

Serneke Group AB Green Bond Second Opinion

March 24, 2021

Serneke Group AB (Serneke) is a Swedish construction group with more than 1,100 employees headquartered in Gotheburg and offering comprehensive services within construction and project development. The Serneke Group is divided into three business areas. In business area Sweden, contracting is conducted in construction, civil engineering and infrastructure-related operations and project development operations through the development of project and development properties. Business area Invest conducts development projects with a higher degree of complexity, higher transaction risk and a greater need for tied-up capital. International is the business area that gathers the Group's international efforts.

Proceeds allocated under Serneke's green bond framework will be allocated to environmentally certified buildings in Sweden. The criteria for eligible projects is a relevant environmental certification (minimum Miljöbyggnad Silver, LEED Gold, BREEAM-SE Very Good, or Nordic Swan Ecolabel) and an energy efficiency 20% better than current regulations. It is noteworthy that all proceeds from the green bonds will be used for operational expences (OPEX) in constructing buildings in the Green building category for customers. In a life cycle assessment of buildings, the emissions related to construction, and materials in particular, can represent 40% of the total. In order to assess the greenness of the portfolio of a construction company such as Serneke, investors should also factor in the company's direct impacts through own emisions.

Lately, due to increased activity, CO₂ emissions has varied considerably over the last few years, representing a challenge to Sernekes long term climate target, which is to achieve climate neutrality by 2045. Serneke has some additional shorter term targets and has mapped out a reasonable, if challenging, road towards this goal. The selection process of eligible projects under the framework is orderly, and is done in-house by sustainability team and external experts on environmental certifications and includes a structured screening for projects with high environmental and climate risks. The reporting to investors covers both allocation and impact of the proceeds. The impact reporting do not cover emissions and waste from the construction process Serneke does not follow the guidelines from TCFD when it comes to reporting or use of scenario analysis.

Based on the overall assessment of the eligibility criteria for Green buildings in the framework of Serneke, governance and transparency considerations, the green bond framework receives an overall **CICERO Light Green** shading and a governance score of **Good**. In order to achieve a Medium Green shading, a better control and reporting on emissions from the construction processes themselves would be required.

SHADES OF GREEN

Based on our review, we rate the Serneke's green bond framework **CICERO Light 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 Serneke's framework to be **Good**.



GREEN BOND PRINCIPLES

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





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated March 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 Wind energy projects with a strong vision of a low carbon and climate resilient future. Fossil-fueled technologies that governance structure that lock in long-term emissions do not qualify for financing. Ideally, exposure to integrates environmental concerns 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-Bridging technologies such as term emissions do not qualify for financing. Physical and transition climate risks might be plug-in hybrid buses 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 Efficiency investments for fossil short-term GHG emission reductions, but need to be managed to avoid extension of fuel technologies where clean equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the alternatives are not available physical and transitional climate risk without appropriate strategies in place to protect them.

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 Serneke's green bond framework and related policies

Serneke Group AB (Serneke) is a Swedish construction group with more than 1,100 employees headquartered in Gotheburg and offering comprehensive services within construction and project development. The Serneke Group is divided into three business areas: Sweden, Invest and International. In business area Sweden, contracting is conducted in construction, civil engineering and infrastructure-related operations and project development operations through the development of project and development properties. The business area performs contracts for both external customers and for business area Invest. Business area Invest conducts development projects with a higher degree of complexity, higher transaction risk and a greater need for tied-up capital. The business area that gathers the Group's international efforts. This business area is starting up and today consists of a participating interest in a construction company in Australia and an on-going project export effort.

Environmental Strategies and Policies

The environmental impact of construction and civil engineering projects comprises a direct impact from the project itself and an indirect impact as a consequence of the operation and use of the property or building. Serneke strives to minimize the environmental impact through the entire value chain, both in the building phase and the operating and final phase. They also make sure to conduct adequate assessments of climate and environmental risks associated with the project in question. This includes risks assessments related to surrounding environment, climate impact, technical- and geotechnical aspects, origin and type of materials used, quality and durability of materials as well as climate related regulations.

Serneke supports the national road map for climate neutral construction and shares the objective of being climate neutral by 2045. Compensatory measures can be used to achieve climate neutrality. 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. The objective is to unite politicians, authorities and industry actors in the vision for a climate-neutral industry. In May 2019, Serneke also signed the Local Road Map Malmö 2030 (LFM30¹).

Serneke has set further environmental targets for 2025 as follows: 25% of the utility vehicles, work vehicles and machines used should be fossil fuel free; all staff should have received basic internal environmental training within 6 months from the date of employment; climate footprint should be calculated for all self-developed projects; 100% of the electricity should be renewable; and the use of total production energy, the majority of which is related to machinery, should be reduced by 10% compared to measurement in 2019.

Through participation in the Research and Development Council at Byggföretagen (employers' association), Serneke is involved in research on sustainable construction and receive the latest research on how climate change affects the construction sector. This information includes in Serneke's processes and procedures. The national road

¹ LFM30 is an industry initiative and rallying of forces for a climate neutral construction and civil engineering sector in Malmö by 2030. <u>https://lfm30.se</u>

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map 2045 points out that the sector need to plan for a changing climate, for example through other requirements to buildings and facilities linked to precipitation, water levels, moisture, heat and cold.

One of the processes in the construction phase with the highest climate impact is the production of construction materials, mainly cement and steel. The buildings' energy consumption after completion also contributes to the climate impact, but decreases as the buildings become more energy efficient and electricity production transitions to more renewable sources. In 2020 the work to map and measure climate impact from Serneke's operations continued. At a company level, greenhouse gases are estimated according to the guidelines of the Green House Gas Protocol (GHG). Serneke does not follow the guidelines from TCFD when it comes to reporting or use of scenario analysis.

Serneke's climate survey encompasses scope 1, 2 and 3 where scope 1 and 2 are mandatory to report according to GHG and includes direct emissions from the company's own transports and purchased energy. In scope 3, Serneke report emissions linked to business travel (trains, flights and rental cars). The fact that Serneke own few of the vehicles and work machines in use makes it difficult to report on production fuel. It is therefore important to engage subcontractors regards to machinery and fuel. Serneke does this through placing environmental requirements on sub-contractors, e.g., regarding quality of fuels, handling of waste, etc. In handling waste, the so-called waste hierarchy is followed (prevent, recycle, burn, deposit).

Covid and several large transactions in 2020, gave a low key indicator for climate impact (0.27 CO₂e tonnes/MSEK), down from 0.41 CO₂e/MSEK in 2019 and up from 0.23 CO₂e/MSEK in 2018. The key indicator is probably not fully representative of the actual climate impact, which is why focus in the future is to find effective measurement methods for the total direct emissions and the indirect climate impact in Serneke's value chain, from for example, material production and the buildings' environmental impact after completion. 97% of the electricity that Serneke purchased in 2020 comes from renewable sources: Hydro, wind and solar power.

In terms of absolute numbers, Serneke reported total greenhouse gas emissions in 2020 of 1,856 tCO₂e, a reduction of 37% relative to 2019 figures, but somewhat higher than comparable 2018 figures. The scope 1 emissions in 2020 represented 78% of total emissions, Scope 2 represented 20% and the remaining 2% was scope 3 emissions.

Serneke Sweden is certified according to ISO 14001:2015 (environment), ISO 9001:2015 (quality) and Nyberg Svets (a company in the group) holds the certification EN 1090:2 (construction steel). In 2020, approximately 60% of Serneke's ongoing construction projects, with a project cost of more than SEK 30 million, worked according to certification systems BREEAM, LEED, Nordic Swan Ecolabel (Svanen) or Miljöbyggnad. This is a 10 percentage points increase from the previous year.

Use of proceeds

The net proceeds of the green bonds issued by Serneke will be used to finance or re-finance eligible projects in Sweden that have been evaluated and selected by Serneke in accordance with their green bond framework. The value of green buildings included in the eligible project portfolio consists of the expenditures required to construct and complete a building in line with the eligibility criteria outlined in table 1 below. The majority of the proceeds will be for new financing and operational expences can be financed with a look-back period of no more than three years.

Serneke is enabling green buildings by offering construction and development in accordance with leading environmental certification systems. Financing will be allocated to expenditures required to build environmentally certified and energy efficient buildings. Green Eligible Projects means a portfolio of construction projects undertaken by Serneke that enables climate change mitigation and/or adaptation and are eligible under the criteria



in table 1. All eligible projects are in the Green building category and net proceeds are mainly operational expences (OPEX) covering running costs of construction. Proceeds will be allocated to a portfolio of projects.

The proceeds will not be used to finance projects related to fossil fuel 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.

Serneke has designed and implemented a process to ensure that only projects aligned with the criteria set out in table 1 will be selected as eligible projects for its green bond issuance. To oversee this a Green Bond Committee has been established with members from management, finance, sustainability and business control. The finance representative is the chair of the committee and the sustainability representative holds a veto.

The Green Bond Committee follows the below outlined process when selecting and evaluating projects for the eligible portfolio.

- 1. Serneke Finance will propose potential projects to be financed to Sustainability.
- 2. Serneke Sustainability will evaluate eligibility of proposals according to the eligibility criteria in table 1 and remove projects that do not meet the criteria.
- 3. Serneke Sustainability presents the potential eligible projects to the Green Bond Committee for final approval.

The portfolio of eligible projects will be reviewed and updated at least on an annual basis, or when a green bond is issued. If a project no longer meets the eligibility criteria, the project will be removed from the portfolio of eligible projects and no proceeds will be allocated to the project.

Management of proceeds

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

Serneke will establish a Green Bond Register in relation to green bonds issued by Serneke for the purpose of monitoring the green bond project portfolio and the allocation of the net proceeds from green bonds to a eligible projects.

Given the inherent nature of Serneke's business model, the control and ownership of the eligible projects will be transferred to the acquirer at completion. These eligible projects will be removed from the Green Bond Register when control is transferred to the acquirer.

Serneke will over the duration of the outstanding green bonds build up and maintain an aggregate amount of projects in the Green Bond Register that is at least equal to the aggregate net proceeds of all outstanding Serneke green bonds. There may be periods when the total outstanding net proceeds of green bonds exceed the value of the eligible projects in the Green Bond Register. Any such portion will be held in accordance with Serneke's normal liquidity management policy.

The Green Bond Register will form the basis for the impact reporting.

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.

Serneke will annually publish a report on the allocation and impact of green bonds issued under their framework. The first report will be published approximately 1 year after issuance. The Treasury team will have the main responsibility for the report on allocation and impact, with support from the Green Bond Committee. Where relevant Serneke will seek to align the reporting with the latest standards and practices as identified by ICMA and the guidelines in the Nordic Public Sector Issuer's Position Paper on Green Bond Impact Reporting². The impact report will also include a section on methodology, baselines and assumptions used in impact calculations. Reporting will be linked to the individual bonds.

The allocation report will include the amount of net proceeds that have been allocated to the green bond project categories and, when possible and relevant, further information related to the type, number and location of the green bond projects funded, a detailed descriptions and case studies of selected eligible projects financed, and the remaining balance of net proceeds which have not yet been allocated to eligible projects.

Serneke will strive to report on the actual environmental impact of the use of proceeds financed by their green bonds on a portfolio basis. If/when actual impact for some reason is not observable or unreasonably difficult to source, estimated impact will be reported.

The impact indicators may vary with investment category, as defined in the green bond framework. Due to the fact that Serneke is a construction company, the company will not have the possibility to report on the actual performance of the building after control and ownership has been transferred to the acquirer. The reported impact will hence be based on estimations and targeted environmental certification. The impact metrics selected may include the following:

- Number/share of buildings built in line with environmental certifications as well as targeted certificates for these buildings
- Annual energy avoided compared to the relevant building code, MWh
- Energy intensity of buildings constructed, kWh/m²
- Estimated annual greenhouse gas (GHG) emissions avoided due to energy savings, tCO₂e

'Second Opinion' on Serneke's Green Bond Framework

² <u>https://www.kuntarahoitus.fi/app/uploads/sites/2/2020/02/NPSI_Position_paper_2020_final.pdf</u>



3 Assessment of Serneke's green bond framework and policies

The framework and procedures for Serneke'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 Serneke 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 Serneke's green bond framework, we rate the framework **CICERO Light Green**.

Eligible projects under the Serneke'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".

Sht Green Note that the highest shading level, dark green, is reserved for the highest building standards such as Zero-Energy
buildings and passive houses. BREEAM, Miljöbyggnad, and similar certification schemes cover a broad set of sustainability issues. However, these certification levels alone do not ensure energy efficient outcomes. The framework's additional requirement on energy efficiency mitigates this concern and is aligned with the proposed requirement of the EU taxonomy. The issuer informs us that no land acquisitions and no buildings with fossil fuel heating will be eligible. Only green electricity or district heating will be used. The lack of control with emissions



- Subcontractors
- Swedish Green Building council (SGBS) fees

subcontractors make the shading of this category lighter than the criteria themselves would normally indicate.

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%³. The European Green Deal aims for carbon neutrality in 2050.⁴

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.⁵ 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.⁶ CICERO Shades of Green assesses all of these factors when evaluating the climate impact of buildings.

The Exponential Roadmap⁷ 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 forestry⁸. Quantitative estimates are imprecise, but some studies

³ https://ec.europa.eu/clima/policies/strategies/2030 en

⁴ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁵ https://www.iea.org/reports/building-envelopes

⁶ <u>https://www.worldgbc.org/how-can-we-make-our-buildings-green</u>

⁷ https://exponentialroadmap.org/wp-

content/uploads/2020/03/ExponentialRoadmap_1.5.1_216x279_08_AW_Download_Singles_Small.pdf

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.

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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 types of activities.⁹ 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 July¹⁰. The Do-No-Significant-Harm 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.

CICERO Green will not here verify Serneke's framework against the full draft EU taxonomy, but notes that the updated proposed taxonomy includes specific 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 20% 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.
- 3. Renovations should deliver at least 30% primary energy savings.
- 4. Large non-residential buildings should have dedicated energy management system.

It is currently unclear what will be in the final taxonomy and how this will apply to Sweden, but it is reasonable to expect that new buildings with energy use 20% below present regulation would be aligned with the taxonomy. The screening criteria for ownership and acquisition of buildings built before 2021 are strict (EPC A).

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 Serneke'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.

The policies and goals of Serneke is aligned with the long term goal of climate neutrality in 2045 of the sector as well as of Sweden on a national level. Serneke has additional quantitative climate and environmental targets in the short- to mid-term, allowing monitoring of progress towards the long term (climate neutral) target. The selection

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

¹⁰ https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy#ISC_WORKFLOW

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process is orderly, but do not explicitly exclude eligible investments in buildings with fossil fuel heating or cooling technologies. The issuer informs us, however, that these types of projects are highly unlikely. The selection assessment is done in-house by a sustainability team and external experts on environmental certifications and includes a structured screening for projects with high environmental and climate risks. Screening for projects with local resistance is handled through the public planning and regulation processes. Policy towards subcontractors is governed by Serneke's Code of conduct and additional environmental requirements, which stipulates that e.g., everyone understands the environmental risks that exist at work, takes necessary actions and adheres to applicable procedures, effectively conserve resources and make environmentally aware choices from the perspective of life cycle, and protect biodiversity and conservation in the areas in which they operate. Management of proceeds is

aligned with the Green Bond Principles, but temporary management of unallocated proceeds is not well defined. The reporting to investors covers both allocation and impact of the proceeds. A list will be available for the aggregated green portfolio. The impact reporting do not cover emissions and wastes from the construction phase.



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

Strengths

It is a strength of the framework that the eligibility criteria are clear and include a minimum energy performance, i.e., 20% improvement on national regulations at the time of selection, in addition to environmental certification. The commitment to impact reporting increases transparency to investors and is also a strength. We note, however, that the impacts are related to the end products of the construction process, i.e., the buildings, and not the construction process itself.

Weaknesses

While the use of proceeds are mainly for operational expences during the construction process, the eligibility criteria is solely linked to the qualities of the finished buildings, not the construction process. Other than this, we find no material weaknesses in the framework.

Pitfalls

Pitfalls of a green bond framework are potential environmental risks. Whereas weaknesses are areas that remain unaddressed by the issuer, pitfalls can be mitigated.

All proceeds from Serneke's green bonds are for all operational expences (OPEX) related to construction of green buildings with a look-back period of 3 years. This includes, but are not limited to, wages, materials as well as costs of sub-contractors. Thus, Serneke can be said to carry out an enabling activity in the language of the EU Taxonomy. We note that Serneke's impact reporting related to the buildings characteristics can represent a double counting if the owner of the building at some later stage claims the same impacts from investing in the building.

While Serneke has its own climate and environmental targets and a code of conduct for its suppliers, it is nevertheless difficult to assess all the climate and environmental impacts of the construction process. Serneke could ask for the emissions numbers in the contracting of sub-contractors, to better be able to report Scope 3 emissions.

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There is a potential pitfall in the framework that investments in buildings with fossil fuel technologies are not explicitly excluded. However, the issuer informs us that these types of projects are highly unlikely, also in view of the certification levels in the eligibility criteria.

Serneke intends to follow the Nordic Public Sector Issuer's Position Paper on Green Bond Impact Reporting. This includes a recommended grid factor in the Nordic countries of over 300 gCO₂/kWh, a figure that is considerably higher than the 'real' grid factor in Sweden. In addition, only half of all life cycle greenhouse gas emissions from a new building comes from heat and energy use, while approximately 40% comes from use of materials. Emissions directly associated with construction and demolition account for 2-5%. Thus, impacts of investment can easily be over stated by focusing only on energy use combined with a high emission factor for electricity use. Serneke is encouraged to provide full transparency on the applicable impact reporting methodology and assumptions and to apply the same grid factor for impact assessment as for emission accounting.

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



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Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Serneke Green Bond Framework (8 March 2021)	Serneke's Green bond framework
2	Serneke_ENG_AR2019	Serneke's Annual report 2019
3	201904092747-1	Serneke's Annual report 2018
4	code-of-conduct-serneke-group-ab_eng	Serneke's Code of coduct version 1.1
5	20201208_pi-kort_v03	Serneke's decision basis template
6	Serneke miljökrav Entreprenad4100	Serneke's environmental regulations for sub- contractors
7	Gemensamma miljömål Serneke Sverige 2020- 2025	Poer point presentation of Serneke's environmental targets towards 2045
8	Serneke Färdplan för fossilfri konkurrenskraft Bygg- & Anläggningssektorn	Serneke's road map and decision to join the target for a fossil free real estate sector by 2045
9	Utdrag beslutsprocess för entreprenad och PU Projekt Serneke	Extract of document explaining the internal decision process for contracting at Serneke
10	projekthandbok-serneke-sverige-ab-version-1-1- 2020	Serneke's project handbook

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).

