NRC Group ASA
Green Finance Second Opinion

24 August 2023

Executive Summary

NRC Group is a public company, headquartered in Oslo, Norway, and listed on the Oslo Stock Exchange, that develops and supplies services to build transport solutions planned by customers. The service offering includes groundwork, specialised track work, electrical systems, signalling systems, demolition, recycling and mass transport. NRC Group has nearly 2,000 professionals and the group operates from offices in Finland, Sweden and Norway. The Nordic revenue in 2022 was 7 billion NOK.

The green finance framework is for clean transportation projects and covers investment and operating expenses related to infrastructure for rail transport, infrastructure enabling low-carbon public transport, and light and heavy vehicles and construction machines. Infrastructure projects include but may not be limited to ballasts, sleepers, rails, switches, signalling systems, power supply systems, groundwork, and bridges. The majority of the proceeds from the first issuance is expected to go to refinancing of rail transport projects.

We rate the framework **Dark Green** and give it a governance score of **Good.** NRC Group has set an ambitious reduction target for their scope 1 and 2 emissions (but not scope 3) in the short term and have set the long-term goal of being net zero by 2050. The selection process is good. There is screening for controversial projects, and expenditures on fossil fuels are avoided as far as possible. We note, however, that NRC Group as a contractual partner has limited influence on the design of projects, e.g., on the materials use and hence embodied emissions associated with the projects. The planned allocation and impact reporting is good, but the impact reporting is not independently verified. Within their domain of influence and where economically feasible, the NRC Group is focused on low carbon and environmentally friendly solutions, e.g., when it comes to biodiversity issues and recycling of waste.

SHADES OF GREEN

°C | °CICERO Dark Green

GOVERNANCE ASSESSMENT

GREEN BOND AND LOAN PRINCIPLES

Based on this review, this framework is found to be aligned with the principles.

Strengths

The increased use of electrified or otherwise zero direct tailpipe emission public and freight transport is crucial element in the 2050 vision. The eligible projects have the potential to provide greater access to safe, affordable, accessible, and low carbon transport systems. Besides embodied emissions in materials, emissions from machinery is a main concern for construction projects. The focus of NRC Group on use of renewable biogas from waste and electrification of equipment, together with the intention of the issuer to exclude financing of fossil fuels and fossil fuel equipment are thus further strengths of the framework.

Pitfalls

Most of the greenhouse gas emissions associated with transport infrastructure are embodied emissions in materials such as steel and concrete. These emissions are not assessed under the framework and are not part of the group's climate footprint reporting. According to NRC Group, they are on contractual deals with customers who in the end are responsible for the design and planning of the projects, including materials selection in many cases, limiting NRC Group's influence on this aspect of climate impact.

Contents

1 NRC Group's environmental management and green bond framework

Company description

NRC Group is a public company, headquartered in Oslo, Norway, and listed on the Oslo Stock Exchange, that develops and supplies services to build transport solutions planned by customers. This includes the entire value chain for the prioritised markets such as rail, light rail and civil engineering. The service offering includes groundwork, specialised track work, electrical systems, signalling systems, demolition, recycling and mass transport.

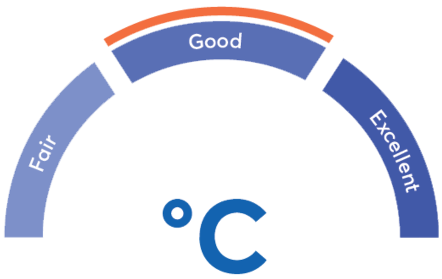
NRC Group has nearly 2,000 professionals and the group operates from offices in Finland, Sweden and Norway. The Nordic revenue in 2022 was 7 billion NOK.

Governance assessment

NRC Group has been reporting on sustainability since 2015, but only since 2020 under the current sustainability reporting standard, which follows the GRI standard. NRC Group also reports on climate risks according to the TCFD guidelines, however without relying on scenario analyses at the group level.

NRC Group has set an ambitious 30% reduction target for their scope 1 and 2 emissions in the short term (2021-2025) and have set the long-term goal of being net zero by 2050. It is encouraging that they are investigating setting a Science-Based Target (SBTi[1]), including identifying and reporting a useful intensity factor, which measures the carbon intensity of the operations on a relevant basis. The selection process is good and includes screening for controversial projects which will be excluded, and expenditures on fossil fuels are avoided as far as possible. We note, however, that NRC Group as a contractual partner has limited influence on the design of projects, e.g., on the materials use and hence embodied emissions associated with the projects. While the planned allocation and impact reporting is good and the methodologies used for impact reporting will be made publicly available to the extent possible, the impact report will not be independently verified.

The overall assessment of NRC Group's governance structure and processes gives it a rating of **Good**.



[1] https://sciencebasedtargets.org

Sector risk exposure

Physical climate risks. Extreme weather events are expected to increase in intensity and frequency. In northern Europe, more extreme precipitation (and associated flooding), as well as increased extreme heat, are likely. These threaten transportation infrastructure, with potential effects including traffic disruptions, overheating engines, increased fire risks associated with the trains and related infrastructure, and distortion of steel rails.

Transition risks. Due to the profound changes needed to limit global warming to well-below 2ºC, transition risk affects all sectors. Despite the efficiency of public transport compared to private transport and rail freight compared to other transport modes, fossil fuel powered equipment, for example, is exposed to transition risks from increasingly ambitious policies and tighter regulations, such as stricter rules for zero-emissions urban environments. Transition risks could also impact the use of emissions-intensive construction materials such as cement and steel.

Environmental risks. Transport infrastructure can cause disturbance from noise, resource use, and pollution, and fragment ecosystems and disrupt wildlife movement. Modifications, upgrades, and expansions of transport infrastructure can also lead to waste, which should be managed in accordance with the waste hierarchy, while environmental risks also arise in supply chains.

Social risks. The most apparent social risks arising from infrastructure projects and investments concern working conditions, such as health and safety. There are, however, also risks linked to supply chains, for example in the production of equipment and building materials. For battery powered vehicles, social risks in supply chains are linked to mining, smelting, and refining of raw materials, with these activities often taking place in regions where the risk for serious human rights violations is high.

Environmental strategies and policies

NRC Group's environmental policy includes overarching qualitative goals, such as reducing greenhouse gas emissions, managing, sorting, and recycling waste, and seeking sustainable procurement. Its code of conduct states that the group shall strive to select the most environmentally friendly solutions, insofar as these do not lead to unreasonable costs or disadvantage. In addition, it imposes requirements on subcontractors such that they adapt their supplies, production and material selections to be as environmentally friendly as possible, however without imposing quantitative environmental criteria. NRC Group operates mainly as contractor in projects planned by customers, and according to them, it is the customers who are in charge of the lifecycle analyses[2] of projects as well as physical climate risk assessment of the built infrastructure in many cases. Climate risk assessments of the project operations are also part of the environmental impact assessments carried out by NRC Group in accordance with ISO14001 standards. The main concerns identified are heavy snow loads and extremely hot weather.

Regarding climate related targets, NRC Group has set a 30% reduction target for their greenhouse gas (GHG) emissions (scope 1+2) by 2025, using 2021 as a baseline. The group is committed to align its reduction efforts with the Paris Agreement and have set the long-term goal of being net zero by 2050 in scope 1 and 2 emissions. They are investigating setting a Science-Based Target (SBTi), including identifying and reporting a useful intensity

[2] The Nordic transport infrastructure agencies, which are the largest customers to NRC Group totalling approximately 55% of Group revenue, have examined the possibilities and benefits of LCA within infrastructure projects in the common-Nordic NordLCA-project. NRC Group has provided support to the customers in this Nordic life cycle assessment.

factor, which measures the carbon intensity of the operations on a relevant basis. Current sustainability reporting, which has been ongoing since 2015, follows the GRI standard.

The total GHG emissions (scope 1+2+3[3]) in 2022 were 13,051 tonnes CO_2e, an 8.2% increase from 2021 levels. Embodied emissions in construction materials such as steel and cement are not included in these figures. In 2022, NRC Group hedged the impact of inflation by procuring fuel directly instead of via their sub-contractors. This resulted in a 24% increase in annual emissions from the Finnish operations. Meaningful GHG emission reductions were achieved within other parts of the business in 2022. Thus, scope 1 greenhouse gas emissions decreased in Norway by -10.4% and in Sweden by -8.4% year-on-year.

The majority of the emissions measured in 2022 (scope 1 and 2), result from the use of diesel fuels in equipment. A much smaller proportion of the emissions came from electricity used at offices and on some project sites. NRC Group is investing in numerous initiatives to reduce the GHG emissions and improve efficiency. The focus on the efficient operation of equipment is complemented by a transition to renewable biogas fuels produced from waste products such as biowaste, sewage sludge, animal manure and other by-products from industry and agriculture, and investments in electrification of suitable equipment.

Where unavoidable waste materials are generated, NRC Group investigates reuse and recycling options. The group has defined a recycling rate target of a minimum of 70%[4] and continue to pursue a zero waste ambition. Ultimately, it aspires to operate its business in a circular economic model, where waste is designed out of the system. In 2022, the total waste generated by the group's operating activities was 82,983 tonnes (2021: 203,860 tonnes), with a recycling rate of 94% (2021: 96%). With this performance, NRC Group has already reached its minimum target of a 70% recycling rate. According to the issuer, the recycling rate typically lies at 50-60 % in the construction industry in general.

Some of the most visible environmental impacts of NRC Group's activities occur on the work sites. Impacts such as noise, dust, vibration, emissions, soil and vegetation removal are all regulated and specified in the project contracts. NRC Group states that they are meeting and exceeding these environmental performance requirements, primarily through the implementation of NRC Group's environmental management system.

The Norwegian and Finnish operations of NRC Group are certified to ISO14001, the international environmental management standard. According to the issuer, they have a management system according to ISO14001 in Sweden as well, but as their main customer, Trafikverket, does not require the certificate, they have not applied for external assurance for their system. A core feature of the ISO14001 standard is the requirement to demonstrate continual improvements in environmental performance, year-on-year.

The issuer says that despite having a relatively low risk of biodiversity impacts because its operating sites are already established and located in transportation corridors and built environments, the projects maintain site management plans, including how NRC Group monitors and protects biodiversity values. Specific measures are taken where there are notable or vulnerable biodiversity areas on the sites, typically nature reserves or habitats of protected species. Projects may also occur in locations classified as protected groundwater areas. NRC Group states that they always adhere to strict work activity permits, local environmental regulations and its own environmental protection protocols.

[3] Scope 3 emissions cover emissions associated with business air travel (CO_2 directly from agent or mileage), company cars and purchased goods and services (light oil fuel).
[4] This is similar to the do-no-significant-harm criteria for climate mitigation in construction activities in the EU taxonomy.

In 2021, NRC Group published reporting on climate-related financial risks for the first time, following the Task Force on Climate-related Financial Disclosure (TCFD) recommendations. This is now done annually in their sustainability reports.

The new Norwegian Transparency Act ("Åpenhetsloven") came into force in July 2022. By 30 June 2023, Norwegian companies which are covered by the act, such as NRC Group, are obligated to carry out annually due diligence on their supply chain regarding fundamental human rights and decent working conditions. Companies are required to publish an account of their assessment. The due diligence has to be in line with the OECD Guidelines for Multinational Enterprises.

Green finance framework

Based on this review, this framework is found to be aligned with the Green Bond Principles[5] and Green Loan Principles[6]. For details on the issuer's framework, please refer to the green finance framework dated August 2023.

Use of proceeds

For a description of the framework's use of proceeds criteria, and an assessment of the categories' environmental impacts and risks, please refer to section 2.

Selection

NRC Group has established a green finance committee (GFC) to evaluate and select eligible green projects and to allocate net proceeds to such assets. The GFC will convene every six months or when otherwise considered necessary. The GFC holds the right to exclude any eligible green project already funded if the project no longer meets the eligibility criteria defined in the framework. Also, if a project is found to be controversial it will be excluded from green bond financing. If an eligible green project for any reason loses its eligibility, funds will then follow the procedure under Management of Proceeds until reallocated to other eligible green projects.

The Green Finance Committee consists of senior representatives from Group Finance and Sustainability. A list of the potential projects is presented to the GFC, which is solely responsible for the decision to acknowledge the projects as an eligible green project. A decision to allocate net proceeds will require a consensus decision from the GFC.

In the process of selecting eligible green projects and allocating net proceeds, the GFC will also consider aspects such as human and labour rights and the avoidance of significant harm to the other environmental objectives defined in the EU Taxonomy, to the extent possible.

Management of proceeds

NRC Group will use a register (Green Register) to monitor that an amount equal to the net proceeds from green debt issued are allocated to eligible green projects. The purpose of the Green Register is to ensure that net proceeds only support the financing of relevant eligible green projects or to repay any green debt outstanding. The Green Register will form the basis for the impact and allocation reporting.

In the event that the total outstanding net proceeds of the green debt exceed the value of the eligible green projects in the Green Register, such unallocated amount will temporarily be placed in the liquidity reserve and managed accordingly by NRC Group. Unallocated proceeds will not be used to invest in fossil fuel related assets.

[5] https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/
[6] https://www.lsta.org/content/green-loan-principles/

Reporting

NRC Group will annually until full allocation, and in the event of any material developments, provide investors with a green finance report describing the allocation of proceeds and the environmental impact of the green projects. The first report is expected to be published in conjunction with the annual report subsequent to the first issuance. Group Finance and Group Sustainability will be responsible for the reporting. As NRC Group can finance a large number of smaller green projects in the same project category, reporting may, to some extent, be aggregated. The reporting will not be linked to individual bonds. In the event NRC Group would have green debt other than bonds outstanding, the company may choose to report, in relation to these other financial instruments, directly and non-publicly to the lenders or counterparties. The green finance report will, to the extent feasible, include a section on the methodology used in the impact calculations. On occasion the reporting could be more on a descriptive level, typically when indirect effects of projects are reported.

Allocation reporting will include the following information:

- Nominal amount of outstanding green debt
- Relative share of new financing versus refinancing
- Descriptions of selected green projects financed
- The balance of unallocated proceeds, if any

In addition, NRC Group may, to the extent feasible, report on the EU Taxonomy alignment of the projects financed.

The impact reporting section aims to disclose the environmental impact of the green projects financed under the framework, based on NRC Group's share of each project, where feasible and subject to data availability.

The impact assessment may, if applicable, be based on the following impact indicators:

- Project description and environmental benefit
- Number of vehicles and/or construction machines
- Annual GHG emissions avoided (tonnes CO_2e)

The issuer states that reporting on own emissions and emissions avoided will be based on consistent methodologies (e.g., grid factors). An independent external party appointed by NRC Group may upon request, provide a review confirming that an amount equal to the net proceeds has been allocated to eligible green projects. As of now NRC Group is not committing to having the impact report verified independently.

2 Assessment of NRC Group's green finance framework

The eligible projects under NRC Group's green finance framework are shaded based on their environmental impacts and risks, based on the "Shades of Green" methodology.

Shading of eligible projects under NRC Group's green finance framework

- An amount equal to the net proceeds of the green debt will finance or refinance, in whole or in part, investments undertaken by NRC Group or its subsidiaries, in each case as determined by NRC Group in accordance with the green project categories defined below (eligible green projects). Where feasible, NRC Group will prioritise financing and refinancing of projects that are considered to be aligned with the EU Taxonomy, with particular focus on those that meet the technical screening criteria for climate change mitigation.
- For the first issuance, the expectation is that the majority of the proceeds will be for refinancing. According to the issuer, the majority of the proceeds will be for "infrastructure for rail transport".
- New financing is defined as green projects financed in and after the reporting year when the green debt is issued, and refinancing is defined as financing prior to the reporting year of when the green debt is issued.
- Operating expenditures will qualify with a maximum three-year look-back period prior to the issuance of the green debt. NRC Group states that they will exclude expenses for fossil fuel to the extent possible.
- Green debt net proceeds will not be allocated to activities that are dedicated to the transport or storage of fossil fuels.

Category	Eligible project types	Green Shading and considerations
Clean transportation	*Infrastructure for rail transport:* Expenditures related to the construction, modernisation, and maintenance of infrastructure for railways, where the trackside is electrified or where there is a plan for electrification. *Infrastructure enabling low-carbon public transport:* Expenditures related to construction, modernisation, maintenance of infrastructure and installations dedicated to light railway and metro lines with zero direct (tailpipe) CO_2 emissions, including associated signalling systems for metro, tram and rail systems.	**Dark Green** ✓ The increased use of electrified or otherwise zero direct tailpipe emission public and freight transport is a crucial element in the 2050 low carbon vision. The eligible projects have the potential to provide greater access to safe, affordable, accessible, and low carbon transport systems. Climate friendly construction and modernization of necessary infrastructure is therefore considered Dark Green, although they may entail substantial construction and embodied emissions. NRC Group is aware of this pitfall and tries to mitigate these emissions where possible. ✓ To be eligible, infrastructure for rail should be for projects where the trackside is electrified, or be fit for use by zero tailpipe CO_2 emission trains within 10 years from the

	Light and heavy vehicles and construction machines: Purchase, leasing and operation of light and heavy vehicles and construction machines powered by electricity or biogas, as well as associated infrastructure including electrical charging points.	beginning of the activity. The issuer states that they will not consider projects eligible that either are not or will not be electrified with certainty within ten years. ✓ Infrastructure projects includes but may not be limited to ballasts, sleepers, rails, switches, signalling systems, power supply systems, groundwork, and bridges. ✓ Construction, modernisation and maintenance may involve fossil fuels for vehicles and equipment. The issuer informs us that they will exclude fossil fuel powered equipment and planned expenditures for fossil fuel use but cannot guarantee exclusion of absolutely all fossil fuel purchases. They state that they will minimise this to the extent possible. The issuer also states that biogas vehicles only will be run on certified renewable biogas. ✓ Transport infrastructure construction can involve biodiversity risks and generate local pollution, including noise pollution. NRC Group undertakes environmental impact assessments and associated mitigation measures to manage these potential impacts. ✓ Decarbonising heavy vehicles and construction machinery is positive, given that they are hard to abate machinery. Similarly, benefits of charging points to facilitate electrification is positive. Within the framework agreement with electricity suppliers, NRC Group has agreed on the guarantee of origin for the electricity. ✓ Biogas to be used is produced from waste products such as biowaste, sewage sludge, animal manure and other by-products from industry and agriculture. According to the supplier, using biogas can help reduce lifecycle emissions by up to 90%.

Table 1. Eligible project categories

3 Terms and methodology

This note provides Shades of Green's second opinion of the client's framework dated August 2023**.** This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. Shades of Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

'Shades of Green' methodology

Shades of Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

	Shading	Examples
°C	**Dark Green** is allocated to projects and solutions that correspond to the long-term vision of a low-carbon and climate resilient future.	Solar power plants
°C	**Medium Green** is allocated to projects and solutions that represent significant steps towards the long-term vision but are not quite there yet.	Energy efficient buildings
°C	**Light Green** is allocated to transition activities that do not lock in emissions. These projects reduce emissions or have other environmental benefits in the near term rather than representing low carbon and climate resilient long-term solutions.	Hybrid road vehicles

The "Shades of Green" methodology considers the strengths, weaknesses and pitfalls of the project categories and their criteria. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised, including potential macro-level impacts of investment projects.

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. Shades of Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

Assessment of alignment with Green Bond Principles

Shades of Green assesses alignment with the International Capital Markets' Association's (ICMA) Green Bond Principles. We review whether the framework is in line with the four core components of the GBP (use of proceeds, selection, management of proceeds and reporting). We assess whether project categories have clear environmental benefits with defined eligibility criteria. The Green Bonds Principles (GBP) state that the "overall environmental profile" of a project should be assessed. The selection process is a key governance factor to consider in Shades of Green's assessment. Shades of Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance Shades of Green places on the selection process. Shades of Green assesses whether net proceeds or an equivalent amount are tracked by the issuer in an appropriate manner and provides transparency on the intended types of temporary placement for unallocated proceeds. Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs.

Appendix 1:
Referenced Documents List

Document Number	Document Name	Description
1	NRC Group Green Finance Framework 2023	NRC Group's Green finance framework
2	NRC Group - Environmental policy rev 1_3	NRC Group's Environmental policy
3	Code-of-Conduct-2022-NRC-Group-ASA	NRC Group's Code of conduct
4	Health working environment and safety policy NRC Group	NRC Group's Health working environment and safety policy
5	Åpenhetsloven-NRC-Group	The Norwegian Transparency law: Statement of due diligence assessments for NRC Group
6	Sustainability-report-2022	NRC Group's 2022 Sustainability report
7	Annual-report-2022	NRC Group's 2022 Annual report

Appendix 2:
About Shades of Green

Shades of Green, now a part of S&P Global and formerly part of CICERO, provides independent, research-based second party opinions (SPOs) of green financing frameworks as well as climate risk and impact reporting reviews of companies. At the heart of all our SPOs is the multi-award-winning Shades of Green methodology, which assigns shadings to investments and activities to reflect the extent to which they contribute to the transition to a low carbon and climate resilient future.

Shades of Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. Shades of Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. Shades of Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

Environmental Finance
Bond Awards
2022
Winner
External assessment provider of the year

- **2021 Largest External Reviewer,** Climate Bonds Initiative Awards
- **2020 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2020 Largest External Review Provider In Number Of Deals,** Climate Bonds Initiative Awards
- **2019 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2019 Largest Green Bond SPO Provider,** Climate Bonds Initiative Awards
- **2018 External Assessment Provider Of The Year,** Environmental Finance Green Bond Awards
- **2018 Largest External Reviewer,** Climate Bonds Initiative Awards
- **2017 Best External Assessment Provider,** Environmental Finance Green Bond Awards
- **2016 Most Second Opinions,** Climate Bonds Initiative Awards