



SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Asset Pool

Deutsche Bank AG 16 April 2020



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CONTENTS

| Overall Evaluation of the Green Bond | 3 |
|---|---|
| ISS ESG ASSESSMENT SUMMARY | 3 |
| Contribution of the Green Bond to the UN SDGs | 1 |
| ISS ESG SPO ASSESSMENT | 5 |
| PART I: GREEN BOND PRINCIPLES | 5 |
| PART II: SUSTAINABILITY QUALITY OF THE ASSET POOL10 |) |
| Wind Energy10 |) |
| Solar Energy11 | L |
| Biomass12 | 2 |
| Energy efficiency (LED lighting)14 | 1 |
| PART III: ASSESSMENT OF DEUTSCHE BANK'S ESG PERFORMANCE | 5 |
| ANNEX 1: ISS ESG Corporate Rating17 | 7 |
| ANNEX 2: Methodology22 | 2 |
| About ISS ESG SPO23 | 3 |



Overall Evaluation of the Green Bond

Deutsche Bank AG (Deutsche Bank) commissioned ISS ESG to assist with its Green Bond by assessing three core elements to determine the sustainability quality of the Bond:

- 1. Deutsche Bank's Green Bond framework benchmarked against the International Capital Market Association's (ICMA) Green Bond Principles (GBPs).
- 2. The asset pool whether the projects aligned with 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: Performance against GBPs | The issuer has defined a formal concept for its Green Bonds regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA GBPs. | 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 Green Bond KPIs. The Green Bond KPIs contain a clear description of eligible asset categories which include: solar energy, wind energy, biomass and energy efficiency (LED lighting). The use of proceeds categories included in the asset pool have a significant contribution for some, and limited contribution for others to SDGs 7 'Affordable and clean energy' 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 itself shows a medium sustainability performance and has been given a rating of C, which classifies it as 'Prime' by the methodology of the ISS ESG Corporate Rating. It is rated 6 th out of 285 companies within its sector as of 16.04.2020. This equates to a high relative performance, with a Decile Rank ² of 1. | Status: <i>Prime</i> Rating: <i>C</i> Decile Rank: 1 |

¹ ISS ESG's evaluation will remain valid until any modification of the Green Bond Framework or addition of new assets into the asset pool by the issuer and as long as the Corporate Rating does not change (last modification on the 24.03.2020). The controversy check of the underlying assets was conducted on the 16.03.2020.

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



Contribution of the Green Bond to the UN SDGs

Based on the assessment of the sustainability quality of the green bond asset pool and using a proprietary methodology, ISS ESG assessed the contribution of the Deutsche Bank's green bond 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 | Limited | No | Limited | Significant |
|-------------|-------------|------------|--------------|--------------|
| Obstruction | Obstruction | Net Impact | Contribution | Contribution |

Each of the bond'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 | | | | | |
|-------------------|--------------------------------|--|--|--|--|--|--|
| Wind Energy | Significant contribution | 7 CLEAN ENERGY CLEAN ENERGY 13 CLIMATE ACTION | | | | | |
| Solar Energy | Significant contribution | 7 AFFORMABLE AND CLEAN EVENDS 13 CLIMATE ACTION | | | | | |
| Biomass | Limited Contribution | 7 AFFORDABLE AND CLEAN EVEND 13 CLIMATE ACTION | | | | | |
| Energy efficiency | Limited Contribution | 7 AFFORDABLE AND CLEAN ENERGY 13 CLIMATE ACTION | | | | | |

ISS ESG ▷

ISS ESG SPO ASSESSMENT

PART I: GREEN BOND PRINCIPLES

1. Use of Proceeds

An amount corresponding to the net proceeds from any Green Bond 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 Bond 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 and the SDGs.

| GBP CATEGORY | ELIGIBILITY CRITERIA | | | | | | |
|-------------------|--|--------|--|--|--|--|--|
| | 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 biomass. | | | | | | |
| e Energy | Eligibility requirements under current version of the EU Taxonomy to be considered: | | | | | | |
| Renewable Energy | Asset / Project loans: Over-arching, technology-agnostic emissions threshold of 100g CO2e / KWh declining to 0gCO2e/kWh by 2050 for all sorts of electricity production (life cycle impact for producing 1 kWh of electricity) | 93.7 % | | | | | |
| | - 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 | | | | | | |
| iciency | 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). | | | | | | |
| Energy Efficiency | Eligibility requirements under current version of the EU Taxonomy to be considered: | 6.3 % | | | | | |
| Ξ | - 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 | | | | | | |



| | 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. | |
|-----------------|--|--|
| | Construction of new commercial buildings which meet at least one of the following criteria: | |
| | - Certification with a minimum of LEED "Gold", BREEAM "Very Good", 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) | |
| ings | Renovation of existing buildings which meet the following criteria: | |
| Green Buildings | - Energy savings of at least 30% in comparison to the baseline performance of the building before the renovation | |
| Gre | Buildings that are used for the purpose of occupation by fossil fuel extraction or manufacturing of fossil fuel activities are explicitly excluded. | |
| | Eligibility requirements under current version of the EU Taxonomy to be considered: | |
| | - 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 | |

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 Bond Framework aligned with the GBPs and with the 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 Bond 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 asset(s), following the exclusion process through the Green Bond Forum as described in step two.

Opinion: ISS ESG considers the Process for Project Evaluation and Selection provided by Deutsche Bank's Green Bond Framework as aligned with the GBPs. Deutsche Bank has a documented step by

³ According to the <u>Taxonomy Technical Report</u> as of March 2020.



step process to determine that projects fit within defined categories. Additionally, assets need to be validated by the Deutsche Bank Green Bond 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 Bond 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 bonds outstanding. To maintain a buffer of Eligible Green Assets in the Inventory over green bond net proceeds, 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 bonds 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 Bond outstanding, Deutsche Bank is committed to publish relevant information and documents regarding our Green Bond activities in a dedicated Green Bond 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:

⁴ <u>www.db.com/ir/</u>



Allocation reporting

- Confirmation that the use of proceeds of Green Bonds outstanding are in alignment with the eligibility criteria set by the Framework
- The total amount of outstanding Green bonds 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 Bond 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 CO 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 Bond 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 bonds 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.

⁵ www.db.com/ir/



PART II: SUSTAINABILITY QUALITY OF THE ASSET POOL

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".

Additionally, when considering the deeper ESG management, wind energy 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 | ASSOCIATION WITH THE SDGS | | | | | | |
|----------------|--|---|--|--|--|--|--|--|
| Site selection | | | | | | | | |
| ✓ | 100% of assets are not located in key biodiversity areas (Ramsar sites, IUCN protected areas I-IV). | 15 UPFE DO LAND | | | | | | |
| ✓ | 100% of assets underwent environmental impact assessments at the planning stage. | 15 UFE ON LAND | | | | | | |
| Com | munity dialogue | | | | | | | |
| ~ | 70% 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). No information is available on the remaining asset. | 11 SUSTAINABLE CITES AND COMMUNITIES 16 PEACE JUSTICE AND STRUNG INSTITUTIONS INSTITUTIONS | | | | | | |
| Envi | ronmental aspects of construction and operation | | | | | | | |
| ~ | 70% of assets meet high environmental standards during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work). For the remaining asset, no information is available. | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | | | | | | |
| ✓ | 70% 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 asset, no information is available. | 14 LIFE 15 DIFE LAND | | | | | | |
| | | | | | | | | |

Working conditions during construction and maintenance work

70% 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 based in the United States,







which does not provide high labour and health and safety standards in accordance with the ILO Core Conventions.

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.

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".

Additionally, when considering the deeper ESG management, solar energy 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

Site selection

37% of assets are not located in key biodiversity areas (Ramsar sites,

 IUCN protected areas I-IV). For the remaining assets, no information is available.

Supply chain standards

50% 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

100% of assets feature a conversion efficiency of at least 15%.

88% 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.



ASSOCIATION

WITH THE SDGS







 100% 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).

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 provide high labour and health and safety standards in accordance 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.

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".

Additionally, when considering the deeper ESG management, biomass 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 | ASSOCIATION WITH THE SDGS | | | | | | |
|---|---|---|--|--|--|--|--|--|
| 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). | 15 UPE LAND | | | | | | |
| ✓ | 100% of assets underwent environmental impact assessments at the planning stage. | 11 SUSTAMABLE CITIES AND COMMUNITIES 15 UIFE ON LAND | | | | | | |
| ✓ | 100% of assets meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimization of environmental impact during construction work). | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | | | | | | |







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 provide high labour and health and safety standards in accordance 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.











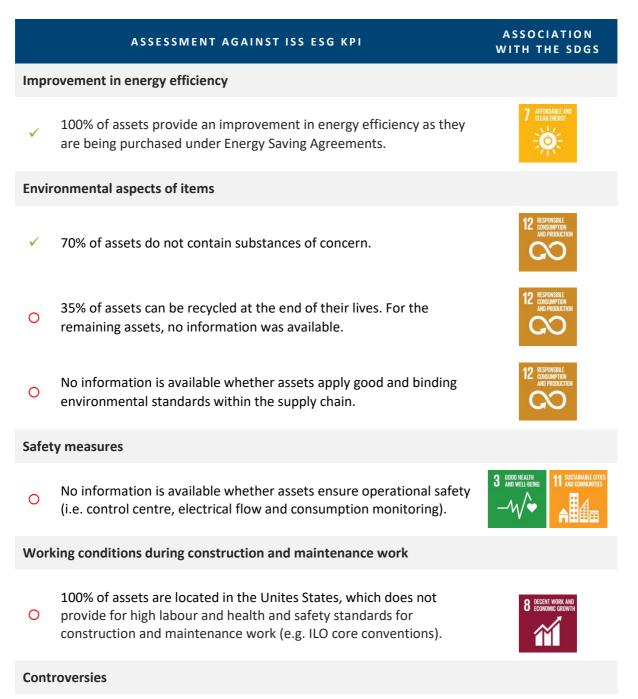


Energy efficiency (LED lighting)

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.





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 a rating and then designates a company as 'Prime⁶' or 'Not Prime' based on its performance relative to the industry sector. It is also assigned a Decile Rank, indicating this relative industry group performance, with 1 indicating a high relative ESG performance, and 10 a low relative ESG performance.

| C Ο M Ρ Α Ν Υ | STATUS | Rating | DECILE RANK | | |
|---------------|--------|--------|-------------|--|--|
| DEUTSCHE BANK | PRIME | C | 1 | | |

This means that the company performed well in terms of sustainability, both compared against others in the industry and in terms of the industry-specific requirements defined by ISS ESG. In ISS ESG's view, the securities issued by the company therefore all meet the basic requirements for sustainable investments.

As of 16.04.20, this rating places Deutsche Bank 6th out of 285 companies rated by ISS ESG in the Financials/ Commercial Banks & Capital Markets sector.

Key Challenges facing companies in term of sustainability management in this sector are:

- Sustainability impacts of lending and other financial services/products
 - Customer and product responsibility
 - Sustainable investment criteria
 - Labour standards and working conditions
 - Business ethics

In four of the key issues, Deutsche Bank rates above the average for the sector. A very significant outperformance was achieved in "Sustainable investment criteria". The company lags the industry's average performance in "Business ethics".

The company has a significant controversy level. Severe and very severe controversies relating to weaknesses in anti-money laundering controls, allegations on anti-competitive behavior, and aiding tax evasion in the US have been revealed.

Details on the rating of the issuer can be found in Annex 1.

Robert Hassler, Head of ISS ESG Ratings London/Munich/Rockville/Zurich

⁶ Prime is only awarded to the top sector performers, often less than 10% of companies within the respective sector.



DISCLAIMER

- 1. Validity of the SPO: For Deutsche Bank's first issuance following the SPO release date.
- 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 se- lection 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: ISS ESG Corporate Rating

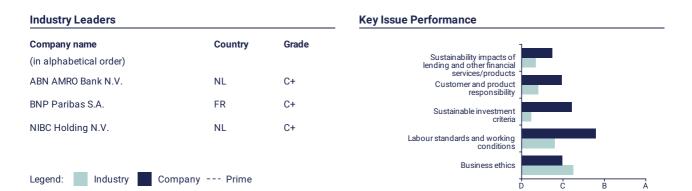
The following pages contain extracts from Deutsche Bank's 2020 ISS ESG Corporate Rating.

ESG Corporate Rating

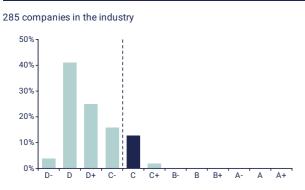
Deutsche Bank AG

| Industry | Financials/Commercial Banks & Capital Markets | | Status | | Prime | | Corporate ESG Performance | | | | |
|---|---|----|---------|-----------------|----------|------|------------------------------|----|-------|----------|----|
| Country | Germany | | Rating | | С | | RATED BY | | Prime | | |
| ISIN | DE0005140008 | | Prime T | Prime Threshold | | | | | | | |
| | | | | | Decile F | Rank | 1 | | | | |
| Absolute F | Absolute Rating | | | | | | | | | | |
| D- | D | D+ | C- | С | C+ | B- | В | B+ | A- | А | A+ |
| | poor | | | medium | | | good | | | excellen | t |
| The assessment of a company's sustainability performance is based on approximately 100 criteria, selected specifically for each industry. A company's failure to disclose, or lack of transparency, regarding these matters will impact a company's rating negatively | | | | | | | | | | | |
| Decile Rar | nk | | | | | | | | | | |
| 10 | 9 | | 8 | 7 | 6 | 5 | 4 | 3 | | 2 | 1 |
| Low relative | ow relative performance High relative performance | | | | | | | | | | |

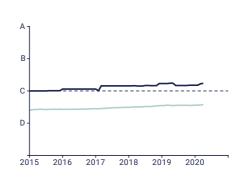
Indicates decile rank relative to industry group. A decile rank of 1 indicates a high relative ESG performance, while a 10 indicates a lower relative ESG performance.



Distribution of Ratings



Rating History



ISS ESG ▷

Deutsche Bank AG

Analyst Opinion

Sustainability Opportunities

Deutsche Bank offers its clients several SRI mutual funds, impact investments as well as SRI portfolio management services. In 2018, total ESG related assets under management, encompassing a broad range from lenient to strict approaches, amounted to EUR 47.1 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 7% of total assets under management. Furthermore, Deutsche Bank has a long-standing tradition of supporting micro-entrepreneurs. In addition, during 2018, Deutsche Bank fully or partially arranged EUR 1.2 billion in project finance to renewable energy projects. However, these products and activities do not constitute a major business for Deutsche Bank.

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. There is no indication on third party anti-corruption due diligence measures, though. 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.

Governance Opinion

Deutsche Bank's shareholder structure is dispersed and investors defined as having a long-term investment horizon hold the majority of shares (as at March 31, 2019). Regarding its governance structure, the independence of the company's chairman, Mr. Paul Achleitner (as at January 31, 2019), is ensured and the majority of board members are independent. However, only a minority of the audit, the remuneration and the nomination committee are composed of independent directors. Moreover, 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 50% independent members (as at January 31, 2019). 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. There is no indication on third party anti-corruption due diligence measures, though. 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.

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.

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).

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).



Social & Governance Relevance

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.

Major Shareholders & Ownership Summary - Overview of the company's major shareholders at the time of generation of this report. All data as well as the categorisation system for the investor types is based on information from S&P Capital IQ.

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).

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.

ISS ESG ▷

ANNEX 2: Methodology

ISS ESG Green Bond KPIs

The ISS ESG Green Bond 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 Bond.

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.

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 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 to ISS ESG or that the information provided did not fulfil the requirements of the ISS ESG Green Bond 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 Bond contributes to related SDGs and has a positive association with their respective sub-targets.

The contribution assessment is split into two Levels:

- 1. *Level 1:* Contribution and/or obstruction of the Use of Proceeds categories to be financed through the bond to the UN SDGs
- 2. Level 2: Association of the assets' ESG performance with further SDGs



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, and this Green Bond, contact:

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