



Samhällsbyggnadsbolaget i Norden AB (SBB) Green Finance Second Opinion

1 June, 2020

Samhällsbyggnadsbolaget i Norden AB (SBB) is a Nordic real estate company focused on rent regulated residential properties in Sweden and low-risk community service properties in the Nordic region. At the end of 2019, SBB acquired Hemfosa Fastigheter AB (publ) (“Hemfosa”). Hemfosa was a specialist in social infrastructure properties for public sector offices in the Nordic region. The property value in SBB after the acquisition of Hemfosa amounts to nearly SEK 80bn. Both SBB and Hemfosa have as independent companies developed Green Bond Frameworks shaded by CICERO in 2018 and 2019, respectively with Medium green shadings. This Second opinion on SBB’s Green Finance Framework is an update of previous second opinions.

The framework has eligible project categories **Green buildings** and **Energy efficiency** and covers both finance and refinance of new and refurbishment of existing buildings. Eligible projects offer substantial energy and greenhouse gas emissions reductions, but not quite enough to satisfy the upcoming EU Taxonomy for green buildings.

SBB’s long term goal is to reach climate neutrality by 2030. SBB have shorter term targets for energy use, use of wood as a construction material in buildings, water and waste management, etc.

The selection process is orderly, but there are no separate screening criteria to avoid lock-in or rebound effects, nor systematic life cycle assessment or supply chain considerations. The management of proceeds will be managed on a portfolio level. The reporting includes detailed and comprehensive reporting on the environmental performance of projects and assets, but we note that impact reporting is provided with the reservation that not all related data can be covered and that calculations therefore will be on a best intention basis. The issuer has not incorporated the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) but are stating that they are disclosing TCFD aligned information through CDP-reporting starting 2019.

Based on the overall assessment of the project types in the framework of SBB, governance and transparency considerations, the green finance framework receives an overall **Medium Green** shading. In order to achieve a dark green shading, the green finance framework would need a clearer requirement that best environmental technologies are used in eligible building projects.

SHADES OF GREEN

Based on our review, we rate the SBB’s green finance 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 SBB’s framework to be **Good**.



GREEN BOND and GREEN LOAN PRINCIPLES

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





Contents

1	Terms and methodology _____	3
	Expressing concerns with 'shades of green'	3
2	Brief description of SBB'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 SBB's green finance framework and policies _____	9
	Overall shading.....	9
	Eligible projects under the SBB's green finance framework	9
	Background.....	11
	EU Taxonomy	11
	Governance Assessment.....	12
	Strengths	12
	Weaknesses	13
	Pitfalls	13



1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated May 2020. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

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

Expressing concerns with 'shades of green'

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

CICERO Shades of Green



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



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



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



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

Examples



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



Bridging technologies such as plug-in hybrid buses



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



New infrastructure for coal

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, the governance aspects are carefully considered and reflected in the overall shading of the green finance framework. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green 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.



2 Brief description of SBB's green finance framework and related policies

Samhällsbyggnadsbolaget i Norden AB (SBB) was founded in March 2016 with the aim of building a strong and stable Nordic real estate company focused on residential and community service properties. The company's strategy is to have a long-term view on ownership, management and development of rent regulated residential properties in Sweden and low-risk community service properties in the Nordic region. SBB also carries out value-creating activities such as redevelopment and renovations of existing properties as well as conversions of commercial properties in central locations with proximity to efficient infrastructure into residential properties.

In November 2019, SBB made a recommended public takeover bid to the shareholders of Hemfosa Fastigheter AB (publ) ("Hemfosa"). The acquisition was eventually carried out through a mix of compensation in shares and compensation in cash in January 2020. Hemfosa was a specialist in social infrastructure properties for public sector offices, schools, healthcare and adapted housing, as well as the judicial system in the Nordic region. The property value in SBB after the implementation of the acquisition of Hemfosa amounts to nearly SEK 80bn. The company is thereby one of the largest listed property companies and the largest in social infrastructure in the Nordic region with a particularly strong position in Sweden. SBB is listed on Nasdaq Stockholm Large Cap.

Both SBB and Hemfosa have as independent companies developed Green Bond Frameworks shaded by CICERO in 2018 and 2019, respectively. Both were given a Medium green shading. This Second opinion is an update of previous second opinions.

Environmental Strategies and Policies

As part of the company's property acquisition process, SBB evaluates the geographical locations in terms of proximity to public transportation. SBB's viewpoint on modern sustainable living is that tenants shall have access to healthcare, schools and care services without having to use a car. Most of the company's acquired development properties are therefore located close to rail, metro or tram stations and all development areas are in designated priority transport locations. In connection with the acquisition of properties, SBB performs thorough investigations of both land and buildings to identify risks and opportunities for both health, society and the environment. SBB also offers so-called green lease agreements¹, which are based on the property owners' contract template, in all new negotiations or renegotiations with tenants.

SBB's long term goal is to reach climate neutrality (net zero CO₂ emissions) by 2030 while continuously monitoring the climate risks of the current property portfolio. SBB also supports the principles of the UN Global Compact and the Sustainable Development Goals. In its Vision 2030 document, SBB states the following additional ecological sustainability goals:

- 100 percent renewable electricity in the entire property portfolio and minimizing carbon dioxide emissions by reducing the emissions by at least 5 percent per year.
- Continuing to contribute to innovations in environmental technology.

¹ Green lease agreements are a form of cooperation for tenants and property managers in order to work together for more sustainable properties.



- Responsibly and effectively using natural resources and building and managing with a life-cycle mindset (among other things by promoting construction using wood). At least 50 percent of SBB's new production is to be comprised of buildings built of wood.
- Promoting renovation instead of demolition of buildings in the management portfolio. All properties held for more than three years must be environmentally inventoried and these inventories are to be done at least every ten years.
- Continuing to contribute to reduced water consumption in our properties with the goal of 1 percent water savings per year.
- Managing and creating housing in locations close to public transport, which contributes to reducing the transport sector's environmental impact.
- Contributing to greater biodiversity and limiting the use and spread of environmentally hazardous products.
- Actively working to create environments where tenants and employees feel safe.
- Responsible management of waste by minimizing waste, preventing pollution and viewing waste as a resource for re-use and recycling.

Green bond reporting from last year (2019) shows that Hemfosas fulfilled its target of 3% annual reduction in energy use per square meter and temperature adjusted. The average annual energy use was then 153.2 kWh/m² (compared to 157.9 for 2018). Of this 58.7 kWh/m² (62.3) was electricity and 94.5 kWh/m² (95,6) was heat. All electricity was from origin certified renewable energy sources. SBB believes that their target of 30% reduction in energy consumption in buildings renovated with green bond funding, has been achieved.

Specific annual CO₂ emissions from the portfolio acquired from Hemfosa² was 11.3 kg CO₂/m² temperature corrected in 2019. Of this, 8.3 kg CO₂/m² came from district heating and 2.9 kg CO₂/m² from electricity (scope 2).

SBB informs us that company wide reporting on energy and carbon emissions for all of SBB's assets will be in full force for the reporting year 2021.

Use of proceeds

The Green Finance Framework will apply to any green financing instruments issued by SBB and will be applied at least as long as any such instrument is outstanding. Green financing instruments include green bonds, green loans, green hybrids, green convertibles, green private placements, green project finance, green commercial paper and any other financial instrument where the proceeds can be exclusively allocated to finance or re-finance in part or in full new and/or existing eligible green assets as defined in this framework. There is currently no indication of the share of new financing versus re-financing. In the case of green loans SBB will ensure alignment with the recommendations of the Green Loan Principles³.

Eligible green assets relevant for use under this Framework include projects in the Green Bond Principles categories **Green buildings** (three different categories, see section 3) and **Energy efficiency**.

On 23 December 2019, SBB acquired the Nordic real estate company Hemfosa, which has outstanding Green Bonds under its existing framework⁴. In order to avoid double counting, as long as the Green bonds issued by

² Representing approximately 45% of the total SBB portfolio.

³ LMA Green Loan Principles December 2018:

https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf

⁴ https://hemfosa.se/app/uploads/2019/05/Hemfosa-Green-Bond-Framework_final.pdf



Hemfosa remain outstanding, SBB will not use the portion of Eligible Green Assets financed by these bonds within its own Eligible Green Asset portfolio as described within SBB's framework.

The proceeds of SBB's Green Financing Instruments will not be used to finance fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, 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 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.

The selection of Eligible Green Assets is managed by a dedicated Green Financing Committee consisting of: SBB Chief Executive Officer, Chief Financial Officer, Technical Manager, Head of Sustainability and Head of Finance.

A list of Eligible Green Assets is kept by the Green Financing Committee and the Head of Finance is responsible for keeping this list up to date. The list of Eligible Green Assets is monitored on a regular basis as long as there are Green Financing Instruments outstanding to ensure that the proceeds are sufficiently allocated to Eligible Green Assets and that these assets continue to meet the Eligibility Categories described in the Use of Proceeds section.

The eligible projects are selected in-house and verified by an external consultant according to the requirements. Inclusion in the list of Eligible Green Assets follows a two-step process. This process is also applicable if, for any reason, a singular asset which is an Eligible Green Assets, is sold or for other reasons needs to be excluded from the list, and where SBB replaces the asset with a similar asset meeting the criteria in the Framework.

- i. The SBB Business Controller team presents relevant buildings, meeting the criteria of this Framework to the Green Financing Committee.
- ii. The Green Financing Committee solely makes the decision to include the new building in the list of Eligible Green Assets. A decision to include an asset will require a consensus decision by the Green Financing Committee. The decision is documented and filed.

The proceeds of SBB's Green Financing Instruments will not be used to finance fossil energy generation, nuclear energy generation, research and/or development within weapons and defense, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

Management of proceeds

CICERO Green finds the management of proceeds of SBB's green finance instruments to be in accordance with the Green Bond and Green Loan Principles.

An amount equal to the net proceeds of SBB's Green Financing Instrument is credited to a separate account. The proceeds are kept separated from other accounts to ensure and enable separate monitoring and tracking of the Green Financing Instrument net proceeds. SBB will document all transfers to and from the separate account, to secure tracking of the funds and to simplify the annual review. The Treasury Department is responsible for the allocation of net proceeds of Green Financing Instruments to the relevant and approved list of Eligible Green Assets and their related investments.



All Green Financing Instruments issued by SBB will be managed on a portfolio level. This means that a Green Financing Instrument will not be linked directly to one (or more) pre-determined eligible green assets. SBB will keep track and ensure there are sufficient eligible green assets in the portfolio. Assets can, whenever needed, be removed or added to/from the eligible green assets portfolio.

In the event the separate account has a positive balance, SBB will have the right to either: i) temporarily deposit such positive balance with approved financial institutions as defined by the company's Financial Policy with a focus on low economic risk or ii) temporarily invest in debt securities from issuers with a minimum credit rating of BBB- from Standard & Poor's or equivalent rating from another rating institute and with a maximum maturity of 12 months. Temporary investments or deposits will not be made in entities with a business plan focused on fossil energy extraction and use, nuclear energy generation, research and/or other carbon dioxide intense activities, development within weapons and defense, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco.

As long as Green Financing Instruments are outstanding and the separate account has a positive account balance, such positive account balance will in relation to amounts allocated to Eligible Green Assets, be adjusted at least every fiscal quarter. SBB will, until full allocation of the net proceeds from Green Financing Instruments has taken place, in its reporting disclose the amount of net proceeds not yet allocated.

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.

SBB will annually, and until the maturity of the Green Financing Instruments issued, provide investors with an annual newsletter, publicly available on its website <http://sbbnorden.se/>. Head of Finance will be responsible for the reporting which will not be linked to individual bonds. All financed projects will be listed and the first report is expected to be available in the first quarter of 2021. The annual newsletter will include:

- i. A summary of Green Financing developments.
- ii. The outstanding amounts of issued Green Financing Instruments.
- iii. The balance on the separate account (including any, temporary investments or deposits and Green Financing repayments).
- iv. Share of proceeds used for financing/re-financing as well as share of proceeds used for categories in section 3 (table 1).
- v. Share of unallocated proceeds (if any)
- vi. A complete list of Eligible Green Assets financed by Green Financing Instruments.
- vii. Impact reporting

SBB intends to show reduced or avoided emission of CO₂-equivalents in proportion to the eligible part financed or refinanced with net proceeds from Green Financing Instruments. Both Swedish average and European mainland mix grid factors will be employed. Grid factors will be disclosed in the investor report. SBB will use a baseline calculation method taking into consideration energy savings, avoided energy consumption and reduced usage of fossil energy sources.

Such impact reporting is provided with the reservation that not all related data can be covered and that calculations therefore will be on a best intention basis. E.g. if energy efficiency investments are still under construction and not



yet operational, SBB will provide an approximation of energy consumption savings, confirmed by an external consultant, as presented under the Energy Reduction action plan, until the actual outcome is confirmed.

The following metrics for impact reporting on asset level will be included in the annual investor letter:

- Green buildings, category I & II: Type of certification and degree of certification, energy performance per square meter and/or estimated annual greenhouse gas emissions reduced or avoided for buildings (tCO₂e).
- Green buildings, category III: Pre and post renovation energy consumption disclosed as absolute consumption and per square meter, calculated annual CO₂-equivalent emissions reduced or avoided disclosed as absolute (tCO₂e) and per square meter, the percentage of total energy use supplied by renewable energy.
- Energy efficiency: Amount of energy saved per square meter, estimated GHG emissions reduced or avoided (tCO₂e).
- An external consultant confirmation to every individual property energy reduction reported.

The following metrics for impact reporting on a portfolio level will be included in the annual investor letter:

- Energy reduction.
- Calculated annual CO₂ equivalent emissions reduced or avoided (tCO₂e).
- The external consultant confirmation of the reported energy reduction.



3 Assessment of SBB’s green finance framework and policies

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

Eligible projects under the SBB’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 finance aims to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) and Green Loan Principles 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	Category I: New constructions and major renovations: <ol style="list-style-type: none"> i. All new construction that either have or will receive minimum certification of Miljöbyggnad Silver or GreenBuilding or Passive House (Sw. “Passivhus”) after the completed construction. ii. All new construction that i) either have or will receive minimum certification of “LEED Gold” or “BREEAM Very Good” after the completed construction and have an energy performance at least 25% below the current national regulation after the completed construction. iii. New construction with energy consumption 25% below the national building requirements and/or major renovations 	Medium Green <ul style="list-style-type: none"> ✓ Eligible green assets in Category I correspond to the relevant invested amount. Eligible green assets in Category II & III are based on the market value reported on the balance sheet at time of the issuance of the green financing instrument. ✓ The issuer informs us that expected (approximate) shares of the different sub-categories are 50/50 between Category II and Category III with only a smaller share to Category I buildings. ✓ The highest shading level, dark green, is reserved for the highest building standards such as Zero-Energy buildings and passive houses.



	<p>reducing energy consumption by at least 25%.</p> <p>iv. All new constructions that either have or will receive an energy performance certificate (EPC) of levels A.</p> <p>Category II: Existing buildings including acquired buildings:</p> <p>i. Existing buildings that have obtained certification during the construction period according to category I.</p> <p>ii. Existing buildings certified as Green Building and Miljöbyggnad Silver.</p> <p>iii. Existing building that are certified as minimum “LEED Gold” or “BREEAM Very Good” and have an energy performance at least 25 % below the current national regulation.</p> <p>Category III: Existing buildings that are part of the “Green Residential Portfolio”⁵ of residential buildings close to public services and public transportations (less than 2 km) committed to a 30% reduction in energy consumption over a five year period.</p>	<ul style="list-style-type: none"> ✓ The issuer should also consider construction phase emissions and waste handling. ✓ The issuer has confirmed that proceeds will not be used for any equipment that is fossil-fueled based nor for any buildings with direct fossil fuel heating in any of the categories. ✓ A 25% reduction in energy use is not enough to be in line with the IEA ‘well below 2 C’ target. The issuer should be conscious of the improvement in standards that will be required over time in order to reach the 2050 targets. ✓ The issuer states that if, for any reason, an asset in the Green Residential Portfolio needs to be replaced, the new asset must meet the following criteria; <ul style="list-style-type: none"> - Rent regulated residential apartment house. - Built in the 20th century. - Proximity to public services and public transportation.
Energy efficiency	<p>Energy retrofits such as heat pumps, installment of LED lighting, improvements in ventilation systems, extension of district heating and cooling systems.</p>	Dark green
		<ul style="list-style-type: none"> ✓ Be aware that district heating may contain fossil elements. ✓ Be aware of lock-in effects, in particular if district heating and cooling networks run on a significant share of fossil fuels.

Table 1. Eligible project categories

⁵ The “Green Residential Portfolio” corresponds to a targeted, and by SBB predefined, portfolio of rent regulated residential apartment houses, mainly built in the period between the 1950s and the 1980s, with proximity to public services and public transportation. Every single building in the Green Residential Portfolio must at least achieve an Energy Reduction of 15 percent in the given timeframe of 5 years. On a portfolio level, the energy purchased per square meter should be reduced by at least 30 percent. An external consultant will verify the reduced energy consumption for individual properties and on a portfolio level.



Background

In a low carbon 2050 perspective, the energy performance of buildings is expected to be improved, with passive house technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. According to the IEA⁶, the buildings and buildings construction sectors combined are responsible for 36% of global final energy consumption and nearly 40% of total direct and indirect CO₂ emissions. 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 Energy efficiency improvements in buildings are thus important building blocks towards reaching the 2°C goal. Also, local transport solutions and easy access to renewable energy are important elements. Emissions from buildings are approximately half coming from materials/construction and half from energy use. Over time the energy use becomes less important (with off grid solution such as geothermal and solar increasing).

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 forestry⁸. 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.

Although voluntary environmental certifications such as LEED and BREEAM 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. They do not guarantee a reduction in GHG emissions nor necessarily include considerations of resiliency.

EU Taxonomy

The proposed EU taxonomy for sustainable finance⁹ includes a number of principles including a “do-no-harm clause” and safety thresholds for various types of activities. CICERO Green will not here verify SBB’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 dedicated energy management system.

⁶ <https://www.iea.org/topics/energyefficiency/buildings/>

⁷ <http://www.iea.org/tcep>

⁸ R&D Fund for public real estate, The Swedish Association of Local Authorities and Regions (2016): Climate impacts of wood vs. non-wood buildings.

⁹ 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



It is currently unclear how this will apply to Sweden, but it is reasonable to expect that buildings with energy use 20% below present regulation would be aligned with the taxonomy. 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.

We note that SBB is close to fulfilling these requirements, but not quite there yet. Also, the pooling of buildings as in the Green Residential Portfolio in Category III in table 1, is not eligible under the EU taxonomy.

Governance Assessment

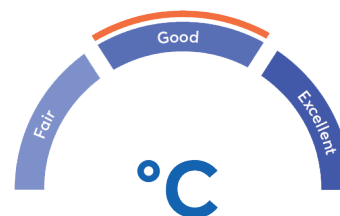
Four aspects are studied when assessing the SBB's governance procedures: 1) the policies and goals of relevance to the green finance framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent.

SBB's long term goal is to reach climate neutrality by 2030 while continuously monitoring the climate risks of the current property portfolio. SBB also supports the principles of the UN Global Compact and the Sustainable Development Goals, and have shorter term targets for energy use, use of wood as a construction material in buildings, water and waste management, etc. SBB carries out climate risk assessments for new projects.

The selection process is orderly, however carried out by a committee with limited ecological and environmental competence. There are no separate screening criteria based on avoiding lock-in or rebound effects, life cycle assessment or supply chain considerations. The management of proceeds will be managed on a portfolio level and is in accordance with the Green Bond and Green Loan Principles. The reporting includes detailed and comprehensive reporting on the environmental performance of projects and assets, but we note that impact reporting is provided with the reservation that not all related data can be covered and that calculations therefore will be on a best intention basis.

The issuer has not incorporated the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) but are stating that they are disclosing TCFD aligned information through CDP-reporting starting 2019 (not yet scored by CDP). Reporting on energy use and greenhouse gas emissions only cover part of the portfolio. The intention is for this reporting to cover the whole portfolio in 2021. SBB has not yet implemented policies towards suppliers.

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



Strengths

It is a clear strength that the green finance framework is supported by a good governance structure and clear environmental goals. Explicit exclusions of fossil fuel technologies is also a strength.

The framework focuses on voluntary environmental certifications such as the Sweden-specific Miljöbyggnad (in addition to energy use, indoor climate and material use are assessed), Passive House, Green Building and BREEAM. These certifications provide transparency on the buildings' environmental impacts. These schemes



however provide varying degrees of measurement of the environmental footprint of a building, including energy use. Some are more stringent than others and also offer internal gradings (excellent-good, platinum-silver, etc.). SBB's green finance framework includes additional energy efficiency and emission reduction requirements which is clearly a strength. External consultants will verify reduced energy consumption and greenhouse gas emissions of individual properties.

SBB has experience of working proactively in assessing climate risks with regard to floods by performing adaptation and resilience investments and measures in roads and water barriers to protect against future possible consequences of climate change. Before any real estate acquisition, SBB performs assessments of low points where water could possibly accumulate in heavy downpours. For the avoidance of doubt, none of the buildings in the Green Residential Portfolio is assessed to fall into the risk category. Physical risks are also assessed by use of a screening tool developed by the World Bank Global Facility for Disaster Reduction and Recovery (GFDRR). The tool, ThinkHazard! (thinkhazard.org), screens 11 hazards based on a specific location, or city.

Finally, we note that the largest ongoing project at present is wooden building which means that more than 50% of new productions is with wooden structures as of summer 2020. This is a very welcomed development.

Weaknesses

The policy on company cars is a lax requirement of being below 170 g/km (WLTP). Impact reporting is currently incomplete and provided with the reservation that not all related data can be covered and that calculations therefore will be on a best intention basis. No other significant weaknesses are perceived.

Pitfalls

Buildings certifications fall short of guaranteeing an environmentally-friendly building. Therefore, CICERO Green also looks at the energy efficiency improvements of the building and targets that exceed regulations. In a low carbon 2050 perspective, the energy performance of buildings is expected to be improved, with passive house technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. According to the International Energy Agency (IEA), efficiency of buildings needs to improve by 30% by 2025 in order to reach the Paris Agreement well below 2°C climate goal. The highest potential to reduce energy consumption will result from improvements made to the existing building stock. The energy efficiency requirements for existing buildings in the framework of 25 percent is below the 30 percent improvement by 2025 which IEA recommends for renovation of buildings. The issuer should be conscious of the improvement in standards that will be required over time in order to reach the long term climate targets.

CICERO Green also assesses if there is any screening for potential impacts from more extreme weather events, such as flooding and forest fires. Flood risk for properties is of particular concern in vulnerable geographic regions such as those close to rivers that are exposed to flood risks. We also factor in if there have been any considerations around transportation solutions and environmental impacts in the construction phase of the building (building material and waste considerations). The CICERO Dark Green shading is difficult to achieve in particular in the building sector because buildings have a long lifetime. CICERO Dark Green shading in the building sector should therefore conform to strict measures and is reserved for the highest building standards such as LEED Platinum, Zero-Energy buildings and passive houses. The issuer is encouraged to also consider better controlling for building/construction phase emissions. There is currently only weak or no requirements on suppliers and sub-contractors. However, supplier and sub-contractor requirements will be implemented through a project check-list that is currently tested. Mandatory requirements will include understanding and signing the Code of Conduct, Sustainability Policy and using only renewable electricity in 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. SBB's work with its property users can actively mitigate the risk of rebound effects related to energy efficiency.



Appendix 1: Referenced Documents List

Document Number	Document name	Description
1	Green Financing Framwork SBB 200429	SBB's Green financing framework dated 29 April 2020
2	Green-Bond-Annual-Report-2020	SBB's Green bond annual report 2020
3	Hemfosa-Green-Bond-Framework_final	Hemfosa's Green bond framework 2019
4	Hållbarhetspolicy SBB 2020-04-27	SSB's Sustainability policy dated 27 April 2020
5	Investerarrapport-v2	Hemfosa's Report to investors 2019
6	SBB final 20062018	Secon opinion of SSB's Green bond framework dated 20 June 2018
7	SBB-Green-Bond-Framework-June-15-2018	SBB Green bond framework dated 15 June 2018
8	SBB-Vision-2030	SBB's Vision statement
9	Second Opinion CICERO GREEN Hemfosa 26042019	Second opinion of Hemfosa's green bond framework dated 26 April 2019
10	Uppförandekod	SBB Code of conduct
11	Årsredovisning-SBB-2019_ENG-FINAL	SBB Annual report 2019
12	Press release regarding Vision 2030 (in Swedish)	https://news.cision.com/se/samhallsbyggnadsbolaget-i-norden-ab/r/samhallsbyggnadsbolaget-i-norden-ab-presenterar-vision-2030--100-procent-klimatneutrala,c3038865
13	Finanspolicy 2020-04-27	SBB Finance policy



14	Green Bond Developments: Annual report 2020	Investment report for SBB, https://sbbnorden.se/wp-content/uploads/2020/03/Green-Bond-Annual-Report-2020.pdf
15	Green bond Investeringsrapport 2019 for Hemfosa	Investment report for Hemfosa 2019, https://hemfosa.se/app/uploads/2020/03/Investerarrapport-v2.pdf



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).

