiative
European Union institutions (e.g. European Commission)	urgewald
Facing Finance	US Consumer Financial Protection Bureau
Fair Labor Association	US Department of Justice
Financial Times	US Equal Employment Opportunity Commission
Freedom House	US Securities and Exchange Commission
Friends of the Earth	Wall Street Journal
Greenpeace	World Health Organization
Handelsblatt	World Wildlife Fund (WWF)
Human Rights Watch	

Participation in Rating Process

The rating report was prepared based on publicly available company documentation and information from external sources such as NGOs, authorities, trade unions and the media. It was subsequently submitted to the company for consideration and feedback. The company actively participated in the rating process and provided additional information.

Contact ISS ESG

Sector Specialist
Karoline Wagner

Contributing Analyst
Katharina Anhalt

For questions, visit the [ISS Help Center](#).

Deutsche Bank AG

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