°CICERO Shades of Green

Magnolia Bostad
Green Bond Second Opinion

September 16, 2020

Magnolia Bostad develops resource effective buildings using materials that minimize the buildings' negative environmental impact in Sweden's growth areas and major cities. The company creates modern homes and living environments while also engaging in social activities and projects in the areas where it operates. Magnolia Bostad delivers complete offers of rental apartments, tenant-owned apartments, residential care facilities and hotels to municipalities that want to develop new and existing neighbourhoods.

Magnolia Bostad's updated framework lists eligible assets and projects in the Green Bond Principle category "Green buildings". Proceeds can be allocated to both new and existing projects (with a look-back period of 5 years) with at least an environmental standard of either Miljöbyggnad Silver (or higher) or Svanen. Included in the updated framework are wood-frame buildings, which must be certified according to the same standard. The issuer has specified the wood-frame buildings are likely to be 40% more energy efficient than Swedish BBR regulations and made from FSC and PEFC certified wood. Note, however, that buildings are primarily heated with the district heating, which may be based on fossil fuel infrastructure. In most cases, Magnolia Bostad's customers buy the buildings prior to their construction, however, under this framework, proceeds may be used to bypass this process and temporarily cover the cost of construction.

Magnolia Bostad is committed to support the UN Sustainable Development Goals (SDGs) and has a long-term ambition of becoming a climate neutral company by 2045. Magnolia Bostad recognises the disproportionate impact of material use on emissions from buildings, and therefore conducts life cycle analyses and screening of contractors and suppliers, regarding waste management, transportation and re-use and re-cycling of materials. The impact reporting is relevant but primarily focuses on energy use of the projects and omits emissions reporting. Although not strictly aligned with guidelines from TCFD, Magnolia Bostad carries out geo-analytical assessments for all projects, which includes an analysis of physical climate risk factors for projects where this is deemed relevant.

Based on the overall assessment of the project types in the framework of Magnolia Bostad, governance and transparency considerations, the green bond framework receives an overall **CICERO Medium Green** shading and a Governance score of **Good**. In order to achieve a darker green shading, the green bond framework would need a clearer requirement that the best environmental technologies are used in eligible building projects, clearer quantitative climate targets in the shorter term and more comprehensive impact reporting.

SHADES OF GREEN

Based on our review, we rate the Magnolia Bostad'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 Magnolia Bostad'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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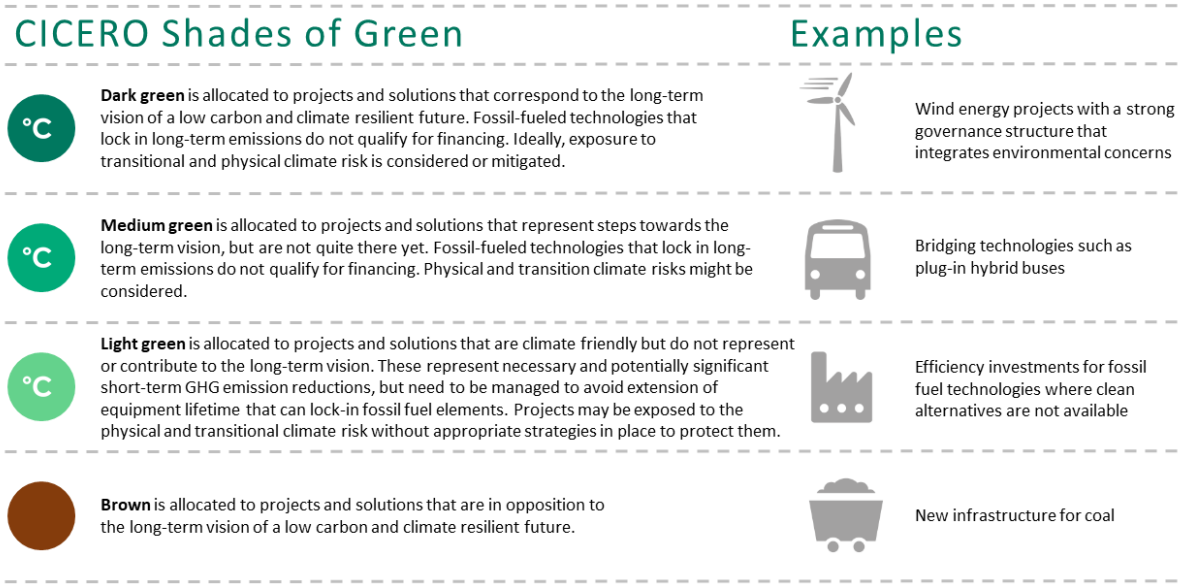
1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework updated September 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:



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. 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. 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.

2 Brief description of Magnolia Bostad's green bond framework and related policies

Magnolia Bostad develops resource effective buildings using materials that minimize the buildings' negative environmental impact in Sweden's growth areas and major cities. The company creates modern homes and living environments while also engaging in social activities and projects in the areas where it operates. This business model allows Magnolia Bostad to deliver complete offers of rental apartments, tenant-owned apartments, residential care facilities and hotels to municipalities that want to develop new and existing neighbourhoods.

Environmental Strategies and Policies

The overarching climate target for Magnolia Bostad is to be climate neutral by 2045 by mainly reducing own emissions and then compensating remaining own emissions by buying emission quotas from others. The ambition is also to contribute to a climate neutral sector. Magnolia Bostad has an internal target that they should be climate neutral with their internal operations by 2030. They have identified eight of the UN Sustainable Development Goals that align with their practices, including, but not limited to, Goal 7- Affordable and clean energy, Goal 11- Sustainable cities and communities, and Goal 13- Climate action. According to the issuer, energy efficiency in Magnolia Bostad's buildings is currently significantly lower than the required levels from the Swedish National Board of Housing, Building and Planning.

Magnolia Bostad's environmental policy follows the intentions of ISO14001 and ISO9001. Together with the code of conduct, the environmental policy is part of all bigger supplier agreements and they expect all employees, business partners, suppliers, and contractors to abide by the policy and other goals connected to minimizing negative environmental impact. All construction of buildings is undertaken by contractors which are heavily screened against the environmental policy. Magnolia Bostad actively lowers the negative environmental impact of the company's suppliers by having dialogues regarding environmentally friendly waste management, transportation as well as the re-use and re-cycling of materials. Magnolia Bostad's broad sustainability work entails many different focus areas, of the greatest interest for this framework is the life cycle analysis (LCA) that Magnolia Bostad performs on chosen projects[1]. All materials and products are evaluated from a life-cycle perspective to mitigate environmental and/or health risks. The purpose is to identify where Magnolia Bostad can have the largest influence and to develop good choices of sustainable materials.

Wood-based projects are a key area of priority for the company moving forward and the updated framework from September 2020 involves the addition of a wood building sub-category. A life-cycle analysis conducted in 2018 illustrated the significant potential for emissions reductions by replacing concrete with wood for the frame of the buildings. Thus, Magnolia Bostad entered into a partnership with Derome, a company providing wood-based building solutions, to construct environmentally friendly wood-frame buildings. The wood is locally sourced and PEFC and FSC certified.

[1] In the LCA, a Swedish energy mix is assumed for electricity and a 'Stockholm energy mix' for district heating.

The company strives to make sure to prepare all buildings for certification according to Miljöbyggnad Silver (or higher), Svanen or equivalent. According to the 2019 sustainability report, 992 of 1020 buildings were environmentally certified. As a consequence of climate change, sea levels are expected to rise, and extreme weather become more common. Magnolia Bostad takes these climate related risks into account when developing new all projects by conducting geo-analytical and environmental risk assessments in cooperation with environmental consultants. The geo-analytical assessment helps determine whether it is relevant for the specific project to also conduct a risk analysis of climate risk factors such as extreme weather, flood risk and heat stress.

Magnolia Bostad's sustainability work and Code of Conduct align with the UN Global Compact, and reporting is done according to GRI standards. The company is a member of the Swedish Green Building Council (SGBC).

Use of proceeds

Proceeds will, in part or in full, finance eligible assets and projects in the Green Bond Principle category "Green buildings". Proceeds can be allocated to both new and existing projects with a look-back period of 5 years.

The company cooperates with others to find climate resilience solutions for the communities. Proceeds may be used to fund the part cost of any joint venture covered by Magnolia Bostad, in the cases where ownership is at least half of the venture to ensure that Magnolia Bostad's high environmental standard is enforced.

Buildings are in most cases sold before the issuer starts to build them. The issuer has an account for receivables towards the buyer. Instead of waiting for them to pay the receivable, the issuer wants to fund these receivables in order to use the money for green investments. Hence, proceeds may also be used to for example fund customer receivables in projects which obtain at least an environmental certification of Miljöbyggnad Silver (or higher) or Svanen before the new owner takes possession of the building. The verification of the certification is done after two years and is made by the new owner of the project. Should a project or asset at any given time no longer be deemed as eligible as per the above stated criteria, it will be replaced.

Proceeds will not be used for investments in fossil fuel related infrastructure.

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 considered 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.

Magnolia Bostad has established a Green Bond Committee to oversee, in an inhouse assessment that only assets and projects eligible under this framework are funded by proceeds from any Green Bond. The issuer will have a documented process to follow when they start working with the proceeds. The Green Bond Committee consists of the CFO, the Manager of Sustainability as well as the Head of Legal Department. The Manager of Sustainability has experience from the real estate market and is responsible for the Sustainability strategy and for the GRI-reporting in the annual report. Each member of the committee has the right to veto against any asset or project. The group shall meet no more seldom than twice yearly, and notes of which projects and assets they deem as eligible per this framework will be saved.

Management of proceeds

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

Magnolia Bostad will keep a registry of all Green Bonds issued under this framework for the purpose of monitoring the allocation of the amount equal to the net proceeds to eligible projects and assets. Proceeds will be allocated to a portfolio of disbursements. Magnolia Bostad will over the duration of the company's outstanding Green bonds build up and maintain an aggregate number of projects and assets in the Green register that exceeds the aggregate net proceeds of all outstanding Green bonds of Magnolia Bostad.

The total outstanding net proceeds of Magnolia Bostad's Green bonds may at times temporarily exceed the value of the eligible assets and projects in the Green register. The auditor's report will clarify how much that has been issued and total amount allocated. Any unallocated amount will be held in accordance with Magnolia Bostad's normal Financial policy. No investment from the green bond will be used to finance investments linked to fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, potentially environmentally negative resource extraction, gambling or tobacco.

The Green Funding Register is maintained by Magnolia Bostad's Green Bond Committee and will form the basis of the impact report.

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 that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

For as long as it has green bonds outstanding, Magnolia Bostad will make publicly available on its website an annual impact report. The CFO will be responsible for the reporting which will be on a portfolio basis. The impact report will enclose information regarding both allocation and impact (measured where feasible, otherwise estimated). Magnolia Bostad will, to the extent possible, report on follows metrics amongst others:

- The total aggregated sum of green bonds issued.
- A full list of all projects that has been allocated proceeds from green Bonds.
- For the project portfolio, the proposed environmental certificate and information regarding whether an independent environmental consultant has overseen the building.
- For all completed buildings i) the environmental certification obtained before the new owner takes it into possession ii) annual energy saved per square meter (energy consumption compared to relevant building code) and iii) if applicable, the calculated annual renewable energy possible to produce at the building, such as solar power.
- For buildings made predominantly out of wood, Magnolia Bostad will report on the CO_2 emissions avoided by using wood compared to alternative conventional materials (e.g. concrete). Calculations will be based on CO_2 emissions reporting from the wood supplier.

Magnolia Bostad's auditor will make a limited assurance as to the allocation of proceeds in the impact report.

3 Assessment of Magnolia Bostad's green bond framework and policies

The framework and procedures for Magnolia Bostad'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 Magnolia Bostad 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 Magnolia Bostad's green bond framework, we rate the framework **CICERO Medium Green.**

Eligible projects under the Magnolia Bostad'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
Green buildings	✓ Proceeds may be used to fund the projects in Magnolia Bostad's portfolio of planned projects ("exploateringsportfölj"), which are planned to at least reach the environmental standard of either Miljöbyggnad Silver (or higher) or Svanen. ✓ Proceeds may be used to fund the part cost of any joint venture covered by Magnolia Bostad, in the cases where ownership is at least half of the venture to ensure that Magnolia Bostad's high environmental standard (certified as detailed above) is enforced. ✓ Proceeds may be used to fund customer receivables (temporarily cover payments	**Medium Green** ✓ A Dark Green shading is reserved for the highest building standards such as net-zero energy buildings and passive houses. Magnolia Bostad is taking steps towards this long-term vision. ✓ Miljöbyggnad and Svanen place significant emphasis on energy efficiency measures. Efficiency of building envelopes needs to improve by 30% by 2025 to keep pace with increased building size and energy demand.[4]

[4] https://www.iea.org/topics/tracking-clean-energy-progress

from buyers) in projects of Magnolia Bostad's which obtain at least an environmental certification of Miljöbyggnad Silver (or higher) or Svanen before the new owner is moving in.[2]

✓ Proceeds may be used to fund Magnolia Bostad's portfolio of planned projects constructed mainly in wood[3] and to be certified as Miljöbyggnad Silver (or higher), or to fund customer receivables in project constructed in wood before the new owner takes possession of the building.

✓ Although voluntary environmental certifications such as Miljöbyggnad and Svanen can measure or estimate the environmental footprint of buildings and raise awareness of environmental issues, they fall short of guaranteeing an environmentally friendly building. They do not guarantee a reduction in greenhouse gas emissions nor necessarily include considerations of climate resiliency.

✓ The issuer considers accessibility to clean transportation for every project. They install charging infrastructure and storage and repair units for bikes.

✓ Wood buildings will be certified according to Miljöbyggnad Silver or Svanen. There are no energy efficiency requirements for wood buildings, but the issuer has specified that energy efficiency will likely be 40% better than Swedish BBR regulations.

✓ The issuer has informed us that all wood material will be sourced from local sustainable forestry in Sweden and will be certified according to FSC and PEFC standards. These standards are stringent and include measures to promote biodiversity and conservation of old growth trees, thresholds for sustainable logging, as well as regulations to reduce impacts of transport routes on local ecosystems. Additionally, for every harvested tree, two new trees are planted.

✓ Wood frames are constructed on site to minimize impact and transport distances.

✓ Wood projects will be mostly rental accommodations. Wood cabins or

[2] Miljöbyggnad Silver requires, among other things, the primary energy demand of residential buildings and commercial buildings to be 20% and 30% lower than the national building regulation, respectively.
[3] Wood will be used for the frame instead of concrete, lowering the initial carbon footprint of the building by around 30%.

	hotels are not expected to be included.

Table 1. Eligible project categories

Background

The construction and real estate sector have a major impact on our common environment. According to the National Board of Housing, Building and Planning's environmental indicators, it accounts for 32% of Sweden's energy use, 31% of waste and 19% of domestic greenhouse gas emissions. Calculations from Sveriges Byggindustrier indicate that the climate impact of new production of a house is as great as the operation of the house for 50 years.

As members of the EU, Sweden is subject to the EU's climate targets of reducing collective EU greenhouse gas emissions by 40% by 2030 compared to 1990 levels, increasing the share of renewable energy to 32% and improving energy efficiency by at least 32.5%.[5] The European Green Deal aims for carbon neutrality in 2050.[6] Sweden has developed a National Energy and Climate Plan (NECP) in which it outlines the targets and strategies in all sectors.[7] These strategies include measures such as increasing renewable energy capacity, increasing energy efficiency, facilitating the large scale implementation of clean transportation alternatives, and increasing carbon sinks through reforestation and the LULUCF sector. Non-ETS emissions, of which public buildings and households are a part, must decrease by 63% by 2030.

The building sector accounts for a large share of primary energy consumption in most countries, and the IEA reports that the efficiency of building envelopes needs to improve by 30% by 2025 to keep pace with increased building size and energy demand – in addition to improvements in lighting and appliances and increased renewable heat sources.[8] The energy efficiency of buildings is dependent on multiple factors including increasing affluence and expectations of larger living areas, growth in population and unpredictability of weather, and greater appliance ownership and use. Additionally, approximately half of life-cycle emissions from buildings stem from materials/construction. The other half stems from energy use, which becomes less important over time with the increasing adoption of off-grid solutions such as geothermal and solar. All of these factors should therefore be considered in the project selection process. In addition, voluntary environmental certifications such as LEED and BREEAM or equivalents measure or estimate the environmental footprint of buildings and raise awareness of environmental issues. These points-based certifications, however, fall short of guaranteeing a low-climate impact building, as they may not ensure compliance with all relevant factors e.g., energy efficiency, access to public transport, climate resilience, sustainable building materials. Many of these factors are covered under the World Green Building Council's recommendations for best practices for developing green buildings.[9] CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

The Exponential Roadmap[10] lays out a trajectory for reducing emissions by 50% by 2030 and requires that emissions reductions strategies within the buildings sector be rapidly scaled up. The roadmap advocates for standardised strategies that are globally scalable within areas such as new procurement practices for construction

[5] https://ec.europa.eu/clima/policies/strategies/2030_en
[6] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
[7] https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans_en
[8] https://www.iea.org/reports/building-envelopes
[9] https://www.worldgbc.org/how-can-we-make-our-buildings-green
[10] https://exponentialroadmap.org/wp-content/uploads/2020/03/ExponentialRoadmap_1.5.1_216x279_08_AW_Download_Singles_Small.pdf

and renovation that require dramatically improved energy and carbon emission standards, developing new low-carbon business models for sharing space and smart buildings to achieve economies of scale, and allocating green bond funding for sustainable retrofitting and construction.

A large number of LCA studies show that wood-frame building results in lower primary energy and GHG emission compared to non-wood alternatives including concrete and steel. Less energy, in particular fossil fuels, is needed to manufacture wood-based building materials compared with alternative non-wood materials. Wood-based materials use primarily biomass residues for processing energy. Wooden materials also store carbon during their lifetime, temporary sequestering carbon from the atmosphere. Large amounts of biomass residues are produced during the manufacture and end-of-life of wood products, and these can be used to replace fossil fuels. Hence, wood-based buildings are appropriate for long-term strategies for reducing fossil fuel use and GHG emissions when combined with sustainable forestry[11]. Quantitative estimates are imprecise, but some studies indicate energy savings of the order of one third in the construction phase of wood buildings compared to buildings using mainly other materials.

EU Taxonomy

The proposed EU taxonomy for sustainable finance includes a number of principles including a "do-no-harm clause" and safety thresholds for various types of activities.[12] Do-No-Significant-Harm criteria include measures such as ensuring resistance and resilience to extreme weather events, preventing excessive water consumption from inefficient water appliances, ensuring recycling and reuse of construction and demolition waste and limiting pollution and chemical contamination of the local environment. CICERO Green will not here verify Magnolia Bostad's framework against the full EU taxonomy, but notes that the taxonomy includes specific thresholds for the real estate sector, briefly summarized as follows:

1. 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.
2. Ownership or acquisition of buildings built before 2021: Energy performance in the top 15% of similar stock.
3. Renovations should deliver 30% energy savings.
4. Large non-residential buildings should have a dedicated energy management system.

The taxonomy also highlights the importance of lifecycle emissions including a focus on building material such as wood. 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 energy efficiency, including installation of solar panels, heat pumps, extension of district heating and cooling, are to be classified as sustainable according to the EU Taxonomy.

Magnolia Bostad's framework indicates that most of its green financing will be aligned with the EU Taxonomy. New constructions certified with Miljöbyggnad Silver satisfy or exceed the requirement of 20% lower primary energy demand than the level determined by the Swedish BBR national regulations. The issuer has further informed us that wood projects will likely be at least 40% more efficient than national regulations.

[11] R&D Fund for public real estate, The Swedish Association of Local Authorities and Regions (2016): Climate impacts of wood vs. non-wood buildings. https://webbutik.skl.se/bilder/artiklar/epub/7585-377-2.epub
[12] 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

Governance Assessment

Four aspects are studied when assessing Magnolia Bostad'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. 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.

Magnolia Bostad has as an ambition that their internal operations shall be climate neutral by 2030, and otherwise contribute to the Swedish building sector's target of being climate neutral by 2045. Suppliers and contractors are subject to strict environmental screening on waste, materials use and transportation. They do have a sound selection process with veto power for the environmental expertise in the Green Bond Committee. Management of proceeds are in accordance with the Green Bond Principles (2018). The reporting, which is on a portfolio level, aligns with GRI standards and is focused primarily on energy use. The issuer does not conduct emissions reporting from its activities. Magnolia Bostad has completed life-cycle assessments to inform their activities, including one on their buildings to assess the impact of concrete which led to the inclusion of wood buildings in their updated framework. Although not strictly aligned with guidelines from TCFD, Magnolia Bostad carries out geo-analytical assessments of each project, which also includes risk analysis of climate risk factors such as extreme weather, flood risk and heat stress for certain relevant projects.[13] We note that these assessments are not yet fully integrated into the company strategy or selection processes.

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

Strengths

The framework of Magnolia Bostad is well aligned with the Green Bond Principles (2018). The eligible category, Green buildings, is well defined and provide important steps toward a low carbon future. The criteria for eligible projects under the Green building category are commendable, but do not yet deliver the solutions needed in a low-carbon 2050 perspective (e.g., passive house technology).

The company is in close dialogue with suppliers regarding environmentally friendly waste management, transportation as well as the re-use and re-cycling of materials. Life cycle analysis of buildings, resilience considerations and strong environmental requirements of sub-contractors, are other strong points of the framework. A life-cycle analysis conducted in 2018 indicated the significant potential in emissions reductions by replacing concrete frames with wood frames on their buildings, and wood-based projects are now a key area of priority for the company.

Weaknesses

We find no substantial weaknesses in the green bond framework of Magnolia Bostad.

[13] https://www.fsb-tcfd.org/publications/final-recommendations-report/

Pitfalls

Although voluntary environmental certifications such as Miljöbyggnad and Svanen or equivalents can measure or estimate the environmental footprint of buildings and raise awareness of environmental issues, they fall short of guaranteeing an environmentally friendly building, as they do not always lead to a reduction in greenhouse gas emissions nor necessarily include considerations of climate risk and resiliency.

The wood-frame buildings are not subject to additional efficiency requirements under this framework, beyond what is outlined in the Miljöbyggnad and Svanen certifications. Although the company expects energy efficiency improvements of around 40%, CICERO Green encourages robust screening to ensure energy efficiency measures are sufficiently prioritized and followed through in the design process of wooden buildings. Additionally, wood that is certified with FSC and PEFC has clear benefits, however there is a case to be made for conducting an alternatives analysis on a case-by-case basis to consider the relative environmental impact of wood buildings vs. old growth forests and the ecosystem services they provide.

While it is commendable that Magnolia Bostad conducts rigorous environmental risk analyses, including for climate risk factors for projects where this is relevant, these are not yet fully integrated into company strategy and selection processes. CICERO Green encourages the issuer to implement the TCFD recommendations to better incorporate findings from their risk analyses into company strategy. Additionally, CICERO Green encourages to ensure that the method for determining the necessity of a climate risk analysis is robust and accounts for multiple climate scenarios.

We note a lack of quantitative climate targets for the company in the shorter term up to 2030, and a lack of impact reporting beyond energy use in the operation of the buildings. Consistent emissions reporting should be a key step to allow for strategic progression towards the company's goal of climate neutrality by 2045.

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. This is particularly the case when it comes to transport solutions associated with the buildings, although the issuer has informed us that all buildings are designed with clean transportation solutions in mind. 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.

Efficiency improvements to buildings may lead to rebound effects, as when the cost of an activity is reduced there will be incentives to do more of the same activity. If efficiency improvements are directed towards fossil-fuel based infrastructure/equipment, there is a risk that the volume of absolute emissions increases. Magnolia Bostad should be aware of such effects and possibly avoid green bond funding of projects where the risk of rebound effects is particularly high.

Most of the buildings in Magnolia Bostad's portfolio are heated with district heating, which may include certain elements of fossil fuels. CICERO Green would encourage the issuer to strive to decarbonize both the heating and electricity sources of their buildings.

Appendix 1:
Referenced Documents List

Document Number	Document Name	Description
1	Magnolia Bostad Green Bond Framework	Green Bond Framework dated September 2020
2	Uppförandekod_190219	Code of conduct
3	Etiska rådet, instruktion med bilagor	Ethical guidelines
4	Magnolia Bostad Hållbarhetsrapport 2019	Sustainability report for Magnolia Bostad for the year 2019.

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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).