Green Evaluation

Samhällsbyggnadsbolaget i Norden AB’s Proposed SEK 500 Million Green Bond

Transaction Overview

In February 2019, Swedish real estate company Samhällsbyggnadsbolaget i Norden AB (SBB) plans to issue a SEK 500 million senior unsecured green bond. The company will use the proceeds to refinance a portfolio of rent-regulated residential properties in Sweden. SBB has committed to invest in varied energy efficiency projects and refurbish residential buildings to reduce the purchased amount of energy per heated square meter of the portfolio by at least 30%. In our opinion, this transaction is aligned with the Green Bond Principles 2018 (GBP).

Green Evaluation Overview

Transaction's Transparency

- Use of proceeds reporting: E2/64
- Reporting comprehensiveness: 91

Transaction's Governance

- Management of proceeds: 76
- Impact assessment structure: E2

Mitigation

<table>
<thead>
<tr>
<th>Sector</th>
<th>Net Benefit Ranking</th>
<th>Hierarchy Adjustments</th>
<th>Net Benefit Ranking</th>
<th>Hierarchy Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Buildings</td>
<td>Refurbishment</td>
<td>Carbon</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Green Energy</td>
<td>Geothermal Power</td>
<td>Carbon</td>
<td></td>
<td></td>
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<tr>
<td>Water</td>
<td>Conservation</td>
<td>Water</td>
<td></td>
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</tr>
<tr>
<td>Adaptation</td>
<td>NA</td>
<td></td>
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</tbody>
</table>

Entity:
Samhällsbyggnadsbolaget i Norden AB
Subsector:
Real Estate
Location (HQ):
Sweden
Financing value:
SEK 500 million
Amount evaluated:
89%
Evaluation date:
Feb. 1, 2019
Contact:
Noemie de la Gorce
+44-020-7176-9836
noemie.delagorce@spglobal.com

Overall Score

E2/64
Weighted aggregate of three
(Transparency + Governance + Mitigation)
Project Description

Samhällsbyggnadsbolaget i Norden AB (SBB) is involved in managing and developing rent-regulated residential properties in Sweden and other Nordic regions. The aim is to build efficient infrastructure by redeveloping and renovating the existing buildings and converting commercial properties. SBB plans to use the proceeds to refinance a green project portfolio as defined by SBB that consists of residential apartments built predominantly between the 1950s and 1980s.

The company’s Green Bond Framework defines the eligible projects included in the Green Project Portfolio. This definition includes a wide range of measures aimed at achieving an overall portfolio-wide energy reduction of 30%. All projects undertaken adhere to this definition and therefore 100% of proceeds qualify as green in our Governance assessment. However we do not currently have methodologies to assess exhaust air heat pumps, and pressure-controlled circulation pumps, which account for 11% of total proceeds. We therefore exclude these financed projects from our impact evaluation but note that these technologies do offer environmental benefits.

SBB evaluates all acquisitions of rent-regulated residential apartments in accordance with its corporate responsibility principles. There is a two-step process followed for inclusion in the green project portfolio.

1. The SBB Business Controller team presents relevant buildings meeting the applicable Green Projects Portfolio criteria to the Green Bond Committee.

2. The Green Bond Committee is solely responsible for making the decision to include the new buildings in the Green Project Portfolio. Inclusion requires a consensus decision by the Green Bond Committee which is then documented and filed.

To achieve an overall energy reduction of at least 30%, SBB will also perform a number of energy efficiency investments in the targeted Green Project Portfolio.

The projects that will be financed include refurbishment measures such as roof insulation, efficient windows, efficient water taps, and geothermal heat pumps. The properties are located throughout Sweden in towns such as Bollnäs, Motala, Skara, Sundsvall, and Söderhamn. Differing characteristics among the buildings in the Green Project Portfolio, including the current state of refurbishment and geographical location, may result in different energy reduction outcomes for the individual buildings. For example, some buildings may achieve as much as a 50% to 60% energy reduction, while others will achieve less. However, every building in the Green Project Portfolio must achieve a minimum energy reduction of 15% in the given five-year time frame. The combined impact of all of these buildings must be at least a 30% reduction.

Scoring Summary

This transaction achieved an overall score of 64, which equates to E2 on our scale of E1 to E4. This score reflects the net environmental impacts of the technologies that SBB have been and will finance over the next five years.

The Mitigation score of 64 caps the final score despite the Governance and Transparency assessments achieving higher scores (76 and 91, respectively). This is because we view Transparency and Governance as supportive to achieving environmental impact, but these aspects cannot increase the level of environmental impact achievable by the technologies used.

These real estate energy and water efficiency projects are located in Sweden where the grid is already relatively decarbonized, given its reliance on mostly hydroelectric and nuclear energy, which somewhat limits the Mitigation score. Our assessment works on the assumption that the refurbishment projects will reduce energy demand from the grid, thereby reducing emissions by the amount equivalent to the energy generated. We also assume that geothermal heat pumps displace fossil fuel heating and therefore use our geothermal green energy methodology to assess these projects. We may be overstating this benefit given the higher-capacity factors assumed in our analysis of geothermal energy, but this is somewhat mitigated by the overall higher environmental costs assumed in construction and decommissioning of geothermal power versus geothermal heat pumps.

Rationale

- While the relatively clean Swedish grid results in comparatively low net benefit scores for the real estate refurbishment project, the hierarchy brings the overall environmental impact scores up to reflect the sustainable nature of the technologies employed.

- The company achieves strong Governance and Transparency scores based on its comprehensive green bond framework that includes a defined selection criteria linked to environmental objectives, third-party verification of environmental impacts achieved, and comprehensive annual reporting.
Key Strengths And Weaknesses

By 2050, 70% of the world’s population will live in cities, making cities critical in achieving a sustainable future for the world. Improving the carbon and water footprints of the buildings that we live in is therefore essential to sustainable development. In the case of this Green Evaluation the important role of these refurbishment technologies is reflected in our hierarchy adjustment and brings the net benefit score from 22 to 60. The combination of impactful technologies and Sweden’s relatively clean grid and non-stressed water systems lead to the strong overall score of 64. The Governance score is also solid at 76 and the Transparency scores is a robust 91.

The transaction has a detailed framework outlining a number of features that we consider positive in our assessment. For example, SBB will get third-party verification of the environmental impacts achieved. As described in the framework, SBB will commission an external consultant to assess energy consumption at the properties in the portfolio and confirm that the combined energy savings corresponds to at least 30% compared with the levels prior to renovation and energy efficiency investments.

One driver of the robust transparency score is the comprehensive reporting commitments SBB outlined in its Green Bond Framework; SBB will report on an annual basis: a summary of green bond developments and the green project portfolio, the balance on the separate account (including any temporary investments or deposits and green bond repayments), and the amount of proceeds not yet allocated. SBB will also disclose impact metrics such as avoided emissions in CO2 equivalents and pre- and post-renovation energy consumption in terms of absolute consumption (MWh) and intensity (kWh per Atemp).

Further supporting the excellent Transparency score is the commitment to publicly disclosing the detailed methodology used to calculate energy consumption of the buildings within the green project portfolio.

SBB will not have their properties certified by green building standards such as BREEAM or LEED. While this does not affect our assessment of environmental impact, it does marginally reduce the Governance score. We view green building certification as positive to a financing’s governance because it gives additional comfort to investors that the desired environmental impacts will be achieved.

Second Opinion On GBP Alignment

Based on our Transparency score of 91 and Governance score of 76, and that 100% of proceeds have or will be allocated to projects with environmental benefits, we expect this bond to meet the basics of the four pillars of the voluntary GBP given the issuer has committed to:

- Allocating the full amount of the net proceeds of bonds to eligible green projects - as defined by the issuer,
- Using clear “green” criteria (as defined by issuer) to select projects for funding,
- Managing and tracking proceeds (potentially with the use of sub accounts), and
- Committing to regular reporting of environmental impact and use of proceeds.

Sector level scores

<table>
<thead>
<tr>
<th>Sector</th>
<th>Location</th>
<th>Technology</th>
<th>Use of Proceeds (SEK mil.)</th>
<th>Use of Proceeds treatment</th>
<th>Net Benefit Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Buildings</td>
<td>Sweden</td>
<td>Residential Building Refurbishment</td>
<td>340</td>
<td>Estimated</td>
<td>22</td>
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<tr>
<td>Green Energy</td>
<td>Sweden</td>
<td>Geothermal Power</td>
<td>95</td>
<td>Estimated</td>
<td>22</td>
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<tr>
<td>Water</td>
<td>Sweden</td>
<td>Conservation: Residential Building</td>
<td>10</td>
<td>Estimated</td>
<td>39</td>
</tr>
</tbody>
</table>

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## Carbon

### Green Evaluation Process

<table>
<thead>
<tr>
<th>Technology</th>
<th>Baseline Carbon Intensity</th>
<th>Net Benefit Ranking</th>
<th>Carbon Hierarchy Adjustment</th>
<th>Environmental Impact Score</th>
<th>Proceeds (SEK mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind power</td>
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<tr>
<td>Solar power</td>
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<tr>
<td>Geothermal power</td>
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<tr>
<td>Small hydro</td>
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<tr>
<td>Large hydro (excluding tropical areas)</td>
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<tr>
<td>Energy management and control</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Green transport without fossil fuel combustion</td>
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<tr>
<td>Green buildings – new build</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Energy efficient projects (industrial and appliance efficiencies)</td>
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<tr>
<td>Green transport with fossil fuel combustion</td>
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<tr>
<td>Green buildings refurbishment</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Nuclear</td>
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<tr>
<td>Large hydro in tropical areas</td>
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<tr>
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<tr>
<td>Coal to natural gas</td>
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<tr>
<td>Cleaner fuel production</td>
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<tr>
<td>Cleaner use of coal</td>
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<tr>
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</tbody>
</table>

### Carbon Scores

- **Transparency**: 91
- **Governance**: 76
- **Mitigation**: 64

**Overall Score**: E2/64

**Weighted aggregate of three (Transparency + Governance + Mitigation)**

**Environmental Impact Scores**

- **Systemic decarbonization**: 80
- **Significant decarbonization in sectors already aligned with a green economy**: 60
- **Alleviating emissions of existing carbon-intense industries**: 60
- **Decarbonization technologies with significant environmental hazards**: 60
- **Improvement of fossil-fueled activities’ environmental efficiency**: 60

**Proceeds (SEK mil.):**

- **Systemic decarbonization**: 95
- **Significant decarbonization in sectors already aligned with a green economy**: 340
# Water

## Green Evaluation Process

<table>
<thead>
<tr>
<th>Technology</th>
<th>Baseline Water Stress</th>
<th>Net Benefit Ranking</th>
<th>Water Stress and Hierarchy Adjustment</th>
<th>Environmental Impact Score</th>
<th>Proceeds (SEK mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling wastewater for water (agricultural uses)</td>
<td>High</td>
<td>Low</td>
<td>Sweden</td>
<td>Increasing freshwater availability through system enhancements</td>
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</tr>
<tr>
<td>Recycling wastewater for water (other uses)</td>
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<td></td>
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<tr>
<td>Wastewater treatment with no energy recovery</td>
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<tr>
<td>Wastewater treatment with energy recovery</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Reducing water losses in water distribution network</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Water desalination to supply municipal water</td>
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<tr>
<td>Unspecified</td>
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<tr>
<td>Conservation measure in residential buildings</td>
<td>39</td>
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<td></td>
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<td></td>
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<tr>
<td>Conservation measure in commercial buildings</td>
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<tr>
<td>Conservation measure in industrial buildings</td>
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<tr>
<td>Smart metering in residential buildings</td>
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<tr>
<td>Unspecified</td>
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</tr>
</tbody>
</table>

## Overall Score

- **Transparency**: 91
- **Governance**: 76
- **Mitigation**: 64
- **Weighted aggregate of three (Transparency + Governance + Mitigation)**: E2/64

- **Environmental Impact Score**
  - 39
  - 46

- **Proceeds (SEK mil.)**
  - 10
Our Green Evaluation Approach

Weighted aggregate of three:

- Transparency
  - Use of proceeds reporting
  - Reporting comprehensiveness
- Governance
  - Management of proceeds
  - Impact Assessment Structure
- Mitigation
  - Buildings, industrial efficiencies, energy infrastructure, transport, and water
- Adaptation
  - Resilience capex such as flood defenses, asset protection etc.

Common approach used amongst opinion providers

Unique to S&P Global Ratings

Net Benefit Ranking
- eKPI's: Carbon, Waste, Water Use

Cost Benefit Ranking
- Resilience benefit ratio: Estimate of reduction in damages if event occurs

Hierarchy Applied

Environmental Impact

Resilience Level

Mitigation Score

Adaptation Score

Final Green Evaluation (E1–E4 or R1–R4)

eKPI – Environmental Key Performance Indicator
This product is not a credit rating.

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