°CICERO Shades of Green

Besqab AB
Green Finance Second Opinion

April 28, 2021

Besqab AB ("Besqab") works mainly within residential development. Founded in 1989, Besqab has chosen to concentrate on the local housing markets in Greater Stockholm and the city of Uppsala. The head office is located in Danderyd north of Stockholm. Besqab's business consists of two segments: Residential Development for sale to private individuals and Property Development and Real Estate including development of rental apartments and community service properties (incl. nursing homes and pre-schools). Management of own properties is also the responsibility of this last business area. Besqab had a revenue of 949.6 MSEK in 2020, 563 new projects were started, 341 properties sold and profit before taxes amounted to 256.8 MSEK according to segment reporting.

It is expected that the majority of proceeds from Besqab's Green Finance Framework will be allocated towards the category Green and Energy Efficient Buildings with criteria based on the Nordic Swan Ecolabel and Miljöbyggnad Silver, or Energy Performance Certificate A or B. Renovation leading to at least 30% improvement in energy use is also eligible under this category. The other eligible category is Energy Efficiency. Initially the largest share of the proceeds under the framework will be for new financing. The look back period for re-financing will be up to two years.

Besqab supports and will follow the national road map for climate neutral construction and shares the objective of being climate neutral by 2045. The road map stipulates that actors in the building and construction sector should measure their greenhouse gas (GHG) emissions and decide on climate targets by 2022, have reduced their GHG emissions by 50% by 2030 relative to 2015, and further reduced them by 75% by 2040. Meanwhile, Besqab has set as targets to ensure certification of all projects according to Nordic Swan Ecolabel or Miljöbyggnad Silver. Currently, Besqab does not report on greenhouse gas emissions. Besqab considers climate risks related to flooding and temperatures in the design phase or before a property is bought, and introduce mitigating actions accordingly. They do not, however, follow the TCFD recommendations and climate scenario analysis. Besqab's policy towards sub-contractors largely follows from the Nordic Swan Ecolabel requirements. The requirements of this classification schemes applies to all parties involved in the construction of the building.

Based on the overall assessment of the eligibility criteria in the green finance framework, governance and transparency considerations, the framework receives an overall **CICERO Medium Green shading**. In order to achieve a Dark Green shading, the green finance framework would need stronger eligibility criteria in the Green and Energy Efficient Buildings category.

SHADES OF GREEN

Based on our review, we rate the Besqab's green finance framework **CICERO Medium Green.**

Included in the overall shading is an assessment of the governance structure of the green finance framework. CICERO Shades of Green finds the governance procedures in Besqab's framework to be **Good.**

GREEN BOND PRINCIPLES

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

°CICERO Medium Green

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Green

Contents

1 Terms and methodology ____ **3**
Expressing concerns with 'Shades of Green' ... 3

2 Brief description of Besqab's green finance framework and related policies ____ **4**
Environmental Strategies and Policies ... 4
Use of proceeds ... 5
Selection ... 6
Management of proceeds ... 6
Reporting ... 7

3 Assessment of Besqab's green finance framework and policies ____ **8**
Overall shading ... 8
Eligible projects under the Besqab's green finance framework ... 8
Background ... 10
Governance Assessment ... 11
Strengths ... 12
Weaknesses ... 12
Pitfalls ... 12

Appendix 1: Referenced Documents List ____ **14**

Appendix 2: About CICERO Shades of Green ____ **15**

1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated April 2021**.** 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	Examples
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.	Wind energy projects with a strong governance structure that integrates environmental concerns
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.	Bridging technologies such as plug-in hybrid buses
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.	Efficiency investments for fossil fuel technologies where clean alternatives are not available

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 finance 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 finance 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 Besqab's green finance framework and related policies

Besqab AB (Besqab) has for more than 30 years developed housing in Stockholm County and Uppsala in Sweden. Besqab was founded in 1989 and the business concept is to develop new homes with knowledge and understanding of how people want to live their lives. They have chosen to concentrate on the local markets in Greater Stockholm and the city of Uppsala. The head office is located in Danderyd north of Stockholm with a regional office in Uppsala. The business is conducted in two business areas:

Within *Residential Development*, Besqab conducts operations throughout the value chain for housing development, from the acquisition and detailed planning of raw land to the production of turnkey housing. The business area refers to the development of apartment units and single-family homes for sale to private individuals including i) tenant-owner apartments (Sw. "bostadsrätter"), ii) condominiums with outright ownership rights (Sw. "ägarlägenheter"), and iii) single-family homes with outright ownership rights or tenant-owner rights (Sw. "äganderätter").

In *Property Development and Real Estate*, Besqab develops rental apartments and community service properties including nursing homes and pre-schools. Management of own properties is also the responsibility of this business area.

Besqab had a revenue of 949.6 MSEK in 2020, 563 new projects were started, 341 properties sold and profit before taxes amounted to 256.8 MSEK according to segment reporting.

Environmental Strategies and Policies

The construction sector in Sweden has, within the framework of the government initiative Fossil-Free Sweden[1], formed a strategic plan with the ultimate goal of becoming fossil-free by 2045. The initiative challenges companies, organizations, municipalities and regions to implement concrete measures to reduce greenhouse gas emissions. Besqab has committed to the agreement.

Besqab focuses on building energy-efficient houses, making well-thought-out material choices and reducing greenhouse gas emissions. The company also works to reduce waste by using sustainable materials and ensuring that an increased share of waste is reused or recycled. The ambition is to reduce the environmental and climate impact of Besqab's properties throughout the entire life cycle of the building. Besqab has set as targets to ensure certification of all projects according to Nordic Swan Ecolabel, to increase resource efficiency in production, and to increase the share of renewable energy. The work to obtain a basic license within the Nordic Swan Ecolabel for Besqab started in 2019 – a long process where routines, work processes and templates are reviewed and evaluated by Ecolabelling in Sweden. The basic license was approved in June 2020, which means that Besqab can continue the work of Nordic Swan Ecolabelling individual housing projects. At the end of the year, Besqab had applied for Nordic Swan Ecolabelling for a total of ten ongoing or upcoming projects, and of the 563 homes that started production in 2020, 74% are undergoing the Nordic Swan Ecolabelling process.

[1] https://sustainabledevelopment.un.org/partnership/?p=33918

Besqab will only use green electricity from renewable sources on its contruction sites and offices. In addition, solar cells are installed in projects where possible to increase the proportion of renewable electricity. Sewage heat exchangers are installed in some projects to utilize waste heat.

As Besqab builds according to the Nordic Swan Ecolabel, the company has indirectly a target to limit the average energy intensity in newly built houses to minimum 10-15% below current regulations. This implies a target of 41 kWh/m^2 for detached houses and 67.5 kWh/m^2 for apartment buildings. In 2019 (the lastest year with data), Besqab realized 36.6 kWh/m^2 and 58.4 kWh/m^2 for detached houses and apartment buildings, respectively, thus reaching the target. Even nursing homes with an energy intensity of 67.1 kWh/m^2 came in below the target value of 67.5 kWh/m^2.

Besqab has previously reported the company's climate impact by mapping direct and indirect emissions in a limited part of the business, mainly emissions from company cars and other business trips including accommodation, as well as consumption of electricity, district heating and cooling in the office. As these emissions are insignificant in size and only correspond to a very small part of the emissions that occur in the housing construction value chain, Besqab has decided to not report them in the latest 2020 company sustainability report. They have as ambition, however, to start estimating scope 3 emissions related to the construction phase, mainly from transport and materials, for projects started in 2022. Also, by commiting to the national road map for climate neutral construction, Besqab intend to follow the associated road map that stipulates that actors in the building and construction sector should measure their greenhouse gas (GHG) emissions and decide on climate targets by 2022, have reduced their GHG emissions by 50% by 2030 relative to 2015, and further reduced them by 75% by 2040.

The last reporting on (scope 1, 2 and 3[2]) emissions of CO_2 was in 2019. Then, total emissions was 150.1 tCO_2, of which 41% was scope 1, 5% scope 2 and 54% scope 3 emissions. Total emssions increased by 2% from 2018 with a substantial increase in scope 1 emissions (44%) but a reduction in scope 3 emissions (-17%).

Finally, Besqab has targets for, and monitor and report on, construction waste intensities (kg/m^2) and percentage of unsorted construction waste. The targets are 30 and 22 kg/m^2 for the waste instensities associated with detached houses and apartment buildings, respectively. The target for unsorted waste is to be below 3%. In 2020, the realized numbers where 44.7 and 26.8 kg/m^2 for the waste intensities and 14% for the unsorted waste fraction, all above the target values.

Besqab does not follow the TCFD recommendations and climate scenario analysis. They do, however, consider climate risks related to flooding and temperatures in the design phase or before a property is bought, and introduce mitigating actions accordingly.

Besqab's policy towards sub-contractors largely follows from the Nordic Swan Ecolabel requirements. The requirements of this classification schemes applies to all parties involved in the construction of the building. Use of the ID06 system[3] provides some social safeguards for people at the constructions sites.

Use of proceeds

An amount equivalent to the net proceeds from Besqab's green finance instruments shall be used to finance or re-finance, in part or in full, eligible assets providing distinct environmental benefits ("Green Eligible Assets"). The

[2] The scope 3 emissions here covers purchase of, for example, office supplies as well as travel and accommodation in the service.
[3] ID06 has several areas of use such as attendance registration in electronic personnel files, digitization of diplomas, company control and access and lock functions. Thus, companies in the ID06 system must meet legal requirements for business activities; individuals in the ID06 system must have one, and only one, secured identity; and the employer relationship between company and individual must be ensured.

criteria for eligibility are shown in table 1 and covers the categories Green and energy efficient buildings and Energy efficiency. The issuer informs us that initially the largest share of the proceeds will be for new financing in the Green and Energy Efficient Buildings category. The look back period will be up to two years. Later, re-financing of nursing homes may become relevant.

Green eligible assets can be owned by Besqab or by any if its subsidiaries or joint ventures. For the latter mentioned, the value of green eligible assets is to be adjusted for the share of capital owned by Besqab.

The proceeds of Besqab's green finance instruments will not be used to finance either fossil fuel energy generation, nuclear energy generation, weapons and defence industries nor potentially environmentally negative resource extraction, gambling or tobacco. Besqab will follow the development of the green financing market and manage any future updates of the Green Finance Framework to reflect current and future market practices (e.g. relating to the EU taxonomy) and potential updates to the Green Bond Principles and Green Loan Principles.

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.

According to the issuer, Besqab will continuously exercise its professional judgement, discretion and sustainability expertise when identifying the eligible assets. The selection of eligible assets is managed by a dedicated group, the Green Finance Committee ("GFC"). Members of the GFC consist of the CEO, CFO and Technical Manager. The Technical Manager holds the sustainability expertise as of now, and going forward Besqab will assure that the sustainability expertise always relies within the GFC. All decisions are made in consensus, and this applies to the selection process of eligible assets as well. The selection decisions are independently reviewed once a year by an external expert. A list of eligible assets is kept by the Finance Department who is also responsible for keeping it up to date.

Management of proceeds

CICERO Green finds the management of proceeds of Besqab to be in accordance with the 2018 Green Bond Principles and Green Loan Principles.

The list of eligible assets is monitored on a regular basis during the term of the green finance instruments to ensure that the proceeds are sufficiently allocated to eligible assets. This is also a responsibility of the GFC. Equivalent to the net proceeds from Besqab's green finance instruments will be tracked by using a spreadsheet where all issued amounts of green finance instruments will be inserted. The spreadsheet will contain the list of eligible assets. Information available in the spreadsheet will in turn serve as basis for regular reporting.

All green finance instruments issued by Besqab will be managed on a portfolio level. This means that a green finance instrument will not be linked directly to one (or more) pre-determined eligible assets. Besqab will keep track and ensure there are satisfactory eligible assets in the portfolio.

Assets can, whenever needed, be removed or added to/from the eligible assets' portfolio. Any unallocated proceeds will be temporary held by Besqab and placed on the company's ordinary bank account.

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.

To be fully transparent towards investors and other stakeholders, Besqab commits to regular reporting until no green finance instruments are outstanding. The Finance Department will be responsible for the reporting. The report will be published on the company's website (https://investors.besqab.se) on an annual basis, with the first report expected in the spring of 2022.

The allocation of proceeds reporting will be on a portfolio basis and will not be linked to an individual green finance instrument. The reporting will show total amount of green finance instruments issued, the share of proceeds used for financing/re-financing and share of proceeds used for categories described in table 1, and share of unallocated proceeds (if any). Allocation of proceeds will be subject to an annual review by an external part/verifier. The verification report provided by the external part will be published on Besqab's website.

The impact reporting will also be on a portfolio basis. Besqab intends to report on quantitative impact indicators where reasonable and where relevant data is available for the two main categories:

Green and energy efficient buildings:

- Information on the energy usage in kWh/m^2/year
- Estimated annual greenhouse gas emissions reduced or avoided (tCO_2e/year)
- Energy performance certificate class, if any
- Type of certification including level, if any (e.g. Nordic Swan Ecolabel, Miljöbyggnad Silver, etc.)

Energy efficiency:

- Amount of energy saved per m^2.
- Estimated annual greenhouse gas emissions reduced or avoided (tCO_2e/year)

In estimating impacts on greenhouse gas emissions, the grid factor for the Nordic mix[4] will be used. The method will be made publicly available.

[4] Currently estimated as 315 gCO_2/kWh. See Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting (February 2020), https://www.kbn.com/globalassets/dokumenter/npsi_position_paper_2020_final_ii.pdf

3 Assessment of Besqab's green finance framework and policies

The framework and procedures for Besqab's green finance 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 Besqab 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 Besqab's green finance framework, we rate the framework **CICERO Medium Green.**

Eligible projects under the Besqab's green finance 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 finances 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 and Energy Efficient Buildings	Buildings that have, or with the objective to receive: • Nordic Swan Ecolabel, Miljöbyggnad Silver or an equivalent energy performance level from another well recognized certification scheme which is subject to evaluation and approval from the Green Finance Committee, • an energy performance certificate ("EPC") of class A or B, • major renovations resulting in reduced energy consumption of at least 30%.	**Medium Green** ✓ The issuer informs us that close to 100% of net proceeds will be for the Green and Energy Efficient Buildings category. No buildings with direct fossil fuel infrastructure will be eligible. ✓ Note that the highest shading level, dark green, is reserved for the highest building standards such as Zero-Energy buildings and passive houses. The building criteria are good, but do not represent the highest standard levels. ✓ To be able to certify a building according to Nordic Swan Ecolabel, the buildings must be included in a life cycle analysis. Building materials and chemical products are inspected. The use of renewable energy and green innovations is encouraged. In Sweden the Nordic Swan Ecolabel require an energy

		efficiency of 85% of BBR 24 or 90% of BBR 25/BBR26/BBR 29 for apartment buildings and buildings for pre-schools and schools and 80% of BBR 24 or 85% of BBR 25/BBR 26/BBR 29 for small houses. Miljöbyggnad Silver require an energy use less than 80% of current regulations. ✓ In Sweden, EPC A is at least 50% better that current regulations, while EPC B is between 50% and 75% of current regulation for new buildings. Older buildings can have labels that are up to 10 years old, and therefore considerably weaker energy wise. ✓ Refurbishment of existing buildings are often better than new constructions from a climate point of view, but should ideally come with greater improvements in energy efficiency. IPCC recommends 50% energy efficiency improvement in deep renovations. According to IEA, efficiency of building envelopes needs to improve by 30% by 2025 to be aligned with the Paris target. The issuer is aligned with this goal.
Energy Efficiency	Energy retrofits such as installation of onsite solar panels, heat pumps, sewage heat exchangers, improvements in ventilation systems, extension of district heating and cooling systems, improvements and implementation of control systems, as well as infrastructure for electric vehicles.	**Dark Green** ✓ Efficiency measures in existing buildings is a good way to lower the climate footprint of buildings, unless it involves fossil fuel elements which then can be locked in. The issuer informs us that no fossil-based systems will be involved, and no upgrading of fossil fuel technologies will be allowed. District heating system may contain some fossil elements through the use of waste for energy. ✓ Be aware of potential rebound effects following energy efficiency improvements.

Table 1. Eligible project categories

Background

As member 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]

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. 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.[7] 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.

Voluntary environmental certifications such as Nordic Swan Ecolabel and Miljöbyggnad or equivalents measure or estimate the environmental footprint of buildings and raise awareness of environmental issues. They may, however, fall short of guaranteeing a low-climate impact building, as they may not ensure compliance with all relevant factors e.g., access to public transport, climate resilience, and sustainable building materials. Many of these factors are covered under the World Green Building Council's recommendations for best practices for developing green buildings.[8] CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

The Exponential Roadmap[9] 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 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 finance funding for sustainable retrofitting and construction.

Choice of building materials is becoming more important for climate footprint than heating/cooling and power. A large number of life cycle analyses (LCA) 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. Wooden materials also store carbon during their lifetime, temporary sequestering carbon from the atmosphere. Hence, wood-based buildings are appropriate for long-term strategies for reducing fossil fuel use and GHG emissions when combined with sustainable forestry[10]. 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.

In March 2020, a technical expert group (TEG) proposed an EU taxonomy for sustainable finance that included a number of principles including a "Do-No-Significant-Harm" (DNSH) clause and safety thresholds for various

[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://www.iea.org/reports/building-envelopes
[8] https://www.worldgbc.org/how-can-we-make-our-buildings-green
[9] https://exponentialroadmap.org/wp-content/uploads/2020/03/ExponentialRoadmap_1.5.1_216x279_08_AW_Download_Singles_Small.pdf
[10] R&D Fund for public real estate, The Swedish Association of Local Authorities and Regions (2016): Climate impacts of wood vs. non-wood buildings.

types of activities.[11] In November 2020, EU published its draft delegated act to outline its proposed technical and Do-No-Significant-Harm (DNSH) screening criteria for climate adaptation and mitigation objectives, respectively, which it was tasked to develop in order to take the taxonomy after it entered into law in July[12]. The DNSH criteria include among other things 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. Among the stricter draft DNSH criteria are constraints on type of land that can be used for buildings (no forest, fertile soil or land with high biodiversity). In addition, the buildings should not be dedicated to extraction, storage, transport or manufacture of fossil fuels. Finally, the full criteria set for climate change mitigation and adaptation was released on April 21, 2021.

CICERO Green will not here verify Besqab's framework against the full draft EU taxonomy[13], but notes that the updated taxonomy includes specific technical thresholds for the real estate sector, some of which can briefly be summarized as follows:

1. The design and construction of new buildings needs to ensure a net primary energy demand that is at least 10% lower than the threshold set for the nearly zero-energy building (NZEB) requirements in national regulation.
2. Ownership or acquisition of buildings built before 2021 should have an Energy Performance Certificate label A. As an alternative, the building is within the top 15% of the national or regional building stock expressed as operational Primary Energy Demand (PED) and demonstrated by adequate evidence, which at least compares the performance of the relevant asset to the performance of the national or regional stock built before 31 December 2020 and at least distinguishes between residential and non-residential buildings.
3. Renovations should deliver at least 30% primary energy savings.
4. Large non-residential buildings should have dedicated energy management system.

It is currently not entirely clear how this will apply to Sweden, but it is reasonable to expect that new buildings with energy use 10% below present regulation will be aligned with the technical criteria in the taxonomy. It is 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.

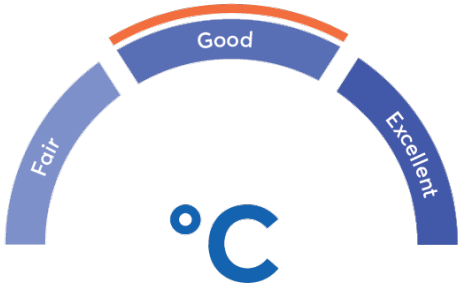
Governance Assessment

Four aspects are studied when assessing the Besqab's governance procedures: 1) the policies and goals of relevance to the green finance 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.

[11] 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

[12] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy#ISC_WORKFLOW

[13] Mitigation provisional taxonomy (Annex 1): https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf
Adaptation provisional taxonomy (Annex 2): https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-2_en.pdf



Besqab supports and will follow the national road map for climate neutral construction and shares the objective of being climate neutral by 2045. The road map stipulates that actors in the building and construction sector should measure their greenhouse gas (GHG) emissions and decide on climate targets by 2022, have reduced their GHG emissions by 50% by 2030 relative to 2015, and further reduced them by 75% by 2040. The road map was developed by the Swedish Construction Federation, industry representatives, researchers and the organization the Fossil-Free Sweden Initiative. In addition, Besqab has as an environmental goals to environmentally certify all new assets and has also goals in relation to waste from constructions. The selection process is good. Potential controversies associated with building projects are treated through the municipal planning procedures. Management of proceeds is in accordance with the Green Bond Principles and Green Loan Principles. The reporting on allocation is good on a portfolio basis and will be independently reviewed, while impact reporting will take place 'where reasonable and where relevant data is available'.

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

Strengths

Besqab has good, but not the most ambitious, targets for its climate impact. The Nordic Swan Ecolabel for buildings is a comprehensive scheme covering many of the main sustainability aspects. It is also very useful that Besqab intends to work more on mapping scope 3 emissions associated with the construction processes including the climate footprint from use and transport of materials as a follow up of the national road map for climate neutral construction. Their focus and targets on waste handling during construction is also very good.

A commitment to substantial reporting of impacts increases transparency to investors and is a clear strength of the framework.

Weaknesses

We find no material weaknesses in Besqab's Green finance framework.

Pitfalls

The CICERO Dark Green shading is difficult to achieve in particular in the real estate sector because buildings have a long lifetime. CICERO Dark Green shading in this sector should therefore conform to strict measures and is reserved for the highest building standards such as Zero-Energy buildings and passive houses. Besqab has as yet no quantitative targets for GHG emissions. The issuer is encouraged to consider construction phase emissions and systematically work on reducing emissions related to transportation to and from the properties. The green buildings eligible under Besqab's framework are falling short of the long-term vision of zero-energy buildings or passive houses.

For the Green and Energy Efficient Buildings criteria of Energy Performance Certificate A or B, we note that for older buildings these labels can be up to 10 years old and hence considerably weaker that current labels for new buildings. We note that the Nordic Swan Ecolabel requires 10-15% improvement on current energy regulations, and is as such probably in alignment with the coming EU taxonomy for new buildings.

We note that district heating is the predominant heating method in Sweden and probably represents a major part of the energy use in Besqab's eligible buildings. Also, most of the district heating companies seek to minimize the

use of oil or other fossil fuels. However, when waste-to-energy is utilized, it is sometimes difficult to know the fossil fraction of the waste stream, e.g., the amount of plastics. Again, many Swedish district heating companies have strong policies to minimize these types of fractions, but without specific information of suppliers of district heating, it is difficult to guarantee totally against the use of some fossil fractions.

Regarding transport solutions associated with projects, the issuer informs us that they build in locations close to public transport, and households does not have to be dependent on owning a car. In many projects they have a car pool or bicycle pool as well.

'Nordic mix' will be used as grid factor as recommended by the latest Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting. This factor, currently estimated as 315 gCO_2/kWh, is high compared to local Swedish gird factors. To secure consistency, it is important that the issuer use a common grid factor when reporting own emissions and impacts from eligible projects.

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 1, an example is energy efficiency investments in buildings which in part may lead to more energy use or a failing to reach the potential reductions. Besqab's work with its property users can actively mitigate the risk of rebound effects related to energy efficiency.

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. Besqab's green finance framework is not quite there yet, but is taking valuable steps towards this long-term vision. More stringent criteria would have been required for a darker shading.

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Appendix 1:
Referenced Documents List

Document Number	Document Name	Description
1	Green Finance Framework - Besqab - April 2021	Besqab's Green Finance Framework dated April 2021
2	201903249015-2	Besqab's Annual Report 2018
3	202003274177-2	Besqab's Annual Report 2019
4	202103268478-1	Besqab's Annual Report 2020

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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).