



Bane NOR Eiendom AS

Green Bond Second Opinion

8 June 2020

Bane NOR Eiendom AS (“Bane NOR Eiendom”) is a major transportation hub developer and service provider to the railway in Norway, owning and managing real estate properties historically owned by the state railway company. Bane NOR Eiendom’s property portfolio ranges from office and commercial premises to railway stations, workshops and terminals. The company is 100% owned by Bane NOR SF, a state owned company responsible for the national railway infrastructure under the Ministry of Transportation and Communication.

Bane NOR Eiendom’s green finance framework includes projects within Clean transportation and Green buildings. Clean transportation provides infrastructure like workshops, depots and train storage for railways. Green buildings includes new commercial and residential buildings at communication hubs, and renovation of existing buildings. Sustainable hub development is stated as a core undertaking of Bane NOR Eiendom. The issuer expect a fifty-fifty share of financing of new investments and refinancing of previously financed projects within this green bond framework.

Bane Nor Eiendom has sound procedures for selection of eligible projects and management of proceeds. The issuer’s strong record of achievements within green buildings signal compliance with targeted certification levels of residential and commercial buildings. Targets are not set for infrastructure for clean transportation. However, the issuer’s record and environmental strategy points to that sustainability will be pursued also in these technical constructions.

Bane NOR Eiendom will be fossil free within 2021. Targets for other environmental indicators are, however, mainly qualitative and without timeline and the policies are not explicit on how to achieve them. The issuer, a large actor, does not set goals for greening of the supply chain, which means a loss of industry power behind initiatives for a more sustainable construction business.

Based on the overall assessment of the project types that will be financed by the green bonds, governance and transparency considerations, Bane NOR Eiendom green bond framework receives a **CICERO Medium Green** shading. Bane NOR Eiendom would benefit from climate risk reporting (TCFD) and more actively engaging its supply chain to reduce the environmental impacts of its activities.

SHADES OF GREEN

Based on our review, we rate the Bane NOR Eiendom’s green bond framework **CICERO Medium Green**.

Included in the overall shading is an assessment of the governance structure of the green bond framework. CICERO Shades of Green finds the governance procedures in Bane NOR Eiendom’s framework to be **Good**.



GREEN BOND PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated April 2020. 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. CICERO 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.

Expressing concerns with 'shades of green'

CICERO 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:

CICERO Shades of Green



Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.



Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.



Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.



Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.

Examples



Wind energy projects with a strong governance structure that integrates environmental concerns



Bridging technologies such as plug-in hybrid buses



Efficiency investments for fossil fuel technologies where clean alternatives are not available



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green bond framework. CICERO 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.



2 Brief description of Bane NOR Eiendom's green bond framework and related policies

Bane NOR Eiendom AS (“Bane NOR Eiendom”) is a major transportation hub developer and service provider to the railway in Norway, owning and managing real estate property historically owned by the state railway company. Bane NOR Eiendom's property portfolio ranges from office and commercial premises to railway stations, workshops and terminals in Norway. The company is involved in more than 200 property development projects mainly located at transportation hubs. By increasing the efficiency and appeal of rail transport, Bane NOR Eiendom has set itself the goal of encouraging more people to choose to travel by rail.

The company is 100% owned by Bane NOR SF (“Bane NOR”), a state-owned railway infrastructure company under the Ministry of Transportation and Communication. Bane NOR is responsible for a number of the country's largest public transportation projects and the upgrade of railway infrastructure under the The National Transport Plan¹ has great impact on Bane NOR Eiendom as a service provider and its real estate prospects.

Bane NOR Eiendom owns train stations and has a land bank of approximately 2,800 hectares with an estimated development potential of 2 million square meters mainly located close to transportation hubs, with the opportunity to impact environment through real estate development.

Environmental Strategies and Policies

Sustainability is an important part of Bane NOR Eiendom's business and the issuer will work to obtain a climate neutral society. In order to guide and assess Bane NOR Eiendom's progress in integrating climate risk into its operations, Bane NOR Eiendom has set the following environmental goals with respect to new property developments:

- Develop attractive and sustainable hubs with efficient land use and increased use of public transport. The hubs should incorporate good aesthetic solutions, high environmental standards, as well as having high functional value.
- All new buildings over 10,000 square meters shall be classified according to BREEAM-NOR, with the ambition of achieving a BREEAM-NOR Excellent classification.
- The ambition is also to achieving Energy Performance Certificate (EPC) label A for new buildings and EPC label B for renovation projects, as well as focus on reducing resource consumption.

Bane NOR Eiendom's Environmental strategy also states an ambition to develop attractive and well-functioning hubs. These ambitions are further outlined by the issuer, aligning with Bane NOR's parking strategy, which involves careful considerations about the impacts of car parking in urban versus rural areas and about their policy

¹ <https://www.regjeringen.no/contentassets/7c52fd2938ca42209e4286fe86bb28bd/en-gb/pdfs/stm201620170033000engpdfs.pdf>



to enhance walking, biking and providing facilities for electric vehicles and car cooperatives. The issuer cooperates closely with local authorities and transportation companies on hub development.

BaneNor Eiendom has a strong track record as documented in their Environmental Strategy of 19 October 2019. During 2010-2015, energy use and water consumption in buildings were both reduced by 21% and CO₂-emissions by 17%. Bane NOR Eiendom achieved Norway's first BREEAM-NOR Excellent certification of commercial buildings and Norway's first Energy Performance Certification (EPC) label A building. The Environmental Strategy states that the company of Bane NOR Eiendom plans to be fossil free by 2021. With regards to construction and real estate development the company will continue to challenge suppliers and achievements on non fossil solutions

Issuance of green bonds will enable Bane NOR Eiendom to integrate the company's environmental strategy into its funding and will enable the company to focus even more on positive environmental impacts.

Use of proceeds

The net proceeds raised from the issuance of Bane NOR Eiendom green bonds will be used to finance or re-finance, in whole or in part, a selected pool of assets that promote the transition to low-carbon and climate resilient growth and as determined by Bane NOR Eiendom in accordance with criteria defined in table 1 for the categories "Clean Transportation" and "Green buildings". Bane NOR Eiendom's green bonds can be used to finance new projects or refinance issued green bonds. The issuer expect a fifty-fifty share of financing of new investments and refinancing of previously financed projects within this grenn bond framework. New projects are projects and assets financed within 12 months from completion. For refinancing the look-back period is approximately three years for real estate and 10 years for transportation projects.

Selection

The selection process is a key governance factor to consider in CICERO Green's assessment. CICERO Green typically looks at how climate and environmental considerations are made when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

Eligible projects will be evaluated, selected and approved in consensus by a Green Bond Committee consisting of the Head of Sustainability, Head of Projects and Head of Finance. The group will ensure that the financing processes and the allocation of the proceeds from the Bane NOR Eiendom green bonds are structured or made, as applicable, in accordance with this Framework.

Management of proceeds

CICERO Green finds the management of proceeds of Bane NOR Eiendom to be in accordance with the 2018 Green Bond Principles.

Bane NOR Eiendom will establish a Green Bond Register to monitor the allocation of net proceeds from Bane NOR Eiendom's Green Bonds to eligible projects. Bane NOR Eiendom will build up and maintain a portfolio of eligible projects in a total amount at least equal to the aggregate net proceeds of all outstanding Green Bonds. The net proceeds raised under the Framework is managed by the Finance department of Bane NOR Eiendom.

An internal third party with relevant expertise and experience will annually assure the issuer's selection process for eligible projects and allocation of proceeds of Bane NOR Eiendom's green bonds, and that such processes and allocations are in accordance with the Bane NOR Eiendom's green bond framework.



If, for any reason, an eligible project is sold and/or no longer fulfil the eligible project criteria, such asset will be removed from the Green Bond Register and replaced by another eligible project.

Proceeds yet to be allocated towards eligible projects will be placed in Bane NOR Eiendom's liquidity reserves and managed as such. Unallocated capital from green bonds that may arise for a period will not be reinvested in stocks or debt instruments.

Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to build confidence in that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

To enable investors to follow the development and to provide insight to prioritised areas, the issuer will, until maturity of Bane NOR Eiendom's green bonds, provide an investor letter on an annual basis. All projects financed will be listed. The investor letter will include:

1. Total amount of green bonds issued.
2. When possible, further information of eligible projects financed, including a brief description and expected or actual impact where feasible.
3. Information on the allocation of green bond proceeds between new projects, refinancing as well as any unallocated balance outstanding.
4. When possible, list with further information on eligible projects financed, including a brief description and expected or actual impact where feasible:
 - a. Type of certification and level
 - b. Energy performance (kWh per produced m²)
 - c. CO₂ emissions
 - d. Waste from construction phase
 - e. Water intensity (m³ per m² and year)
 - f. Material consumption (kg per produced m²)

The green bond framework, the second party opinion, and the annual investor letter will be publicly available on Bane NOR Eiendom's Investor Relations webpage (<https://www.banenor.no/ir>).



3 Assessment of Bane NOR Eiendom’s green bond framework and policies

The framework and procedures for Bane NOR Eiendom’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. 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 in this section to note areas where Bane NOR Eiendom should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Bane NOR Eiendom’s green bond framework, we rate the framework **CICERO Medium Green**.

Eligible projects under the Bane NOR Eiendom’s green bond framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Clean transportation 	Investments in new supportive railway infrastructure, such as maintenance depots, trains storage and depot facilities	Dark Green. ✓ These investments are organic elements of clean transportation. The strong record of Bane NOR Eiendom in green building ensures that environmental friendly solutions will be implemented to an extent that is feasible in such highly specialized and technical buildings.



**Green
buildings**



- a) New construction of commercial buildings that have or with the objective to receive, after completed construction, a certification from BREEAM-NOR with a minimum certification level of “very good” and Energy Performance Certification label A.
- b) New construction of residential buildings that have or with the objective to receive, after completed construction, either a certification from BREEAM-NOR with a minimum certification level of “very good” and Energy Performance Certification label A or a Nordic Swan Ecolabel (Svanen) Certification.
- c) Major renovations of existing buildings, leading to reduced energy use per year on a m² basis of at least 30%.

Medium green

- ✓ Real estate development related to transportation hubs
- ✓ Achieving EPC Label A ensures energy savings in buildings.
- ✓ Buildings directly heated by fossil fuels such as natural gas will not be eligible.
- ✓ Efforts to influence environmental performance of subcontractors and fossil free supply chains are less focused.
- ✓ These projects are shaded medium green, acknowledging that the energy saving is substantial and represents a step towards a climate neutral society.

Table 1. Eligible project categories

Background

According to the International Energy Agency (IEA), the buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption in 2018 and nearly 40% of total direct and indirect CO₂ emissions. Appliances (excluding heating, cooking and cooling appliances) are responsible for around 17% of final electricity use by buildings. The energy and emissions savings potential remain largely untapped because of continued use of less efficient technologies, lack of effective policies and weak investments in sustainable buildings. The IEA’s Sustainable Development Scenario suggests 50% of new constructed building area in 2030 to be near zero emission – in addition to increased renewable heat sources up to 25% in 2030.² Energy efficient buildings are important building blocks towards reaching the 2°C goal. Heating from buildings account for 2.1 percent of Norwegian on-land emissions, the materials, construction and demolition phase of the building lifecycle constitute additional emissions³. The building sector has developed a roadmap for sustainable growth towards 2050, which includes a number of recommendations for the sector. Some of the key recommendations include certifying the organization, removing all fossil fuel heating, requesting fossil free construction sites and commissioning an energy budget for the estimated actual and energy consumption⁴.

Physical climate change such as extreme events and flooding are affecting all sectors and regions already. Due to historical emissions, we are de facto locked in for approximately 1.5°C global warming.⁵ Given today’s policy ambition, the world is most likely heading toward 3°C warming in 2100 which implies accelerated physical climate impacts, including more extreme storms, accelerated sea level rise, droughts and flooding.⁶ For near-term physical risk, investors and companies must consider the probabilities of physical events and resiliency measures to plan

² <http://www.iea.org/tcep>

³ <https://www.miljostatus.no/tema/klima/norske-klimagassutslipp/klimagassutslipp-bygg/>

⁴ <https://byggalliansen.no/wp-content/uploads/2019/02/roadmap2050.pdf>

⁵ <https://www.cicero.oslo.no/en/posts/news/scientists-demystify-climate-scenarios-for-investors>

⁶ https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf



for and protect against the worst impacts. For the Norwegian building sector the most severe physical impacts will likely be increased flooding and urban overflow, as well as increased storms and extreme weather. Developing projects with climate resilience in mind is critical for this sector.

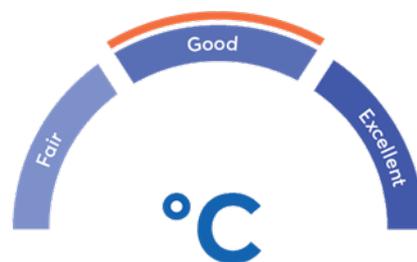
EU Taxonomy

The proposed EU taxonomy for sustainable finance⁷ includes a number of principles including a “do-no-harm clause” and safety thresholds for various types of activities. CICERO Green will not here verify Bane Nor Eiendom’s framework against the full EU taxonomy, but notes that the taxonomy includes specific thresholds for the real estate sector. The design and construction of new buildings needs to ensure a net primary energy demand that is at least 20% lower than the level mandated by national regulations. Buildings with energy label A in Norway are expected to be aligned with the taxonomy. Ownership or acquisition of buildings built before 2021 needs to have an energy performance in the top 15% of similar stock. It is unclear how this will be applied in the Norwegian context. All large non-residential buildings should have dedicated energy management system.

Energy saving renovations for existing properties that result in buildings lowering their primary energy demand with 30% are also to be classified as sustainable within the EU Taxonomy. It is further anticipated that activities related to infrastructure for electrified railways such as maintenance depots, trains storage and depot facilities and energy efficiency, are to be classified as sustainable according to the EU Taxonomy. Based on this we note that Bane Nor’s green bond framework potentially could be aligned with the EU taxonomy provided a more in depth scrutiny of the do no significant harm requirements.

Governance Assessment

Four aspects are studied when assessing the Bane NOR Eiendom’s governance procedures: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.



The overall assessment of Bane NOR Eiendoms’s governance structure and processes gives it a rating of **Good**. In order to achieve an Excellent rating Bane NOR Eiendom could improve its climate risk reporting (TCFD), set more specific overall environmental targets and work more actively with its supply chain.

Strengths

Bane NOR Eiendom has a strong record in carrying out large construction projects with green profiles and their environmental strategy is clearly pointing towards continuation and strengthening of these achievements. In addition, Bane NOR Eiendom is a facilitator of flexible public transportation hubs that in itself is an important move towards a low carbon future. The links to the owner Bane NOR and to local authorities is likely to enhance integration and good solutions.

Bane NOR Eiendom’s environmental strategy indicates a broad approach to sustainable construction activity. In this Green Bond framework, Bane Nor Eiendom sets targets for certifications level and energy standard. The issuer

⁷ Taxonomy: Final report of the Technical Expert Group on Sustainable Finance, March 2020. https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy_en



informs us that Bane NOR Eiendom have quantitative targets for greenhouse gases and local pollutants, and often also have environmental requests in procurements contracts.

Eligible projects will be selected in consensus by a Green Bond Committee. Environmental expertise is member of the Committee, which will ensure that the financing processes and the allocation of the proceeds from the Bane NOR Eiendom Green Bonds are in accordance with this Framework. The project selection procedure is sound and aligns with the Green Bond Principles. Screening for controversial projects, e.g. project with public opposition, are not specified,

Bane NOR Eiendom will establish a Green Bond Register to monitor the allocation of net proceeds from Bane NOR Eiendom's Green Bonds to eligible projects. An internal third party with relevant expertise will assure that Bane NOR Eiendom's selection process is in accordance with this Framework.

The annual investor letter will inform about total amount of green bonds issued and provide further information on eligible projects and allocation of proceeds. In addition, Bane NOR Eiendom will report on selected environmental indicators such as avoided CO₂ emissions and use of materials, waste and recycling, thus filling in some information gaps caused by the composite nature of the BREEAM NOR certificates.

For investments in Clean transportation (train workshops, depots) there are no specific targets for energy/environmental achievements for these highly specialized and technical facilities. However, being anchored in Bane NOR Eiendom's Environmental strategy and their solid record of achievements, Bane NOR Eiendom is likely to deliver marked environmental results.

Weaknesses

Bane NOR Eiendom, a large actor, does not always set goals for greening of the supply chain, which means a loss of industry power behind initiatives for a more sustainable construction business. However, the issuer informed us that quantitative targets and requirements might be imposed at project level.

Pitfalls

The CICERO Dark Green shading is difficult to achieve in particular in the building sector because buildings have a long lifetime. CICERO Dark Green shading in the building sector should therefore conform to strict measures and is reserved for the highest building standards such as BREEAM Outstanding and LEED Platinum, Zero-Energy buildings and passive houses. Buildings certifications fall short of guaranteeing an environmentally-friendly building. Therefore, CICERO Green also looks at the energy efficiency improvements of the building and targets that exceed regulations. The highest potential to reduce energy consumption will result from improvements made to the existing building stock. The energy efficiency requirements for existing buildings in the framework is aligned with the 30% improvement by 2025 which IEA recommends for renovation of buildings. The issuer should be conscious of the improvement in standards that will be required over time in order to reach the 2050 targets.

CICERO Green also assesses if there is any screening for potential impacts from more extreme weather events, such as flooding and forest fires. Flood risk for properties is of particular concern in vulnerable geographic regions such as those close to rivers that are exposed to flood risks.

Efficiency improvements may lead to rebound effects. When the cost of an activity is reduced there will be incentives to do more of the same activity. If energy efficiency investments in buildings reduce consumption of renewable energy, use of renewable energy will be enhanced through price and market effects. For fossil fuel reductions, the market effect is similar but not sustainable.



Efficient land use is highlighted in Bane NOR Eiendom's environmental strategy as a factor enhancing green solutions by reducing demand for transportation. However, efficient land use coincides with high return on investments and might put aesthetic values like green areas, sunlight and privacy under pressure, elements that also have a place in a green future.

The reporting that will be provided to investors convey some uncertainty about the scope of information that will be provided.



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Bane NOR Eiendom AS Green Bond Framework April 2020	Outlines Bane NOR Eiendom's position as a leading transportation hub developer and their environmental criteria for their projects financed with green bonds.
2	Bane NOR Eiendom Miljøstrategi accessed 20191211 https://banenoreiendom.no/dokumentfil18?pid=Native-ContentFile-File&attach=1	Highlights the ambitions and considerations in project development. årsra
3	Bane NORs parkeringsstrategi 2017 BaneNOR/KNE/sh, versjon 2.0, 28 september 2017	Gives a thorough introduction to the task of providing the right services for sustainable transportation hubs, while taking care of local variations in need and opportunities.
4	Bane Nor Eiendom årsrapport 2019	Bane NOR Eiendom Annual report 2019 https://2019aarsrapport.banenoreiendom.no



Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO 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. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

