SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Asset Pool

NRW.BANK
20 June 2022

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	• Green Bond
Relevant standards	• Green Bond Principles (2021) as administered by the International Capital Market Association (ICMA), June 2021 version • Draft Model of EU Green Bond Standard (March 2020 version as requested by NRW.BANK) • Technical Expert Group Final Report on EU Taxonomy and associated Technical Annex (March 2020 version as requested by NRW.BANK)
Scope of verification	• NRW.BANK's Green Bond Framework (as of November 2020) • NRW.BANK's Green Loan portfolio (as of 04.05.2022)
Lifecycle	• Asset level verification
Validity	• This SPO is valid as long as no new project categories are added to the analyzed asset pool.

CONTENTS

SCOPE OF WORK

NRW.BANK ("NRW.BANK" or "the Issuer") commissioned ISS ESG to assist with its Green Bond Framework by assessing three core elements to determine the sustainability quality of the bond:

1. NRW.BANK's sustainability performance, according to the ISS ESG Corporate Rating.
2. NRW.BANK's Green Bond Framework – benchmarked against the Green Bond Principles as administered by The International Capital Market Association (ICMA), June 2021 version and on a best effort basis against the Draft Model of EU Green Bond Standard[1] (EU GBS March 2020 version).
3. The assets – whether the projects align with the Technical Expert Group Final Report on EU Taxonomy (March 2020) and associated Technical Annex[2] (EU Taxonomy) on a best effort basis.[3]
4. While the EU Commission released Delegated Acts on the EU Taxonomy in April 2021, NRW.BANK referred in its Framework to the Taxonomy Report: Technical Annex from March 2020 and requested that this SPO be conducted with reference to that version. Thus, ISS ESG reviewed the alignment of the due diligence processes of NRW.BANK for each project categories to be (re-)financed under this Framework against the EU Taxonomy March 2020 Technical Annex.
5. Similarly, NRW.BANK's Framework references the March 2020 proposal of the EU GBS and therefore this SPO has used an assessment of the Framework against the March 2020 version of the EU GBS.

[1] Usability Guide EU Green Bond Standard (March 2020)
https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teggreen-bond-standard-usability-guide_en.pdf
[2] Taxonomy Report: Technical Annex (March 2020)
https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf

[3] ISS ESG reviewed the alignment of the framework with the EU GBS and the processes in line with the EU Taxonomy activity-specific requirements for all project categories.

ISS ESG ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION[4]
Part 1: **Green Bond Framework link to issuer's sustainability strategy**	According to the ISS ESG Corporate Rating published on 27.10.2021, the issuer shows a high sustainability performance against the industry peer group on key ESG issues faced by the Development Banks industry. The issuer is rated 15th out of 43 companies within its industry. The Use of Proceeds categories described in this Green Bond Framework are consistent with the issuer's sustainability strategy and material ESG topics for the issuer's industry.	**Consistent with issuer's sustainability strategy**
Part 2: **Performance against the draft of EU GBS & GBPs**	The issuer has defined a formal concept for its Green Bond Framework regarding Strategy and Rationale, Process for Selection of Green Projects, Green Projects, Management of Use-of-Proceeds and Reporting. This concept is in line with the draft of EU GBS (March 2020), as well as with the ICMA GBPs.	**Positive**
Part 3: **Alignment of the asset pool with the EU Taxonomy**	The green bonds will (re-)finance eligible project categories which include Renewable Energy, Clean Transportation, Green Buildings, Sustainable (Waste) Water Management and cogeneration of heat/cool and power from bioenergy. For these green project categories, ISS ESG assessed their alignment against the criteria requirements of the EU Taxonomy (March 2020). The issuer's eligible categories correspond to the following EU Taxonomy activities: (4.3) "Production of Electricity from Wind Power", (4.20) "Cogeneration of Heat/Cool and Power from Bioenergy (Biomass, Biogas, Biofuels)", (5.1) "Construction, extension and operation of water collection, treatment and supply systems", (5.2) "Centralized Wastewater Treatment", (6.1) "Passenger rail transport", (6.3) "Urban and suburban passenger land transport (public transport)", (6.4) "Infrastructure for low carbon transport (land transport - electric charging stations)", (6.5) "Passenger cars and commercial vehicles", (8.1) "Construction of new buildings (Residential, commercial buildings, schools and nursing homes", and (8.3) "Individual Measures and Professional Services". Based on processes for selection of Green Projects, most of the Green Projects are considered as aligned, on a best-efforts basis, with the EU Taxonomy (March 2020), and the relevant activity-specific Technical Screening Criteria, Do No Significant Harm Criteria and Minimum Social Safeguards.	**Positive**

ISS ESG SPO ASSESSMENT

PART I: ASSESSMENT OF NRW.BANK'S ESG PERFORMANCE

ASSESSMENT OF NRW.BANK'S ESG PERFORMANCE

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

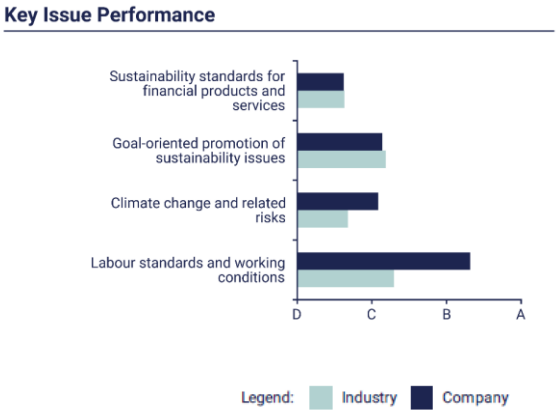
COMPANY	INDUSTRY	DECILE RANK	TRANSPARENCY LEVEL
NRW.BANK	DEVELOPMENT BANKS	3	VERY HIGH

This means that the company currently shows a high sustainability performance against peers on key ESG issues faced by the Development Banks industry and obtains a Decile Rank relative to the industry group of 3, given that a decile rank of 1 indicates the highest relative ESG performance out of 10.

ESG performance

As of 25.05.2022, this Rating places NRW.BANK 15th out of 43 companies rated by ISS ESG in the Development Banks industry.

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



Sustainability Opportunities

NRW.BANK is the promotional bank of the German federal state of North Rhine-Westphalia. Its three developmental focus areas lie in the promotion of economy, housing, as well as municipalities and infrastructure. NRW.BANK has issued various green bonds in recent years and its first social bond in 2020, to refinance its promotional activities, e.g. in the field of climate and environmental protection and social infrastructure. As a promotional bank, NRW.BANK directly contributes to the UN's Sustainable Development Goals (SDGs).

Sustainability Risks

NRW.BANK manages the social and environmental risks associated with financed activities to some extent. Its various promotional programmes demand certain environmental and/or social prerequisites in order to be eligible for support. There is, however, no comprehensive ESG lending guideline that ensures the inclusion of a similar level of environmental and social standards across all

[4] ISS ESG's evaluation is based on the NRW.BANK Green Bond Framework (November 2020 version), on the analysed green portfolio as received on 04.05.2022, and on the most recent ISS ESG Corporate Rating applicable (06.10.2020). ISS ESG reviewed the alignment of the framework with the EU GBS (March 2020) and the projects with the EU Taxonomy (March 2020) criteria.

financing activities, although the company excludes certain controversial business areas and practices from its portfolio. In addition, the bank does not further elaborate on the application processes of its environmental and/or social prerequisites. NRW.BANK carries out monitoring and evaluation efforts regarding the sustainable development impacts of minor parts of its promotional activities. It does provide some transparency on its promotional business on an aggregated level, displaying volumes, sectors and regions it has supported throughout a specific year. However, no disclosure is given on the level of the project or the client. Finally, on behalf of the German state of North Rhine-Westphalia, NRW.BANK owns several companies that organize jointly the state-licensed lottery business in the region.

In contrast, as regards its own operations. NRW.BANK is advanced in the provision of good working conditions for its staff and the environmental management of its buildings and operations.

Governance opinion

While separate persons are holding the positions of CEO and chair of the board of directors, its governance structure does not ensure effective oversight of the executive management. The chair of the board of directors (Andreas Pinkwart, as at October 21, 2021) is not considered independent as he is a minister in the government of the German federal state of North Rhine-Westphalia, the single owner of NRW.BANK. In addition, the majority of board directors are not independent, and neither are the established board committees charged with audit, remuneration and nomination. The company discloses its remuneration policy for executives on an individual basis. All managing board members exclusively receive fixed remuneration. Regarding the bank's governance of sustainability, there is no indication of an independent board committee on sustainability matters. However, NRW.BANK has several business ethics related guidelines in place, which cover the most important topics to some extent. These are accompanied by several relevant compliance procedures, although measures for whistleblower protection are still missing.

Sustainability impact of products and services portfolio

Using a proprietary methodology, ISS ESG assessed the contribution of NRW.BANK's current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs). This analysis is limited to the evaluation of final product characteristics and does not include practices along NRW.BANK's production process.

PRODUCT/SERVICES PORTFOLIO	ASSOCIATED PERCENTAGE OF REVENUE	DIRECTION OF IMPACT	UN SDGS
Emergency aid	7%	CONTRIBUTION	
Financing of healthcare facilities, financing of water and/or wastewater services for residential customers	4%	CONTRIBUTION	

Financing of educational facilities, financing of educational programs, financing of student housing	5%	CONTRIBUTION	
Financing of childcare and/or dependent care services	1%	CONTRIBUTION	
Financing of affordable housing (for low- to median-income households), financing of non-luxury residential housing, financing of social housing, financing of water and/or wastewater services for residential customers	16%	CONTRIBUTION	
Financing of water and/or wastewater services for residential customers	2%	CONTRIBUTION	
Financing of energy efficiency improvements, financing of renewable energy	7%	CONTRIBUTION	
Financing of energy efficiency improvements, financing of renewable energy	7%	CONTRIBUTION	
Financing of terrestrial ecosystem restoration	2%	CONTRIBUTION	
Others	N/A	NO NET IMPACT	N/A

Breaches of international norms and ESG controversies

The issuer is not facing any severe/very severe controversy as of 25.05.2022.

PART II: ALIGNMENT WITH THE GBPs and DRAFT MODEL OF EU GREEN BOND STANDARD (MARCH 2020)

1. Strategy and rationale (EU GBS)

NRW.BANK first published its Green Bond Framework in June 2019. The Green Bond Framework has now been updated and expanded to reflect the latest developments within the agency and the EU as well as to be aligned with the draft EU Green Bond Standard. NRW.BANK has responded to the EU action plan on sustainable finance and the Green Deal. Going forward, the Green Bond Framework 2020 shall apply to all green bonds issued by NRW.BANK and may be updated from time to time.

NRW.BANK is part of the European Commission Climate Strategy. In order to keep global warming - in line with the Paris Agreement - close to 1.5 degree Celsius the European Commission (EC) targets a zero (net)emission economy by 2050. EC's roadmap is converted into national climate strategies. Germany's goal is to reduce emissions by 65% in 2030 vs 1990 and to zero in 2045. NRW.BANK is contributing to these targets via its building renovation, energy infrastructure and e-mobility loan programmes.

NRW.BANK bank has a long-standing commitment to sustainability, having issued several Green Bonds in the past.

Opinion: *ISS ESG considers the Strategy and Rationale description provided by NRW.BANK's Green Bond Framework as aligned with the draft model of EU Green Bond Standard (EU GBS March 2020). The rationale for issuance is stated clearly and the environmental objectives are adequately linked to the issuer's strategy and with EU Taxonomy objective "Climate change mitigation". Furthermore, the issuer describes its sustainability strategy and associated key targets in relation to international sustainability commitments such as the Paris Agreement.*

2. Process for Selection of Green Projects (EU GBS) – Process for Evaluation and Selection (GBPs)

The NRW.BANK ESG-Team selects projects with the highest contribution to the climate policy of the agency, the Federal State of North Rhine-Westphalia, the Federal Republic of Germany and the EU. It ensures that the required Do No Significant Harm (DNSH) criteria and Minimum Social Safeguards are systematically fulfilled during the selection process. The focus of each bond is on dark green assets (renewable energy, clean transportation, etc.). Medium green assets (residential and public green buildings) are only added to the pool in order to reach the minimum size of EUR 500 million. NRW.BANK classifies these assets as climate mitigation projects. The climate adaptation part includes fluvial projects with the focus on flood protection and on the improvement of biodiversity (e.g. the restoration of the river Emscher and its tributaries) as well as municipal climate projects. These assets are classified as dark green. In a next step, the ESG-Team looks at the maturity of the respective assets. NRW.BANK follows the approach of a static asset pool: there will not be any changes made during the lifetime of the green bond. In order to achieve this, the shortest loan maturity determines the longest possible maturity of the bond.

Opinion: *ISS ESG considers the Process for Selection of Eligible Green Projects described by NRW.BANK's Green Bond Framework as aligned with the draft model of EU GBS (March 2020). The*

issuer shows in its framework the potential EU Taxonomy activities with which its projects may be aligned with.

ISS ESG conducted a screening of the procedure in place to identify eligible assets in line with the activity-specific requirements of the EU Taxonomy (see part III of this report).

Moreover, ISS ESG finds that the Process for Evaluation and Project Selection description provided by NRW.BANK aligns with the GBPs. The issuer provides transparency about internal responsibility over the selection process.

3. Green Projects (EU GBS) – Use of Proceeds (GBPs)

FROM ISSUER'S FRAMEWORK

An amount equal to the net proceeds of any NRW.BANK Green Bond will be allocated to refinance existing projects which have been identified as eligible by the internal ESG-Team and which are not older than 12 months before the initiation of the SPO for the respective green bond. These projects are focused on the goals of climate mitigation and climate adaptation. It is ensured that the required Do No Significant Harm (DNSH) criteria and Minimum Social Safeguards are systematically fulfilled. Climate mitigation projects aim to support the 1.5-degree-target of the Paris Agreement by avoiding/reducing CO_2 emissions, whereas climate adaption projects deal with the already existing impacts of climate change, e.g. by raising resilience against heavy precipitation events or supporting biodiversity. All projects need to meet the technical standards defined in the draft taxonomy.

During a transition period, NRW.BANK may allocate a mixture of taxonomy-aligned and likely taxonomy-aligned assets to be (re)financed by a green bond issuance. Likely aligned assets are assets that are aligned with the green bond principles and mapped to the UN SDGs and are reasonably assumed to meet the Taxonomy thresholds although it is difficult to factually determine this due to insufficient data. NRW.BANK will provide the investor in a transparent manner with the information it can provide about the (re)financed assets. It is NRW.BANK's ambition to keep the transition period short and the proportion of likely taxonomy aligned assets low.

NRW.BANK has included the relevant EU taxonomy criteria requirements, including quantitative thresholds, in its project selection criteria.

Opinion: *ISS ESG finds that the Green Projects description proposed by NRW.BANK's Green Bond Framework aligns with the draft model of EU GBS (March 2020) as Green Projects are defined in line with the EU Taxonomy activities. The issuer clearly outlines the environmental objectives of the project categories.*

Moreover, ISS ESG finds that the Use of Proceeds description provided by NRW.BANK aligns with the GBPs. The issuer sets in its framework a list of exclusion criteria, which follow best market practices.

4. Management of Use-of-Proceeds (EU GBS) – Management of Proceeds (GBPs)

FROM ISSUER'S FRAMEWORK

Since the assets of NRW.BANK's Green Bonds are static and do not change during the lifetime of the respective bond, tapping does not fit into this approach and is therefore excluded. A corresponding amount is used for thematically corresponding projects within the business operations of the issuer in accordance with the Act on NRW.BANK and its mandate of providing promotion loans, in case of changes in the asset structure. Ring-fencing of the proceeds is not necessary: the underlying loans were already disbursed and are not older than 12 months before the initiation of the respective SPO. The entire asset-pool is earmarked in the agency's systems.

Opinion: *ISS ESG finds that the Management of Use-of-Proceeds defined by NRW.BANK's Green Bond Framework aligns with the draft model of EU GBS (March 2020). The issuer ensures that proceeds are appropriately earmarked and the expected allocated period is clearly defined. As no proceeds will remain unallocated, the reporting of unallocated proceeds requirement of the EU* GBS (March 2020), *is not applicable.*

Moreover, ISS ESG finds that the Management of Proceeds description provided by NRW.BANK aligns with the GBPs.

5. Reporting (EU GBS & GBPs)

FROM ISSUER'S FRAMEWORK

Allocation Reporting

NRW.BANK publishes an annual allocation report on its website [5]and will continue to do so until full allocation of proceeds of the bond.

Impact Reporting

The draft EU GBS (March 2020) recommend issuers to keep investors updated about the expected ecologic impact of the issuances. NRW.BANK reports on each single green bond on a bond-by-bond-basis annually within the agency's Sustainability Report in order to achieve full transparency. The issuer works together with different institutions and authorities in order to guarantee scientifically accurate figures about the impact of its green bonds:

Climate Change Mitigation

For calculating the CO_2 savings of the green bond, NRW.BANK cooperates with the Wuppertal Institute (WI), an academic research institution that is specialised in topics regarding climate, environment and energy. From 2019 onwards, the CO_2 savings of renewable energy projects are calculated based on three different benchmarks: the energy mix of North Rhine-Westphalia,

[5] https://www.nrwbank.de/en/about-us/sustainability/

Germany and the EU. In doing so, NRW.BANK reacts to requests from investors to provide comparable figures for CO_2 savings. Furthermore, the WI reports on the annual energy generation of renewable energy projects. This impact reporting is fully aligned with the Multilateral Development Banks Harmonised Framework.

See table below for more impact reporting indicators:

ELIGIBLE GREEN PROJECTS	EXAMPLES OF ENVIRONMENTAL KPIS
Renewable Energy	• Total CO_2 emissions reduced/avoided in tonnes* • Annual Energy Generation in GWh/a and MW • Length of grids in km
Clean Transportation	• Total CO_2 emissions reduced/avoided in tonnes* • Number of refinanced vehicles • Number of charging stations, fuel stations, etc. • Length of the tracks in km
Residential Green Buildings	• Total CO_2 emissions reduced/avoided in tonnes* • Number of refurbished houses
Public Green Buildings	• Total CO_2 emissions reduced/avoided in tonnes* • Number and usage of refurbished buildings (m^2)
Terrestrial and Aquatic Biodiversity Conservation and Climate Change Adaptation	• Km of sewers in the river and in the catchment area • Km of renatured parts • Number of species in the aquatic and terrestrial biodiversity (animals, plants, fungus, etc.) • Number of species in the Macrobenthos • Annually prevented flooding damages in EUR • (Re-)Created retention basins in m^3 • (Re-)Created water areas, floodplains and adjacent land areas (real wetlands) in m^2
Sustainable (Waste) Water Management	• Number of persons benefiting directly from access to clean drinking water provided by local waterworks and sewage treatment plants • kWh/cbm • ILI

* The avoided/reduced CO_2-emissions are calculated against the energy mix of North Rhine-Westphalia, Germany and the EU. The total savings will furthermore be shown as: per year and million EUR, per year and per bond volume and during the total lifetime of the bond.

External Review – Second Party Opinion (SPO) and full Allocation Report

NRW.BANK will choose an accredited external reviewer - as soon as available - for verifying this Green Bond Framework and the full allocation report. Before the green bond issuance, NRW.BANK will publish an external review in form of a SPO on its website. This independent review will provide investors with the following information:

- Alignment with the draft EU Green Bond Standard (EU GBS March 2020) and the Green Bond Principles (GBP)
- SDGs targeted by the asset categories of the respective bond
- Consideration of environmental aspects during planning and construction of the projects
- Performance of essential KPIs: lifecycle and supply chain analyses, compliance with national law, fulfilment of social standards and workers' rights, etc.

Opinion: *ISS ESG finds that the Reporting proposed by NRW.BANK's Green Bond Framework partially aligns with the draft model of EU Green Bond Standard. The allocation and impact reports will be appropriately disclosed and publicly available. While the issuer describes how the impact metrics contribute to the environmental objectives of the bond, it is not indicated how they are linked to the DNSH criteria.*

Moreover, ISS ESG finds that the transparency on the level of expected reporting and on the type of information to be reported is aligned with the GBPs.

PART III: SUSTAINABILITY QUALITY OF THE USE OF PROCEEDS

1. CONTRIBUTION OF THE ELIGIBLE PROJECT CATEGORIES 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 NRW.BANK Green Bond project categories to the Sustainable Development Goals defined by the United Nations (UN SDGs).

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

Significant Obstruction	Limited Obstruction	No Net Impact	Limited Contribution	Significant Contribution

The Green Bond project categories have been assessed for their contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS	CONTRIBUTION OR OBSTRUCTION[6]	SUSTAINABLE DEVELOPMENT GOALS
Renewable Energy (Wind)	**Significant contribution**	
E-mobility (electric vehicles)	**Significant contribution**	
	Limited contribution	
E-mobility (charging stations)	**Limited contribution**	
Clean Transportation (Electric Trams, buses and passenger rail transport)	**Significant contribution**	
Individual Measures (building renovation)	**Significant contribution**	
	Limited contribution	
Construction of new buildings which comply with the KFW 55 standard (schools)	**Significant contribution**	

[6] This assessment differs from the ISS ESG SDG Solutions Assessment (SDGA) proprietary methodology designed to assess the impact of an issuer's product and service portfolio on the SDGs.
The insight on the project level in the scope of the current SPO allows to take into account more granular information on the project level, in particular with regard to EU Taxonomy Technical Annex (March 2020) for the all activities. As the projects to be financed under the Use of Proceeds categories have been found to comply with the Technical Screening Criteria defined by the EU Taxonomy Technical Annex, a significant contribution to climate change mitigation by the projects is attested.

	Limited contribution	
Construction of new buildings which comply with the KFW 40 standard (nursing home)	Significant contribution	
	Limited contribution	
Construction of new buildings (residential and non-residential buildings)	Significant contribution	
	Limited contribution	
Cogeneration of Heat/Cool and Power from Bioenergy	No Net Impact	
Water Treatment (Fresh water watermain)	Significant contribution	
Centralized Wastewater Treatment (Emscher river)	Significant contribution	

2. ALIGNMENT OF THE ASSETS WITH THE EU TAXONOMY

ISS ESG assessed the alignment of the Eligible Green Projects included in the Green Bond pool with the EU Taxonomy criteria (March 2020 Technical Annex). All Green Projects are located in the State of North Rhine-Westphalia. The results of the assessments are shown below. Simplified versions of the EU Taxonomy criteria are included.

For almost all of the DNSH criteria assessments below, a high-level assessment was conducted. This is because NRW.BANK distributes her loans via the house bank channel to the final beneficiary (SME or household). Because of the onward lending of the house banks, NRW.BANK has only limited access to project specific information. NRW.BANK provides assurances that projects are in compliance with all laws and regulations that may be relevant to the EU Taxonomy criteria. Given the highly regulated nature of projects in the state of North Rhine-Westphalia and NRW.BANK's systems, this legal compliance is used as a basic proxy for the purposes of the DNSH criteria assessments.

NRW.BANK's project selection criteria overlap with the following economic activities in the EU Taxonomy for Substantial Contribution to Climate Change Mitigation:

4.3 Production of electricity from wind power

4.20 Cogeneration of Heat/Cool and Power from Bioenergy

5.1 Construction, extension and operation of water collection, treatment and supply systems

5.2 Centralized wastewater treatment

6.1 Passenger Rail Transport

6.3 Urban and suburban passenger land transportation (public transport)

6.4 Infrastructure for Low Carbon Transport

6.5 Clean Transport (E-mobility)

8.1 Construction of New Buildings

8.3 Individual measures and professional services (building renovations)

2.1 Production of electricity from wind power (4.3)

Projects under this category include wind farms.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
Facilities operating at life cycle emissions lower than 100gCO_2e/kWh, declining to net-0gCO_2e/kWh by 2050, are eligible.	Wind power is automatically eligible	✓

2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauGB). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Water quality and water consumption	Environmental assessments conducted as part of the planning process include considerations of impacts on water quality. As per compliance with BImSchG (Federal Immission Control Act), measures regarding water use are in place.	✓
Compliance with the EU Water legislation	The projects comply with the EU Water legislation.	✓
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
End-of-life waste management and decommissioning	Decommissioning obligations are part of the planning process and approvals.	✓
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Environmental Impact Assessment or Strategic Environmental Assessment has been conducted and required mitigation measures implemented.	The projects all comply with the German Renewable Energy Act (EEG) and the Federal Building Code (BauGB). Thus, they all involve an Environmental Impact Assessment or a Strategic Environmental Assessment when relevant. Any required mitigation measures for protection of biodiversity/eco-systems have been implemented.	✓

2.2 Cogeneration of Heat/Cool and Power from Bioenergy (4.20)

Projects under this category include combined heat and power plants which use waste wood as feedstock.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
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, are eligible. Facilities must use feedstocks which meet the criteria on the Manufacture of Biomass, Biogas and Biofuels.	The feedstock for the CHP plant is waste wood which belong to Categories I, II and III, under the Germany waste wood classification system. Typical CO2 savings according to RED II, using the appropriate feedstock category, is 92%.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauEG). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Water quality and water consumption	Environmental assessments conducted as part of the planning process include considerations of impacts on water quality. As per compliance with BImSchG (Federal Immission Control Act), measures regarding water use are in place.	✓
Compliance with the EU Water legislation	The projects comply with the EU Water legislation.	✓
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Implement measures concerning waste management required by the Commission Implementing Decision (EU) 2017/1442 under the Industrial Emissions Directive 2010/75/EU, relying	The project complies with BImSchG (Federal Immission Control Act), which regulates emissions which may impact on air, soil and water quality.	

to the extent possible on the JRC's BAT Reference Document for Large Combustion Plants. These requirements apply for installations with a total rated thermal input of 50 MW or more.		
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Ensure emissions to air, water and soil are prevented / minimised by employing the techniques included in the reference documents for the Best Available Techniques (BAT) – so-called BREF(s)) – concerning the activity in question or other techniques that provide for an equivalent level of environmental protection.	The project complies with BImSchG (Federal Immission Control Act), which regulates emissions which may impact on air, soil and water quality.	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A

2.3 Construction, extension and operation of water collection, treatment and supply systems (5.1)

Projects under this category are focused on extension of fresh watermain pipes in the Vulkaneifel district.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
The front-to-end water collection, treatment and supply system is eligible provided that: it's performance in terms of energy consumption per cubic meter of final water supply is high or substantially improved. *Please refer to the TEG Technical Annex for further*	The issuer confirms that the relevant project substantially improves performance in terms of energy consumption per cubic meter of final water supply.	✓

information on optional thresholds.		
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation. Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Water quality and water consumption	Environmental assessments conducted as part of the planning process include considerations of impacts on water quality. As per compliance with BImSchG (Federal Immission Control Act), measures regarding water use are in place.	✓
Compliance with the EU Water legislation	The projects comply with the EU Water legislation.	✓
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Environmental Impact Assessment or Strategic Environmental Assessment has been conducted and required mitigation measures implemented.	The projects comply with relevant legislation and underwent a preliminary Environmental Impact Assessment or a Strategic Environmental Assessment. Required mitigation measures for protection biodiversity/eco-systems are implemented. According to the report reviewed by ISS ESG, a significant adverse effect on protected areas is not to be expected.	✓

2.4 Centralized wastewater treatment (5.2)

Projects under this category are focused on the sewage treatment plant and sewer canals around the Emscher river. The projects are part of a river restoration project which also contributes to climate change adaptation.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
Construction or extension of centralized wastewater systems is eligible, provided that the new wastewater treatment substitutes more GHG emission intensive wastewater treatment systems. No threshold applies.	The new projects replace more GHG emission-intensive wastewater treatment systems. This is a mammoth project. It is the elimination of an open drainage of wastewater (the River Emscher) through the construction of underground sewers. It should be noted that the Emscher Catchment was one of the most heavily loaded and degraded waterbody systems in Europe.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauGB). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Ensure emissions to water are within the ranges set in the Urban Wastewater Treatment Directive 91/271/EEC	The issuer confirms this criteria requirement is met, on the basis of their assumption that the project is in compliance with all relevant regulatory and legal requirements, as well as adopting best market practices.	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Environmental Impact Assessment or Strategic	The projects comply with relevant legislation and underwent an Environmental Impact	✓

Environmental Assessment has been conducted and required mitigation measures implemented.	Assessment or a Strategic Environmental Assessment when relevant. Required mitigation measures for protection biodiversity/eco-systems have been implemented.	

2.5 Passenger Rail Transport (6.1)

Projects under this category include electric trains for Line RE13 (Maas-Wupper-Express), connecting Germany and the Netherlands.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
Zero direct emissions trains are eligible. Other trains are eligible if direct emissions (TTW) are below 50g CO2e emissions per passenger kilometre (gCO2e/pkm) until 2025 (non-eligible thereafter)	The issuer confirms that relevant expenditure (Line RE13) is eligible.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauEG). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Ensure proper waste management both at the use phase (maintenance) and the end-of-life for the rolling	The project concerns public railway infrastructure, which needs to comply with the requirements set forth in the German Railroad Commissioning Permit Ordinance (Eisenbahn-	✓

stock, e.g. reuse and recycle of parts like batteries, in compliance with EU and national legislation on hazardous waste generation, management and treatment.	Inbetriebnahmegenehmigungsverordnung (EIGV) as well relevant legislation on waste generation, management and treatment. The Düsseldorf district government is responsible for the technical supervision of all streetcar and trolleybus operations based in North Rhine-Westphalia.	
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Engines for the propulsion of railway locomotives (RLL) and engines for the propulsion of railcars (RLR) must comply with latest applicable standards (currently stage V) of Non-Road Mobile Machinery Regulation. Minimise noise and vibrations of rolling stock, thresholds in line with Regulation 1304/2014 Noise TSI.	From December 2026, the Maas-Wupper-Express (RE 13) will be operated with 20 Flirt 3XLs. The issuer confirms that vehicle data for this particular train type comply with requirements set forth in the TEG Technical Annex. Moreover, the Directive 1304/2014 has been transposed into German law, reflected in the German Rail Noise Protection Act (Schienenlärmschutzgesetz, SchlärmschG).	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A

2.6 Urban and suburban passenger land transportation (public transport) (6.3)

Projects under this category are focused on the electric trams which contribute to climate change adaptation.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
Zero direct emissions land transport activities (e.g. light rail transit, metro, tram, trolleybus, bus and rail) are eligible	The new projects support buying electric trams to increase the number of zero-emission fleets.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	As confirmed by Issuer, the projects comply with German environmental legislation, such as the General Railway Act (Allgemeinen Eisenbahngesetz – AEG) and Renewable Energy	✓

	Act (EEG) and the Federal Building Code (BauGB). Which are a part of the operating permit requirements. Besides Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	
Supporting system adaptation	As confirmed by Issuer, Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with operating permit requirements issued by EBA (Eisenbahn Bundesamt) and KBA (Kraftfahrbundesamt).	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Regarding both maintenance and end-of-life management of vehicles or rolling stock, compliance with EU and national legislation on hazardous waste generation, management and treatment.	As confirmed by Issuer, both maintenance and end-of-life management of vehicles or rolling stock are consistent with operating permit requirements issued by EBA (Eisenbahn Bundesamt) and KBA (Kraftfahrbundesamt).	✓
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Railcars, locomotives must comply with latest applicable standards (currently stage 5) of Non-Road Mobile Machinery Regulation Tyres must comply with the (revised) Tyre labelling regulation. It includes noise labelling requirements but not requirements on tyre abrasion.	The issuer confirms this criteria requirement is met which they are part of the operating license requirements, on the basis of their assumption that the project is in compliance with all relevant regulatory and legal requirements, as well as adopting best market practices.	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A

2.7 Infrastructure for Low Carbon Transport (6.4)

Projects under this category include financing the installation of electric car charging stations in the state of NRW.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
The construction and operation of transport infrastructure is eligible in the following cases: 1. Infrastructure that is required for zero direct emissions transport (e.g. electric charging points, electricity grid connection upgrades, hydrogen fuelling stations or electric highways). *Please refer to the TEG Technical Annex for further relevant cases.* For all cases: • Only infrastructure that is fundamental to the operation of the transport service is eligible. • Infrastructure that is dedicated to the transport of fossil fuels or blended fossil fuels is not eligible	The underlying activity concerns the installation of electric car charging stations and is thus eligible for alignment. It is further fundamental to the operation of the passenger transport service.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauEG). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for	✓

	other stakeholders and they are consistent with regional and national adaptation efforts.	
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Water quality and water consumption	Environmental assessments conducted as part of the planning process include considerations of impacts on water quality. As per compliance with BImSchG (Federal Immission Control Act), measures regarding water use are in place.	✓
Compliance with the EU Water legislation	The projects comply with the EU Water legislation.	✓
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Re-use parts and use recycled material during the renewal, upgrade and construction of infrastructure. At least 80% (by weight) of the non-hazardous construction and demolition waste (excluding naturally occurring material defined in category 17 05 04 in the EU waste list) generated on the construction site must be prepared for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials. This can be achieved by executing the construction works in line with the good practice guidance laid down in the EU Construction and Demolition Waste Management Protocol.	The EU Waste Framework Directive (2008/98/EC) stipulates that by 2020 at least 70% by weight of the non-hazardous construction and demolition waste is prepared for reuse, recycling or other material recovery. The Directive is implemented in Germany, through the KrWG Kreislaufwirtschaftsgesetz (Closed Substance Cycle Waste Management Act) In 2020, the recovery rate of C&D waste stood at 93% in Germany[7].	✓
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Minimise noise and vibrations from use of infrastructure by introducing open trenches/ wall barriers/ other measures	The projects under this category concern the installation of wall-mounted electric car charging stations at various locations near the headquarters of the Caritasverband in NRW. As	✓

[7] https://ec.europa.eu/eurostat/databrowser/view/cei_wm040/default/table?lang=en

and comply with the Environmental Noise Directive 2002/49/EC. Minimise noise, dust, emissions pollution during construction / maintenance works.	such, the related works is relatively minor and minimal noise, dust or emission pollution during construction/maintenance works is to be expected.	
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Infrastructure for low carbon transport is land use intensive and is a major factor of ecosystem deterioration and biodiversity loss. Projects should ensure that: • Environmental Impact Assessment (EIA) has been completed in accordance with EU Directives on Environmental Impact Assessment (2014/52/EU) and Strategic Environmental Assessment (2001/42/EC) or other equivalent national provisions. • Such impact assessments should, at the very least, identify, evaluate, and mitigate any potential negative impacts of the designated activities, projects, or assets on ecosystems and its biodiversity and should be assessed and conducted in compliance with the provisions of the EU Habitats and Birds Directives. • Invasive plants are appearing very often along transport infrastructure and are sometimes even spread duo to transport infrastructure, which might	The projects under this category concern the installation of wall-mounted electric car charging stations at various locations near the headquarters of the Caritasverband in NRW. As such, related works is relatively minor and there will be very little impacts on the local ecosystem.	✓

negatively impact natural ecosystems (e.g. natural fauna). Care should be taken not to spread any invasive plants through proper maintenance. • Wildlife collisions is a problem and should be considered. Solutions developed for should be applied for the detection and avoidance of potential traps that may cause the unnecessary death of animals. • Mitigation options exist and different types of measures can be beneficial for wildlife.		

2.8 Clean Transport (E-mobility) (6.5)

Projects under this category are focused the acquisition of electric vehicles. All Green Projects are located in the State of North Rhine-Westphalia. The results of this assessment are displayed below:

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
Zero tailpipe emission vehicles (incl. hydrogen, fuel cell, electric). These are automatically eligible.	Electric vehicles are automatically eligible as below these threshold	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		
Reducing material physical climate risks	Operating permits granted by national authorities (Kraftfahrbundesamt) include climate risk assessments.	✓
Supporting system adaptation	Operating permits ensure compliance with regional and national adaptation efforts.	✓

Monitoring adaptation results	Compliance with German environmental legislation requires monitoring of adaption results.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable		-
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Compliance with EU and national legislation on hazardous waste generation, management and treatment. Special focus on critical raw materials recovery from batteries	The issuer ensures that the outlined DNSH criteria is covered under the operating permits issued by national authorities.	✓
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Vehicles must comply with the emission thresholds for clean light-duty vehicles from the EU directive 2019/1161	The issuer ensures that the outlined DNSH criteria is covered under the operating permits issued by national authorities.	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable		-

2.9. Construction of New Buildings (8.1)

Projects under this category include the construction of school, nursing home, sustainable living and new energy efficient buildings.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
To be eligible, the 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" (NZEB) requirements.	The buildings have an EPC level of A. This corresponds with at least 20% lower than NZEB requirements in Germany.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		

Reducing material physical climate risks	The projects comply with German environmental legislation, such as the Renewable Energy Act (EEG) and the Federal Building Code (BauEG). Assessments of physical climate risks are conducted at the planning stage and relevant measures are applied to reduce identified risks.	✓
Supporting system adaptation	Environmental risks assessments conducted as part of the planning process ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
All relevant water appliances must be in the top 2 classes for water consumption of the EU Water Label	The issuer is confident there is a high likelihood of compliance with the top 2 classes for water consumption of the EU Water Label, however exact confirmation is not possible at this stage.	○
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
At least 80% (by weight) of the non-hazardous construction and demolition waste must be prepared for re-use or sent for recycling or other material recovery	This information is confirmed as part of the planning process.	✓
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Building components and materials do not contain asbestos nor substances of very high concern as identified on the basis of the "Authorisation List" of the REACH Regulation	Asbestos in construction has been banned in Germany since 1993. With respect to the use of substances of very high concern, Germany has set forth some restrictions and prohibitions for the content of dangerous substances in construction products and for the emission of dangerous substances from construction products in the Prohibition of Chemicals Ordinance. Further, the German Act for Promoting Closed Substance Cycle Waste Management and Ensuring Environmentally Compatible Waste Disposal necessitates that binding of waste within products may in particular not lead to an accumulation of harmful substances within the recovered substance cycle. This act implements	✓

	the Directive 2008/98/EC in Germany. The REACH regulation is also applicable in Germany, being a country of the European Union.	
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
The new construction must not be built on protected natural areas.	The buildings are located in an urban location, in the city center. It is not located in biodiversity-sensitive areas, or in UNESCO Heritage areas.	✓
The new construction must not be built on arable or greenfield land of recognised high biodiversity value and land that serves as habitat of endangered species (flora and fauna) listed on the European Red List and / or the IUCN Red List.	The buildings are located in an urban location, in the city center. It is not located in biodiversity-sensitive areas, or in UNESCO Heritage areas.	
At least 80% of all timber products used in the new construction must have been either recycled/reused or sourced from sustainably managed forests as certified by third-party certification audits performed by accredited certification bodies, e.g. FSC/PEFC standards or equivalent.	As the projects are located in the EU, the construction uses only timber from sustainable managed forests. The timber fulfils FSC/PEFC standards.	

2.10 Individual measures and professional services (building renovations) (8.3)

Projects under this category include small scale renovations and measures that increase the energy efficiency of the building. Project examples include new windows and front doors; external wall and roof insulation; and replacements of inefficient boilers.

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
1. CLIMATE CHANGE MITIGATION – *TECHNICAL SCREENING CRITERIA*		
There are no defined metrics across the individual measures and professional services.	All efforts to improve energy efficiency of a building are financed by this programme, such as small-scale building renovations and measures such as rooftop solar panels which are eligible.	✓
2. CLIMATE CHANGE ADAPATION – *DO NO SIGNIFICANT HARM CRITERIA*		

Reducing material physical climate risks	Modifications to buildings comply with relevant Germany legislation, which considers various risk assessments. These include physical climate risks.	✓
Supporting system adaptation	Modifications to buildings, environmental risks assessments are conducted as part of the planning process. The assessments ensure that the projects do not increase the climate risks for other stakeholders and they are consistent with regional and national adaptation efforts.	✓
3. WATER – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
4. CIRCULAR ECONOMY – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A
5. POLLUTION – *DO NO SIGNIFICANT HARM CRITERIA*		
Building components and materials do not contain asbestos nor substances of very high concern as identified on the basis of the "Authorisation List" of the REACH Regulation	NRW.BANK provides assurances that all projects are conducted in accordance with local regulatory and legal requirements, which include proper handling of any asbestos relevant materials in renovation works of older buildings. NRW.BANK also provides assurance that all projects are conducted to the best market standards and do not contain substances of very high concern on the REACH list.	✓
6. ECOSYSTEMS – *DO NO SIGNIFICANT HARM CRITERIA*		
Not applicable	N/A	N/A

Minimum Social Safeguards

ISS ESG assessed the alignment of NRW.BANK's due diligence and processes with the EU Taxonomy Minimum Social Safeguards. The results of this assessment are applicable for every project financed under this framework and are displayed below:

EU TAXONOMY REQUIREMENT	GREEN PROJECTS OWN PERFORMANCE AND SELECTION PROCESSES	ISS ESG ANALYSIS AGAINST REQUIREMENTS
OECD Guidelines on Multinational Enterprises	Germany is an OECD country and therefore companies in Germany are expected to follow them. As with other OECD countries, there is a National Contact Point (NCP) which is responsible	✓

	for ensuring that companies follow them, even if the companies do not make explicit references to the Guidelines in their policies or other internal documents. All of projects financed by this bond are located in Germany.	
UN Guiding Principles on Business and Human Rights	Germany adopted the National Action Plan to implement the UN Guiding Principles on Business and Human Rights at the federal level in 2016.	✓
ILO Core Labour Conventions	The Core Conventions have been ratified in Germany and are included in German legislation. NRW.BANK's compliance processes ensure the company's alignment with the relevant legislation. Risk control processes are in place to identify and prevent any potential compliance breach at the project level. Projects can be removed from the bond's financing in case of non-compliance.	✓

DISCLAIMER

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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 standardized procedures to ensure consistent quality of responsibility research worldwide. In addition, we provide Second Party Opinion (SPO) on bonds based on data provided by the issuer.
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ANNEX 1: Methodology

ISS ESG Green KPIs

The ISS ESG Green Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of NRW.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. If a majority of assets fulfill the requirement of an indicator, this indicator is then assessed positively. Those indicators may be tailor-made to capture the context-specific environmental and social risks.

Environmental and social risks assessment methodology

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 NRW.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 NRW.BANK's Green Bond contributes to related SDGs.

ANNEX 2: ISS ESG Corporate Rating Methodology

The following pages contain methodology description of the ISS ESG Corporate Rating.

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.

Norm-Based Research - Severity Indicator - 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

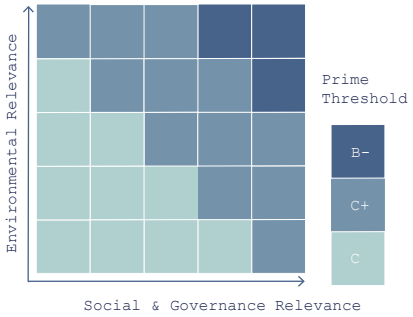
Severity of impact is categorized as Potential, Moderate, Severe, Very severe. This informs the ESG Corporate Rating.

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).

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

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



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

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

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

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

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

A+: the company shows excellent performance.

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

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

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

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

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

0% - < 20%: very low

20% - < 40%: low

40% - < 60%: medium

60% - < 80%: high

80% - 100%: very high

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

ANNEX 3: Quality management processes

SCOPE

NRW.BANK commissioned ISS ESG to compile a Green Bond SPO. The Second Party Opinion process includes verifying whether the Green Bond Framework aligns with the ICMA Green Bond Principles and to the extent possible, with the Draft Model of EU Green Bond Standard (EU GBS). Moreover, the assessment included whether the Green Bond project categories align with the EU Taxonomy (Final Report of the Technical Expert Group March 2020), on a best effort basis.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles, Draft Model of EU Green Bond Standard (EU GBS March 2020) and EU Taxonomy (March 2020)
- ISS ESG Key Performance Indicators relevant for Use of Proceeds categories selected by NRW.BANK

ISSUER'S RESPONSIBILITY

NRW.BANK's responsibility was to provide information and documentation on:

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

ISS ESG's VERIFICATION PROCESS

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

ISS ESG has conducted this independent Second Party Opinion of the Green Bond to be issued by NRW.BANK based on ISS ESG methodology and in line with the ICMA Green Bond Principles and Draft Model of EU Green Bond Standard (EU GBS)

The engagement with NRW.BANK took place from May to June 2022.

ISS ESG's BUSINESS PRACTICES

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

About ISS ESG SPO

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

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

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

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

For more information on SPO services, please contact: SPOsales@isscorporatesolutions.com

For more information on this specific Green Bond SPO, please contact: SPOOperations@iss-esg.com

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