

Second Party Opinion

Assessment of the Sustainability Quality of the Second Green Bond Programme of Deutsche Kreditbank

01 September 2017

Aim and Scope of this Second Party Opinion

Deutsche Kreditbank (DKB) commissioned oekom research to assist with its Second Green Bond Programme ("the Green Bond Programme" or "the programme") by assessing the added sustainable value of this programme, from which assets for Green Bonds will be chosen. The assessment of the Green Bond Programme was conducted using the criteria and indicators of a Green Bond Analysis Framework developed by oekom research. The aim of the Green Bond issuances based on the programme (the bonds) is to refinance projects with an added environmental value, namely the construction and operation of onshore wind power plants and solar power plants. The programme has a volume of 896 million EUR and shall be executed by one or more transactions.

oekom research's mandate included the following services:

- Definition of a Green Bond Analysis Framework ("oekom Green Bond Analysis Framework")
 containing a clear description of eligible asset categories and the social and environmental
 criteria assigned to each category for evaluating the sustainability-related performance of the
 assets (re-)financed through the proceeds of the bonds.
- Analysis of the alignment of the Green Bonds to be issued out of the Green Bond Asset Portfolio against the ICMA's Green Bond Principles.
- Evaluation of compliance of the Green Bond asset portfolio with the oekom Green Bond Analysis Framework criteria.
- Review and classification of DKB's sustainability performance on the basis of the oekom Corporate Rating.

In principle, this Second Party Opinion will stay valid for a period of three years until 31 August 2020. However, every year following the initial issuance, oekom will carry out an additional assessment and update the respective parts of the Second Party Opinion. In particular, the asset pool will be reassessed if new projects will have been added. In addition, the issuer's sustainability evaluation will be updated.



Overall Evaluation of the Green Bond Programme

oekom's overall evaluation of the Second Green Bond Programme issued by DKB is positive:

- DKB 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 Green Bond Principles (Part I of this Second Party Opinion).
- The overall sustainability quality of the Green Bond asset portfolio in terms of sustainability benefits and risk avoidance and minimisation is good (Part II of this Second Party Opinion)¹.
- The issuer itself shows a very good sustainability performance (Part III of this Second Party Opinion).

There are some aspects for potential improvement of the sustainability quality of the Green Bond Programme and a more specific selection or performance criteria would be recommended as these could still add to the overall quality of future Green Bond programmes developed by DKB.

Regarding wind power projects, selection criteria should include comprehensive environmental impact assessments for all projects. Further, within the construction process of windparks the active involvement of local residents, for example through dialogue platforms, should be fostered. Regarding solar power projects, selection criteria should include specifications that solar panel and inverter manufacturers require high labour standards from their suppliers.

The annual updates of this Second Party Opinion carried out by oekom research will provide information and assessments of the sustainability quality of all future Green Bond issuances under DKB's Green Bond Programme.

-

¹ The sustainability quality of the bonds may differ from this assessment depending on the assets selected for inclusion in the bonds.



Total CO₂ Performance of the Green Bond Programme

The proceeds of this programme will be used exclusively to refinance renewable energy loans for the construction and operation of onshore wind power plants and solar power plants.

The following table contains the CO₂ performance of the power plants refinanced through the Green Bond Programme. DKB provided the predicted energy production data², oekom research has carried out the CO₂ performance calculations. More information on the calculations can be found in Part II of this document.

Category	Number of Projects	Nominal Capacity	Predicted Annual Energy Production	Predicted CO ₂ Emissions Avoidance ³
A. Renewable energy loans for the construction and operation of onshore wind power plants	81	258 MW	582 GWh	311 kt
B. Renewable energy loans for the construction and operation of solar power plants	118	249 MW	226 GWh	121 kt
Total	199	507 MW	808 GWh	432 kt

The predicted annual energy production of the projects refinanced by the Green Bond Programme approximates the annual electricity need of about 240,000 2-person households in Germany.⁴

² In their lending guidelines, DKB requires a minimum of two assessments of the expected wind yields for future projects or actual data from the past three years of operation for existing power plants. Regarding solar power, DKB's lending guidelines require an independent yield study (including the performance ratio) and information on factors such as shade levels and power tolerance.

³ Based on the carbon intensity of the German electricity mix: CO2 emissions of electricity were 535 g/kWh in 2015 (Source: German Federal Environmental Agency).

⁴ Based on the annual average electricity use of 3,343 kWh per 2-person household in Germany (estimations for 2015; source: destatis.de).



Part I – Green Bond Principles

1) Use of Proceeds

The proceeds of this programme will be used exclusively to refinance renewable energy loans. All assets are situated in Germany.

The following categories have been chosen for allocating the proceeds of issuances within this Green Bond Programme (the percentages relate to volume and a respective asset pool of EUR 896,359,177):

Project Category	A. Renewable energy loans for the construction and operation of onshore wind power plants	B. Renewable energy loans for the construction and operation of solar power plants	Total
Number of Projects	81	118 (25% roof- mounted, 75% ground- mounted)	199
Start Dates of the Loans (First Draw Date of the Loans)	02/2013 - 01/2017	01/2013 - 01/2017	01/2013 - 01/2017
Share of Asset Pool	55%	45%	100%
Project Costs refinanced through the Asset Pool	EUR 496,853,473	EUR 399,505,704	EUR 896,359,177

From a sustainability point of view, the construction and operation of both wind and solar power plants is positive: Renewable energy projects contribute to climate protection and foster the transition towards a low carbon economy. Additionally, the projects meet specific environmental and social standards (see part II of this document), which assure that a positive impact is not impaired by adverse impacts and effects in other areas (e.g. environmental impacts, impacts on local communities).



2) Process for Project Evaluation and Selection

The selection of the loan portfolio for inclusion in the Green Bond Programme has been carried out by all relevant client units of DKB involved in renewable energy finance in cooperation with the Treasury deptartment.

The selection is based on eligibility criteria defined by DKB: All wind and solar projects are based in Germany and are subject to German standards and regulations regarding the construction, operation and maintenance of wind and solar power plants (e.g. consideration of flora and fauna, health and safety of workers). Regarding wind power, DKB provided oekom research with the internal lending guidelines that – among other requirements - either require a minimum of two assessments of the expected wind yields for future projects or actual data from the past three years of operation for existing power plants. Also, DKB has identified certain manufacturers as primary supplier for wind power plants (e.g. Vestas, Enercon). Regarding solar power, DKB's lending guidelines require an independent yield study and information on factors such as shade levels and power tolerance.

Further, the minimum volume of each loan is EUR 1,000,000 and all loans were signed after 01/2013.

Additionally DKB has internally defined specific minimum rating criteria to ensure a high loan quality within the proceeds.⁵

All wind and solar projects are legally organized as special purpose vehicles to provide a maximum degree of safety regarding the proper use of the proceeds.

In addition to DKB's selection process, oekom research has defined a Green Bond Analysis Framework (see Annex 1 of this document). For each eligible project/asset category, it comprises a list of specific sustainability criteria. On this basis, the sustainability quality of the assets has been assessed by oekom research.

3) Management of Proceeds

DKB states that its Green Bond Programme will exclusively refinance the selected portfolio and that the loans will be earmarked by an internal system key within DKB's core bank system. In order to ensure that the Green Bond's proceeds will not be double-used, the loans are not eligible for DKB's other capital markets funding pillar, specifically not for the cover pools of its "Pfandbriefe" (covered bonds).

Further, DKB ensures that the nominal amount of the loan portfolio will not fall below the nominal amount of the outstanding Green Bonds to be issued within the programme.

The portfolio will be monitored on a yearly basis. In case of any changes to the loans with respect to the selection criteria mentioned above, DKB commits to substitute the loans in the Green Bond

⁵ oekom research did not assess the minimum rating criteria and / or the financial quality of the assets.



Programme. DKB commits that these substitutions will be in line with the sustainability criteria of the Green Bond Analysis Framework.

4) Reporting

DKB commits to report annually towards the Green Bond Programme's investors. The reporting will be made available within the investor relations section on DKB's homepage.

According to DKB, the use of proceeds reporting will be structured as follows:

- Nominal amount of the loan portfolio
 - of which wind power plant loans
 - o of which solar power plant loans
- Number of loans of the loan portfolio
 - of which wind power plant loans
 - of which solar power plant loans
- Geographical segmentation of the portfolio within Germany
- Data on plants in construction/operating
- Amount and number of loans substituted since last reporting

According to DKB, the impact reporting will be structured as follows:

- Environmental impact indicators
 - Nominal output of the refinanced plants
 - Energy performance p.a.
 - Avoidance of CO₂ emissions p.a.
 - Equivalent 2-person-households (energy need)



Part II – Sustainability Quality of the Green Bond Programme

1) oekom Green Bond Analysis Framework

The Green Bond Analysis Framework serves as a framework for evaluating the sustainability quality and thus the social and environmental added value of the use of proceeds of DKB's Green Bond Programme. The framework comprises firstly the definition of eligible categories of projects offering environmental added value. Secondly, it encloses the specific sustainability criteria for each project category by means of which this added value and therefore the sustainability performance of the Green Bonds can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the Green Bond Programme and which can also be used for reporting. In addition, impact indicators were defined for each project category, thus providing investors with concrete information of environmental added value.

Details of the individual criteria and indicators for the two project categories can be found in Annex 1 "Green Bond Analysis Framework".

2) Evaluation of the Assets within the Green Bond Asset Portfolio

Method

oekom research has evaluated whether the projects funded through the bond programme match the project categories and criteria listed in the Green Bond Analysis Framework.

The analysis was carried out using information and documents provided to oekom research, partly on a confidential basis, by DKB (e.g. building licenses, Green Bond portfolio including data on location, equipment manufacturers). Due to the large number of projects, DKB provided oekom research with exemplary documents regarding licensing procedures for different project types and licensing procedures. DKB states that, due to the German legal framework, these exemplary or similar measures are carried out among all projects if necessary.

The evaluation of social standards regarding the wind and solar power equipment manufacturers is based on country-specific regulations at the relevant production sites (if available), their signature of the United Nations Global Compact, or their adherence to the ILO core conventions. Regarding the supply chain, oekom research analysed the manufacturer's supply chain standards.

All percentages refer to the respective volume of the loans within the Green Bond Programme.



Findings

A. Renewable energy loans for the construction and operation of onshore wind power plants

Sustainability Risks and Benefits of the Project Category

The environmental benefits of wind power comprise climate protection and the transition towards a low carbon economy. Further benefits are less environmental intervention (e.g. resource extraction, releases of waste streams to air, water or soil) and less need for cooling water in comparison to fossil fuel or nuclear power plants.

Regarding wind power, the construction and operation of power plants can result in negative environmental impacts at construction sites (e.g. biodiversity, noise) and impacts on local communities. Further risks include potentially poor working conditions during construction and maintenance of power plants as well as in the production processes of wind power plants. As the construction of these plants requires large amounts of raw materials and equipment, life cycle aspects are an important factor when assessing the overall environmental footprint of related projects.

All projects selected for the Green Bond asset portfolio are located in Germany, a country with high level of social and environmental regulations.

- A.1. Consideration of environmental aspects during planning and operation
 - ✓ None of the projects are located in key biodiversity areas such as Ramsar sites, UNESCO Natural World Heritage sites and IUCN protected areas I-IV.
 - √ 100% of the projects comply with the German Federal Immission Control Act (Bundes-Immissionsschutzgesetz/ BImSchG), which provides for minimum standards regarding the assessment of possible environmental impacts of wind power plants (i.e. basic environmental screening).
 - O No information is available on the number of projects, which underwent individual and indepth environmental impact assessments (i.e. assessments including the consideration of all relevant natural goods, elaboration of alternatives etc.) in addition to or within the compliance requirements with the German Federal Immission Control Act.
 - √ 100% of the projects meet high environmental standards during the construction phase. For example, waste management is provided for by regulations within the German waste legislation. Noise emissions are regulated by the German Federal Immission Control Act which sets maximum noise emission levels.
 - ✓ 100% of the projects comply with the regulations of the German Federal Immission Control Act and have adequate measures in place to protect habitat and wildlife during operation of the plant (project-dependent measures include turbine turn-off times, monitoring of bats, consideration of birds' flight paths).



A.2. Environmental aspects of wind power plants

✓ For 60 projects, accounting for 70% of the loans' volume, wind power plants are manufactured by companies, which carried out life-cycle assessments of the wind power plants and/or its components. For 21 projects, accounting for 30% of the loans' volume, wind power plant manufacturers did not carry out such assessments or no such information is available.

A.3. Community dialogue

- ✓ 100% of the projects comply with the regulations of the German Federal Immission Control Act, which provides for minimum standards regarding the consideration of local residents' interests during the planning phase (possibility to voice concerns, for example).
- O No information is available on the number of projects for which the active involvement of local residents (e.g. through official public dialogue platforms) is ensured.
- A.4. Working conditions during construction and maintenance work
 - ✓ For 100% of the projects, high standards regarding health and safety for both own employees and contractors are in place during construction and maintenance work (in accordance with local regulations).
 - ✓ For 100% of projects high labour standards regarding e.g. working time, periods of rest, minimum wages, freedom of association, collective bargaining and non-discrimination (in accordance with local regulations) are in place.
- A.5. Social standards in the supply chain of wind power plants
 - ✓ For 72 projects, accounting for 88% of the loans' volume, the equipment is manufactured by companies which primarily produce (i.e. have more than 50% of production sites) in countries with high labour standards (e.g. European Union), are a signatory of the United Nations Global Compact, or adhere to the ILO core conventions. For 9 projects, accounting for 12% of the loans' volume, the companies show poor performance or no such information is available.
 - Only for 4 projects, accounting for 7% of the loans' volume, wind power plant manufacturers require high social standards from their suppliers (e.g. regarding the prohibition of forced labour, wages, working time, health and safety). For 77 projects, accounting for 93% of the loans' volume, the manufacturers do not require high social standards from their suppliers or no such information is available.

Controversy assessment

✓ A controversy assessment on the underlying assets did not reveal any controversial activities or practices that could be attributed to DKB.

Impact indicator 1: Energy performance

The loans refinance wind power plants with a total predicted annual energy production of 582 GWh/year. This calculation is based on energy yield assessments carried out by independent assessors. DKB requires a minimum of two different assessments for wind power projects. oekom research was provided with one exemplary wind yield assessment by DKB. These assessments cover,



for example, long-term wind measurements and site- and/or plant-specific predictions regarding wind resources.

Impact indicator 2: CO₂ emissions performance

The predicted total avoidance of CO₂ emissions (through renewable energy generation) related to the loans is 311 kt CO₂/year (based on the carbon intensity of the German electricity mix: CO₂ emissions of electricity generation were 535 g/kWh in 2015; source: German Federal Environmental Agency).

DKB provided all data on impact indicators, oekom research AG has carried out the CO_2 performance calculations.



B. Renewable energy loans for the construction and operation of solar power plants

Sustainability Risks and Benefits of the Project Category

The environmental benefits of solar power generation projects comprise the contribution to climate protection and to the transition towards a low-carbon economy. Further benefits are less environmental degradation and pollution (e.g. resource extraction, releases of waste streams to water or soil) in comparison to fossil fuel or nuclear power plants. From a social perspective, the transition from fossil fuels to solar power reduces negative human rights impacts of oil, gas and coal production (e.g. land-use conflicts, resettlement). In addition – different from fossil fuels combustion - solar power does not negatively impact air quality.

With respect to potential risks, the manufacturing of solar panels in countries with low levels of social and environmental regulations (e.g. China) can have negative social and environmental impacts. As the production of solar panels requires scarce raw materials and as the panels contain hazardous substances, aspects such as recyclability, management of hazardous substances and conversion efficiency are relevant to evaluate the overall environmental performance of related projects. However, in comparison with other renewable energy sources, social and environmental risks related to solar power are deemed to be low.

All solar power projects selected for the Green Bond asset portfolio are located in Germany, a country with a high level of social and environmental regulations.

- B.1. Consideration of environmental aspects during planning and construction
 - ✓ None of the projects are located in key biodiversity areas such as Ramsar sites, UNESCO Natural World Heritage Sites or IUCN protected areas I-IV.
 - √ 100% of projects comply with the German Renewable Energy Act (Erneuerbare Energien Gesetz/ EEG). Therefore, all solar power plants have to be located in areas that are either next to motorways or railways; areas that were already sealed; areas that were formerly used for commercial, traffic-related, residential or military purposes and that were not declared nature reserves.
 - O No information is available on the number of projects, which underwent individual and indepth environmental impact assessments (i.e. assessments including the consideration of all relevant natural goods, elaboration of alternatives etc.) in addition to or within the compliance requirements with the German Renewable Energy Act.
 - √ 100% of the projects meet high environmental standards during the construction phase. For example, waste management is provided for by regulations within the German waste law. Noise emissions are regulated by the German Federal Immission Control Act which provides for maximum noise emissions.



B.2. Environmental aspects of solar power plants

- ✓ 110 solar power plant projects, accounting for 93% of the loans' volume, have a performance ratio of at least 80%. 5 projects, accounting for 6% of the loans' volume, have a performance ratio between 70 and 79%. For 3 projects, accounting for around 1% of the loans' volume, the performance ratio is not available.
- O No information is available on the share of projects for which the conversion efficiency of solar panels is at least 15%.
- √ 100% of projects meet high standards regarding take-back options. All debtors are required by DKB to either submit a take-back guarantee by the solar module manufacturer or to use solar modules by manufacturers that are member of the photovoltaic waste management initiative PV Cycle.
- O No information is available on the percentage of loans allocated to projects that are in line with the European Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive).
- B.3. Community dialogue (not applicable for PV roof systems)
 - √ 100% of the projects comply with the regulations of the German Building Code (Baugesetzbuch/ BauGB). The regulations provide for the consideration of local residents' interests during the development of land-use plans and zoning maps (e.g. through public display of development plans, possibility to voice concerns, case-dependent compensation measures).
- B.4. Working conditions during construction and maintenance work
 - ✓ For 100% of projects, high standards regarding health and safety are in place during construction and maintenance work. Contractors have to be supervised by the projects' commissioners (in accordance with local regulations).
 - ✓ For 100% of projects, high labour standards regarding e.g. working time, periods of rest, minimum wages, freedom of association and collective bargaining and non-discrimination (in accordance with local regulations) are in place.
- B.5. Social standards in the supply chain of solar modules and inverters
 - Only for 3 projects, accounting for 3% of the loans' volume, solar modules are manufactured by companies that primarily produce (i.e. have more than 50% of production sites) in countries with high labour standards (e.g. European Union), are a signatory of the United Nations Global Compact, or adhere to the ILO core conventions. For 115 projects, accounting for 97% of the loans' volume, the companies show poor performance or no such information is available.
 - For 118 projects, accounting for 100% of the loans' volume, manufacturers do not require high social standards from their suppliers (e.g. regarding the prohibition of forced labour, wages, working time, health and safety) or no such information is available.
 - ✓ For 83 projects, accounting for 72% of the loans' volume, the solar inverters are manufactured by companies that primarily produce (i.e. have more than 50% of production



- sites) in countries with high labour standards (e.g. European Union), are a signatory of the United Nations Global Compact, or adhere to the ILO core conventions. For 35 projects, accounting for 28% of the loans' volume, the companies show poor performance or no such information is available.
- ✓ For 83 projects, accounting for 72% of the loans' volume, solar inverter manufacturers require high social standards from their suppliers (e.g. regarding the prohibition of forced labour, wages, working time, health and safety). For 35 projects, accounting for 28% of the loans' volume, manufacturers do not require high social standards from their or no such information is available.

Controversy assessment

✓ A controversy assessment on the underlying assets did not reveal any controversial activities or practices that could be attributed to DKB.

Impact indicator 1: Energy performance

The loans refinance solar power plants with a total predicted annual energy production of 226 GWh/year. This calculation is based on energy yield assessments carried out by independent assessors. DKB requires at least one assessment for solar power projects. oekom research was provided with one exemplary solar yield assessment by DKB. For example, these yield assessments refer to technical specifications of the system such as module capacity and orientation and to site-specific parameters such as shade levels.

Impact indicator 2: CO2 emissions performance

The predicted total avoidance of CO₂ emissions related to the solar loans is 121 kt CO₂/year (based on the carbon intensity of the German electricity mix: CO₂ emissions of electricity were 535 g/kWh in 2015; source: German Federal Environmental Agency).

DKB provided all data on impact indicators, oekom research AG has carried out the CO₂ performance calculations.



Part III - Assessment of DKB's Sustainability Performance

In the oekom Corporate Rating with a rating scale from A+ (excellent) to D-(poor), DKB is awarded a score of B- and classified as "Prime". 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 oekom research. In oekom research's view, the



securities issued by the company thus all meet the basic requirements for sustainable investments.

As at 01.09.17, this rating puts DKB in place 1 out of 90 companies rated by oekom research in the "Financials/Public & Regional Banks" sector.

In this sector, oekom research has identified the following issues as the key challenges facing companies in term of sustainability management:

- Sustainability impacts of lending and other financial services/products
- Costumer and product responsibility
- Sustainable investment criteria
- Employment security and employment wellbeing
- Business ethics

In all of these key issues, DKB achieved a rating result that is well above the average of the sector.

Further, oekom research's analysis did not reveal that DKB is involved in any controversies and the company's controversy score is zero.

More details on the rating of the issuer can be found in Annex 2 "Corporate Rating DKB".

oekom research AG

Munich, 01 September 2017



Disclaimer

1. oekom research AG 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.

- 2. 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 oekom research AG 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 analysis of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.
- 3. 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.
- 4. We would point out that this SPO, in particular the images, text and graphics contained therein, and the layout and company logo of oekom research AG are protected under copyright and trademark law. Any use thereof shall require the express prior written consent of oekom research AG. Use shall be deemed to refer in particular to the copying or duplication of the SPO wholly or in part, the distribution of the SPO, either free of charge or against payment, or the exploitation of this SPO in any other conceivable manner.

About oekom research

oekom research is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries with regard to their environmental and social performance. oekom research has extensive experience as a partner to institutional investors and financial service providers, identifying issuers of securities and bonds which are distinguished by their responsible management of social and environmental issues. More than 100 asset managers and asset owners routinely draw on the rating agency's research in their investment decisionmaking. oekom research's analyses therefore currently influence the management of assets valued at over 1.5 trillion euros.

As part of our Green 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 the compliance with the criteria in the selection of projects and draw up an independent second party opinion so that investors are as well informed as possible about the quality of the loan from a sustainability point of view.

Contact: oekom research AG, Goethestraße 28, 80336 Munich, Germany, tel: +49 / (0) 89 / 54 41 84-90, e-mail: info@oekom-research.com



Annex

- Annex 1: oekom Green Bond Analysis Framework
- Annex 2: oekom Corporate Rating DKB



Annex 1: oekom Green Bond Analysis Framework

oekom Green Bond Analysis Framework

The Green Bond Analysis Framework serves as a framework for evaluating the sustainability quality and thus the social and environmental added value of the use of proceeds of this Green Bond Programme. The framework comprises firstly the definition of eligible categories of projects offering environmental added value. Secondly, it encloses the specific sustainability criteria for each project category by means of which this added value and therefore the sustainability performance of the Green Bonds can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the Green Bond Programme and which can also be used for reporting. In addition, impact indicators were defined for each project category, thus providing investors with concrete information of environmental added value.

Use of Proceeds

The proceeds of this Green Bond Programme by DKB will be exclusively used for the following project categories:

- A. Renewable energy loans for the construction and operation of onshore wind power plants
- B. Renewable energy loans for the construction and operation of solar power plants



Sustainability Criteria and Quantitative Indicators for Use of Proceeds

A. Renewable energy loans for the construction and operation of onshore wind power plants

1. Consideration of environmental aspects during planning and operation

Quantitative indicators:

- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).
- Percentage of loans allocated to projects for which measures to protect habitat and wildlife are in place (e.g. measures to protect birds and bats during operation of the power plant).

2. Environmental aspects of wind power plants

Ouantitative indicators:

 Percentage of loans allocated to projects for which life-cycle assessments of the wind power plants have been carried out.

3. Community dialogue

Quantitative indicators:

 Percentage of loans allocated to projects that feature community dialogue as an integral part of the planning process and the operational phase (e.g. sound information of communities, community advisory panels and committees, surveys and dialogue platforms, grievance mechanisms and compensation schemes).

4. Working conditions during construction and maintenance work

Quantitative indicators:

 Percentage of loans allocated to projects with high labour and health and safety standards for construction and maintenance work conducted by own employees and contractors (e.g. ILO core conventions).

5. Social standards in the supply chain

Quantitative indicators:

• Percentage of loans allocated to projects for which high labour standards are applied in the supply chain (e.g. ILO core conventions).



Controversy assessment

• Description of controversial projects (e.g. due to labour rights violations, environmental incidents, adverse biodiversity impacts).

Impact indicators: Energy production and avoidance of CO₂ emissions

- Total annual energy production by the wind power projects (in GWh).
- Total annual avoidance of CO₂ emissions through the wind power projects (in t), based on the carbon intensity of the relevant country's / region's energy mix

B. Renewable energy loans for the construction and operation of solar power plants

1. Consideration of environmental aspects during planning and construction

Quantitative indicators (not applicable for PV roof systems):

- Percentage of loans allocated to projects that underwent environmental impact assessments at the planning stage.
- Percentage of loans allocated to projects for which the location in key biodiversity areas can be excluded (e.g. exclusion of Ramsar sites, UNESCO Natural Word Heritage, IUCN protected areas I-IV).
- Percentage of loans allocated to projects that meet high environmental standards and requirements during the construction phase (e.g. noise mitigation, minimisation of environmental impact during construction work).

2. Environmental aspects of PV plants

Quantitative indicators:

- Percentage of loans allocated to projects for which the performance ratio of PV plants is at least 80%.
- Percentage of loans allocated to projects for which conversion efficiency is at least 15%.
- Percentage of projects that meet high environmental standards regarding take-back and recycling of PV modules at end-of-life stage.
- Percentage of loans allocated to projects for which the thresholds defined by the European Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) are voluntarily fulfilled.

3. Community dialogue (not applicable for PV roof systems)

Quantitative indicator:

 Percentage of loans allocated to projects that 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).



4. Working conditions during construction and maintenance work

Quantitative indicator:

 Percentage of loans allocated to projects with high labour and health and safety standards for construction and maintenance work conducted by own employees and contractors (e.g. ILO core conventions).

5. Social standards in the supply chain

Ouantitative indicator:

• Percentage of loans allocated to projects for which high labour standards are applied in the supply chain (e.g. ILO core conventions).

Controversy assessment

• Description of controversial projects (e.g. due to labour rights violations, environmental incidents, adverse biodiversity impacts).

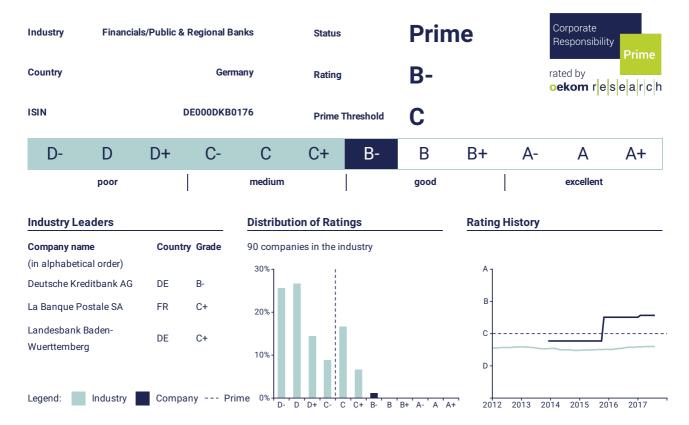
Impact indicators: Energy production and avoidance of CO₂ emissions

- Total annual energy production by the PV projects (in GWh).
- Total annual avoidance of CO₂ emissions through the PV projects (in t); based on the carbon intensity of the relevant country's / region's energy mix.

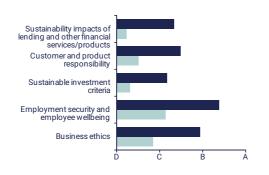


oekom Corporate Rating

Deutsche Kreditbank AG



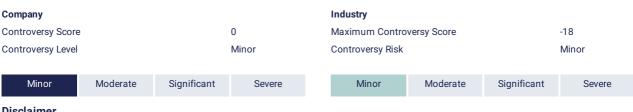
Key Issue Performance



Strengths and Weaknesses

- + reasonable integration of environmental and social aspects into the lending business
- + reasonable policy on responsible marketing and transparent contracts
- + comprehensive programmes regarding financial services to companies/projects with high social benefit
- + reasonable code of conduct covering important aspects of business ethics
- + integration of environmental and social aspects into the asset management business
- no comprehensive measures taken to grant access to financial services without discrimination

Controversy Monitor



Disclaimer

- 1. oekom research AG 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
- 2. We would, however, point out that we do not warrant that the information presented in this Rating Report is complete, accurate or up to date. Any liability on the part of oekom research AG in connection with the use of these pages, the information provided in them and the use thereof shall be excluded.
- 3. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations.
- 4. We would point out that this Rating Report, in particular the images, text and graphics contained therein, and the layout and company logo of oekom research AG are protected under copyright and trademark law. Any use thereof shall require the express prior written consent of oekom research AG. Use shall be deemed to refer in particular to the copying or duplication of the Rating Report wholly or in part, the distribution of the Rating Report, either free of charge or against payment, or the exploitation of this Rating Report in any other conceivable manner

Please note that all data in this report relates to the point in time at which the report was generated. Contact details: oekom research AG, Munich / Germany. Phone: +49 89 544184 90. Email: info@oekom-research.com



Deutsche Kreditbank AG

Methodology - Overview

oekom Corporate Rating - The oekom Universe comprises more than 3,800 companies (mostly companies in important national and international indices, but also small and mid caps drawn from sectors with direct links to sustainability as well as significant non-listed bond issuers).

The assessment of a company's social and environmental performance is based on approximately 100 environmental, social and governance criteria, selected specifically for each industry. All criteria are individually weighted and evaluated and the results are aggregated to yield an overall score (rating), in which the key issues account for at least 50 per cent of the total weight. In case there is no relevant or up-to-date company information available on a certain criterion and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the criterion is graded 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 itself as well as information from 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.

An external rating committee assists the analysts at oekom research with the content-related design of industry-specific criteria and carries out a final plausibility check of the rating results at the end of the rating process.

Controversy Monitor - The oekom Controversy Monitor is a tool for assessing and managing reputational and financial risks associated with companies' negative environmental and social impacts.

The controversy score is a unit of measurement for the number and severity of a company's current controversies. All controversial business areas and business practices receive a negative score, which can vary depending on the significance, number and severity of the controversies. Both the company's score and the maximum score obtained in the industry are displayed.

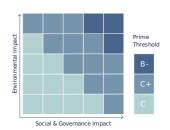
For better classification, the scores are assigned different levels: minor, moderate, significant and severe. The industry level relates to the average controversy score.

Only controversies for which reliable information from trustworthy sources is available are recorded. In addition to proven misconduct and activities of companies, alleged misconduct and activities are also assessed when the facts and circumstantial evidence provided by those sources, taking into account the experience of specialised analysts for each topic, is estimated to be sufficiently reliable. It should be noted that large international companies are more often the focus of public and media attention. Thus, the information available on those companies is often more comprehensive than for less prominent companies.

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

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

Depending on this classification, the two dimensions of the oekom Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the oekom 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 oekom 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.

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).

Status & Prime Threshold - Companies are categorised as Prime if they achieve/exceed the minimum sustainability performance requirements (Prime threshold) defined by oekom for a specific industry (absolute best-in-class approach) in the oekom Corporate Rating. Prime companies rank among the sustainability leaders in that industry.

Strengths & Weaknesses - Overview of selected strengths and weaknesses of a company with regard to the key issues of the industry from a sustainability point of view.