

SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and alignment of the Issuer's Sustainability Bond Framework with the ICMA Green and Social Bond Principles and Sustainability Bond Guidelines

State of North Rhine-Westphalia
31 March 2021

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	<ul style="list-style-type: none">• Sustainability Bonds
Relevant standards	<ul style="list-style-type: none">• Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines administered by the International Capital Market Association
Scope of verification	<ul style="list-style-type: none">• State of North Rhine-Westphalia Sustainability Bond Framework (as of 03.03.2021)
Lifecycle	<ul style="list-style-type: none">• Pre-issuance verification
Validity	<ul style="list-style-type: none">• As long as the Sustainability Bond Framework does not change

CONTENTS

SCOPE OF WORK	3
ISS ESG ASSESSMENT SUMMARY	3
ISS ESG SPO ASSESSMENT	4
PART I: SUSTAINABILITY BOND FRAMEWORK LINK TO NRW'S SUSTAINABILITY STRATEGY	4
A. ASSESSMENT OF GERMANY'S ESG PERFORMANCE	4
B. CONSISTENCY OF SUSTAINABILITY BOND FRAMEWORK WITH NRW'S SUSTAINABILITY STRATEGY	6
PART II: ALIGNMENT WITH GREEN BOND PRINCIPLES, SOCIAL BOND PRINCIPLES AND SUSTAINABILITY BOND GUIDELINES	8
ANNEX 1: ISS ESG Country Rating Methodology	13
ANNEX 2: Quality management processes	15
About ISS ESG SPO	16

SCOPE OF WORK

The State of North Rhine-Westphalia (“NRW” or “the issuer”) commissioned ISS ESG to assess the alignment of its Sustainability Bond Framework (March 2021 version) with the International Capital Market Association’s (ICMA) Green Bond Principles (GBPs), Social Bond Principles (SBPs) and Sustainability Bond Guidelines (SBGs), and to assess the link between the Sustainability Bonds and NRW’s sustainability strategy – drawing on NRW’s overall sustainability profile and issuance-specific Use of Proceeds categories.

ISS ESG ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
<p>Part 1:</p> <p>Sustainability Bond Framework link to issuer’s sustainability strategy</p>	<p>According to the ISS ESG Corporate Rating published on 19.02.2021, Germany, the country in which NRW is located, shows a good sustainability performance against its peer group on key ESG issues faced by the sovereigns. Germany is rated 11th out of 121 countries rated by ISS ESG.</p> <p>The Use of Proceeds categories (re)financed under the Sustainability Bond Framework of NRW are consistent with the issuer’s sustainability strategy and material ESG topics for sovereign and sub-sovereign issuers. The rationale for issuing sustainability bonds is clearly described by the issuer.</p>	<p>Consistent with issuer’s sustainability strategy</p>
<p>Part 2:</p> <p>Alignment with GBPs, SBPs & SBGs</p>	<p>The issuer has defined a formal concept for its Sustainability Bond Framework regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines administered by the ICMA.</p>	<p>Positive</p>
<p>Sustainability quality of the eligible projects</p>	<p>Not applicable for this scope of work.</p> <p>NRW will obtain a separate Second Party Opinion from ISS ESG to assess the sustainability quality of the asset and project pool to be (re-)financed for each Sustainability Bond issuances. Since 2015, ISS ESG verified and re-verified Sustainable Bonds issued by NRW. All previous SPOs conducted by ISS ESG for NRW’s Sustainable Financing Instruments are available on the ICS website².</p>	<p>Not applicable</p>

¹ ISS ESG’s evaluation is based on the NRW’s Sustainability Bond Framework (March 2021 version) and on the ISS ESG Country Rating applicable at the SPO delivery date (updated on the 19.02.2021).

² <https://www.isscorporatesolutions.com/solutions/esg-solutions/second-party-opinion/>

ISS ESG SPO ASSESSMENT

PART I: SUSTAINABILITY BOND FRAMEWORK LINK TO NRW'S SUSTAINABILITY STRATEGY

A. ASSESSMENT OF GERMANY'S ESG PERFORMANCE

The ISS ESG Country Rating provides material and forward-looking environmental, social and governance (ESG) data and performance assessments. For the purpose of assessing NRW's ESG performance, ISS ESG used Germany Country Rating as a basis for this assessment.

COUNTRY	STATUS	RATING	DECILE RANK
GERMANY	PRIME	B	1

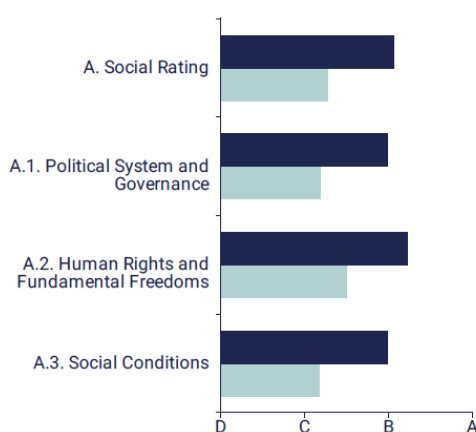
This means that Germany currently shows a good sustainability performance against other countries assessed by ISS ESG.

ESG performance

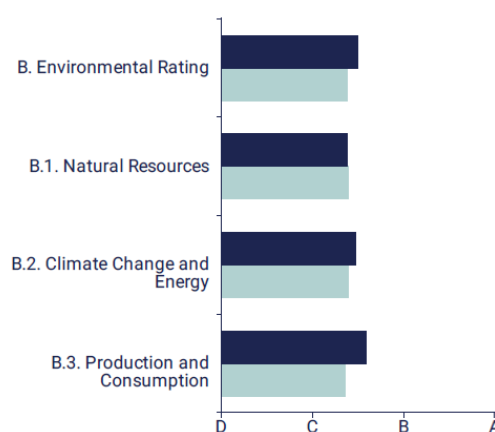
As of 31.03.2021, this Rating places Germany 11th out of 121 countries rated by ISS ESG.

Key challenges faced by sovereign issuers in terms of sustainability management are displayed in the charts below, as well as Germany's performance against those key challenges in comparison to the other countries' average performance.

Governance and Social Performance



Environment Performance



Legend: ■ Universe ■ Country

Governance opinion

Germany is a federal republic and a constitutional parliamentary democracy with a bicameral parliament. The last federal elections were held in September 2017, resulting in a coalition of the

conservative Christ Democratic Union/Christ Social Union (CDU/CSU) and the Social Democratic Party (SPD). The Bundestag elected Angela Merkel, then leader of the CDU, again as chancellor.

Germany is a stable democracy with intact checks and balances, well-functioning institutions and a constitution, which protects important civil and political rights. While the level of corruption is perceived to be relatively low by the German public, the country's financial system exhibits a very high level of financial secrecy and thus fosters money laundering and tax evasion.

Basic human rights and fundamental civil and political freedoms, such as equality before the law, freedom of the press and the right to asylum are respected by the government and generally considered non-negotiable by society. However, some politicians and parts of the public reacted to the large influx of migrants to Europe in recent years with right wing-rhetoric and xenophobic sentiments, leading to increasing discrimination against minorities. In addition, women are underrepresented in the national parliament and still face significant disadvantages in the labor market.

Regarding foreign affairs, Germany is a member of the European Union and as such is involved in a non-violent crisis with Russia over international power and ideological differences in the Ukraine. Moreover, while the military expenditure is on a lower-medium level, the country is one of the world's largest exporters of conventional weapons.

Social opinion

Germany is a welfare state with a well-functioning healthcare system, resulting in a relatively high life expectancy and low private expenditure on health. The country's social security system comprises a comprehensive scope of branches but is only partially effective in reducing the population's vulnerability to poverty. In addition, private wealth remains very unevenly distributed and increasing inequality is perceived a major challenge by large parts of the society. Basic labor rights are protected by law and working conditions are generally good. While a stable economy results in low unemployment rates, the relatively high level of long-term unemployment remains a problem. Migrants are to some extent excluded from receiving high-quality education, from participating in the labor market and from enjoying the benefits of the welfare state.

Environmental opinion

As an industrialised country, Germany's per capita energy consumption and greenhouse gas emissions are comparatively high. In 2019, Germany adopted a climate protection programme and introduced the federal climate change act, fixing sector goals and establishing mechanisms for controlling. It's yet unclear whether targets can be achieved (55% reduction until 2030, base year 1990) under the given mix of policies, especially with regard to the transport and building sectors.

The area under sustainable forestry and under organic agriculture, as well as the area of protected land is high. Genetically modified crops are not used in Germany. Despite this, a large number of plants, animal and fish species in Germany are threatened by extinction.

While Germany's industry has a very high resource productivity, general consumption patterns of industry and households regarding material, food and energy, as well as the country's transport system, are environmentally unsustainable.

Sustainability summary

Germany is a well-functioning democracy with effective political institutions and a stable economy. Civil and political rights are respected and generally effectively protected, but the European migrant crisis led to an increase of xenophobic sentiments in society and the rise of right-wing political forces. Germany's industrialized economy and the society's unsustainable consumption patterns have significant negative impacts on the local and global environment. Whether a policy framework adopted in 2019 does effectively counter climate change in line with the Paris Agreement goals has yet to be seen.

Breaches of international norms and ESG controversies

The country is not involved in severe controversies.

B. CONSISTENCY OF SUSTAINABILITY BOND FRAMEWORK WITH NRW'S SUSTAINABILITY STRATEGY

Key sustainability objectives and priorities defined by the issuer

NRW adopted a sustainability strategy in 2016 and an updated version in 2020³. The content, goals and measures of the strategy aim to be aligned with the federal German Sustainable Development Strategy (2018 update) and the UN SDGs. NRW commits to ensure that the activities at the federal and State level support each other and to achieve a substantial German contribution to the implementation of the SDGs. In addition to SDG-aligned measures, NRW describes focal areas with qualitative and/or quantitative targets as well as information on organizational structures and instruments to implement the sustainability strategy. NRW commits itself to regular and transparent reporting on progress made in this context.

The core of the current sustainability strategy is a set of 67 specific goals and indicators that are thematically assigned to the SDGs. Ecology, economy and social interaction are equally taken into account. The spectrum of goals and indicators ranges from an increase in organic farming to 20 percent of the agricultural area, to strengthening the environmental economy as an important future segment, to a minimum investment of 3.5 percent of GDP in innovations and solutions for the future. Further indicators describe the expansion of all-day care in elementary school age and the increase in raw material productivity by 2030. The strategy also includes topics such as digitalization, the circular economy and electromobility.

In terms of national harmonization of sustainability measures, NRW has also oriented itself to the main principles of the German sustainability strategy of 2018:

1. Apply sustainable development as a guiding principle consistently in all areas and in all decisions
2. Take global responsibility
3. Preserve natural resources

³ www.nachhaltigkeit.nrw.de

4. Strengthen sustainable management
5. Maintain and improve social cohesion in an open society
6. Use education, science and innovation as drivers of sustainable development

NRW's sustainability strategy considers its specific socioeconomic characteristics, such as a high settlement density, a high proportion of industry with many energy-intensive companies and a high proportion of migrant population.

Rationale for issuance

The State of NRW launched a Sustainability Bond programme to finance its sustainability related projects. According to NRW, it plays a particularly pioneering role in issues such as sustainability bonds and, with a total volume of more than 13 billion euros which it placed on the financial markets in the past few years, is the largest public issuer of sustainability bonds worldwide.

NRW states that, by realizing projects in areas listed in its Sustainability Bond Framework, it positively contributes to several SDGs which form the basis of NRW's Sustainability Strategy. By that, the concept of the Sustainability Bonds is closely related to the Sustainability Strategy for North Rhine-Westphalia which serves as the political reference for the Sustainability Bonds. Progress in the implementation of the strategy is being measured using indicators which are assigned to the 17 SDGs. The first Sustainability Indicator Report was published in 2016. In addition, the indicators are regularly being updated, with results published on a dedicated website.

Contribution of Use of Proceeds categories to sustainability objectives and priorities

ISS ESG mapped the Use of Proceeds categories financed under this Sustainability Bond Framework with the sustainability objectives defined by the issuer, and with the key ESG challenges as defined in the ISS ESG Country Rating methodology. Key ESG challenges are key issues that are highly relevant for sovereign or sub-sovereign issuers when it comes to sustainability. From this mapping, ISS ESG derived a level of contribution to the strategy of each Use of Proceeds categories.

USE OF PROCEEDS CATEGORY ⁴	SUSTAINABILITY OBJECTIVES FOR THE ISSUER	KEY ESG INDUSTRY CHALLENGES	CONTRIBUTION
Green eligible activities	✓	✓	Contribution to material objectives
Social eligible activities	✓	✓	Contribution to material objectives

Opinion: *ISS ESG finds that the Use of Proceeds categories (re)financed under the Sustainability Bond Framework of NRW are consistent with the issuer's sustainability strategy and material ESG topics for sovereign and sub-sovereign issuers. The rationale for issuing sustainability bonds is clearly described by the issuer.*

⁴ A detailed description of the Green and Social eligible activities can be found in the next page of this report.

PART II: ALIGNMENT WITH GREEN BOND PRINCIPLES, SOCIAL BOND PRINCIPLES AND SUSTAINABILITY BOND GUIDELINES

1. Use of Proceeds

The proceeds under the Sustainability Bond Framework will be used for the preparation, realization and operation of projects belonging to the following Use of Proceeds categories and that satisfy the applicable criteria described in section “II.2. Process for Project Evaluation and Selection”.

SOCIAL BOND PRINCIPLES CATEGORIES	GREEN BOND PRINCIPLES CATEGORIES
<p>A. Affordable basic infrastructure e.g. digitalization, public transportation</p> <p>B. Access to essential services e.g. health care and health infrastructure, education at universities, schools and day care centres, research</p> <p>C. Affordable housing e.g. adaptation of urban and rural infrastructure</p> <p>D. Employment generation, and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance e.g. integration of handicapped, migrants or long-term unemployed into the labour market, green economy</p> <p>E. Food security and sustainable food systems e.g. safe and healthy food</p> <p>F. Socioeconomic advancement and empowerment e.g. inclusion of handicapped and migrants, fight against poverty, protection against violence, gender equality</p>	<p>G. Renewable energy e.g. promotion of and consulting regarding renewable energy</p> <p>H. Energy efficiency e.g. promotion of and consulting regarding energy efficiency</p> <p>I. Pollution prevention and control e.g. climate protection, circular economy, green infrastructure</p> <p>J. Environmentally sustainable management of living natural resources and land use e.g. nature protection, biodiversity, responsible agriculture</p> <p>K. Clean transportation e.g. infrastructure for cyclists and pedestrians</p> <p>L. Sustainable water and wastewater management e.g. flood protection</p> <p>M. Climate change adaptation e.g. adaptation to climate change, sustainable infrastructure</p> <p>N. Green buildings e.g. new and refurbished buildings</p>

Opinion: ISS ESG considers the Use of Proceeds description provided by NRW as aligned with the GBPs, SBPs and SBGs. The issuer (re)finances project categories with clear environmental or social objectives.

2. Process for Project Evaluation and Selection

The State of NRW's treasury team of the Ministry of Finance is responsible for the evaluation and selection of projects and regularly exchanges views with the sustainability team of the Ministry for Environment. The treasury team identifies projects in line with Use of Proceeds criteria and allocates the proceeds to the eligible project portfolio in accordance with the eligibility criteria. The reference for the selection of projects is the State of NRW's Sustainability Strategy 2020. Projects are mapped to specific SDGs and a document with the description of all projects will be published pre-issuance of each Sustainability Bond as well as a Second Party Opinion analyzing the sustainability quality of the projects. Only the State of NRW's own discretionary spending (net of EU grants, federal grants or other revenues earmarked for specific purposes) is taken into account. The State of NRW's personnel costs as well as projects prescribed by federal law are excluded. All projects are part of the State of NRW's discretionary spending of the current fiscal year and can be traced to the NRW Budget Plan of the current year. Only the expenditures of the current year are taken into account. In case a project runs for more than one year, it might be part of a number of subsequent Sustainability Bonds. A list of eligible projects is kept by the treasury team and monitored during the term of the Sustainability Bond to ensure that the proceeds are sufficiently allocated to eligible projects on a regular basis.

Do no harm principle

The State of NRW actively joins the global efforts under the umbrella of the global Agenda 2030 and the 17 SDGs articulated in it. In its sustainability strategy, the State of NRW explains how it will implement this global consensus on sustainable development in NRW.

The core of the new sustainability strategy is a set of 67 specific goals and indicators covering 16 of the 17 SDGs (without SDG 14). These goals and indicators are closely aligned with the goals at the federal level. Ecological, economic and social interaction are equally taken into account. A separate indicator report covers the development of the indicators. A dedicated website⁵ enables ongoing progress reporting on the indicators.

“Sustainability checks” for regional legal acts and programmes strive to focus the political debate on the synergies and conflicts between the different sustainability goals. In the implementation process, cooperation with municipalities, civil society and the private sector will continue to play an important role. The State Government also aims at transforming the State bodies and authorities into a “sustainable administration” (by means of sustainable public procurement, climate neutral buildings, sustainable events etc.) by 2030.

Compliance to social safeguards

The International Labour Organization (ILO) International Labour Standards form an intrinsic part of the EU's legal system. Through compliance with the EU's legal system, the State of NRW's Sustainability Bond is also in compliance with minimum social safeguards. In addition, the State of NRW's investments include provisions on compliance with the laws and regulations (including on social issues) under which its bodies operate.

Controversies

The State of NRW monitors the expenses of the State to ensure that they comply with existing laws and regulations that are in place and that they can achieve the positive environmental and social

⁵ NRW's sustainability indicators: www.nachhaltigkeitsindikatoren.nrw.de/en

impacts intended. The State of NRW's parliament carries out the monitoring on a continuous basis, making sure the State's expenses are correctly carried out within the authority provided by the statutory budget. In that context, controversies may come to attention through NGO reports and dialogues, or through media exposure, which will then be subject to further inquiry and debates, if members of parliament demand such scrutiny.

Exclusions

Projects from the following sectors are excluded:

- Fossil fuel production and generation of fossil fuel power,
- Generation of nuclear power,
- Production or trade in any product or activity deemed illegal under international conventions and agreements or subject to international prohibitions.

Opinion: ISS ESG considers the Process for Project Evaluation and Selection description provided by the NRW's Sustainability Bond Framework as aligned with the GBPs, SBPs and SBGs. The issuer describes responsibilities and processes to identify eligible projects based on clear criteria for social safeguards and sectorial exclusion criteria. Furthermore, the issuer describes the process to ensure that the projects financed will not harm other objectives defined as per the UN SDGs and its process related to identification and monitoring of potential ESG controversies.

3. Management of Proceeds

The proceeds will be allocated and managed by the State of NRW's Treasury team on a portfolio basis. The State of NRW will monitor and track the expenditures for the selected projects as described in the document "Eligible Assets" through its internal accounting system and will seek to allocate an amount at least equal to the net proceeds of the Sustainability Bond. In case net issue proceeds exceed the State's expenditures for eligible projects in the year of issuance, the remaining proceeds will be used to cover expenditures for similar projects of the following years until the expenditures exceed the net issue proceeds.

Opinion: ISS ESG finds that Management of Proceeds proposed by NRW is aligned with the GBPs, SBPs and SBGs, as all the proceeds are appropriately tracked and allocated to eligible projects in a defined period of time. In addition, the framework covers coherent back-up options in case net issue proceeds exceed the State's expenditures for eligible projects in the year of issuance.

4. Reporting

Reporting will be made available to investors within one year from the date of the Sustainability Bond issuance and annually thereafter until the proceeds have been fully allocated. The annual Sustainability Bond report with updates on the allocation of proceeds and an impact evaluation of the funded projects will be published on the website for NRW's Sustainability Bonds⁶.

⁶ NRW Sustainability Bonds: www.nachhaltigkeit.nrw.de/en/sustainability-bonds/

Allocation reporting

Allocation reporting will be available to investors within one year from the date of a Sustainability Bond issuance and annually thereafter, until the proceeds have been fully allocated. The State of NRW will report on the percentage of proceeds allocated.

Impact reporting

In order to give a comprehensive view on the impact of the investments, impact reporting varies for each Use of Proceeds category. Per Use of Proceeds category, the State of NRW or a third party charged with it will provide relevant impact indicators on a best-efforts basis. The impact reporting occurs on a project basis where possible.

Opinion: *ISS ESG finds that the reporting on the use of proceeds and impact proposed by NRW and already implemented in its Sustainability Bond Reporting, as aligned with the GBPs, SBPs and SBGs.*

DISCLAIMER

1. Validity of the SPO: As long as the Sustainability Bond Framework does not change
2. ISS ESG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
3. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of ISS ESG in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by the issuer.
4. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations. In particular, the SPO is no assessment of the economic profitability and credit worthiness of a bond but refers exclusively to the social and environmental criteria mentioned above.
5. We would point out that this SPO, in particular the images, text and graphics contained therein, and the layout and company logo of ISS ESG and ISS-ESG are protected under copyright and trademark law. Any use thereof shall require the express prior written consent of ISS. Use shall be deemed to refer in particular to the copying or duplication of the SPO wholly or in part, the distribution of the SPO, either free of charge or against payment, or the exploitation of this SPO in any other conceivable manner.

The issuer that is the subject of this report may have purchased self-assessment tools and publications from ISS Corporate Solutions, Inc. ("ICS"), a wholly-owned subsidiary of ISS, or ICS may have provided advisory or analytical services to the issuer. No employee of ICS played a role in the preparation of this report. If you are an ISS institutional client, you may inquire about any issuer's use of products and services from ICS by emailing disclosure@issgovernance.com.

This report has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While ISS exercised due care in compiling this report, it makes no warranty, express or implied, regarding the accuracy, completeness or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. In particular, the research and scores provided are not intended to constitute an offer, solicitation or advice to buy or sell securities nor are they intended to solicit votes or proxies.

ISS is an independent company owned by entities affiliated Genstar Capital ("Genstar"). ISS and Genstar have established policies and procedures to restrict the involvement of Genstar and any of Genstar's employees in the content of ISS' reports. Neither Genstar nor their employees are informed of the contents of any of ISS' analyses or reports prior to their publication or dissemination. The issuer that is the subject of this report may be a client of ISS or ICS, or the parent of, or affiliated with, a client of ISS or ICS.

© 2021 | Institutional Shareholder Services and/or its affiliates

ANNEX 1: ISS ESG Country Rating Methodology

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

Germany

Methodology - Overview

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

ESG Country Rating – The ESG Country Rating universe comprises 58 countries, as well as Hong Kong and the European Union, representing 96 per cent of global outstanding sovereign debt (as of June 2018). The assessment of a country's sustainability performance is based on approximately 100 environmental, social and governance criteria with equal weight assigned to the social and environmental dimension. All criteria are individually weighted and evaluated and the results are aggregated to yield an overall score (rating). The selection of criteria is derived from ISS ESG's understanding of sustainability and reflects various global challenges that are embodied in the Sustainable Development Goals. Criteria are selected according to their relevance (materiality) and the quality of data regarding availability, up-to-dateness and consistency for all the countries rated.

Country controversies – In addition to the rating, ISS ESG conducts a comprehensive analysis of relevant controversies. Thereby, our clients have the possibility to consider, either separately or in addition to the rating, circumstances in areas they view as especially critical. The country controversy assessment is either directly derived from information provided by credible and acknowledged external sources, such as indices or blacklists, or it is based on the country's performance in the respective rating section. In the latter cases, underperformance in a specific set of indicators constitutes a controversy. Some controversy issues are delineated on different levels of severity.

Country leaders - List (in alphabetical order) of the top three countries from the ESG Country Rating universe at the time of generation of this report.

Criteria design – The rating comprises both qualitative and quantitative criteria. For instance, the safeguarding of fundamental freedoms by a country's government is mostly assessed in qualitative terms, while a country's consumption of resources is quantified. Qualitative criteria are evaluated against absolute targets and/or best practices, the assessment of quantitative indicators is based on thresholds. Those either reflect normative considerations and/or relative performance in a given area. In order to ensure their validity, some quantitative indicators are normalised against eligible denominators. To assess the quality of government policy in a specific area, we use indicators measuring input, such as spending on education as a proportion of GDP, as well as criteria measuring output, such as female participation in education.

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

Distribution of Ratings - Overview of the distribution of the ratings of all countries that are included in the ESG Country Rating universe (country portrayed in this report: dark blue).

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

A+: the country shows excellent performance

D-: the country shows poor performance

Overview of the range of scores achieved in the ESG Country Rating universe (light blue) and indication of the grade of the country evaluated in this report (dark blue).

Sources of Information - The sources we draw on include international institutions such as the World Bank, the International Energy Agency (IEA) and the World Health Organisation (WHO), as well as respected non-governmental organisations such as Amnesty International, Transparency International and the Stockholm International Peace Research Institute (SIPRI). A selection of sources used for this report is illustrated in the annex.

Status & Prime Threshold – Countries are categorised as Prime if they achieve/exceed the minimum sustainability performance requirements (Prime threshold) defined by ISS ESG for the Country Rating.

Update cycle - The vast majority of rating criteria is updated annually, only single indicators receive event-driven updates. The exact timing is determined by the publication dates of major sources of information.

ANNEX 2: Quality management processes

SCOPE

NRW commissioned ISS ESG to compile a Sustainability Bond Framework SPO. The Second Party Opinion process includes verifying whether the Sustainability Bond Framework aligns with the Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines administered by the ICMA and the issuer's sustainability strategy.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Green Bond Principles
- ICMA Social Bond Principles
- ICMA Sustainability Bond Guidelines

ISSUER'S RESPONSIBILITY

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

- Framework

ISS ESG'S VERIFICATION PROCESS

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

ISS ESG has conducted this independent Second Party Opinion of the Sustainable Bonds to be issued by NRW based on ISS ESG methodology and in line with the ICMA Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines.

The engagement with NRW took place in February and March 2021.

ISS ESG'S BUSINESS PRACTICES

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

About ISS ESG SPO

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

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

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

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

For Information about SPO services, contact:

Federico Pezzolato

SPO Business Manager EMEA/APAC

Federico.Pezzolato@isscorporatesolutions.com

+44.20.3192.5760

Miguel Cunha

SPO Business Manager Americas

Miguel.Cunha@isscorporatesolutions.com

+1.917.689.8272

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

Project team

Project lead

Melanie Comble
Sr. Associate
Head of SPO Operations

Project support

Damaso Zagaglia
Associate
ESG Consultant

Project supervision

Viola Lutz
Associate Director
Deputy Head of Climate Services