

‘Second Opinion’ on NorgesGruppen’s Green Bond Framework

January 23rd, 2019

Summary

NorgesGruppen's green bond framework together with its climate and environmental policies provide a strong base for climate-friendly investments. Overall, CICERO finds the framework to be aligned with the Green Bond Principles.

NorgesGruppen has solid management and governance structures in place. NorgesGruppen takes a holistic, scientifically informed approach to sustainable development and has set itself ambitious emission reduction goals. NorgesGruppen has informed us that resiliency considerations are evaluated individually for every project, along with a number of other environmental considerations. However, CICERO encourages the issuer to consider a more systematic approach towards climate risks to follow up the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. The framework supports the issuers' corporate strategy, and includes a sound selection process, as well as, transparent reporting on green bond projects to investors and the public. CICERO is encouraged also that not only emissions reductions, but also other indicators that measure the transition to a low carbon and climate resilient society will be reported. To make it easier for investors to be regularly updated on impacts, it is a strength that the issuer indicates when the report will be available (first report April 2020), an exact date would have been even better. The overall assessment of the governance structure of NorgesGruppen gives it a rating of Excellent.

The green bond framework lists eligible projects which promote the transition to low carbon, climate resilient growth and a sustainable development in Norway. Proceeds will fund clean transportation, green buildings and renewable energy. According to the issuer, the majority of proceeds will be allocated to renewable energy followed by green buildings. The allocation of proceeds to clean transportation is dependent on technology and policy developments. CICERO encourages the issuer to take a holistic view of green bond investments. Investments in renewable energy and clean transportation can work to enhance the environmental impact of green buildings. For example, heat pumps and exchanges that could be funded under the renewable energy category, or the installation of charging stations. Green bond proceeds can be used to finance both new projects as well as refinance existing eligible projects. NorgesGruppen has informed CICERO that the aim is to allocate most of the proceeds to new projects.

Based on the overall assessment of the project types that will be financed by the green bonds and governance and transparency considerations, NorgesGruppen's Green Bond Framework is rated Dark Green.



°CICERO
Dark Green

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1 Introduction and background

As an independent, not-for-profit, research institute, CICERO (Center for International Climate and Environmental Research - Oslo) provides Second Opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The Second Opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings, teleconferences and e-mail correspondence with the client.

CICERO 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 has established the global Expert Network on Second Opinions (ENSO), a network of independent non-profit research institutions on climate change and other environmental issues, to broaden the technical expertise and regional experience for Second Opinions. CICERO works confidentially with other members in the network to enhance the links to climate and environmental science, building upon the CICERO model for Second Opinions. In addition to CICERO, ENSO members currently include Basque Center for Climate Change (BC3), International Institute for Sustainable Development (IISD), Stockholm Environment Institute (SEI), and Tsinghua University's Institute of Energy, Environment and Economy. A more detailed description of CICERO can be found at the end of this report. ENSO 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.

CICERO's Second Opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO does not validate or certify the climate effects of single projects, and thus, has no conflict of interest in regard to single projects. CICERO is neither responsible for how the framework or mechanisms are implemented and followed up by the institutions, nor the outcome of investments in eligible projects.

This note provides a Second Opinion of NorgesGruppen's Green Bond Framework and environmental policies. The aim is to assess the Green Bond Framework as to its ability to support NorgesGruppen's stated objective of supporting the global transition from a fossil-based economy towards a low-carbon and climate resilient economy.

This Second Opinion is based on the green bond framework presented to CICERO by the issuer. Any amendments or updates to the framework require that CICERO undertake a new assessment. CICERO takes a long-term view on activities that support a low-carbon climate resilient society. In some cases, activities or technologies that reduce near-term emissions result in net emissions or prolonged use of high-emitting infrastructure in the long-run. CICERO strives to avoid locking-in of emissions through careful infrastructure investments, and moving towards low- or zero-emitting infrastructure in the long run. Proceeds from green bonds may be used for financing, including refinancing, new or existing green projects as defined under the mechanisms or framework. CICERO assesses in this Second Opinion the likeliness that the issuer's categories of projects will meet expectations for a low carbon and climate resilient future.

Expressing concerns with ‘shades of green’

CICERO/ENSO Second Opinions are graded dark green, medium green or light green, reflecting the climate and environmental ambitions of the bonds and the robustness of the governance structure of the Green Bond Framework. The grading is based on a broad qualitative assessment of each project type, according to what extent it contributes to building a low-carbon and climate resilient society. The shading methodology also aims at providing transparency to investors when comparing green bond frameworks exposure to climate risks. A dark green project is less exposed to climate risks than a lighter green investment.

This Second Opinion will allocate a ‘shade of green’ to the green bond framework of NorgesGruppen:

- **Dark green** for projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future. Typically, this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities.
- **Medium green** for projects and solutions that represent steps towards the long-term vision, but are not quite there yet.
- **Light green** for projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil-based processes).
- **Brown** for projects that are irrelevant or in opposition to the long-term vision of a low carbon and climate resilient future.

Assessing governance

In assessing the governance quality of the issuer, four aspects are studied: The policies and goals of relevance to the green bond framework; the selection process used to identify eligible projects under the framework; management of proceeds and 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.

Overall shading

The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations are also important because they give an indication whether the institution that issues the green bond will be able to fulfil the climate and environmental ambitions of the investment framework. Hence, the governance assessment plays a role in the overall shading of the framework. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The overall shading reflects an ambition of having the majority of the project types well represented in the future portfolio, unless otherwise expressed by the issuer.

2 Brief Description of NorgesGruppen's Green Bond Framework and rules and procedures for climate-related activities

NorgesGruppen is one of the largest food retail companies in Norway, with 1835 grocery stores, 914 points of sale as retail convenience goods stores, 1021 independent retailers and 40 000 employees from 70 different nationalities.

NorgesGruppen has set ambitious goals for climate change mitigation, environment and eco-systems. The company has a ten-year track record of working systematically to reduce environmental impacts. The long-term goal of the issuer is to be a climate-neutral business. Near-term goals focus on renewable fuel distribution, improvements in waste management and production of renewable energy. The sustainability framework focuses on five action areas: a sustainable value chain, improved public health, increased capacity building, reduction of greenhouse gas emissions and environmental impacts and local value creation in Norway.

Norgesgruppen has identified seven UN Sustainable Development Goals (SDGs) that are relevant for their sustainability work. The green bond framework targets three SDGs through the categories described in table 2: Goal 7. Affordable and Clean Energy, Goal 11. Sustainable Cities and Communities and Goal 13. Climate action.

Use of proceeds:

NorgesGruppen green bond framework will fund eligible projects and assets with the aim of supporting sustainable development and the transition to a low carbon intensity economy. According to NorgesGruppen, proceeds will fund projects aimed at reducing greenhouse gas (GHG) emissions, including investments in low-carbon, clean technology and environmentally sound solutions. In addition to mitigation, some eligible projects and assets aim to contribute to adaptation to climate change by improving resilience to expected changes in the micro-climate and local environment *and/or* environment and ecosystems. The framework also allows for up to 15 percent of the net proceeds to support environmental investments with a positive environmental impact other than direct mitigation of climate change.

The net proceeds will be used exclusively to finance and refinance projects and assets in Norway. The framework specifies three categories: clean transportation (1), green buildings (2) and renewable energy (3). Net proceeds from green bonds will be used to finance new projects and/or refinance existing projects that are selected from a pool of "Eligible Projects and Assets". The long-term ambition of NorgesGruppen is to allocate the majority of the proceeds to new projects and assets. New projects are defined as projects and assets financed within 12 months from completion.

Green bond proceeds will not be allocated or linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defense research and development, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

Selection:

The selection process is a key governance factor in the Green bond Principles. CICERO considers how climate and environmental considerations are taken into account when evaluating whether projects can qualify for green bond funding. The NorgesGruppen green bond framework outlines a detailed and transparent selection procedure that is in line with the Green Bonds Principles.

To be considered for green bond funding, projects must comply with Norgesgruppen's policies and guidelines, including their purchasing policy and sustainability policy. In addition, all projects must comply with the local laws and regulations¹.

Norgesgruppen's green bond framework lists criteria for each eligible project category, to be funded projects and assets must comply to these green terms. The issuer's business units will identify and nominate projects for green bond funding to a business council that evaluates projects and is responsible for ensuring compliance with the green terms. The business council is made up of members of senior management at NorgesGruppen and includes sustainability expertise. The final approval of the eligible projects and assets requires a consensus among the business council members. Decisions of the council will be documented and a list of all eligible projects and assets that meet the green terms will be kept on file at NorgesGruppen.

The green bond framework includes a process for removing non-complying projects from the pool of funded projects or assets. According to the issuer, the financial department and the project owner have the responsibility for an ongoing review of projects against set goals, and to remove non-performing projects.

Management of proceeds:

NorgesGruppen will credit the net proceeds of any issuance under the Green Bonds Framework to an earmarked account – the "Green Account". Financing or refinancing of eligible projects and/or assets will be deducted from the Green Account. Pending allocation of the net proceeds and while the Green Account has a positive balance, the proceeds may be invested or utilized by treasury in accordance with NorgesGruppen's financial policy. These investments are limited to Norwegian government notes (including related entities), Norwegian municipal notes (included related entities) or commercial papers issued by Nordic banks and corporates.

If an eligible green project or asset no longer qualifies according to the Green Terms or if the underlying eligible green project and asset is divested, an amount equal to the funds will be re-credited to the Green Account pending reallocation to other eligible green projects and/or assets. Reallocation of net proceeds to other eligible green projects and/or assets may occur at any point during the term of the Green Bond. Any change in the Green Account will be kept on record by NorgesGruppen treasury.

CICERO finds the management of proceeds to be in accordance with the Green Bond Principles.

Transparency and Accountability:

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green bond programs. Procedures for reporting and disclosure of green bond investments are also vital to build confidence that green bonds are contributing towards a sustainable and climate-friendly future, both among investors and in society. NorgesGruppen has committed to annual reporting on its green bonds. The report will

¹ Note that Norway is on the list of Equator Principles Designated Countries, which is defined as "those countries deemed to have robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the natural environment." <http://equator-principles.com/designated-countries/>

contain both use of proceeds and impact reporting, including information on the eligible green projects and assets, their adherence to the relevant criteria in the green bond framework and a summary of NorgesGruppen’s Green Bond activities in the preceding year. The first such report is expected to be published in April 2020 and will be available in Norwegian. The issuer has informed us that they will evaluate the possibility for English language reporting.

NorgesGruppen commits to disclosure: the sum of outstanding green bonds, the Green Account balance including any short term investments or funds, the proportion of net proceeds allocated to new investments, and the allocation to each of the use of proceeds categories in the green bond framework. Emphasis will be placed on providing examples and allocation reporting to single projects based on size. All data will be reported as of the end of previous year.

The NorgesGruppen green bond framework includes detailed and comprehensive reporting on the environmental impact/ performance of projects and assets. The reporting will contain disclosure of asset level performance indicators and the issuer will strive to disclose impact based on the green bond financing’s share of the total investment. NorgesGruppen will strive to provide estimates of future performance levels for projects and assets that are not yet operational.

NorgesGruppen will emphasize energy production/savings and greenhouse gas savings as the most relevant performance metrics for most project types. According to the issuer, both (gross) greenhouse gas emissions and savings, the number of financed low carbon vehicles, the number of charging stations and the amount of hydrogen produced will be reported for assets in the clean transportation category. For the category green buildings, the issuer will disclose the environmental certification, energy consumption by absolute consumption and intensity and the calculated carbon footprint by emissions and intensity. The metrics for renewable energy category are yearly production of energy from renewable sources, total energy used by real estate assets from renewable energy installations and prevented CO² emissions from renewable energy production.

The reporting will be publically available through a dedicated webpage for Green Bonds at the issuers s website (<https://www.norgesgruppen.no/finans/gjeldsfinansiering/gronne-obligasjonslan/>) where investors can find information regarding NorgesGruppen’s Green Bonds.

The external auditor of NorgesGruppen, or a similar party appointed by NorgesGruppen with the relevant expertise and experience will investigate and report whether an amount equal to the Green Bond net proceeds have been allocated to the Eligible Green Projects and Assets that NorgesGruppen has communicated in the Reporting. The conclusions will be provided in a signed statement, which will be published on NorgesGruppen’s website.

Table 1. below lists the documents that formed the basis for this Second Opinion:

Document Number	Document Name	Description
1	NorgesGruppen's Green Bonds Framework January 23 rd , 2019	This document comprises NorgesGruppen’s Green Bonds Framework and how it intends to use proceeds, how it plans to evaluate

		and select eligible projects, manages the proceeds and reports to investors.
2	NorgesGruppen's Annual and Sustainability Report 2017	This document outlines NorgesGruppen's ambitions and goals for 2020.
3	Ethical Guideline	Online description of the ethical matters related to NorgesGruppen's area of activity, including personal conduct, conflict of interests, anticorruption policy, placing influence and mishandling of sensitive information as well as sanctions in case of violation of these policies.
4	Code of Conduct	The document describes NorgesGruppen position on conditions at and outside of the workplace and on environment and animal welfare.
5	NorgesGruppen Financial Policy 2018	This is non-public document that contains NorgesGruppen overall financial policy.
6	NorgesGruppen Sustainability Policy 2018	This is non-public document that contains NorgesGruppen overall sustainability policy.
7	NorgesGruppen Procurement Policy 2018	This is non-public document that contains NorgesGruppen overall procurement policy.
8	Presentation on sustainability and climate	A non-public presentation with information about sustainability and climate strategy and initiatives

Table 1. Documents reviewed

3 Assessment of NorgesGruppen’s Green bond framework and environmental policies


Overall shading

Based on the project category shadings detailed below, and consideration of the issuer’s systematic sustainability work, governance structure and transparency considerations, the NorgesGruppen green bond framework is rated **CICERO Dark Green**. According to the issuer, the category renewable energy, will cover the majority of projects, followed by green buildings. The issuer informed us that the share allocated to the clean transportation category depends on policy and technology developments.

The project category green buildings is rated medium green. Investments in the other categories can work to enhance the environmental impact of green buildings. For example, heat pumps and exchanges that could be funded under the renewable energy category, or the installation of charging stations that could be funded under clean transportation. CICERO encourages the issuer to take a holistic view of green bond investments.

Eligible projects under the 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 certainty to investors that their investments deliver environmental returns as well as financial returns.

Category	Eligible project types	Green Shading and some concerns
Clean Transportation 	<ul style="list-style-type: none"> • Financing of transportation vehicles with electric or hydrogen technology • Supportive infrastructure such as charging stations, hydrogen production facilities and other investments that support and emphasize the use of clean transportation solutions 	Dark green <ul style="list-style-type: none"> ✓ This category includes innovative solutions that have large potential to foster real change in the sector. ✓ According to the issuer, all hydrogen production will be based on renewable energy sources such as solar power ✓ Supply chain and life cycle impacts are continuously evaluated and new goals are established based on these evaluations

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- ✓ Other investments refer to logistics associated with hydrogen production and installing charging stations

Green Buildings



- Financing of development, acquisition, renovation or otherwise completed commercial properties, such as store and warehouses within NorgesGruppen that have or will receive a BREEAM “Excellent” or “Outstanding”:
 - Design stage certification *and*
 - Post-construction certification *or*
 - In-use certification
- The building will also follow the application national building code (TEK17)

Medium green

- ✓ In addition to climate issues, BREEAM covers a broader set of issues, which is important to overall sustainable development.
- ✓ In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive and plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments
- ✓ The issuer has informed us that they take resiliency considerations, material choice and transportation solutions into account in projects on a case-by-case basis
- ✓ Buildings with fossil fuel power sources are excluded

Renewable Energy



Financing of renewable energy production, such as:

- Wind power installations
- Small hydropower plants (<10 MW)
- Emissions-free geothermal heating and cooling installations
- Heat pumps and heat exchangers
- On-site solar power installations or stand-alone solar farms
- Related infrastructure investments for example grid connections, electric substations, networks or foundations

Dark green

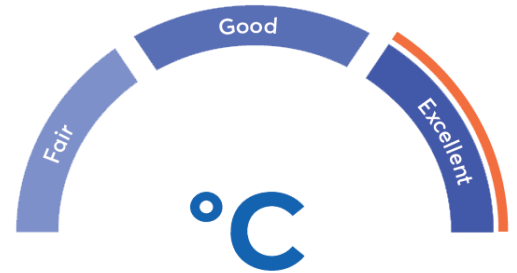
- ✓ Land-use issues may arise from building wind and solar plants. Negative impacts on biodiversity have been linked to wind power plants.
 - ✓ Also small-scale hydropower projects can be associated with the risks of negative local environmental impacts. The issuer has confirmed that only run-of-river projects could be funded.
 - ✓ The issuer has informed us that the heat pumps run on electricity and use excess heat from store refrigeration
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- ✓ The issuer has confirmed that any grid infrastructure will be directly linked to additional renewable energy sources
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Table 2. Eligible project categories

Governance assessment

In assessing the governance quality of the issuer, four aspects are studied: The policies and goals of relevance to the green bond framework (1), the selection process used to identify eligible projects under the framework (2), the management of proceeds (3) and the reporting on the projects to investors (4). 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 the governance structure of NorgesGruppen gives it a rating of Excellent. NorgesGruppen has appropriate and relevant strategies, targets and policies, and reports on emissions and other relevant environmental aspects of their business. The issuer does not carry out climate scenario analysis or risk assessment in alignment with the methodology recommended by TCFD². However, Norgesgruppen takes resiliency considerations into account in projects on a case-by-case basis.

The issuer shows a sound and clearly communicated selection process that includes the ability of environmental specialists to veto projects. The framework also includes impressive impact reporting. NorgesGruppen will transparently disclose project results based on an appropriate selection of impact indicators and will report annually towards investors.

Strengths

Governance

NorgesGruppen has a comprehensive environmental policy, governance and reporting structure and a ten-year track record of working systematically to reduce environmental impacts. According to the issuer, sustainability is an integral part of their operations and is supported by relevant environmental and climate targets. Environmental goals are evaluated yearly and performance is clearly communicated, quantifiable and openly available online. It is a strength that NorgesGruppen takes a holistic, scientifically informed approach to sustainable development and has set itself ambitious emission reduction goals.

NorgesGruppen has an overall good track record on reporting on its environmental targets and impacts. The issuer has informed us that they have evaluated a number of reporting standards and have chosen the integrated sustainability and finance reporting with an emphasis of short (2020) and medium-term (2025) goals. The

² Task Force on Climate-Related Financial Disclosures (TCFD) provides a framework for companies to develop voluntary climate-related financial disclosures that are consistent, comparable, reliable, clear and provide decision-useful information to lenders, issuers and investors. <https://www.fsb-tcfid.org/>

comprehensive reporting towards stakeholders includes reporting on total emissions as well as emission reductions.

A number of near-term goals have been established, and according to the issuer, the following goals will be achieved by 2020 with a high degree of certainty:

- 100% renewable fuel in distribution
- 25% reduction of food waste in own operations
- 85% recycling of waste at source
- 11% own produced or released renewable energy.

According to Norgesgruppen's annual reporting, significant progress towards the goals was achieved in 2017. For example, the company reduced food waste by 19 % from 2015 to 2017, and 680 of their stores implemented energy efficiency measures amounting to a total 30 million kWh savings. As some goals are achieved fully or partly, new goals are added, the most recent of these is reducing the use of plastic by 20% by 2025. CICERO is encouraged to see that NorgesGruppen is working with systematic environmental screening in its value chain.

NorgesGruppen has informed CICERO that there is no established strategy for evaluating the sustainability strategy of vendors, but this evaluation is a natural part of the process. For transport, NorgesGruppen requires a written assessment of the vendors' climate impacts.

CICERO considers it a strength that consensus among the members of the business council is required in the selection and evaluation process of the potential eligible projects. It is also positive that the business council includes representatives from the sustainability, treasury and business units and the CFO.

The framework includes comprehensive impact reporting. CICERO is encouraged also that not only emissions reductions, but also other indicators that measure the transition to a low carbon and climate resilient society are reported. It is also positive that NorgesGruppen has agreed to be transparent on methodologies for these impact assessments. To make it easier for investors to be regularly updated on impacts, it is a strength that the issuer indicates when the report will be available (first report April 2020). The further specification of the exact date would have been even better.

Project Categories

CICERO takes a long-term view on climate change, and thus recommends excluding projects that support prolonged use of fossil fuel-based infrastructure that will contribute to emissions in the long run. It is strength that fossil energy generation is explicitly excluded from the framework. The issuer has further confirmed that the exclusion criteria listed in the framework, including fossil fuel energy sources, will also be applied to any unallocated proceeds

Projects eligible under NorgesGruppen are diverse and reflect the various areas in which the corporation can make effective use of green investments. CICERO considers it a strength that the categories in framework represent core business areas for the issuer, and that investments in one category can enhance the environmental impact of projects in other categories. For example, heat pumps and exchanges will improve the impact of a green building, as will the installation of charging stations.

The clean transportation category includes innovative technologies and highlights NorgeGruppen's climate leadership. The issuer owns a solar powered hydrogen production station and will further invest in hydrogen and electric utility vehicles and supportive infrastructure.

Investments in renewable energy are key to the low-carbon transition. These projects can also represent a risk of negative local environmental impacts, which the issuer has taken steps to mitigate through their systematic approach to environmental impacts. In addition, according to the issuer, the local community and businesses are taken into consideration in the evaluation of renewable energy projects. It is a strength that NorgesGruppen engages with stakeholders for new renewable energy projects.

Weaknesses

No significant weaknesses perceived.

Pitfalls

Governance

The adaptation to climate change is vital to industries with widespread real estate assets and transportation networks. NorgesGruppen has informed us that resilience is evaluated individually for every project. For example, adaptation measures have been taken in some buildings to manage heavy loads of snowfall and runoff related to snowmelt and heavy precipitation. However, CICERO encourages the issuer to consider a more systematic approach towards overall resilience and adaptation.

The framework includes comprehensive reporting on use of proceeds and impacts. The use of proceeds reporting is reviewed by a third-party. CICERO encourages the issuer to consider expanding this review to also include impact reporting.

Project Categories

The total environmental impact of buildings over their life time is difficult to calculate with accuracy. Energy efficiency is key, but it is not sufficient to ensure low overall environmental impact and a good living environment. Impacts from the construction phase, the choice of material, water use, pollution and access to public transport are also important factors that determine a buildings overall sustainability.

The framework includes green buildings certification, which takes into account many of these aspects, but do not guarantee energy performance. NorgesGruppen is aware of the negative environmental impacts of building construction and renovation. The issuer has informed us that the selection of construction material and waste management is a natural part of construction projects which are decentralized and the responsibility lies with the project owner. Further, the issuer has informed CICERO that they systematically work with energy efficiency in their buildings. Buildings have their own energy management system and NorgesGruppen follows the performance through an energy efficiency tracking system. An additional safeguard is that buildings that rely on fossil energy sources will not be funded.

In a low carbon 2050 perspective, the energy performance of buildings is expected to be improved, with zero emission technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. The issuer is taking critical steps in this direction, but it should be mindful of the need for continuous improvements in terms of raising the bar on this criteria.

Impacts beyond the project boundary

Due to the complexity of how socio-economic activities impact the climate, a specific project is likely to have interactions with the broader community beyond the project borders. These interactions may or may not be climate-friendly, and thus need to be considered with regards to the net impact of climate-related investments.

Rebound effects

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. From the project categories in Table 2, an example is green buildings. NorgesGruppen should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

Appendix: About CICERO

CICERO Center for International Climate Research is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international climate cooperation. We collaborate with top researchers from around the world and publish in recognized international journals, reports, books and periodicals. CICERO has garnered particular attention for its work on the effects of manmade emissions on the climate and the formulation of international agreements and has played an active role in the UN's IPCC since 1995.

CICERO is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Second Opinions won several international prizes, including an award from Climate Bonds Initiative for being the biggest second opinion provider (2017) and two awards from Environmental Finance for being the best external review provider (2017, 2018).

CICERO Second Opinions are graded dark green, medium green and light green to offer investors better insight in the environmental quality of green bonds. The shading, introduced in spring 2015, reflects the climate and environmental ambitions of the bonds in the light of the transition to a low-carbon society.

CICERO works with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions. Led by CICERO, ENSO is comprised of trusted 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). ENSO operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

cicero.oslo.no/Greenbonds

