

SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Sustainability Bond Framework

State of North Rhine-Westphalia

24 August 2026

VERIFICATION PARAMETERS

Type(s) of instruments contemplated

- Sustainability Bond(s)¹

Relevant standards

- Green Bond Principles (GBP), as administered by the International Capital Market Association (ICMA) (as of June 2025)
- Social Bond Principles (SBP), as administered by the International Capital Market Association (ICMA) (as of June 2025)
- Sustainability Bond Guidelines (SBG), as administered by the International Capital Market Association (ICMA) (as of June 2021)
- EU Taxonomy Climate Delegated Act, Annex I and II (as of June 2023)
- EU Taxonomy Environmental Delegated Act Annex I and IV (as of June 2023)

Scope of verification

- State of North Rhine-Westphalia Sustainability Bond Framework (as of Aug. 18, 2026)
- State of North Rhine-Westphalia Selection Criteria (as of Jun. 18, 2025)

Lifecycle

- Pre-issuance verification

Update

- Update from the 2025 [version](#)²

Validity

- Valid as long as the cited Framework remains unchanged

¹ Green bonds, social bonds, sustainability bonds.

² The update is restricted to Part IV and does not impact the assessment of the framework's alignment with the relevant market principles, nor the overall opinion and conclusions previously expressed. No reassessment of the framework or review of the remaining sections of the Second-Party Opinion was undertaken as part of this update.

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SCOPE OF WORK

The State of North Rhine-Westphalia ("the Issuer," or "State of NRW") commissioned ISS-Corporate to assist with its Sustainability Bond(s) by assessing three core elements to determine the sustainability quality of the instruments:

1. The State of North Rhine-Westphalia's Sustainability Bond Framework (as of Aug. 18, 2026), benchmarked against the International Capital Market Association's (ICMA) Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines (SBG).
2. The Selection Criteria — whether the project categories contribute positively to the United Nations Sustainable Development Goals (U.N. SDGs) and how they perform against ISS-Corporate's proprietary issuance-specific key performance indicators (KPIs) (see Annex 1).
3. The alignment of the project categories with the EU Taxonomy on a best-efforts basis³ — whether the nominated project categories are aligned with the EU Taxonomy Technical Screening Criteria (including Substantial Contribution to Climate Change Mitigation, Adaptation, Protection And Restoration of Biodiversity And Ecosystems, and Sustainable Use and Protection of Water And Marine Resources Criteria and Do No Significant Harm Criteria) and Minimum Safeguards requirements as included in the EU Taxonomy Climate Delegated Act (June 2023)⁴ and Environmental Delegated Act (June 2023).⁵
4. Consistency of Sustainability Bond(s) with the State of North Rhine-Westphalia's sustainability strategy, drawing on the key sustainability objectives and priorities defined by the Issuer.

³ While the Final Delegated Acts for Mitigation and Adaptation were published in June 2023, the Technical Screening Criteria allow for discretion on the methodologies in determining alignment in certain cases. Therefore, at this stage, the alignment with the EU Taxonomy has been evaluated on a "best efforts basis."

⁴ Commission [Delegated Regulation \(EU\) 2023/2485](#) of 27 June 2023 amending [Delegated Regulation \(EU\) 2021/2139](#).

⁵ Commission [Delegated Regulation \(EU\) 2023/2486](#) of 27 June 2023 supplementing [Regulation \(EU\) 2020/852](#).

STATE OF NORTH RHINE-WESTPHALIA OVERVIEW

The State of North Rhine-Westphalia is located in Germany. Germany is a federal parliamentary republic, classified as a high-income country by the World Bank. The Issuer has an estimated population of 18.0 million inhabitants as of 2025.⁶

ESG risks associated with sovereign Issuers

ISS ESG's Country Rating identifies sustainability risks in the following key areas for Germany:⁷ political system and governance, human rights and fundamental freedoms, social conditions, natural resources, climate change and energy, production and consumption.

This report focuses on the sustainability credentials of the issuance. Part IV of this report assesses the consistency between the issuance and the Issuer's overall sustainability strategy.

⁶ Population statistic from [Stastistik.NRW](https://www.statistik.nrw.de/).

⁷ Please note that this is not an Issuer-specific assessment.

ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ⁸
Part I: Alignment with GBP/SBP/SBG	The Issuer has defined a formal concept for its Sustainability Bond(s) regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the GBP, SBP and SBG.	Aligned
Part II: Sustainability quality of the Selection Criteria	The Sustainability Bond(s) will (re)finance the following eligible asset categories: Social categories: Affordable basic Infrastructure, Access to Essential Services, Affordable Housing, Employment Generation, Food Security and Sustainable Food System, Socioeconomic Advancement and Empowerment. Green categories: Renewable Energy, Energy Efficiency, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, Sustainable Water and Wastewater Management and Climate Change Adaptation. Product and/or service-related use of proceeds categories⁹ individually contribute to one or more of the following SDGs: 	Positive

⁸ The evaluation is based on the State of North Rhine-Westphalia's Sustainability Bond Framework (August. 18, 2026, version), on the analysed asset selection criteria as received on Jun. 18, 2025.

⁹ Affordable basic Infrastructure, Access to Essential Services, Affordable Housing, Employment Generation, Food Security and Sustainable Food System, Socioeconomic Advancement and Empowerment, Renewable Energy, Energy Efficiency, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, Sustainable Water and Wastewater Management and Climate Change Adaptation.

SPO SECTION	SUMMARY	EVALUATION ⁸
	The environmental and social risks associated with the use of proceeds categories are managed.	
Part III: Alignment with EU Taxonomy	The State of NRW's project characteristics, due diligence processes and policies have been assessed against the requirements of the EU Taxonomy (Climate Delegated Act of June 2023 and Environmental Delegate Act of June 2023), on a best-efforts basis.¹⁰ The nominated project categories are: - Categories 3.1, 3.2, 3.10, 4.1, 4.11, 4.14, 6.13, 7.4 and 7.6 are aligned with the Climate Change Mitigation Criteria. - Categories 1.2 and 9.3 are aligned with the Climate Change Adaptation Criteria. - Category 1.1 is not aligned with the Protection And Restoration of Biodiversity And Ecosystems Criteria. - Category 3.1 is aligned with the Sustainable Use and Protection of Water And Marine Resources Criteria. All aligned with the Do No Significant Harm Criteria, except for 1.2 All aligned with the Minimum Safeguards requirements.	
Part IV: Consistency of Sustainability Bond(s) with the State of NRW's sustainability strategy	The key sustainability objectives and the rationale for issuing Sustainability Bond(s) are clearly described by the Issuer. All the project categories considered are in line with the Issuer's sustainability objectives.	Consistent

¹⁰ While the Final Delegated Acts for Mitigation and Adaptation were published in June 2023, the Technical Screening Criteria allow for discretion on the methodologies in determining alignment in certain cases. Therefore, at this stage, the alignment with the EU Taxonomy has been evaluated on a "best efforts basis."

SPO ASSESSMENT

PART I: ALIGNMENT WITH THE GBP, SBP and SBG

This section evaluates the alignment of the State of North Rhine-Westphalia's Sustainability Bond Framework (as of Jun. 18, 2025) with the GBP, SBP and SBG.

GBP, SBP, SBG	ALIGNMENT	OPINION
1. Use of proceeds	✓	The use of proceeds description provided by the State of NRW's Sustainability Bond Framework is aligned with the GBP, SBP and SBG. The Issuer's green and social categories align with the project categories as proposed by the GBP, SBP and SBG. Criteria are defined clearly and transparently. The full allocation of proceeds is part of the Issuer's discretionary expenditure for the previous financial year. As such, the allocation of proceeds to eligible activities is published to investors before issuance. The Issuer commits to report by project category. Both environmental and social benefits are described.
2. Process for project evaluation and selection	✓	The process for project evaluation and selection description provided by the State of NRW's Sustainability Bond Framework is aligned with the GBP, SBP and SBG. The project selection process is defined. ESG risks associated with the project categories are identified and managed appropriately. Moreover, the projects selected show alignment with the Issuer's sustainability strategy. Prior to issuance, an impact report outlining the intended benefit to the relevant population is shared and made public on the Issuer's website. The Issuer defines exclusion criteria for harmful projects categories.
3. Management of proceeds	✓	The management of proceeds provided by the State of NRW's Sustainability Bond Framework is aligned with the GBP, SBP and SBG.

GBP, SBP, SBG	ALIGNMENT	OPINION
		The net proceeds collected will equal the amount allocated to eligible projects. The net proceeds are tracked appropriately. The net proceeds are managed on an aggregated basis for multiple green/social bonds (portfolio approach). All the proceeds are allocated at the issuance, hence there are no unallocated proceeds or temporary investment instruments.
4. Reporting	✓	The allocation and impact reporting provided by the State of NRW's Sustainability Bond Framework is aligned with the GBP, SBP, and SBG. For all sustainability bonds issued under this framework, the Issuer commits to disclosing the complete allocation of proceeds, as well as the outcomes and positive social and environmental impact of these expenditures. The report will be published once at issuance. The report will be publicly accessible on the Issuer's website. The state of North Rhine-Westphalia has disclosed the type of information that will be reported and has indicated that the level of information will be at the project category level. Where possible, the impact reporting will occur on a project basis. The impact reporting will be available on the Issuer's website.

PART II: SUSTAINABILITY QUALITY OF THE SELECTION CRITERIA

A. CONTRIBUTION OF THE SUSTAINABILITY BOND(S) TO THE U.N. SDGs¹¹

The Issuer can contribute to the achievement of the SDGs by providing specific services/products that help address global sustainability challenges, and by being a responsible actor, working to minimize negative externalities in its operations along the entire value chain.

1. Products and services

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

The assessment of UoP categories for (re)financing specific products and services is displayed on a three-point scale:

Obstruction	No Net Impact	Contribution
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Each of the Sustainability Bond(s)'s use of proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

Social Categories

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Affordable Basic Infrastructure <i>Digitalization</i> Expansion of fiber optic networks in underserved areas <i>Target Groups: Underserved, owing to a lack of quality access to essential goods and services, Students/trainees, Children/pupils.</i>	Contribution	

¹¹ The impact of the UoP categories on U.N. Sustainable Development Goals is assessed with proprietary methodology and may therefore differ from the Issuer's description in the Framework.

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Affordable Basic Infrastructure <i>Public Transportation</i> Reduced fares for public transportation for specific target groups <i>Target Groups: People with low socio-economic background</i>	Contribution	
Affordable Basic Infrastructure <i>Public Transportation</i> Reduced fares for public transportation for specific target groups <i>Target Groups: Children/pupils, Students/trainees.</i>	Contribution	
Access to Essential Services <i>Healthcare</i> - Measures to ensure healthcare infrastructure functionality and procurement of equipment in a national health emergency - Set up telematics infrastructure, telemedicine, and related innovations in the healthcare sector - Measures to ensure medical care in underserved areas - Modernization of university clinics <i>Target Groups: General Public.</i>	Contribution	
Access to Essential Services <i>Healthcare</i> Prevention and treatment of addiction <i>Target Groups: General Public Children/pupils, Aging population and vulnerable youth.</i>	Contribution	

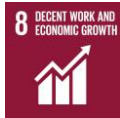
USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Access to Essential Services <i>Healthcare</i> Access to (preventive) medical care <i>Target Groups: General Public Children/pupils, Migrants and/or displaced persons.</i>	Contribution	
Access to Essential Services <i>Healthcare</i> Psychiatric care <i>Target Groups: General Public Children/pupils.</i>	Contribution	 
Access to Essential Services <i>Healthcare</i> Support geriatric care to strengthen structures, improve advice, provide access to digital technology, and enhance participation¹² <i>Target Groups: Aging populations and vulnerable youth.</i>	Contribution	
Access to Essential Services <i>Healthcare</i> Financial grants for the training of geriatric nurses <i>Target Groups: Aging populations and vulnerable youth.</i>	Contribution	  
Access to Essential Services <i>Education (Higher)</i> Training for special needs education <i>Target Groups: People with disabilities, Children/pupils, Students/trainees.</i>	Contribution	  

¹² As part of the State's Development plan on geriatric care (Landesförderplan Alter und Pflege), the State supports projects that contribute to the following five superordinate goals: - Supporting systemic structures - Promoting/spreading knowledge - Promoting quality and transparency of advice - Providing support with (digital) technology/Enable access to (digital) technology - Enhance broader participation.

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Access to Essential Services <i>Education (Higher)</i> State funding to universities to improve the quality of teaching, replacing the tuition fees previously charged to students <i>Target Groups: Students/trainees.</i>	Contribution	
Access to Essential Services <i>Education (School)</i> Social work at schools to support the personal and social development of pupils, counselling, violence prevention, crisis intervention, and advisory tasks for pupils and educational staff¹³ <i>Target Groups: Children/pupils, Aging populations and vulnerable youth.</i>		
Access to Essential Services <i>Education (Pre-School))</i> Family centres¹⁴ to provide counselling services to support parents and children, promote social participation of disadvantaged families, and create more equal opportunities <i>Target Groups: People with low socio-economic background, Children/pupils.</i>		
Access to Essential Services <i>Education (Pre-School))</i> plusKITA and language education support <i>Target Groups: People with low socio-economic background, Children/pupils, Migrants and/or displaced persons.</i>		

¹³ For additional details on the criteria: <https://www.schulministerium.nrw/schulsozialarbeit>.

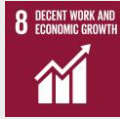
¹⁴ Family centres offer open consultation hours for parenting and family counseling or refer and accompany families to further counseling. Families in special circumstances, such as single parents and families with a migration background, particularly benefit from this. Low-threshold parent cafés, parent events on educational topics, and parenting skills courses contribute to prevention and early support, as do artistic and creative activities, exercise, and nutrition programs for parents and children. Furthermore, the family centers are involved in children's transition to primary school, advise parents on issues related to partnerships, and much more.

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Access to Essential Services <i>Education (Pre-School)</i> ▪ <i>Childcare in special cases e.g. for refugees</i> <i>Target Groups: Migrants and/or displaced persons, Children/pupils.</i>	Contribution	
Access to Essential Services <i>Education (Pre-School)</i> ▪ <i>State funding for the last two years of day care to ensure free pre-school education</i> <i>Target Groups: Children/pupils, General public.</i>	Contribution	
Access to Essential Services <i>Research</i> ▪ <i>Funding to promote the return of highly qualified young German researchers who have a doctorate and can demonstrate 12 months of successful scientific research abroad, in various fields of expertise</i> ▪ <i>Funding of selected universities in NRW to promote excellent research and teaching and strengthen Germany as a science location as well as its international competitiveness¹⁵</i> <i>Target Groups: General public.</i>	Contribution	
Access to Essential Services <i>Research</i> ▪ <i>Funding of technical and non-technical (i.e. business, processes and social) innovations in numerous fields of innovation such as "Key Technologies of the Future, ICT" including quantum computing, AI, robotics, cyber security and industrial transformation</i> <i>Target Groups: General public.</i>	Contribution	

¹⁵ Excellence Strategy, <https://www.exzellenzstrategie.de/>.

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Access to Essential Services <i>Other Essential Services</i> - Facilities for environmental education - Funding of information and educational projects that promote civic engagement for sustainable development and the implementation of the 2030 Agenda with its 17 Sustainable Development Goals. The project themes include environmental, climate and nature conservation, resource conservation, preservation of biodiversity, development policy education and information, intercultural learning in the areas of environment and development, sustainable production and sustainable consumption Target Groups: General public.	Contribution	
Affordable Housing <i>Urban Development</i> Urban development programmes such as "Growth and Sustainable Renewal" to improve public space, living environments, upgrading the building stock, dismantling of buildings that are no longer required and measures of water-sensitive urban and open space planning to reduce the "heat island effect", or "Social cohesion" to improve social infrastructure, promoting integration, and strengthening community cohesion¹⁶ Target Groups: Excluded and/or marginalized populations and/or communities.	Contribution	

¹⁶ Urban districts with a severe loss of functions or a high degree of abandoned or vacant property (residential, commercial, military or railway) are eligible for support under this program. Relevant issues range from urban planning and housing to economic development and social and environmental policies and include the improvement of public space and living environments.

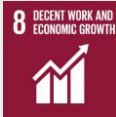
USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Affordable Housing <i>Rural Development</i> Funding of measures in villages and rural infrastructure to improve quality of life, housing, work, and access to basic needs <i>Target Groups: Excluded and/or marginalized populations and/or communities.</i>	Contribution	
Employment Generation <i>Inclusion (Employment Generation)</i> Occupational integration of people with disabilities <i>Target Groups: People with disabilities, Unemployed.</i>	Contribution	
Employment Generation <i>Sustainable Economy (Employment Generation)</i> Funding for the State's environmental economy strategy and activities in the field of environmental and sustainable economy to transform the State into a global green economy leader, through supporting entrepreneurial innovation and strengthening competitiveness of companies in the environmental sector. This results in an increase in jobs and in a growth of gross value added. <i>Target Groups: General Public.</i>	Contribution	
Employment Generation <i>Sustainable Economy (Employment Generation)</i> Funding of Environmental policy framework setting including financing for the implementation of Environmental Economy Strategy ¹⁷¹⁸ <i>Target Groups: General Public.</i>	Contribution	

¹⁷ <https://broschuerenservice.nrw.de/munv/shop/statusbericht-umweltwirtschaft%7C2138/37>.

¹⁸ For the projects mentioned under this category, ISS-Corporate considers the most direct impact to be linked to environmental topics. However, these activities might generate other social impacts. Land NRW has decided to classify this as a social category.

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Food Security and Sustainable Food System <i>Other Food Security and Sustainable Food System</i> EU School programme <i>Target Groups: Children/pupils.</i>	Contribution	 
Socioeconomic Advancement and Empowerment <i>Poverty Reduction</i> Structurally comprehensive, differentiated, and integrated measures and action strategies for poverty prevention and the fight against the consequences of poverty, and to increase participation opportunities for all citizens¹⁹, in particularly disadvantaged neighborhoods, support municipalities to implement integrated, strategic social planning to combat poverty in their respective areas²⁰, lunch programmes at child day care centres, schools, or after-school care centres for children and young people who despite being in need, do not receive benefits under the Education and Participation Package²¹ <i>Target Groups: Children/pupils, Excluded and/or marginalized populations and/or communities, People with low socio-economic background, Underserved- owing to a lack of quality access to essential goods and services.</i>	Contribution	
Socioeconomic Advancement and Empowerment <i>Poverty Reduction</i> Prevention of homelessness <i>Target Groups: Excluded and/or marginalized populations and/or communities, People with low socio-economic background, Underserved- owing</i>	Contribution	

¹⁹ [Together in the neighbourhood programme – initiate, develop and strengthen social planning.](#)
²⁰ [Fighting poverty and social planning programme.](#)
²¹ [All Children eat with us programme.](#)

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
<i>to a lack of quality access to essential goods and services.</i> Socioeconomic Advancement and Empowerment <i>Poverty Reduction</i> Measures to prevent child and youth poverty <i>Target Groups: People with low socio-economic background, Children/pupils.</i>	Contribution	
Socioeconomic Advancement and Empowerment <i>Employment</i> Enhance workforce development and integration supported by the European Social Fund through advising companies on securing skilled workers, competence development of employees, transformation consulting, funding training, part-time vocational training, examination fees during school-based vocational training, further training, additional positions for disabled youth, work advice centres, language courses for refugees, and competence centres for self-determined living. Support regions and individuals in transitioning to a climate-neutral economy, provide early career orientation and training support for young people, and offer measures to improve career choice skills and career entry support for pupils in need <i>Target Groups: Migrants and/or displaced persons, Aging populations and vulnerable youth, Children/pupils.</i>		
Socioeconomic Advancement and Empowerment <i>Gender Equality</i> Promote female workforce participation by supporting talent recruitment and retention, leadership development, equal pay, gender		

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
equality, unbiased career orientation, and social and political participation Professorship programme to retain more women in the academic system and to increase their presence at all qualification levels through equality structures tailored to each specific university Target Groups: Women and/or sexual and gender minorities.	Contribution	
Socioeconomic Advancement and Empowerment Protection from violence Protection of girls in special situations Target Groups: Women and/or sexual and gender minorities, Aging populations and vulnerable youth.		
Socioeconomic Advancement and Empowerment Protection from violence Child Protection Target Groups: Children/pupils.		
Socioeconomic Advancement and Empowerment Protection from violence Services that help to protect vulnerable populations or at risk of violence Target Groups: Women and/or sexual and gender minorities, Underserves, owing to a lack of quality access to essential goods and services.		
Socioeconomic Advancement and Empowerment Inclusion Measures within the State's Action Plan "NRW Inclusive" aim to improve the participation of people with disabilities in society, focusing on	Contribution	

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
<i>family and social networks, education and training, work, and health care</i> <i>Target Groups: People with disabilities.</i> Socioeconomic Advancement and Empowerment <i>Integration of Migrants</i> - Measures targeted at improving access and integration of minor refugees into standard youth work and youth social work offers. Projects for young refugees focused on preventing sexual violence, sexual education, democracy education, political education, and value dialogue <i>Target Groups: Migrants and/or displaced persons, Aging populations and vulnerable youth.</i> Socioeconomic Advancement and Empowerment <i>Integration of Migrants</i> - Promoting the integration of migrants living together in diversity <i>Target Groups: Migrants and/or displaced persons.</i> Pollution Prevention and Control²² <i>Climate Protection</i> <i>Municipal and societal climate education and awareness</i> <i>Examples include:</i> <i>NaturGut – Climate Education for NRW initiative directly targets schools and the general public. Its exhibitions and learning modules empower individuals with knowledge and action paths for climate protection. As outlined in SDG 13.3 and the Paris Agreement’s Article 12, such awareness-raising is an essential enabler of sustained mitigation efforts. Building climate-literate</i>	Contribution Contribution Contribution	10 REDUCED INEQUALITIES 10 REDUCED INEQUALITIES 4 QUALITY EDUCATION

²² Positive assessment is valid for sub-sovereign. For the projects mentioned under this category, ISS-Corporate considers the most direct impact to be linked to social topics. However, these activities might generate other environment impacts. Land NRW has decided to classify this as a green category.

SECOND PARTY OPINION

Sustainability Quality of the Issuer
and Sustainability Bond Framework

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
<i>citizens, especially youth, ensures long-term societal readiness and responsible behavior change.</i> <i>ACE-Hub (Action for Climate Empowerment), supported by NRW in cooperation with the UNFCCC, promotes education and training on climate solutions internationally. It builds mitigation capacity by equipping professionals and stakeholders with the knowledge to develop and implement effective climate policies and technologies.</i> <i>Solar Decathlon Europe 21/22 and subsequent Living Lab NRW exemplify structural transformation in the buildings sector—responsible for a large share of emissions. These real-world demonstrators for climate-neutral construction are open to the public, serving as both innovation platforms and educational tools. They accelerate the adoption of low-carbon building practices and technologies throughout NRW and beyond.</i>		

Green Categories

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Renewable Energy - Solar Photovoltaics²³ - On site solar photovoltaics²⁴ - Energy storage (including pumped hydropower battery storage, power-to-gas and power-to-heat)²⁵	Contribution	
Energy Efficiency - Energy efficient technologies²⁶ - Low emission Mobility²⁷	Contribution	
Energy Efficiency Sustainable Economy (Energy Efficiency) Enhancement of resource efficiency consulting resulting in reduced GHG emissions	Contribution	
Pollution Prevention and Control Sustainable Economy (Pollution Prevention and Control) Manufacture of hydrogen and enabling technologies²⁸	Contribution	

²³ Issuer confirms that eligible activities will meet the technical screening criteria of activity 4.1. Electricity generation using solar photovoltaic technology from the EU Taxonomy Annex I (climate change mitigation).

²⁴ Issuer confirms that eligible activities will meet the technical screening criteria of activity 7.6. Installation, maintenance and repair of renewable energy technologies from the EU Taxonomy Annex I (climate change mitigation).

²⁵ Issuer confirms that eligible activities will meet the technical screening criteria of activity 4.10 Storage of electricity from the EU Taxonomy Annex I (climate change mitigation).

²⁶ Issuer confirms that eligible activities will meet the technical screening criteria of activity 3.1 Manufacture of renewable energy technologies from the EU Taxonomy Annex I (climate change mitigation).

²⁷ Issuer confirms that eligible activities will meet the technical screening criteria of activities 6.4 Operation of personal mobility devices, cycle logistics, 6.5 Transport by motorbikes, passenger cars and light commercial vehicles and 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) from the EU Taxonomy Annex I (climate change mitigation).

²⁸ Issuer confirms that eligible activities will meet the technical screening criteria of activities 3.2 Manufacture of equipment for the production and use of hydrogen & 3.10 Manufacture of hydrogen from the EU Taxonomy Annex I (climate change mitigation).

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Pollution Prevention and Control <i>Sustainable Economy (Pollution Prevention and Control)</i> - Infrastructure for the transmission and distribution of hydrogen²⁹ - Research and development of climate neutral energy systems³⁰	Contribution	
Pollution Prevention and Control ³¹ <i>Climate Protection</i> Municipal and societal climate protection resulting in GHG emission reduction <i>Example projects include Stromspar-Check NRW Spezial: a long-standing, measurable program supporting low-income households with tailored energy efficiency interventions. These include installing energy-saving devices and providing behavioral guidance. Independent evaluations confirm this reduces up to 750 kg CO₂ per household annually, while also lowering utility costs – a dual social and environmental gain.</i>		
Environmentally Sustainable Management of Living Natural Resources and Land Use <i>Nature Protection</i> Protection of Nature³²		
Clean Transportation Infrastructure for cyclists and pedestrians³³		

²⁹ Issuer confirms that eligible activities will meet the technical screening criteria of activity 4.14 Transmission and distribution networks for renewable and low carbon gases from the EU Taxonomy Annex I (climate change mitigation).

³⁰ Issuer confirms that eligible activities will meet the technical screening criteria of activity 9.1 Close to market research, development and innovation from the EU Taxonomy Annex I (climate change mitigation).

³¹ This assessment is valid only for sub-sovereign.

³² Issuer confirms that eligible activities will meet the technical screening criteria of activity 1.1 Conservation, including restoration, of habitats, ecosystems and species from the Environmental Delegated Act's Annex IV of EU Taxonomy.

³³ Issuer confirms that eligible activities will meet the technical screening criteria of activity 6.13 Infrastructure for personal mobility, cycle logistics from the EU Taxonomy Annex I (climate change mitigation).

USE OF PROCEEDS (PRODUCTS/SERVICES)	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Clean Transportation Subsidies for public transportation tickets (general public)	Contribution	
Sustainable Water and Wastewater Management Flood Protection³⁴	Contribution	
Climate Change Adaptation Climate action and regional climate adaptation measures³⁵	Contribution	
Climate Change Adaptation Forest restoration³⁶	Contribution	 

³⁴ Issuer confirms that eligible activities will meet the technical screening criteria of activity 3.1 Nature-based solutions for flood and drought risk prevention and protection from the Environmental Delegated Act's Annex I of EU Taxonomy.

³⁵ Issuer confirms that eligible activities will meet the technical screening criteria of activity 9.3 Consultancy for physical climate risk management and adaptation from the EU Taxonomy Annex II (climate change adaptation).

³⁶ Issuer confirms that eligible activities will meet the technical screening criteria of activity 1.2 Rehabilitation and restoration of forests, including reforestation and natural forest regeneration after an extreme event from the EU Taxonomy Annex II (climate change adaptation).

B. MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS ASSOCIATED WITH THE ELIGIBILITY CRITERIA

Social Eligible Projects

The table below presents the findings of an ISS ESG assessment of the Social Eligible Projects against ISS ESG KPIs. All assets are located in North Rhine-Westphalia.

ASSESSMENT AGAINST ISS ESG SOCIAL KPIs

Environmental and social risks relevant for all social project categories

Labour and health & safety



For any type of expenditure, health and safety for employees, contractors, operators, etc. are ensured according to European and national legislation and standards.

User safety



For any type of expenditure, the safety of building users is ensured via national legislation and according to the building regulations of the respective federal states.



For any type of expenditure, health and safety for both passengers and operators are ensured according to European and national legislation and standards, e.g. the "Nationale Sicherheitsvorschriften für das Eisenbahnsystem in Deutschland" (National safety rules for the railway system in Germany).

Non-discriminatory access to education/programmes/offers/services



100% of projects addressing the enlargement of universities or the creation of additional training facilities are directed at public universities and colleges that currently do not charge any study fees or at professional schools with programmes heavily subsidised for participants.



A system of subsidised loans governed by the German Act on Support for Education (Bundesausbildungsförderungsgesetz/BAföG) assists socially disadvantaged students in covering their living expenses.



For 100% of projects, high social standards regarding non-discrimination are in place (in accordance with national legislation).

Ethics

Land NRW as part of Germany, adheres to several key legal frameworks and international guidelines to promote ethical practices and protect rights. The Allgemeines Gleichbehandlungsgesetz (AGG) ensures anti-discrimination,³⁷ while the Hinweisgebendenschutzgesetz (HinSchG) protects whistleblowers.³⁸

Anti-corruption measures are outlined in the state's Anti-Korruptionserlass, which focuses on preventing and combating corruption in public administration.³⁹



NRW, being part of Germany, also follows the OECD Guidelines for Multinational Enterprises and has established a National Contact Point (NCP)⁴⁰ to enhance the effectiveness of these guidelines.

Additionally, Germany has ratified numerous ILO conventions, including fundamental ones like the Forced Labour Convention (No. 29), the Freedom of Association and Protection of the Right to Organize Convention (No. 87), and the Worst Forms of Child Labour Convention (No. 182), which apply to all German states, including NRW.⁴¹

Quality Management

In the Federal Republic of Germany, including Land NRW, the management elements are structured around the principle of separation of powers. Government power is divided into three branches: legislative power, held by the Bundestag, Bundesrat, and state parliaments; executive power, exercised by the federal and state governments; and the judiciary, composed of independent judges at various court levels. Control of the executive is ensured through the right of citizens to appeal administrative actions to the administrative courts. The independence of the judiciary is guaranteed to maintain fair and impartial justice. Additionally, the state parliament oversees state expenditures by passing budget laws, while the State Audit Office audits financial management and reports annually to the State Parliament and the state government. Furthermore, Land NRW tracks the progress of its sustainability strategy using both financial and non-financial indicators. The core of the current sustainability strategy, established in 2020, includes a set of 67 indicators and goals aligned with sufficient federal objectives and the



³⁷ Anti-discrimination act: <https://www.gesetze-im-internet.de/agg/BJNR189710006.html>.

³⁸ Whistleblower protection act: <https://www.gesetze-im-internet.de/hinschg/BJNR08C0B0023.html>.

³⁹ Anti-corruption: https://recht.nrw.de/lmi/owa/br_text_anzeigen?v_id=54020150224090532740.

⁴⁰ OECD Guidelines for Multinational Enterprise: <https://www.oecd.org/en/countries/germany.html>.

⁴¹ ILO conventions, Germany ratifications: https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:11200:0::NO::P11200_COUNTRY_ID:102643.

global Sustainable Development Goals (SDGs) adopted by the United Nations in 2015. The state government has committed to regular reporting to measure progress using these indicators, with data available on the website⁴². Land NRW did not provide information on the quality standards and management systems in place (i.e., for supervisory bodies -- national and local legislation requiring minimum standards regarding quality management, implementation of a quality management system).

Inclusion



Land NRW is committed to upholding general rights as outlined in its constitution.⁴³ Specifically, gender equality is addressed in SGV § 1,⁴⁴ which details legislative goals and principles. Efforts to combat poverty are overseen by the Ministry of Labor, Health, and Social Affairs (MAGS NRW),⁴⁵ with initiatives aimed at reducing child and youth poverty, preventing homelessness, and providing social tickets for public transportation. Additionally, MAGS NRW focuses on the inclusion of individuals with disabilities,⁴⁶ ensuring that various measures support disadvantaged groups within the state.

Environmental and social risks relevant for some green project categories only

Dialogue with local communities – for infrastructure-related project categories



100% of projects comply with the regulations of the German Building Code (Baugesetzbuch/BauGB). The regulations provide for the consideration of 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).

⁴² https://nachhaltigkeit.nrw.de/fileadmin/Dokumente/Nachhaltigkeitsindikatoren_2025.pdf.

⁴³ <https://recht.nrw.de/lrgv/gesetz/16012026-verfassung-fuer-das-land-nordrhein-westfalen/>.

⁴⁴ SGV § 1: https://www.gesetze-im-internet.de/sgb_1/.

⁴⁵ Ministry of Labor, Health, and Social Affairs (MAGS NRW):

https://recht.nrw.de/lmi/owa/br_bes_text?sg=0&menu=0&bes_id=3321&aufgehoben=N&anw_nr=2.

⁴⁶ MAGS NRW: <https://mags.nrw/aktionsplan-nrw-inklusiv>.

Green Eligible Assets

The table below evaluates the Eligible Assets against issuance-specific KPIs. All of the assets are/will be located in Germany.

ASSESSMENT AGAINST ISS ESG GREEN KPIs

Environmental and social risks relevant for all green project categories

Biodiversity



For any type of expenditure, comprehensive and specific environmental standards (regarding e.g. direct emissions to air, noise mitigation, minimisation of environmental impact during construction work, minimizing impacts on plants, animals and habitats), apply according to European and national legislation and standards, e.g. the "Bundesimissionsschutzgesetz, the Gesetz über die Umweltverträglichkeitsprüfung (UVPG)" and the Bundesnaturschutzgesetz" (engl: Federal Immission Control Act, the Act on Environmental Impact Assessment and Federal Nature Conservation Act). However, no information is available on the number of projects for which Environmental Impact Assessments are conducted.

Waste Management & Pollution Prevention



For 100% of assets, the implementing construction companies and subcontractors have to isolate and remove waste and pollutants (in accordance with national legislation as per the State Circular Economy Act⁴⁷, the Commercial Waste Regulation⁴⁸, and the substitute building materials regulation.⁴⁹

Water management



For any type of expenditure, measures to ensure sufficient water quality, reduce water scarcity, etc. are implemented in accordance with the EU Water Framework Directive. The Directive has been transposed into the Federal Water Act (Wasserhaushaltsgesetz – WHG).⁵⁰

Sustainable procurement



For energy-related goods, services and road vehicles above a certain size, the EU §§ 67 ff. Public Procurement Regulation (§§ 67 ff. Vergabeverordnung (VgV)) requires that energy efficiency criteria must be taken into consideration in

⁴⁷ State Circular Economy Act: https://recht.nrw.de/Imi/owa/br_text_anzeigen?v_id=10000000000000000534.

⁴⁸ Commercial Waste Regulation: https://www.gesetze-im-internet.de/gewabfv_2017/BJNR089600017.html.

⁴⁹ Substitute building Materials regulation: <https://www.gesetze-im-internet.de/ersatzbaustoffv/>.

⁵⁰ Federal Water Act (Wasserhaushaltsgesetz – WHG), https://www.gesetze-im-internet.de/whg_2009/index.html.

public procurement contracts. Further, the state government publishes on its website various procurement guidelines, ranging from electric mobility and municipal vehicles to recycled paper and LEDs. The state government also draws on guidance on sustainable procurement for communities, states and municipalities from European Commission. NRW provides information on some sustainable procurement requirements via its homepage to facilitate their usage.

Circular economy



The legislative framework for end-of-life commissioning, take-back, and recycling of products in Germany is anchored by the Kreislaufwirtschaftsgesetz (Circular Economy Law),⁵¹ which aims to conserve natural resources and prioritize waste management measures that best protect humans and the environment. This law is supplemented by the Abfallverbringungsgesetz (Waste Shipment Law), the Verpackungsgesetz (Packaging Law), and the Elektro- und Elektronikgerätegesetz (Electrical and Electronic Equipment Law). The Kreislaufwirtschaftsgesetz includes regulations on the end of waste status and product responsibility, mandating that products be designed to minimize waste post-use. The EU's Ökodesign-Richtlinie, now replaced by the EU-Verordnung für das Ökodesign nachhaltiger Produkte (ESPR),⁵² sets ecological minimum standards for products, expanding to new environmental aspects and nearly all products to save resources. The Verpackungsgesetz requires producers of single-use drink packaging to collect deposits, aiming to reduce such packaging and ensure proper waste collection and disposal. The ElektroG and BattG (Battery Law) also regulate the sale, return, and environmentally sound disposal of end-of-life products.

Regarding the reduction of hazardous waste and pollution prevention, the Kreislaufwirtschaftsgesetz mandates the proper handling and exclusion of hazardous waste from circular processes. The EU's POP-Verordnung (Persistent Organic Pollutants Regulation) aims to protect human health and the environment by banning or restricting the production, marketing, and use of certain substances. The generation of hazardous waste must be minimized as much as possible. Additionally, regulations like the Verpackungsgesetz and ElektroG contribute to reducing hazardous components in waste streams, while other specific laws address air and water pollution, such as those governing NOx and SOx emission intensities and the quality of treated wastewater.

⁵¹ Kreislaufwirtschaftsgesetz (Circular Economy Law): <https://www.gesetze-im-internet.de/krwg/>.

⁵² EU-Verordnung für das Ökodesign nachhaltiger Produkte (ESPR): <https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A32024R1781>.

Environmental and social risks relevant for some green project categories only**Environmental impact of agriculture – applicable for Environmentally sustainable management of living natural resources and land use only**

Sustainability criteria such as soil and biodiversity management, water conservation in agricultural production, and the climate impact of agricultural production are taken into consideration according to European and national legislation and standards, e.g. as described in several documents regarding "Gemeinschaftsaufgabe: Verbesserung der Agrarstruktur und des Küstenschutzes (GAK)". (engl: Joint task: improvement of agricultural structure and coastal protection)" as well as the Common Agricultural Policy (CAP)/CAP Strategic Plan by the European Union and its implementation in the strategic plan for Germany. The plan aims to benefit environmental protection, nature conservation and climate change mitigation as well as agriculture and rural areas.

Exclusion of harmful sectors and activities

According to NRW's Sustainability Bond Framework projects in relation to fossil fuel production and generation of fossil fuel power, generation of nuclear power, and production or trade in any product or activity deemed illegal under international conventions and agreements or subject to international prohibitions are excluded. Please note that this is not an exhaustive list of potential controversial business activities.

Additionally, within the ISS ESG Country Rating, Germany has no indicated structural controversy⁵³. Therefore, the risk of a structural controversy within the respective sustainability bond categories is considered low. In the event of a controversy arising, the issuer will ensure that appropriate mitigation processes are in place.

⁵³ A structural controversy occurs if an internal ISS ESG threshold is exceeded related to a thematic controversy (e.g. labour right violations), indicating a structural problem. Single cases, unless very severe, do not count as a structural controversy.

PART III: ALIGNMENT OF THE SELECTION CRITERIA WITH THE EU TAXONOMY CLIMATE DELEGATED ACT AND ENVIRONMENTAL DELEGATED ACT

The alignment of the State of NRW's project characteristics, due diligence processes and policies for the nominated Use of Proceeds project categories have been assessed against the relevant Substantial Contribution to Climate Change Mitigation, Climate Change Adaptation, Sustainable use and protection of water and marine resources, Protection and restoration of biodiversity and ecosystems and Do Not Significant Harm (DNSH) Technical Screening Criteria, and against the Minimum Safeguards requirements of the EU Taxonomy Climate Delegated Act⁵⁴ (June 2023) and EU Taxonomy Environmental Delegated Act⁵⁵ (June 2023) based on information provided by the State of NRW. Where the State of NRW's project characteristics, due diligence processes and policies meet the EU Taxonomy Criteria requirements, a tick is shown in the table below.

The State of NRW's project selection criteria overlap with the following economic activities in the EU Taxonomy:⁵⁶

Under the EU Taxonomy Climate Delegated Act, Annex I (Climate Change Mitigation), as of June 2023:

- 3.1 Manufacture of renewable energy technologies
- 3.2 Manufacture of equipment for the production and use of hydrogen
- 3.10 Manufacture of hydrogen
- 4.1 Electricity generation using solar photovoltaic technology
- 4.11 Storage of thermal energy
- 4.14 Transmission and distribution networks for renewable and low-carbon gases
- 6.13 Infrastructure for personal mobility, cycle logistics
- 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)
- 7.6 Installation, maintenance and repair of renewable energy technologies

⁵⁴Commission Delegated Regulation (EU) 2020/852, [URL https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/amending-and-supplementary-acts/implementing-and-delegated-acts_en](https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/amending-and-supplementary-acts/implementing-and-delegated-acts_en).

⁵⁵ Commission Delegated Regulation (EU) 2020/852, [URL https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/amending-and-supplementary-acts/implementing-and-delegated-acts_en](https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/amending-and-supplementary-acts/implementing-and-delegated-acts_en).

⁵⁶ Unless specified, the following activities are part of the EU Taxonomy Climate Delegated Act, Annex I (as of June 2023).

Under the EU Taxonomy Climate Delegated Act, Annex II (Climate Change Adaptation), as of June 2023:

1.2 Rehabilitation and restoration of forests, including reforestation and natural forest regeneration after an extreme event

9.3 Consultancy for physical climate risk management and adaptation

Under the EU Taxonomy Environmental Delegated Act, Annex I (Water and Marine Resources), as of June 2023:

3.1 Nature-based solutions for flood and drought risk prevention and protection

Under the EU Taxonomy Environmental Delegated Act, Annex IV (Biodiversity and Ecosystems), as of June 2023:

1.1 Conservation, including restoration, of habitats, ecosystems and species

All projects financed under the Sustainability Bond Framework are and will be located in Germany.

Note: To avoid repetition, the evaluation of the alignment of the State of NRW's assets to the Do No Significant Harm Criteria to:

- Climate Change Adaptation is provided in Section "n"
- Sustainable Use and Protection of Water and Marine Resources in Section "o"

Protection and Restoration of Biodiversity and Ecosystems is provided in Section "n"

- Pollution Prevention and Control regarding use and presence of chemicals in Section "p"
-

They are applicable to all the above activities.

Furthermore, this analysis only displays how the EU Taxonomy criteria are fulfilled/not fulfilled. For ease of reading, the original text of the EU Taxonomy criteria is not shown. Readers can recover the original criteria at the following [link](#).

a) 1.1 Conservation, including restoration, of habitats, ecosystems and species⁵⁷

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁵⁸	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO BIODIVERSITY	
The financed activity contributes to maintaining good condition of ecosystems, species, habitats or of habitats of species, as well as re-establishing or restoring ecosystems, habitats or habitats of species towards or to good condition, including through increasing their area or range. In particular, the Issuer's Biodiversity Strategy aims to bring most species and habitats into a favourable conservation status, implementing habitat-specific measures, protected area management, and species conservation programs. Furthermore, the strategy emphasizes ecological restoration (e.g. river and floodplain renaturalization, grassland improvement, and a habitat network on 15% of the land. Species reintroductions and target-species programs further support restoration goals. These actions are carried out by biological stations⁵⁹ through local project implementation and habitat expansion.⁶⁰ The financed activity complies with most of the additional requirements such as (i) the activity is carried out in an area with a detailed description of its initial ecological condition (situated largely within protected areas such a Natura 2000, sites and legally protected biotopes, with ecological potential – whether for improving habitat condition or enhancing landscape connectivity - outlined), (ii) the area is covered by a management plan, (iii) the area holds the status of protected area, destined to restoration or conservation in a statutory land, freshwater or maritime use plan approved by the competent authorities (designation of protected areas is normally carried out independently by the districts/independent cities as "landscape planning authorities"), or it is subject to a public or private contractual arrangement that can ensure that the conservation objectives can be achieved and maintained, and (v) offsetting is excluded and the introduction of invasive species is excluded.	○

⁵⁷ EU Taxonomy Environmental Delegated Act Annex IV (as of June 2023).

⁵⁸ This column is based on input provided by the Issuer.

⁵⁹ An overview on biological stations is provided here: <https://www.umwelt.nrw.de/themen/naturschutz/wer-macht-was/biologische-stationen>.

⁶⁰ More details on the financed activity are available here: https://www.umwelt.nrw.de/system/files/media/document/file/biodiversitaetsstrategie_nrw_broschuere.pdf.

However, the additional requirement of auditing regarding the initial description of the conservation area and the management plan is not satisfied as the activity is not audited.	
2. CLIMATE MITIGATION – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer confirmed that the financed activity does not involve the degradation of land with high carbon stock nor the degradation of marine environment with high carbon stock.	✓
3. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
4. WATER – DO NO SIGNIFICANT HARM CRITERIA	
See o)	✓
5. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
6. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA	
The use of plant protection products in accordance with EU Directive 2009/128/EC is regulated uniformly throughout Germany by the Plant Protection Act and the Plant Protection Application Ordinance. In addition, the federal Fertilizer Ordinance, implements the objectives of Directive 91/676/EEC (Nitrates Directive), setting farm-specific upper limits for fertilization based on the determined plant requirements. In addition, the North Rhine-Westphalia State Fertilizer Ordinance designates areas with nitrate pollution of the groundwater where additional fertilization restrictions apply. This ensures that nitrogen and phosphate emissions into the environment caused by fertilization are minimized as much as possible. Regarding the use of hazardous chemicals and pesticides, the German Chemical Law enables the national enforcement authorities to control, inspect and enforce European regulations on chemical safety. As per pollution of water and soil, the protection of water bodies, groundwater and soil in Germany is essentially ensured by the Water Resources Act and the Federal Soil Protection Act, supplemented by the State Water Act of North Rhine-Westphalia and the State Soil Protection Act of North Rhine-Westphalia	✓

- b) 1.2 Rehabilitation and restoration of forests, including reforestation and natural forest regeneration after an extreme event⁶¹

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁶²	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE ADAPTATION	
As part of its Climate Adaptation Strategy,⁶³⁶⁴ the State of NRW developed a cross proprietor silviculture concept for North Rhine-Westphalia in 2015. The aim of this concept is to adapt and develop mixed stand sites to ensure that forests remain resilient and adaptable to climate change in the long term. Efforts will focus primarily on reforestation of infested woodland sites. Storms, periods of extreme drought and bark beetle infestations have deteriorated the condition of forests in the state.⁶⁵ The Issuer commits that physical climate risks that are material to the activity will be identified according to Appendix A (see "n") to this Annex⁶⁶ by performing a robust climate risk and vulnerability assessment. Under the Section 1 of the Federal Climate Change Adaptation Act (KAnG), targets are set for avoiding and minimizing the negative effects of climate change, in order to protect life, health, society, the economy, infrastructure, nature and ecosystems. The KAnG aims to prioritize sustainable adaptation strategies that are in line with nature-based solutions, biodiversity protection, resilient water management, blue-green infrastructure or sustainable urban development. The Act requires that the adaptation measures are aligned with local, regional, national and sectoral adaptation plans and strategies. In all instances, the most recent climate projections (including IPCC scenarios (RCP2.6, RCP4.5, RCP6.0, and RCP8.5)) are integrated into adaptation planning. However, climate projections and assessment of impacts are not binding when deciding on adaptation measures. Chosen Indicators must include "sufficiently ambitious and measurable targets", while monitoring reports must be developed in line with the scientific state of the art. Remedial action must be considered if targets are not met. When the implemented solution is physical and involves an activity for which technical screening	

⁶¹ EU Taxonomy Climate Delegated Act, Annex II (as of June 2023).

⁶² This column is based on input provided by the Issuer.

⁶³ The Climate Adaptation Act of North Rhine-Westphalia (KAnG) can be found [here](#).

⁶⁴ The Climate Adaptation Strategy for forests and Forests Management of North Rhine-Westphalia can be found [here](#).

⁶⁵ More information on the 2024 state of the forests can be found [here](#).

⁶⁶ EU Taxonomy Environmental Delegated Act Annex II (as of June 2023).

criteria are outlined in this Annex.⁶⁷ The solution meets the "Do No Significant Harm" technical screening criteria for that specific activity.

Aligned with Article 11(1), point (b), of [Regulation \(EU\) 2020/852](#), under the KAnG, the resilience of ecological systems and societies must be bolstered to maintain comparable living conditions in the face of advancing climate change. Contributions should be made to both national and international efforts focused on climate adaptation. Adaptation solutions cannot increase the risk of negative impact on other people, nature or property.

2. CLIMATE MITIGATION – DO NO SIGNIFICANT HARM CRITERIA

With regard to forest management, the State of NRW identifies the following areas subject to a Forest Management Plan (FMP), combining both inventory and management plan: private forests, municipal forests, community forests and state forests. By law, municipal, community and state forests are required to have a forest management plan. The State of NRW complies with the [State Forestry Act for the State of NRW](#) (LFoG) and commits FMPs to have a 10 years duration with regular updates. While private forests owners are not obligated to have a Forest Management Plan, all forest owners are obligated to follow the silviculture concept for North Rhine-Westphalia on all the areas where the activity (subsidized reforestation) takes part.⁶⁸

The Issuer commits that none of the activities will involve the degradation of land with high carbon stock as forbidden by the National Forest Act (§ 9) and the National Environmental Act (§ 30) for wetlands and peatlands. Activities will only support land reforestation after loss of forest stand due to storm, drought or bark beetle. Additionally, the Issuer complies with the [EU Timber Regulation \(EU\) No 995/2010](#) laying down the obligations of operators who place timber and timber products on the market.

The Issuer commits to reviewing the compliance with the Do Not Significant Harm criteria at the Forest Management Associations Level. Relevant national authorities will verify two, five and eight years after the reforestation that the activity meets the Do Not Significant Harm criteria. However, the criteria of the EU Taxonomy require a review after two years and every ten years after the activity started. The latter is not met by the Issuer.

⁶⁷ EU Taxonomy Climate Delegated Act, Annex II (as of June 2023).

⁶⁸ More information can be found on www.waldinfo.nrw.

3. WATER – DO NO SIGNIFICANT HARM CRITERIA

See o)



4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA

The subsidy guidelines require forest owners to establish a forest development type aligned with the State of North Rhine-Westphalia [silviculture concept](#). The development type must consist of tree species suitable for commercial logging and long-term wood product production.



5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA

Germany applies EU rules designed to promote the safe and sustainable use of pesticides. [Directive 2009/128/EC](#) requires countries to draw up plans for the responsible use of pesticides and to regulate the equipment used to apply them. [EU Regulation 2019/1021](#) addresses persistent organic pollutants and [EU Regulation 1907/2006](#) covers registration, evaluation, authorization and restriction of chemicals. Germany also applies national regulations, such as the [Ordinance on the Application of Plant Protection Products](#) (Pflanzenschutz-Anwendungsverordnung) and its amendments.

The use of fertilizers is also limited, and manure is prohibited. The State of NRW complies with Regulation (EU) 2019/1009 on fertilizers in addition to the [Federal Soil Protection Act](#) (Bundesbodenschutzgesetz, BBodSchG).



The Issuer also commits to the Rotterdam Convention on the Prior Informed Consent procedure for certain hazardous chemicals and pesticides in international trade, the Minamata Convention on Mercury, and the Montreal Protocol on Substances that Deplete the Ozone Layer.

Under the Federal Soil Protection Act (Bundesbodenschutzgesetz, BBodSchG), the [Environmental Liability Act](#) (Umwelthaftungsgesetz) and the Insect Diversity Protection Act ([Gesetz zum Schutz der Insektenvielfalt](#)), pollution of water and soil is prevention and cleaning up measures are undertaken when pollution occurs.

6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

Under the [Convention on Biological Diversity](#), the [Fauna-Flora-Habitat Directive](#), the NRW State Forestry Act, and the NRW State Nature Conservation Act, activities in designated conservation areas or protected habitats must align with conservation objectives. The Issuer commits to preventing the conversion of habitats sensitive to biodiversity loss, having



high conservation value, or are set aside for restoration. Efforts will be made to maintain and enhance biodiversity according to national and local provisions, including conservation efforts and the controlled use and release of invasive and non-native species. The use of forest reproductive material must lead to favorable ecosystem conditions, considering climate, soil criteria, vegetation zones, and forest fire resilience, especially if native species are no longer adapted to projected climatic and pedo-hydrological conditions.

c) 3.1 Nature-based solutions for flood and drought risk prevention and protection⁶⁹

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁷⁰	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO WATER	
The State of NRW complies with the Federal Water Resources Act transposing the EU Water Framework Directive (2000/60/EC) on water use and protection measures. Moreover, EU Regulation (EU) 2020/852 is also transposed through the NRW State Water Law (Landeswassergesetz, §§24-27) which enforces strict pollution controls and sustainable water management. §3(1) of the Issuer's Klimaanpassungsgesetz Nordrhein-Westfalen (KlAnG) requires public bodies to implement water-related climate adaptation strategies to not compromise water quality or ecological status. The monitoring requirements of the Water Framework Directive and assessment of flood risks as per Directive 2007/60/EC are completed in full. The EU Regulation on nature restoration, effective since 2024, mandates that by 2030, 20% of the EU's degraded ecosystems must be restored, with all ecosystems needing restoration covered by 2050. Each EU Member State, including Germany, must create national restoration plans outlining their measures and timelines. North Rhine-Westphalia (NRW) will contribute to these goals, with the national plan led by the Federal Ministry for the Environment.	

⁶⁹ EU Taxonomy Environmental Delegated Act Annex I (as of June 2023).

⁷⁰ This column is based on input provided by the Issuer.

2. CLIMATE MITIGATION – DO NO SIGNIFICANT HARM CRITERIA

The Issuer commits for the activities not to be involved in the degradation of land and marine environment with high carbon stocks.⁷¹ The State Agency for Nature, Environment, and Consumer Protection of North Rhine-Westphalia (LANUV) has identified 4,100 hectares of existing peatlands and 23,260 hectares of potential areas for peatland restoration in NRW (LANUV [Technical Report 154, 2024](#)). The Ministry also supports the federal government's action program for the protection of the natural climate (ANK). The federal ANK program provides funding to strengthen, restore and preserve ecosystems such as peatlands, waters and forests, so that they remain effective climate protectors and habitats for plants and animals.



3. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA

See n)



4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA

The Circular Economy Act, which the State of NRW adheres to, includes specific regulations for promoting recycling and material recovery. Section 14 of the Act addresses the preparation for reuse, recycling, and other forms of material recovery, including backfilling operations that use waste to substitute other materials. It mandates a recycling rate of 70%. Additionally, Section 6 of the Act outlines the waste hierarchy, prioritizing waste management strategies.



5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA

The Issuer commits that plant protection products will generally not be used on the projects financed. In exceptional cases where they are applied, the use must comply with the Plant Protection Act and the Plant Protection Application Ordinance, which fully implement [Directive 2009/128/EC](#). These structures are not fertilized, and no manure or slurry is applied.



6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

See q)



⁷¹ Land with high-carbon stock means wetlands, including peatland, and continuously forested areas within the meaning of Article 29(4)(a), (b) and (c) of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82-209).

d) 3.1 Manufacture of renewable energy technologies

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁷²	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION	
The economic activity manufactures renewable energy technologies.	✓
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
See o)	✓
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
Federal and state regulations provide specific requirements regarding the reusability and recycling of materials and products. In particular: - regarding the reuse and use of secondary raw materials and re-used components in manufactured products, the Electrical and Electronic Equipment Act (implementing the WEEE-Directive) and the EU Critical Raw Material Act specify certain recycling quota to be complied with. - regarding the design for high durability, recyclability, easy disassembly and adaptability of products manufactured, the EU Eco-Design Regulation requires all products relevant under the financed activity to meet circularity criteria. - regarding waste management, the Circular Economy Act of North-Rhine Westphalia provides the general principle for recycling over disposal; and - regarding information on the traceability of dangerous substances, specific federal and local acts like the Product Safety Act, the Market Surveillance Act or the Electrical and Electronic Equipment Act ensure that no risk is posed by the manufactured products.	

⁷² This column is based on input provided by the Issuer.

5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA

See p)


6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

See q)



e) 3.2 Manufacture of equipment for the production and use of hydrogen

PROJECT CHARACTERISTICS AND SELECTION PROCESSES⁷³
**ALIGNMENT
WITH THE EU
TAXONOMY'S
TECHNICAL
SCREENING
CRITERIA**
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION

The Issuer is financing the manufacture of equipment to produce hydrogen in compliance with the Technical Screening Criteria set out in Section 3.10 of the EU Taxonomy Technical Screening Criteria Annex Document and equipment for the use of hydrogen.

In particular, the Issuer is financing production capacities for electrolyzers (Sunfire 1500 and MAPEVA). Sunfire 1500 refers to the automated production of high-temperature and alkaline electrolyzers at the Solingen (and Dresden) sites.⁷⁴ The systems are needed to produce green hydrogen. The MAPEVA (Modular-Agile Production of Electrolysis Compressor Systems) project is intended to develop an integrated system consisting of an electrolyzer, compressor and storage unit to produce compressed green hydrogen, for example for mobility applications.⁷⁵


2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA

See n)


3. WATER – DO NO SIGNIFICANT HARM CRITERIA

See o)


⁷³ This column is based on input provided by the Issuer.

⁷⁴ More information on this project are available here: <https://www.land.nrw/pressemitteilung/start-fuer-laenderuebergreifendes-wasserstoff-projekt-sunfire-1500-sieben>.

⁷⁵ More information on this project are available here: <https://www.land.nrw/pressemitteilung/wasserstoff-made-nrw-land-und-bund-foerdern-serienproduktion-fuer-elektrolyseure>.

4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA

Considerations on circular economy requirements are covered by federal and national regulations. In particular, the Circular Economy Act (Kreislaufwirtschaftsgesetz - KrWG) supports the reuse and incorporation of secondary raw materials in manufacturing processes, and it includes provisions regarding waste hierarchy (prioritizing prevention, reuse, recycling, and other recovery methods over disposal), product design (emphasizing durable, reusable, and recyclable products, as well as the use of secondary raw materials in the production process), and the promotion of use of recycled materials and the development of markets for secondary raw materials.



Furthermore, the German Product Safety Act (Produktsicherheitsgesetz - ProdSG) and the Market Surveillance Act (Marktüberwachungsgesetz - MüG) include provisions to ensure the traceability of substances of concern in products throughout their lifecycle.

5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA

See o)



6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

See q)



f) 3.10 Manufacture of hydrogen

PROJECT CHARACTERISTICS AND SELECTION PROCESSES⁷⁶

ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA

1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION

The Issuer will finance one specific project, the [GreenMotionSteel initiative](#). A 120 MW electrolysis plant will be constructed with an electrolyzer based on the "Silyzer 300" technology, a joint venture between Siemens Energy and Air Liquide. Air Liquide, the implementing company, confirms that the electricity used is from renewable sources exclusively.



⁷⁶ This column is based on input provided by the Issuer.

The plant will produce renewable hydrogen (H₂) from water and renewable electricity. Since the hydrogen is produced using proton exchange membrane (PEM) electrolyzers powered by renewable energy, the associated lifecycle greenhouse gas (GHG) emissions are expected to be below the EU Taxonomy threshold of 3 tCO₂e per ton of hydrogen. Recent life cycle assessment (LCA) studies indicate that hydrogen production via electrolysis using wind or solar electricity typically results in emissions between 0.3 and 1 kg CO₂e per kg H₂, which translates to 1–2 tCO₂e/tH₂.⁷⁷⁷⁸	
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
See o)	✓
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer commits to the ineligibility of the BAT conclusions for refining mineral oil and gas by ensuring that only PEM electrolysis will be used, which does not involve fossil fuel combustion. This commitment also tends to ensure the absence of cross-media effects, as PEM electrolysis should not result in pollutant emissions to air, soil, or water.	✓
6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA	
See q)	✓

⁷⁷ Literature on the effect of hydrogen leakage on the life cycle climate impacts of hydrogen supply chains is available [here](#).

⁷⁸ Literature on Life Cycle Assessment of Greenhouse Gas Emissions in Hydrogen Production via Water Electrolysis in South Korea is available [here](#).

g) 4.1 Electricity generation using solar photovoltaic technology

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁷⁹	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION	
The activity generates electricity using solar PV technology. In particular, the Issuer is financing solar farms with state support, including the expansion of photovoltaics in North Rhine-Westphalia via the progres.nrw - climate protection technology funding guideline. The financed activity includes various measures, such as the installation of PV systems on municipal roofs, ground-mounted PV systems (including agri-PV and floating PV), advisory services for PV expansion, the modernization of building electrics when installing PV systems in multi-party buildings as well as car park and building-integrated PV systems.	✓
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
The Electrical and Electronic Equipment Act (ElektroG), transposing the WEEE Directive (Directive 2012/19/EU) into German law, mandates that PV module manufacturers design products in a way that facilitates dismantling, recycling, and recovery of components and materials. Additionally, Germany's Circular Economy Act (Kreislaufwirtschaftsgesetz – KrWG) establishes a legal framework promoting waste prevention, reuse, and recycling, reinforcing the obligation to prioritize high-durability and recyclable materials in product design. Furthermore, technical standards set by the German Institute for Standardization (DIN) provide guidelines for the durability and recyclability of PV systems, ensuring that they meet the circular economy requirements.⁸⁰ The Electrical and Electronic Equipment Act (ElektroG) stipulates that when electrical equipment, including PV modules, is placed on the market, the take-	✓

⁷⁹ This column is based on input provided by the Issuer.

⁸⁰ For instance, the DIN provides the following guidelines: [Langlebigkeit](#) and Recyclingfähigkeit.

back of old equipment must be organized. For this purpose, sales volumes, take-back volumes and collection and recycling rates are recorded and transmitted to the responsible authorities. Under the (ElektroG), a collection rate of 85% is prescribed.

5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA

N/A — there is no EU Taxonomy criteria for the category.

6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

See q)



h) 4.11 Storage of thermal energy

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁸¹	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION	
The activity is the construction and operation of thermal energy storage. In particular, the Issuer is financing thermal storage systems in connection with heat and cold networks or for the transport of heat.	✓
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
The financed activity does not include Aquifer Thermal Energy Storage.	N/A
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
The financed activities will be located in Germany, where the KrWG Kreislaufwirtschaftsgesetz (Closed Substance Cycle Waste Management Act), implementing EU Directive 2008/98/EC, stipulates that by 2020 at least 70% by weight of the non-hazardous non-soil and stone construction and demolition waste is prepared for reuse, recycling or other material recovery.	✓

⁸¹ This column is based on input provided by the Issuer.

Additionally, the German Waste Avoidance Programme (a program promoting waste prevention measures and encouraging the reuse and recycling of materials) is in place.	
5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA	
See q)	✓

i) 4.14 Transmission and distribution network for renewable and low-carbon gases

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁸²	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION	
The State of NRW will exclusively focus on the development of supra-regional hydrogen pipelines (GETH) through repurposing existing gas networks for the transport of hydrogen. The activity excludes the transportation of natural gas through the pipelines but allows for low-carbon gases other than hydrogen. The activity also includes leak detection and repair of existing pipelines and other network elements to reduce methane leakage.	✓
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
See o)	✓
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer complies with the Directive 2009/125/EC for the requirements in eco-design for energy-related products. The Directive has been transposed to	✓

⁸² This column is based on input provided by the Issuer.

German law since 2011 via the [Gesetz zur Änderung des Energiebetriebs-Produkte-Gesetzes](#).

6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

See q)



j) 6.13 Infrastructure for personal mobility, cycle logistics

PROJECT CHARACTERISTICS AND SELECTION PROCESSES⁸³

ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA

1. SUBSTANTIAL CONTRIBUTION TO CLIMATE MITIGATION

The State of NRW, through its action plan for the Fahrrad- und Nahmobilitätsgesetz (FaNaG) will fund the following:

- Pavements and Pedestrian Zones:
 - Expansion of pedestrian-friendly areas and accessibility improvements.
 - Implementation of a foot traffic campaign and pedestrian wayfinding systems.
 - Financial support for municipalities to assess and improve pedestrian infrastructure.
- Bike Lanes and Cycling Infrastructure:
 - Development of a statewide cycling priority network (Radvorrangnetz).
 - Planning and financing of high-speed cycling routes (Radschnellverbindungen).
 - Financial support for municipalities for planning, constructing, and improving cycling infrastructure.
 - Integration of cycle networks into regional planning to secure routes.
- Infrastructure for Cycle Logistics:
 - Cargo bike (Lastenrad) funding for private and commercial use to support cycle-based logistics.



⁸³ This column is based on input provided by the Issuer.

▪ Promotion of shared cargo bike schemes and grants for businesses and local governments to expand their fleet. ▪ Infrastructure improvements for cycle logistics, including the establishment of micro-depots for last-mile delivery using cargo bikes. ▪ Parking and Storage Facilities for Personal Mobility: ▪ Expansion of bike parking facilities (Radabstellanlagen) at transit hubs and urban centers. ▪ Creation of Quartiersgaragen(neighborhood garages) for micromobility parking. ▪ Development of a comprehensive parking strategy, including shared parking spaces for bicycles and e-scooters.	
2. CLIMATE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER – DO NO SIGNIFICANT HARM CRITERIA	
See o)	✓
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer commits to the Circular Economy Act (Kreislaufwirtschaftsgesetz - KrWG) which transposes the EU Construction and Demolition Waste Management Protocol, aiming for at least 70% (by weight) of non-hazardous construction and demolition waste to be prepared for reuse, recycling, and other material recovery. The Circular Economy also addresses selective demolition and waste management including dismantling and sorting, crucial for selective demolition and high-quality material recovery. Research and development in low-waste technologies is emphasized and the adoption of the best available techniques in industrial applications encouraged.	✓
5. POLLUTION PREVENTION – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer commits to the Bundes-Immissionsschutzgesetz (BImSchG), a federal German law providing guidelines and measures for various situations, including construction and maintenance works, aligning with EU directives. These are the Outdoor Noise Directive 2000/14/EC, which addresses environmental effects of noise emissions, including dust and pollutants, and the Machinery Directive 2006/42/EC, which focuses on occupational safety	✓

related to noise emissions. Additionally, Directive 2011/92/EU details the assessment of environmental impacts of public and private projects, such as construction sites and road construction. The State of NRW commits to all of the above.	
6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA	
See q)	✓

k) 7.4 Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)

PROJECT CHARACTERISTICS AND SELECTION PROCESSES⁸⁴	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION	
As part of its "low emission mobility" module, the State of NRW will install charging stations, committing to the sole focus on installation and no other activities, including supporting the running costs.	✓
2. CLIMATE CHANGE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER AND MARINE RESOURCES – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
5. POLLUTION – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	

⁸⁴ This column is based on input provided by the Issuer.

l) 7.6 Installation, maintenance and repair of renewable energy technologies

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁸⁵	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION	
The Issuer's commits to the Climate Protection Technology Funding Guideline which supports the following investments:⁸⁶ ▪ Thermal solar systems for the generation of process heat. ▪ Planning and consulting costs for PV expansion. ▪ Renewal of the building's electrical system in existing multi-family homes; prior to the installation of a new photovoltaic system. ▪ Funding consulting services for small wind turbines.	✓
2. CLIMATE CHANGE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
See n)	✓
3. WATER AND MARINE RESOURCES – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
5. POLLUTION – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	
6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA	
N/A — there is no EU Taxonomy criteria for the category.	

⁸⁵ This column is based on input provided by the Issuer.

⁸⁶ While hydropower is included in the Climate Protection Technology Funding Guideline, all hydropower activities do not fall under the eligible EU taxonomy criteria for this activity and are therefore excluded.

m) 9.3 Consultancy for physical climate risk management and adaptation⁸⁷

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁸⁸	ALIGNMENT WITH THE EU TAXONOMY'S TECHNICAL SCREENING CRITERIA
1. SUBSTANTIAL CONTRIBUTION TO CLIMATE ADAPTATION	
The financed activity includes projects, instruments and measures in the area of climate protection and climate adaptation to achieve the State's climate goals as well as for accompanying awareness-raising, networking and public relations work including events. In particular, the funds are intended to finance advisory and accompanying services, development measures and specific projects at regional level including networking and can be used for co-financing measures within the framework of federal or EU funding out of the European Regional Development Fund. The State of NRW adopts publicly available tools such as Climate Atlas NRW, where the methodology and data used for this activity integrate scientific models and climate risk analysis methods that are consistent with current IPCC frameworks, scientific research, and open-source platforms.⁸⁹ Furthermore, Land NRW's consultancy ecosystem is framed within a regulatory and strategic context that closely aligns with international standards on climate adaptation, as the Climate Adaptation Act (KlAnG) and associated tools (e.g., Climate Atlas NRW) operationalize climate impact understanding, uncertainty handling, and risk-based planning, aligning with principles from EN ISO 14090:2019 on adaptation principles and uncertainties, ISO 14091:2021 on vulnerability, impacts, and risk assessment, UNDRR's Technical Guidance through NRW's risk-informed planning and multi-sectoral strategies, and Sendai Framework for Disaster Risk Reduction (2015-2030). Furthermore, stemming from the Climate Adaptation Act and the Climate Atlas NRW, on October 1, 2024, the state government adopted a climate change adaptation strategy. The strategy encompasses sixteen fields of action, including disaster risk reduction. The Ministry of the Interior is in charge of disaster risk reduction.	

⁸⁷ EU Taxonomy Climate Delegated Act, Annex II (as of June 2023).

⁸⁸ This column is based on input provided by the Issuer.

⁸⁹ More information on the financed activity may be found here: https://klimaanpassung-unternehmen.nrw/wp-content/uploads/2023/12/NKU_Broschuere_COP_RZ-online.pdf.

The financed activity considers integrated planning and decision-making by the public sector that includes climate risks.⁹⁰ Within the integrated planning process, there are pre-defined indicators set and monitored against the climate risk management strategies, with remediation action taken if the indicators are not met. The Climate Adaptation Act (KlAnG) requires that the effects of climate change must be taken into account in all public planning, minimizing negative external impacts on people, nature, assets, and the economy. Furthermore, nature-based solutions are fostered, including climate-resilient reforestation, urban green spaces, and sponge city concepts. These are considered examples of blue and green infrastructure initiatives. Land NRW's climate adaptation approach is embedded in Germany's broader climate strategies, including the NRW Climate Adaptation Strategy (2024) and the Climate Adaptation Act (2021).

2. CLIMATE MITIGATION – DO NO SIGNIFICANT HARM CRITERIA

The consultancy services financed are not undertaken on fossil fuel extraction, storage, transport or manufacture facilities.



3. WATER AND MARINE RESOURCES – DO NO SIGNIFICANT HARM CRITERIA

N/A — there is no EU Taxonomy criteria for the category.

4. CIRCULAR ECONOMY – DO NO SIGNIFICANT HARM CRITERIA

N/A — there is no EU Taxonomy criteria for the category.

5. POLLUTION – DO NO SIGNIFICANT HARM CRITERIA

N/A — there is no EU Taxonomy criteria for the category.

6. BIODIVERSITY – DO NO SIGNIFICANT HARM CRITERIA

N/A — there is no EU Taxonomy criteria for the category.

⁹⁰ More details available here: https://klimaanpassung-unternehmen.nrw/wp-content/uploads/2023/12/NKU_Broschuere_COP_RZ-online.pdf.

n) Generic Criteria for DNSH to Climate Change Adaptation

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁹¹	ALIGNMENT WITH THE EU TAXONOMY
2. CLIMATE CHANGE ADAPTATION – DO NO SIGNIFICANT HARM CRITERIA	
The State of NRW is legally required to assess climate risks as part of project planning. According to §3(1) of the Climate Adaptation Act of North Rhine-Westphalia (KlAnG), public institutions must develop and implement adaptation measures that are specific to the risks in their respective regions. All projects under this framework will undergo an initial screening to determine which physical climate hazards, such as flooding, heat stress, or extreme weather events, may impact them. Additionally, §3(2) KlAnG mandates that adaptation planning prioritizes precautionary measures for human health, environmental protection, and economic sustainability, further reinforcing the necessity of early-stage risk identification. At the federal level, the Climate Adaptation Act (KlAnG) mandates systematic risk screening for public infrastructure projects to ensure that they align with national adaptation objectives and requires a federal climate risk analysis every eight years, which will serve as a reference point for climate analysis by the federal states. Furthermore, the Federal Environmental Impact Assessment Act (UVPG, Sections 7-9) requires that climate risks be assessed as part of environmental impact studies. Once a risk is identified, a vulnerability assessment is carried out, to determine whether they are material risks. In particular, §4(2) KlAnG requires the State of NRW to promote climate resilience through support structures, which includes providing guidance for conducting vulnerability assessments before project implementation. The assessment is tailored to the size of project-specific factors such as size, risk exposure, and expected lifespan: for activities with an expected lifespan of less than 10 years, climate risk screening using localized climate data are carried out, while for all the other activities long term adaptation planning is carried out. In particular, the UVPG requires projects to be evaluated against projected climate conditions over relevant time horizons. In all instances, the most recent climate projections (including IPCC scenarios (RCP2.6, RCP4.5, RCP6.0, and RCP8.5)) are integrated into adaptation planning.	

⁹¹ This column is based on input provided by the Issuer.

Once risks are identified, an assessment of adaptation solutions must be conducted to mitigate their impact.⁹² For existing activities and new activities using existing physical assets, KAnG, Section 5, requires adaptation planning to follow a structured timeline, ensuring that climate risks to existing assets are systematically addressed within the stipulated five-year period. The [Federal Building Code](#) (BauGB, Section 1a) reinforces this requirement by mandating that urban planning and infrastructure development incorporate climate resilience measures, ensuring that existing physical assets are adapted in alignment with climate risk mitigation strategies

Finally, adaptation planning must incorporate preventative and precautionary measures, as new infrastructure must be designed to withstand expected climate risks before construction begins the design and .⁹³ The applicable law ensures that climate adaptation considerations are integrated into new projects throughout the design phase, preventing maladaptation and ensuring compliance with climate resilience objectives,⁹⁴ and that adaptation measures consider nature-based solutions wherever feasible, promoting green and blue infrastructure solutions such as floodplain restoration, urban greening, and permeable surfaces.⁹⁵

o) Generic Criteria for DNSH to Sustainable use and protection of water and marine resources

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁹⁶	ALIGNMENT WITH EU TAXONOMY
3. SUSTAINABLE USE AND PROTECTION OF WATER AND MARINE RESOURCES – DO NOT SIGNIFICANT HARM CRITERIA	
To address environmental degradation risks, preserve water quality, and avoid water stress. aiming for good water status and ecological potential, the State of NRW complies with the Directive 2000/60/EC (Water Framework Directive). The directive is transposed into German law.	✓

⁹² §3(2) KAnG requires adaptation measures to focus on precautionary risk reduction, environmental protection, and sustainability, ensuring that suitable solutions are integrated into project design. Furthermore, §4(2) KAnG requires the State of NRW to actively implement and promote adaptation measures, showing a legal requirement to assess and integrate solutions that enhance climate resilience.

⁹³ KAnG, §3(2).

⁹⁴ UVPG, Sections 7-9.

⁹⁵ Federal Nature Conservation Act (Sections 13-19).

⁹⁶ This column is based on input provided by the Issuer.

The Issuer also complies with [Directive 2011/92/EU](#) on Environmental Impact Assessment (EIA). The directive is transposed into the [Federal Environmental Impact Assessment Act](#) (Gesetz über die Umweltverträglichkeitsprüfung (UVPG)). As required by the directive, the Issuer identifies, describes and assesses the potential effects of projects on the environment at an early stage. The State of NRW confirms that this assessment influences all official decisions regarding the approval of projects. According to § 3 of the EIA directive, the assessment must cover both direct and indirect impacts on soil and water.

As a result, all funded projects and expenditures must comply with the relevant provisions of both the Water Framework Directive and the EIA Directive. Given the compliance to both directives and the absence of coastal waters in the State of NRW, the Issuer is committing to ensure that all projects will not hamper the achievement of good environmental status of marine waters nor will they deteriorate marine waters with already good environmental status. These measures are applicable for all projects to which this DNSH applies.

p) Generic Criteria for DNSH to Pollution Prevention and Control regarding use and presence of chemicals

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁹⁷	ALIGNMENT WITH EU TAXONOMY
5. POLLUTION PREVENTION AND CONTROL – DO NO SIGNIFICANT HARM CRITERIA	
The State of NRW ensures none of the financed activities lead to the manufacture, placing on the market or use of substances listed in Annexes I or II of EU Persistent Organic Pollutants Regulation (2019/1021), as the Federal Waste Management Act (KrWG, Section 6), enforces proper hazardous substance disposal, ensuring that persistent organic pollutants are not present in any funded projects. Furthermore, the State of NRW is bound by the EU-Regulation on persistent organic Compounds (POP-Verordnung), the Chemicals Act (ChemG) and the Hazardous Substances Ordinance (Gefahrstoffverordnung), which strictly regulates the handling, use, and disposal of persistent organic pollutants. Regarding mercury and mercury compounds, German water law regulates the emission and immission of mercury and other heavy metals through the Wastewater Ordinance with sector-specific annexes, the Groundwater	

⁹⁷ This column is based on input provided by the Issuer.

[Ordinance](#) and the [Surface Water Ordinance](#). Furthermore, the State of NRW's industrial sector is required to follow the Minamata Convention on Mercury, ensuring that mercury use is phased out except where legally exempted.

With regard to substances that deplete the ozone layer, the Issuer complies with Regulation (EU) 2024/590 and the [Federal Emission Control Act](#) (BImSchG, Section 10) also ensures that NRW's industrial activities comply with ozone-layer protection requirements, preventing the use of restricted substances.

Regarding compliance with the REACH Regulation, the State of NRW ensures compliance through the Federal Chemicals Act (ChemG), which mandates that all restricted substances used in industrial and construction activities (Section 5) and products (substances, mixtures and articles) comply with REACH restrictions (controls according to Section 21). Additionally, the Product Safety Act (Section 6) and the Market Surveillance Act are leveraged to enforce strict controls over the placing of hazardous chemicals on the market, ensuring that NRW-funded projects align with EU chemical safety regulations. Additionally, the ChemG mandates that substances will not be used without an appropriate authorization, in line with the law itself.

Finally, ChemG, in its Section 7, contains national rules for the enforcement of European regulations such as Regulation (EC) No. 1272/2008 Enforcement (CLP Regulation) and Regulation (EC) No. 1907/2006 (REACH Regulation), which mandates that the activity does not lead to the manufacture, presence in the final product or output, or placing on the market, of other substances, whether on their own, or in mixtures or in an article, in a concentration above 0,1 % weight by weight (w/w).

q) Generic Criteria for DNSH to Protection and Restoration of Biodiversity and Ecosystems

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ⁹⁸	ALIGNMENT WITH EU TAXONOMY
6. BIODIVERSITY AND ECOSYSTEMS – DO NO SIGNIFICANT HARM CRITERIA	
The Issuer complies with conducting all the necessary Environmental Impact Assessments (EIAs) across all projects as per the EU Directive 2011/92/EU . The	

⁹⁸ This column is based on input provided by the Issuer.

directive is transposed into the [Federal Environmental Impact Assessment Act](#) (Gesetz über die Umweltverträglichkeitsprüfung (UVPG)).

The Federal Environmental Impact Assessment Act requires that all projects defined in the scope of application as per § 1 be subject to an EIA screening to evaluate their environmental effects, including protection of biodiversity. Protected areas and world heritage sites are both included in the dedicated checklist for the determination of EIA obligations. In addition, the [Nature Conservation Act of North Rhine-Westphalia](#) (LNatSchG, § 33) requires from project developers to assess their impact on animals, plants and natural habitats before obtaining approval. The State of NRW commits that these measures are applicable for all projects to which this DNSH applies.

Mitigation and compensation measures are imposed under the [Federal Nature Conservation Act](#) (BNatSchG), which requires all projects with negative impacts on biodiversity to implement compensatory actions such as habitat restoration or ecological offsets. The Nature Conservation Act of North Rhine-Westphalia (LNatSchG, § 33) also sets ecological compensation measures as a condition for project approval.

In accordance to [Directives 2009/147/EC](#) and [92/43/EEC](#), the Issuer complies with ensuring that appropriate assessments are conducted regarding projects near biodiversity sensitive as well as protected areas. Under the Federal Nature Conservation Act (BNatSchG, §§ 33 and 34), projects near Natura 2000 sites must undergo an appropriate assessment aligned with the requirements of the EU Habitats Directive (92/43/EEC). Moreover, the Nature Conservation Act of North Rhine-Westphalia (LNatSchG, § 53) requires that project development near protected areas must undergo rigorous environmental reviews to prevent adverse impacts on biodiversity. The State of NRW enforces the Directives 2009/147/EC, regulating and mitigating activities near critical bird habitats.

Minimum Safeguards

The alignment of the project characteristics and selection processes in place with the EU Taxonomy Minimum Safeguards, as described in Article 18 of the Taxonomy Regulation,⁹⁹ have been assessed. The results of this assessment are applicable for every project category financed under this framework and are displayed below:

⁹⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852>.

PROJECT CHARACTERISTICS AND SELECTION PROCESSES ¹⁰⁰	ALIGNMENT WITH THE EU TAXONOMY REQUIREMENT
The State of NRW is subject to all treaties and conventions ratified by Germany. These treaties and conventions are binding on the Issuer as federal law takes precedence over state law, as stipulated in Article 31 of the German Basic Law (Grundgesetz). In 1973, Germany ratified the International Covenant on Civil and Political Rights (ICCPR) as well as the International Covenant on Economic, Social and Cultural Rights (ICESCR). In 1985, Germany the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). In 1990, Germany ratified the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) and in 1992 the Convention on the Rights of the Child (CRC). Germany is also a member of the European Union and automatically bound by several key treaties and conventions such as the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights (ECHR). The UN Treaty Body Database is publicly accessible and is including Germany's implementation of core international human rights treaties based on periodic reports. The database provides insights into Germany's progress in fulfilling its treaty obligations and identifies areas for improvement. Are included in the database: State reports, concluding observations, general comments, and decisions on individual complaints. The UN, through the OHCHR, supports the work of these treaty bodies and facilitates the reporting process. As of 2024, Germany ranks 10th/180th in the World Press Freedom Index, and 15th/180th in the Corruption Perception Index. Germany scores 95 out of 100 on the World Freedom 2025 scorecard. Several publications have been issued on human rights in Germany, including by the European Network of National Human Rights Institutions.	

¹⁰⁰ This column is based on input provided by the Issuer.

PART IV: CONSISTENCY OF SUSTAINABILITY BOND WITH LAND NRW'S SUSTAINABILITY STRATEGY

Key sustainability objectives and priorities defined by the Issuer.

TOPIC	ISSUER APPROACH
Strategic ESG topics	The Issuer focuses on the 17 SDGs, in alignment with national-level objectives set by Germany, while also defining local priorities based on an analysis of North Rhine-Westphalia's environmental, social, and economic challenges. 86 goals and 151 indicators were established by Land NRW. The NRW Sustainability Strategy 2026: Living in North Rhine-Westphalia¹⁰¹ is structured around six areas of transformation: Quality of Life, Health and Social Cohesion; Climate Action, Energy and Heat; Mobility and Transport; Industry and the Circular Economy; Climate Adaptation, Nature and Resources; and Education and Participation. These are supported by transformative levers including Innovation and Research, Digitalization and Artificial Intelligence, Finance, Skills and Workforce, Land Use, Communication and Engagement, and Governance.
ESG goals/targets	To achieve its ESG objectives, the NRW Sustainability Strategy 2026 focuses on the goals and indicators mentioned above and establishes a sustainability monitoring framework to ensure alignment.
Climate Transition Strategy	The climate targets of the Issuer include Climate Protection policies, such as the Climate Protection Act (Klimaschutzgesetz NRW). The latter defines reduction goals for GHG emissions. The Issuer seeks to reduce GHG emissions by at least 65 % by 2030 and at least 88 % by 2040 compared with 1990 levels, and achieving greenhouse gas neutrality by 2045. To achieve these targets, the State pursues various measures including the accelerated deployment of renewable energy, the phase-out of coal by 2030 in the Rhineland lignite mining area, the establishment and expansion of hydrogen infrastructure and domestic hydrogen production, the promotion of energy efficiency, the decarbonization

¹⁰¹ Sustainability Strategy 2026: Living in North Rhine-Westphalia, available [here](#).

	of industry and heating systems, and the achievement of a climate-neutral state administration by 2030. The State's energy and climate policies are further supported by the Energy and Heat Strategy of North Rhine-Westphalia, which targets at least 34 GW of installed wind and solar capacity by 2030 and at least 1 GW of electrolysis capacity for green hydrogen by 2030.
Sustainable Development Goals Agenda	The Issuer's relies greatly on the implementation of the 2030 Agenda for Sustainable Development and its 17 SDGs, as evidenced in its NRW Sustainability Strategy 2026.
ESG Risk and Sustainability Strategy Management	The State of NRW's parliament carries out monitoring on a continuous basis to ensure that the public expenditures are appropriately carried out in accordance with the statutory budget. In addition, the State Court of Audit (Landesrechnungshof) examines the accounts as well as the regularity and efficiency of the budget and economic management and summarizes the results of its audits in an annual report to the Parliament and State Government. The State has implemented a Climate Adaptation Act and a broader climate adaptation policy framework to address risks identified through climate impact and risk assessments and to strengthen resilience against climate-related hazards such as flooding, heatwaves, droughts, and extreme weather events. In addition, Land NRW seeks to ensure connectivity with regional and municipal sustainability activities in North Rhine-Westphalia. Other stakeholders, including municipal organizations, representatives of civil society, business, science, and the Nachhaltigkeitsbeirat.NRW, were involved in the identification of risks and the development of the strategy. The NRW Sustainability Strategy 2026 places an emphasis on resilience, climate neutrality, social cohesion, and management of sustainability-related risks using a monitoring framework comprising 86 goals and 151 indicators.
Issuer ranking against international indexes	▪ Human Development Index: 7, in 2024; ▪ Corruption Perception Index: 10, in 2025; ▪ Global Peace Index: 28, in 2026.
Sustainability Reporting	The above-mentioned goals and indicators are publicly available in its NRW Sustainability Strategy 2026. The NRW State Office for

	Information and Technology (IT.NRW) provides regularly updated data on the NRW sustainability indicators. Data is available online¹⁰². IT.NRW bases its reports on the indicator reporting of the Federal Statistical Office (Statistisches Bundesamt) in the context of the German Sustainability Strategy.
Industry associations, Collective commitments	Land NRW is engaged in multiple sustainability initiatives, including the Gemeinschaftswerk Nachhaltigkeit,¹⁰³ Sustainable Development Solutions Network (SDSN Germany),¹⁰⁴ and the European Sustainable Development Network (ESDN).¹⁰⁵ Land NRW also participates in federal-state exchanges focused on sustainable development and education, and works closely with the NRW-Nachhaltigkeitsbeirat and Dialog Nachhaltige Kommunen NRW (DINAKOM) as part of the implementation and further development of its sustainability agenda. Key entities with NRW's involvement include the Wuppertal Institute for Climate, Environment, and Energy, the German Institute of Development and Sustainability (IDOS), and foundations such as the Stiftung Umwelt und Entwicklung NRW and the Nordrhein-Westfalen Stiftung Naturschutz, Heimat- und Kulturpflege.¹⁰⁶
Previous sustainable/sustainability-linked issuances or transactions and publication of sustainable financing framework	Land NRW has issued a total of 13 Sustainability Bonds since the 2015, with a total issuance volume exceeding €27 billion. The sustainability quality has been verified by ISS-Corporate.

¹⁰² Website: https://nachhaltigkeit.nrw.de/fileadmin/Dokumente/Nachhaltigkeitsindikatoren_2025.pdf.

¹⁰³ Gemeinschaftswerk Nachhaltigkeit: <https://gemeinschaftswerk-nachhaltigkeit.de/>.

¹⁰⁴ Sustainable Development Solutions Network (SDSN Germany): <https://www.sdsngermany.de/lenkungsausschuss/>.

¹⁰⁵ ESDN European Sustainable Development Network: <https://www.esdn.eu/>.

¹⁰⁶ <https://www.sue-nrw.de/> and <https://www.nrw-stiftung.de/>.

Rationale for issuance

The state of NRW has issued a total of 13 sustainability bonds with a total volume of over 27 billion euros since 2015. The Issuer addresses investors valuing sustainable investments to support the implementation of its sustainability strategy and the SDGs. Eligible expenditures cover areas including education and research, healthcare, social inclusion and cohesion, affordable basic infrastructure, public transport and sustainable mobility, climate protection and energy transition, environmental protection and nature conservation, sustainable urban and rural development, digitalization, innovation, and the modernization of university clinics.

Opinion: *The key sustainability objectives and the rationale for issuing Sustainability Bonds are clearly described by the Issuer. All the project categories financed are in line with the sustainability objectives of the Issuer.*

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ANNEX 1: METHODOLOGY

The ISS-Corporate SPO provides an assessment of labeled transactions against international standards using ISS-Corporate's proprietary [methodology](#).

EU Taxonomy

The assessment evaluates whether the details of the nominated projects and assets or project selection eligibility criteria included in the Sustainability Bond Framework meet the criteria listed in relevant Activities in the EU Taxonomy Climate Delegated Act (June 2023) and EU Taxonomy Environmental Delegated Act (as of June 2023).

The evaluation shows if the State of North Rhine-Westphalia project categories are indicatively in line with the entirety (or some) of the requirements listed in the EU Taxonomy Technical Annex.

The evaluation was carried out using information and documents provided on a confidential basis by the State of North Rhine-Westphalia (e.g., Due Diligence Reports). Further, national legislation and standards, depending on the project category location, were drawn on to complement the information provided by the Issuer.

ANNEX 2: QUALITY MANAGEMENT PROCESSES

SCOPE

The State of North Rhine-Westphalia commissioned ISS-Corporate to compile a Sustainability Bond(s) SPO. The second-party opinion process includes verifying whether the Sustainability Bond Framework aligns with the GBS, SBP and SBG and assessing the sustainability credentials of its Sustainability Bond(s), as well as the Issuer's sustainability strategy.

CRITERIA

Relevant standards for this second-party opinion:

- Green Bond Principles (GBP), as administered by the International Capital Market Association (ICMA) (as of June 2025)
- Social Bond Principles (SBP), as administered by the International Capital Market Association (ICMA) (as of June 2025)
- Sustainability Bond Guidelines (SBG), as administered by the International Capital Market Association (ICMA) (as of June 2021)
- EU Taxonomy Climate Delegated Act, Annex I and II (as of June 2023)
- EU Taxonomy Environmental Delegated Act, Annex I and IV (as of June 2023)

ISSUER'S RESPONSIBILITY

The State of North Rhine-Westphalia's responsibility was to provide information and documentation on:

- Framework
- Selection criteria
- Documentation of ESG risk management at the project category level

ISS-CORPORATE'S VERIFICATION PROCESS

Since 2014, ISS Group, which ISS-Corporate is part of, has built up a reputation as a highly reputed thought leader in the green and social bond market and has become one of the first CBI-approved verifiers.

This independent second-party opinion of the Sustainability Bond(s) to be issued by the State of North Rhine-Westphalia has been conducted based on proprietary methodology and in line with the ICMA GBP, SBP and SBG.

The engagement with the Issuer took place from July to August 2026.

ISS-CORPORATE'S BUSINESS PRACTICES

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

About this SPO

Companies turn to ISS-Corporate for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk and manage the needs of a diverse shareholder base by delivering best-in-class data, tools and advisory services.

ISS-Corporate assesses alignment with external principles (e.g., the Green/Social Bond Principles), analyzes the sustainability quality of the assets and reviews the sustainability performance of the Issuer itself. Following these three steps, we draw up an independent SPO so investors are as well-informed as possible about the quality of the bond/loan from a sustainability perspective.

Please visit ISS-Corporate's [website](#) to learn more about our services for bond issuers.

For more information on SPO services, please contact SPOsales@iss-corporate.com.

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