

# Green Bond Impact Report 2022



**SBAB!**

SBAB Bank AB (publ)

**SCBC!**  
Covered bonds of SBAB

AB Sveriges Säkerställda Obligationer (publ)  
(Swedish Covered Bond Corporation – SCBC)



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## About the SBAB Group

SBAB Bank AB (publ) ("SBAB") was founded in 1985 and is owned in its entirety by the Swedish state. SBAB primarily provides residential mortgages, however, other loan and savings products are also offered to consumers, tenant-owners' associations and property companies in Sweden. The SBAB Group consists of SBAB and its subsidiaries: AB Sveriges Säkerställda Obligationer (publ) (with the parallel trade name The Swedish Covered Bond Corporation) ("SCBC"), Booli Search Technologies AB ("Booli") and Boappa. SCBC's primary operations are the issuance of covered bonds (Sw. säkerställda obligationer) pursuant to the Swedish Act on Issuance of Covered Bonds (Sw. Lag (2003:1223) om utgivning av säkerställda obligationer), i.e. bonds or other comparable full recourse debt instruments secured by a pool of mortgage credits (the "Cover Pool"), in Swedish and international capital markets. SCBC does not pursue lending activities but instead acquires loans meeting certain criteria from SBAB on a regular basis. Booli develops products and services for the housing market. SBAB and SCBC are hereinafter jointly referred to as "SBAB".

# Sustainability guides our business decisions

During the year we have seen many sustainability related challenges come to life and many peoples everyday life has drastically changed. A new government in Sweden, a seemingly long war in Ukraine, increased interest rates, inflation and spiking energy prices to mention a few significant challenges. With these in mind it is more important than ever to incorporate sustainability into the very core of how we do business – to mitigate risk and manage business opportunities. We consider the integration of sustainability in our business model to be the greatest strength of our sustainability work. During the year, we have continuously focused on adapting to future sustainability regulations and market expectations. For example, we have brought more focus on climate related risks and opportunities to understand how we can support our customers while also protecting our own assets. In addition to that we have recently adopted a green house gas reduction target and roadmap which align with

the Paris agreement of limiting global warming to 1.5 degrees. An ambitious target which we will contribute our very best to reach by supporting the transition of our customers.

The demand for energy efficient and climate smart housing has never been a hotter topic. The product offerings from banks to incentivize customers to live more sustainably has grown accordingly. Similarly, we see considerable demand from investors to fund these developments. Our green bonds enable investors to contribute to the financing of a climate conscious transformation of the Swedish housing market. I am convinced that sustainability will be crucial for customer experience and our long-term competitiveness and profitability.

Mikael Inglander, CEO of SBAB

Read more about SBAB's approach to sustainability

→ [SBAB Annual Report 2022](#)



SBAB assigns priority to four Sustainable Development Goals



# Executive summary

At 31 December 2022, SBAB had committed and disbursed a total of SEK 58 billion in Green Loans to investment projects aligned with our Green Bond Frameworks. This report presents the expected impacts of these investments as well as the impact reporting methodology applied.

## Background

### **SBAB was the first bank in Sweden to issue a Green Bond in 2016**

In 2016, SBAB established its framework for issuing Green Bonds (the "SBAB Green Bond Framework 2016"). The Green Bond Proceeds were used exclusively to finance or refinance buildings that meet certain energy-efficiency criteria or, alternatively, hold a selectively defined environmental certification, as described further in the SBAB Green Bond Framework 2016. The framework received a Medium Green shading from the independent climate and environmental research institute CICERO. During October 2022 the last two bonds from the Green Bond Framework 2016 reached its maturity and the framework will no longer be active for any future emissions.

### **SBAB launches updated framework to enable issuance of Green Covered Bonds**

In January 2019 SBAB published an updated framework for the issue of Green Bonds (the "SBAB Group Green Bond Framework 2019"). This was for reasons including encompassing a new and broader green customer offering, including SBAB's Green Residential Mortgages to private individuals, as well as to enabling further future issues of green bonds in other formats. The framework enabled SBAB to issue notes in

the form of green bonds under SBAB's EMTN programme as well as SCBC to issue covered bonds in the form of green bonds under SCBC's EMTN Programme, as described further in the SBAB Group Green Bond Framework 2019. The updated framework has a Medium Green shading from CICERO. Furthermore, CICERO's overall assessment of the governance structure of the framework is a rating of Excellent.

SBAB became the first bank in Sweden to issue a Green Covered Bond backed by residential mortgages and property loans. The transaction amounted to SEK 6 billion with a tenor of five years. On 13 June 2019, SBAB issued its second Green Bond under the updated green bond framework. The SEK 3 billion Green Bond was issued in Senior Non-Preferred format with a tenor of five years. The Bond was issued out of SBAB's EMTN Programme. On 6 May 2020 SBAB issued its third Green Bond under the "SBAB Group Green Bond Framework 2019". The EUR 500 million Green Bond was issued in Senior-Unsecured format with a tenor of five years. On 20 May 2021 SBAB issued its fourth Green Bond under the same terms and format as the previous bond. Three new bonds were issued under the 2019 Green Bond Framework during 2022.

### **New GHG emission calculation methodology**

During 2022 a new GHG emission calculation methodology have been applied to reflect the estimated CO<sub>2</sub>e savings more accurate with regards to the different heating sources of our assets. The methodology is aligned with how the new climate target is measured and followed up. A significant majority of SBAB's emission consist of scope 3 emissions from the portfolio. Any comparison between savings of GHG emission from previous Impact Reports and this years Impact Report is therefor not feasible.

 [Read more on page 10](#)

## Result as of 31 December 2022

### Outstanding Green Bonds<sup>1)</sup>

Issuer	Issue date	Nominal Amount Issue <sup>2)</sup>	Format	Maturity	Coupon	ISIN	Framework
SCBC	23 January, 2019	SEK 6.0 bn	Covered bond	28 March, 2024	0.75%	XS1943443769	SBAB Group Green Bond Framework 2019
SBAB	13 June, 2019	SEK 2.25 bn	Senior	6 June, 2024	3M Stibor +93 bps	XS2015229516	SBAB Group Green Bond Framework 2019
		SEK 0.75 bn	Non-Preferred	6 June, 2024	1.0%	XS2015229862	
SBAB	6 May, 2020	EUR 500 mn (equiv SEK 5.3 bn)	Senior Unsecured	13 May, 2025	0.50%	XS2173114542	SBAB Group Green Bond Framework 2019
SBAB	20 May, 2021	EUR 500 mn (equiv SEK 5.1 bn)	Senior Unsecured	27 August, 2026	0.125%	XS2346986990	SBAB Group Green Bond Framework 2019
SBAB	31 January, 2022	EUR 500 mn (equiv SEK 5.2 bn)	Senior Unsecured	8 February, 2027	0.50%	XS2441055998	SBAB Group Green Bond Framework 2019
SBAB	1 June, 2022	EUR 750 mn (equiv SEK 7.9 bn)	Senior Unsecured	10 December, 2025	1.875%	XS2489627047	SBAB Group Green Bond Framework 2019
SBAB	25 August, 2022	SEK 1.9 bn	Senior Non-Preferred	2 September, 2025	3M Stibor + 95 bps	XS2527964873	SBAB Group Green Bond Framework 2019
		SEK 0.6 bn		2 September, 2025	3.873%	XS2527964956	
		SEK 1.0 bn		2 September, 2027	4.20%	XS2527965177	
<b>Total</b>		<b>36 bn</b>					

1) On the 11 October 2022, a SEK 1.75 billion SBAB Green Senior Unsecured Bond matured (issued within the SBAB Green Bond Framework 2016).

2) For bonds issued in EUR the conversion to SEK has been made based on the exchange rate at the date of the issue.

# Impact Reporting

## SBAB Green Bond Framework 2016

At 31 December 2022, SBAB had disbursed and/or committed a total of SEK 2.02 billion in Eligible Green Loans to investment projects as defined in SBAB Green Bond Framework 2016. As the framework expired October 11th 2022 the estimated avoided emission from the applicable green loan is calculated January 1st to expiration date. These projects are estimated to have generated an avoidance in GHG emissions corresponding to 127 tonnes CO<sub>2</sub>e during 2022. SBAB's share of the financing is estimated to correspond to an avoidance of 74 tonnes CO<sub>2</sub>e during the same time period. That in turn corresponds to an estimated avoidance of 0.04 tonnes CO<sub>2</sub>e per committed/disbursed SEK 1 million and year.

→ [Read more on page 10](#)

### Eligible Green Loans

**SEK 2.02 billion**

Expected avoidance of energy savings January 1st to October 11th

**1 356 MWh**

Expected avoidance of GHG emissions January 1st to October 11th

**74 tCO<sub>2</sub>e**

Expected annual avoidance of GHG emissions per committed/disbursed SEK 1 million

**0.04 tCO<sub>2</sub>e**

## SBAB Group Green Bond Framework 2019

As of 31st December 2022, SBAB had disbursed a total of SEK 56.12 billion in Eligible Green Loans to investment projects as defined in SBAB Group Green Bond Framework 2019. These projects are estimated to generate an annual avoidance in GHG emissions corresponding to 9 657 tonnes CO<sub>2</sub>e. SBAB's share of the financing is estimated to correspond to an annual avoidance of 4 640 tonnes CO<sub>2</sub>e. That in turn corresponds to an estimated avoidance of 0.08 tonnes CO<sub>2</sub>e per disbursed SEK 1 million and year.

→ [Read more on page 10](#)

### Eligible Green Loans

**SEK 56.12 billion**

SBAB financed annual expected aggregated energy savings

**81 668 MWh**

SBAB financed annual expected avoidance of GHG emissions

**4 640 tCO<sub>2</sub>e**

Expected annual avoidance of GHG emissions per disbursed SEK 1 million

**0.08 tCO<sub>2</sub>e**



## Vinfatet 6

Heba is a long-term property owner with genuine commitment and in-depth knowledge of managing and developing properties. The property sector faces many major challenges regarding energy and use of materials which in turn are responsible for much of the impact on our environment and climate.

Heba's property Vinfatet 6 is located in Sollentuna in Stockholm with a retirement nursing home as tenant. The building was completed in 2016 and achieved a Miljöbyggnad Silver rating. The total area of the property is 4010 sqm, divided in to 76 apartments and connected with communal areas and the courtyard surrounded by beautiful nature. The property has geothermal energy installed and with a ventilation unit with heat recovery.

All Heba's properties are all digitally connected with every apartment having its own temperature meter which enables Heba to check the temperature and follow-up any deviations. The system allows Heba to monitor the temperature thus ensuring that no more energy is used in heating than necessary.

<b>Framework:</b>	SBAB Green Bond Framework 2019
<b>Eligible Category in framework:</b>	Energy efficient building, EPC B
<b>Year of completion:</b>	2016
<b>Total energy performance/year:</b>	53 kWh/m <sup>2</sup> /year
<b>Baseline (energy requirement according to BBR:)</b>	75 kWh/m <sup>2</sup> /year
<b>Project full expected GHG emissions avoided:</b>	7.2 tCO <sub>2</sub> e/year
<b>SBAB financed expected GHG emissions avoided:</b>	3.3 tCO <sub>2</sub> e/year

# Impact Report SBAB Green Bond Framework 2016

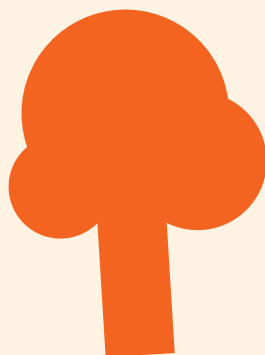
Eligible Category <sup>1)</sup>	#Objects	Mortgage loans, SEK million	Total eligible volumes	Estimated avoidance of GHG emissions (tonnes CO <sub>2</sub> e/year)		
				Full project expected GHG emissions avoided	SBAB financed expected GHG emissions avoided	SBAB Green Bond financed expected GHG emissions avoided
<b>Category 1</b>						
Energy efficient buildings (EPC A or B and/or certification)	16	2 016	2016	127	74	
<b>Total</b>	<b>16</b>	<b>2 016</b>	<b>2016</b>	<b>127</b>	<b>74</b>	<b>64</b>

1) No objects has classified for the reduction of energy usage during 2022

# Impact Report SBAB Group Green Bond Framework 2019

Eligible Category	Eligible Green Loan	#Objects	Eligible volumes (SEK mn)				Total
			EPC A	EPC B	EPC C (Construction initiated before 1 January 2014)	Other	
<b>Retail</b>							
Energy efficient buildings	Residential mortgages (Sw. bolån)	16 486	1 173	13 741	22 249	37 163	
Reduction of energy usage	Residential mortgages and/or consumer loan (Sw. Privatlån)	216				479	
						479	
<b>Corporate Clients &amp; Tenant-Owners' Associations<sup>2)</sup></b>							
Energy efficient buildings	Corporate loans Loans to tenant-owners' associations (Sw. bostadsrättsförening)	369	900	12 241	5 251	18 393	
Reduction of energy usage	Corporate loans Loans to tenant-owners' associations	2				84	
<b>Total</b>		<b>17 073</b>	<b>2 073</b>	<b>25 982</b>	<b>27 500</b>	<b>56 119</b>	

2) No objects have been included in the category for "Energy efficient and green buildings; new constructions and major renovations" or "Energy efficiency and other green investments" in 2022



## Reduction of energy usage – a category with lots of potential!

During 2022 the discussion on energy efficiency has become an increasingly hot topic as energy prices have spiked whereas we have continuously focused on assessing energy improvements across the portfolio. Last year we launched a partnership with Anticimex on energy consultation and the Tibber app which provide real-time visibility into pricing as well as analytics and an overview of the electricity consumption at home. This year, we have initiated a partnership with Hemma where our customers have been offered to use their platform to analyse their housings energy performance and what investment can be done to increase energy efficiency to what payback time. By supporting our customers to understand their housing conditions and energy consumption better we are able to help them to use energy more efficiently and in the big picture contribute to reduce emissions.



## Green Bond Framework 2016

At 31 December 2022, SBAB had disbursed and/or committed a total of SEK 2.02 billion in Eligible Green Loans to investment projects as defined in SBAB Green Bond Framework 2016. As the framework expired October 11th 2022 the estimated avoided emission from the applicable green loan is calculated January 1st to expiration date. These projects are estimated to generate an avoidance in GHG emissions corresponding to 127 tonnes CO<sub>2e</sub> during the year. SBAB's share of the financing is estimated to correspond to an avoidance of 74 tonnes CO<sub>2e</sub> during the same time period. That in turn corresponds to an estimated avoidance of 0.04 tonnes CO<sub>2e</sub> per committed/dispensed SEK 1 million and year. At year-end, outstanding Green Bonds within the SBAB Green Bond Framework 2016 amounted to 0 million SEK. As the framework has lapsed, the assets previously included in the 2016 year framework has been transferred to the assets of SBAB Green Bond Framework 2019 as of January 1st 2023. More information about the respective eligible category is available in Annex I. The framework is available in full on [sbab.se](http://sbab.se).

→ Read more on page 15

## Eligible Green Loans & Estimated 2022 years avoidance of GHG emissions

**SEK 2.02 billion → 74 tCO<sub>2e</sub>**

## Outstanding Green Bonds & Estimated 2022 years avoidance of GHG emissions

**SEK 1.75 billion → 64 tCO<sub>2e</sub>**

Estimated avoidance of GHG emissions (tonnes CO<sub>2e</sub>/year)

EPCA	EPCB	EPC C (Construction initiated before 1 January 2014)		Full project expected GHG emissions avoided	SBAB financed expected GHG emissions avoided	SBAB Green Bond financed expected GHG emissions avoided
		Other				
281	1 807	3 801		5 169	3 042	
			57	57	35	
188	1 464	2 724		4 376	1 544	
			55	55	19	
<b>469</b>	<b>3 271</b>	<b>6 428</b>		<b>9 657</b>	<b>4 640</b>	<b>2 976</b>

## Green Bond Framework 2019

As of 31st December 2022, SBAB had disbursed a total of SEK 56.12 billion in Eligible Green Loans to investment projects as defined in SBAB Group Green Bond Framework 2019. These projects are estimated to generate an annual avoidance in GHG emissions corresponding to 9 657 tonnes CO<sub>2e</sub>. SBAB's share of the financing is estimated to correspond to an annual avoidance of 4 640 tonnes CO<sub>2e</sub>. That in turn corresponds to an estimated avoidance of 0.08 tonnes CO<sub>2e</sub> per disbursed SEK 1 million and year.

In addition to these eligible projects, SBAB has other yet unclassified loan assets (mainly construction loans) that may qualify to serve as the basis for issuing green bonds.

At year-end, outstanding Green Bonds within the SBAB Group Green Bond Framework 2019 amounted to SEK 36 billion. These Green Bonds are estimated to generate an annual avoidance of 2 976 tonnes CO<sub>2e</sub>.

More information about the respective eligible category is available in Annex II. The framework is available in full at [sbab.se](http://sbab.se).

→ Read more on page 16

## Eligible Green Loans & Estimated annual avoidance of GHG emissions

**SEK 56.12 billion → 4 640 tCO<sub>2e</sub>**

## Outstanding Green Bonds & Estimated annual avoidance of GHG emissions

**SEK 36 billion → 2 976 tCO<sub>2e</sub>**

# Reporting methodology

The reporting methodology applied in this report is based on “Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting” and the Partnership for Carbon Accounting Financials (“PCAF”) methodology

As of 2022 the methodology for calculating expected avoidance of GHG emission has been updated to align with SBAB’s overall updated methodology of calculation GHG emission from assets. The updated methodology is based on Partnership for Carbon Accounting Financials (“PCAF”) in order to be comparable between industry peers. Read more about our calculations on GHG emissions in our Climate Report 2022, available in full at [sbab.se](https://sbab.se). The methodology for calculating expected avoidance of GHG emissions for the 2016 and 2019 years framework are based on the same assumptions and calculation method which is presented below.

Note that the updated methodology is more accurate as it takes the source of heating into consideration in comparison to previous years reporting where averages were used. With regards to this change of calculation method it is not possible to compare previous years results to the expected avoided emission in this report.

The expected avoidance of GHG emissions has been calculated based on how much less energy each eligible property’s actual or expected energy consumption is compared with:

- an average energy consumption for existing buildings (buildings with construction year before 1 January 2014).
- allowed energy consumption as stated in the National Board of Housing, Building and Planning’s building codes for new buildings (buildings with construction year after 1 January 2014).
- an old energy declaration if the energy reduction is at least 30 percent within the last 10 years.

Avoided GHG emissions have been estimated for each object based on average emissions per kWh for the specific type of object (multi family buildings or single family houses) and its heating source.

All properties which has at least one building that qualifies for the green bond framework will be included in the Impact Report. The amount of the building included in the Impact Report is allocated based on Atemp (m<sup>2</sup>) of the qualified building in relation to the total Atemp (m<sup>2</sup>) of the building. If there are several buildings on one property with different energy labels that classify for the green bond framework the building with the lowest label is chosen to represent the property. If there are several buildings located on one property with different energy labels, where not all buildings qualify for the green bond framework, a percentage based on m<sup>2</sup> Atemp is calculated for how much of the property that is included in the Impact Report.

## Calculation formula applied

$$\rightarrow ((A \times B) - (C \times D)) \times E = \text{Full project GHG avoided} \times F$$

**A** = Baseline for energy consumption or former energy usage per m<sup>2</sup> Atemp and year  
(see “Baseline methodology” for definitions and details)

**B** = Baseline for average GHG emissions (gCO<sub>2e</sub>) per kWh  
(see “Baseline methodology” for definitions and details)

**C** = Expected or actual energy consumption for the specific object based on Energy Performance (energy usage per m<sup>2</sup> Atemp)

**D** = Average GHG emission (gCO<sub>2e</sub>) per kWh for the specific objects source of heating <sup>1) 2)</sup>

**E** = Object size, m<sup>2</sup> Atemp

**F** = SBAB’s share of the financing<sup>3)</sup>

1) If an object has two or more sources of heating an average of the emission factors are used.

2) If the object is or belongs to a tenant-owned association with multiple buildings an average emission factor for the collective of buildings have been applied. The applicable emission factors can be found in our Climate Report.

3) Existing buildings = Loan relative to the market value.

## Baseline methodology

The energy performance in the energy declarations made from 1 January 2019 is based on primary energy demand instead of specific energy usage. The specific energy usage in older energy declarations was defined as delivered energy to the building divided by the floor area  $A_{temp}$  and different calculations were applied depending on source for heating and the climate zone of the building. The energy performance for buildings with energy declarations done before 1 January 2019 may therefore be different from those made after 1 January

2019 and the energy performance is not always directly comparable.

Due to this challenge and our lack of complete data to convert all energy declarations into primary energy demand, we are taking a conservative approach in our baseline methodology and all threshold values for energy performance are based on available primary energy demand.

1 January 2014 was the date when the new energy class requirements became mandatory in the building regulations with minimum requirement of Energy label C for

all new buildings. Our baseline methodology is therefore different depending on the year of construction. The energy declaration used for full year calculation of energy consumption and GHG emissions is the energy declaration current per year-end.

### Baseline for reduction of energy usage

Houses with an improved energy declaration, where the final energy use per  $m^2$  & year on the property has reduced by at least 30 percent for the Green Bond Framework 2019 and 35 percent for the Green Bond Framework 2016.

### Baseline for average emission factors used

Object type	Distribution from source of heating <sup>1)</sup>	Gram CO <sub>2</sub> e per kWh	Baseline
Multifamily buildings	91% district heating	46,1 gCO <sub>2</sub> e/kWh	49,5 gCO <sub>2</sub> e/kWh
	8% electricity	6 gCO <sub>2</sub> e/kWh	
	1% gas	204,8 gCO <sub>2</sub> e/kWh	
Single Family houses	51% electricity	68,8 gCO <sub>2</sub> e/kWh	45,8 gCO <sub>2</sub> e/kWh
	29% biofuel	0 gCO <sub>2</sub> e/kWh	
	19% district heating	46,1 gCO <sub>2</sub> e/kWh	
	1% gas	204,8 gCO <sub>2</sub> e/kWh	

1) Source of energy distribution is Swedish Energy Agency (Energimyndigheten) data from 2021.

2) Data from Swedish National Board of Housing, Building and Planning (Sw. "Boverket").

3) Data from 2016 is used due to an average time of 2 years between the completion of building and an issued energy declaration.

### Baseline for energy consumption or former energy usage

Construction year	Data explanation	Baseline
After 1 January 2014	Primary energy demand for Energy Class C <sup>2)</sup>	75 kWh/m <sup>2</sup> /year
Before 1 January 2014	Average energy demand per square meter for single family homes and multi family homes in 2016 <sup>3)</sup>	118 kWh/m <sup>2</sup> /year

## Methodology for calculating GHG emissions per building category and heating source

As of 2022 a new methodology for calculating GHG emissions has been introduced. The calculations are based on the methodology developed from Partnership for Carbon Accounting Financials, "PCAF" to

increase comparability between financial institutions. The full calculation methodology and supporting data is presented in SBAB Climate Report 2022 which is published on sbab.se.

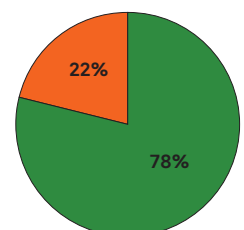
# Approximated alignment with the EU-taxonomy

We assessed the extent to which our allocated green assets contribute to the Technical Screening Criteria in the EU taxonomy. The activity Acquisition and ownership of buildings is specifically applied. This assessment is based on available data and current definitions of national thresholds<sup>1)</sup>. We have not assessed the full taxonomy alignment, including Do No Significant Harm and Minimum Safeguards, due to the lack of available data. Read our mandatory taxonomy report in SBAB's Annual Report 2022 page 176.

The share of eligible green loans of SBAB Impact Report 2022 that qualify for the taxonomy top 15% most energy efficient buildings in Sweden by December 31st

## Top 15 percent of Eligible Green Loans

	#Objects	Eligible green loans (mn SEK)
A	416	2 184
B	5 237	27 077
C	6 081	15 929
	<b>11 734</b>	<b>45 190</b>



■ Qualified for top 15  
■ Not qualified for top 15

## Methodology for approximating top 15

The result is based on all assets included, by year end, in the 2019 Green Bond Framework. This includes the assets which have been transferred from the Green Bond

Framework 2016 to the Green Bond framework 2019 by year end. Any assets which do not classify for the Green Bond Framework 2019 were excluded.

1. The objects are divided based on the dates of the Energy Performance Certificate ("EPC") and the Energy Performance are allocated a weighted multiplier depending on the heating source(s) in order to be converted to BBR 29.<sup>2)</sup>

From date	To date	Conversion
2013-01-01	2018-12-31	Converted with a weighted multiplier to BBR 29
2019-01-01	2020-08-31	Heating source with electricity is divided by 1,6 and thereafter converted with a weighted multiplier to BBR 29
2020-09-01	Current	BBR 29, no conversion performed

2. For tenant-owned apartments the energy performance is calculated as the average for the tenant-owner associations (Sw. "Bostadsrättsförening") and if there are more than one energy label the worst energy label is chosen to represent the tenant-owned apartment<sup>3)</sup>. For corporate clients, tenant-owners associations and single family houses the energy performance is summarized if there are more than one house on the property and divided by the number of houses. The worst energy label is chosen to represent the property.

3. The energy performance is then compared to the national thresholds<sup>1)</sup> of 81 kWh/m<sup>2</sup>/year for multifamily houses and 78 kWh/m<sup>2</sup>/year for single family houses. If the energy performance for the object is equal to or lower than the threshold or holds an EPC label of A it is included in the top 15%.

4. The objects that are identified as top 15 are matched against the object which is included in the green bond framework of 2019 and the amount qualified for the green bond framework.

As there are currently lack of national guidelines of how to calculate and interpret "top 15" SBAB has chosen this methodology to estimate the amount of assets that would likely qualify as the top 15% most energy efficient houses in Sweden. The methodology that have been chosen is developed by another Swedish Bank with a conservative approach which has gone through adequate quality assurance by relevant external parts.

1) National definition of building within the top 15% most energy efficient CIT Energy Management published (2022-12-14) is a report that defines national thresholds for different building types. The threshold for multi-family houses is 81 kWh/m<sup>2</sup>/year and single-family houses is 78 kWh/m<sup>2</sup>/year based on current building regulations (BBR29) (read full report). The National Board of Housing, Building and Planning and the Swedish Energy Agency are investigating their role in developing a method for determining which buildings are the 15 % most energy efficient.

2) The weighted multiplier used is based on heating source(s).

3) This set up is made since specific tenant-owned apartments cannot be allocated to a specific tenant-owned association, therefore, a conservative approach is adopted.



## Stockholm Teodoliten 1

ByggVesta develops rental apartments and student housing for its own management. The company's sustainability work is focused on energy efficiency and reduced climate impact from construction. The property Stockholm Teodoliten 1 was developed by ByggVesta and was finished in 2012. It is now owned by HällBo, a Joint venture between ByggVesta and Bonnier Fastigheter.

The property is situated in Fagersjö, a part of Farsta in the southern part of Stockholm, close to lake Magelungen, Ågesta friluftsområde and other recreational areas. The building is built with a thermos-like system. Geothermal heating is distributed through a high efficiency FTX ventilation. A well isolated system together with radiant solar heat, household appliances, lighting, and the residents themselves, make the need of extra energy input very low. ByggVesta has over the years developed this technique which assures buildings with very low energy consumption. Residents in the buildings have a high level of thermal comfort and get more easily furnished apartments due to the lack of radiators.

<b>Framework:</b>	SBAB Green Bond Framework 2019
<b>Eligible Category in framework:</b>	Energy efficient building, EPC C
<b>Year of completion:</b>	2012
<b>Total energy performance/year:</b>	52 kWh/m <sup>2</sup>
<b>Baseline (energy requirement according to BBR):</b>	118 kWh/m <sup>2</sup> /year
<b>Project full expected GHG emissions avoided:</b>	10.6 tCO <sub>2</sub> e/year
<b>SBAB financed expected GHG emissions avoided:</b>	7.3 tCO <sub>2</sub> e/year

# Auditor's Limited Assurance Report on SBAB's Green Bond Impact Report

To SBAB Bank AB (publ), corporate identity number 556253-7513

## Introduction

We have been engaged by SBAB Bank AB (publ), ("SBAB") to undertake a limited assurance engagement of the Green Bond Impact reporting ("Reporting") for the year 2022 set out in this document.

## Responsibilities of Management

SBAB's Management is responsible for the preparation of the Reporting in accordance with the applicable criteria, as explained in the SBAB Green Bond Framework 2016 and the SBAB Group Green Bond Framework 2019 (available at [https://www.sbab.se/1/in\\_english/investor\\_relations/sbab\\_unsecured\\_funding/sbab\\_green\\_bond.html](https://www.sbab.se/1/in_english/investor_relations/sbab_unsecured_funding/sbab_green_bond.html)), as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of the Reporting that is free from material misstatements, whether due to fraud or error.

## Responsibilities of the auditor

Our responsibility is to express a conclusion on the Reporting based on the limited assurance procedures we have performed. Our engagement is limited to historical information presented and does therefore not cover future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 (revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the

preparation of the Reporting, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with International Standards on Auditing and other generally accepted auditing standards in Sweden.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of SBAB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement.

Accordingly, the conclusion of the procedures performed do not express a reasonable assurance conclusion.

Our procedures are based on the criteria defined by SBAB's Management as described above. We consider these criteria suitable for the preparation of the Reporting.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

## Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Green Bond Impact Report for the year 2022, is not prepared, in all material respects, in accordance with the applicable criteria, as explained in the SBAB Green Bond Framework 2016 and the SBAB Group Green Bond Framework 2019.

Solna 22 March 2023

Deloitte AB

Patrick Honeth  
Authorized Public Accountant

Adrian Fintling  
Expert Member of FAR



## Annex I:

# Use of Proceeds (SBAB Green Bond Framework 2016)

A loan provided by SBAB will become an eligible loan (each an "SBAB Eligible Green Loan") if it is used to finance or refinance a project which fulfils one of the below criteria.

Eligible Category	Eligibility Criteria
<b>Category 1</b>	
Energy efficient buildings (EPC A or B and/or certification)	<p>Is either a new construction, a rehabilitation or major renovation by a corporate entity or a tenant-owner association (Sw. <i>bostadsrättsförening</i>) of one or more of its residential or commercial buildings which has/have obtained or will obtain:</p> <p>(i) an energy performance certificate (Sw. <i>energideklaration</i>) issued by the Swedish National Board of Housing, Building and Planning (Sw. <i>Boverket</i>) (an "Energy Performance Certificate"), regardless of energy label; and</p> <p>(ii) at least one of the following certifications (or similar): Energy Performance Certificate with energy label A or B;</p> <ul style="list-style-type: none"><li>• Energy Performance Certificate with energy class A or B;</li><li>• Miljöbyggnad (minimum certification "silver");</li><li>• Svanen (Eng. Nordic Swan);</li><li>• Passivhus (Eng. Passive House);</li><li>• Green Building;</li><li>• LEED (minimum certification "gold"); or</li><li>• BREEAM or BREEAM-SE (minimum certification "excellent").</li></ul>
<b>Category 2</b>	
Reduction of energy usage	<p>A rehabilitation or major renovation by a corporate entity or a tenant-owner association of one or more of its residential or commercial buildings where the final energy use per square meter and year will be or has been reduced by at least 35 per cent.</p>



## Annex II: Use of Proceeds (SBAB Group Green Bond Framework 2019)

A loan provided and held by the SBAB Group will become an eligible loan (each an “**Eligible Green Loan**”) if it fulfils the eligibility criteria of one of the below categories.

Each Eligible Green Loan (other than a consumer loan) is primarily secured either by mortgages (Sw. pantbrev) pledged in

favour of an entity in the SBAB Group if the loan relates to a property (Sw. fast egen-dom) or a by a pledge in favour of an entity in the SBAB Group if the loan relates to a tenant-owners’ right. In certain cases, the Eligible Green Loans are also secured by a share pledge or through a guarantee.

The loan may be regarded as an Eligible Green Loan during 10 years from the time of selection in accordance with Section 3 in the Framework.

Eligible Category	Eligible Green Loan	Eligibility Criteria
<b>Retail</b>		
Energy efficient buildings	Residential retail mortgage loans (Sw. <i>bolån</i> )  	<ul style="list-style-type: none"> <li>• <b>Properties</b> (Sw. <i>fastigheter</i>) owned by one or more individuals where the building on such property (i) has obtained an EPC with energy class A or B (where the construction was initiated on or after 1 January 2014); (ii) has obtained an EPC with energy class A, B or C (where the construction was initiated before 1 January 2014); or (iii) has an energy performance equivalent to a new EPC with the required criteria set out in (i) or (ii) above (as applicable); or</li> <li>• <b>Tenant-owners’ rights</b> (Sw. <i>bostadsrätter</i>) held by one or more individuals where the building owned by the tenant-owner association (Sw. <i>bostadsrättsförening</i>) to which the tenant-owners’ right relate (i) has obtained an EPC with energy class A or B (where the construction was initiated on or after 1 January 2014); (ii) has obtained an EPC with energy class A, B or C (where the construction was initiated before 1 January 2014); or (iii) has an energy performance equivalent to a new EPC with the required criteria set out in (i) or (ii) above (as applicable).</li> </ul>
Reduction of energy usage	Residential retail mortgage loan and/or consumer loan (Sw. <i>privatlån</i> )	<ul style="list-style-type: none"> <li>• <b>Buildings</b> where the final energy use per sq.m. &amp; year on the property has been reduced by at least 30%, as evidence e.g. by a new EPC.</li> </ul>
<b>Corporate Clients &amp; Tenant-Owners’ Associations</b>		
Energy efficient and green buildings; new constructions and major renovations	Corporate loans	<ul style="list-style-type: none"> <li>• <b>New constructions</b>, including rehabilitations or major renovations, of one or more residential or commercial buildings where the project plan specifies that the intention is either to obtain at least one of the below certifications or to construct/renovate the building according to such certification methods. <ul style="list-style-type: none"> <li>(i) EPC with energy class A or B;</li> <li>(ii) Miljöbyggnad, (minimum certification “silver”);</li> <li>(iii) Svanen (Eng. <i>Nordic Swan</i>);</li> <li>(iv) Passivhus (Eng. <i>Passive House</i>); or</li> <li>(v) Green Building.</li> </ul> </li> </ul> <p>A building is deemed to be a new construction during the planning phase, the construction or renovation phase (as applicable) and until an EPC has been obtained (“<b>Completion</b>”).</p>
Energy efficient buildings	Corporate loans Loans to tenant-owners’ associations (Sw. <i>bostadsrättsförening</i> )	<ul style="list-style-type: none"> <li>• <b>Properties</b> owned by an entity (including a tenant-owner association) where the residential or commercial building on such property (i) has obtained an EPC with energy class A or B (where the construction was initiated on or after 1 January 2014); (ii) has obtained an EPC with energy class A, B or C (where the construction was initiated before 1 January 2014); or (iii) has an energy performance equivalent to a new EPC with the required criteria set out in (i) or (ii) above (as applicable).</li> </ul>
Reduction of energy usage	Corporate loans Loans to tenant-owners’ associations	<ul style="list-style-type: none"> <li>• <b>Buildings</b> where the final energy use per sq.m. &amp; year on the property has been reduced by at least 30%, as evidence e.g. by a new EPC.</li> </ul>
Energy efficiency and other green investments	SBAB Green Loans to tenant-owners’ associations and corporations  SBAB product: <b>SBAB Green Loan</b> (Sw. <i>Gröna Lån</i> )	<ul style="list-style-type: none"> <li>• <b>Activities in buildings</b> where the project plan specifies that the intention is either to reduce the energy use in such building (e.g. new heat source) or to have an environment enhancing impact (e.g. removal of certain materials such as PCBs) and has qualified to be an SBAB Group green loan (Sw. <i>Gröna Lån</i>) in accordance with the terms set out from time to time on <a href="http://www.sbab.se">www.sbab.se</a>.</li> </ul>

For the avoidance of doubt, net proceeds of a Green Bond will not be allocated to fossil energy generation, nuclear energy generation, research and/or development within weapons and defence, potentially environmentally negative resource extraction (such as rare-earth elements or fossil fuels), gambling or tobacco. Neither SBAB nor SCBC provides any loans for the financing of any of the above.





## Annex III: Energy Performance Certificates

### Energy performance measures

Energy consumption is described in the energy performance certificate in terms of energy performance measures. Energy performance measures indicate how much energy is consumed by heating, air-conditioning, hot tap water and the building's property electricity. All energy consumed for this in one entire year is aggregated and divided by the heated surface of the building. The result is the number of kilowatt-hours (kWh) used per square meter (m<sup>2</sup>). Energy performance is expressed in terms of the unit kWh/m<sup>2</sup> and year.

### Energy classes from A to G

Energy classification is included in the certificates to make it easier to compare buildings with each other and to get an idea of their energy consumption. Energy Class A stands for low energy consumption, and G stands for high. A building that has an energy consumption corresponding to the requirement imposed on a newly built building today is placed in Class C.

The seven classes on the scale are based on the energy consumption requirement imposed on new buildings built today. These requirements can be found in the building code, BBR (BFS 2011:6) and depend on the type of building, if it is electrically heated or not, and where in Sweden it is situated. Energy Class C corresponds to the particular requirement that would apply to the building if it were built today. Below is a list showing what each energy class stands for.

EP = Energy performance measures of the building in question

≤ = less than or equal to

> = more than

A = EP is ≤ 50 percent of the requirement for a new building.

B = EP is > 50 - ≤ 75 percent of the requirement for a new building.

C = EP is > 75 - ≤ 100 percent of the requirement for a new building.

D = EP is > 100 - ≤ 135 percent of the requirement for a new building.

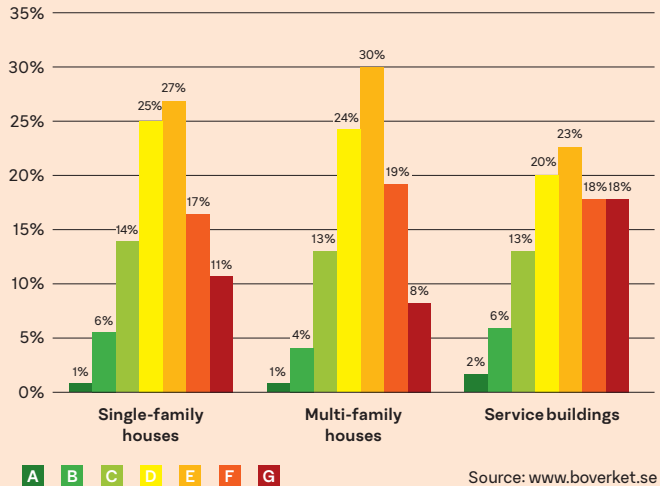
E = EP is > 135 - ≤ 180 percent of the requirement for a new building.

F = EP is > 180 - ≤ 235 percent of the requirement for a new building.

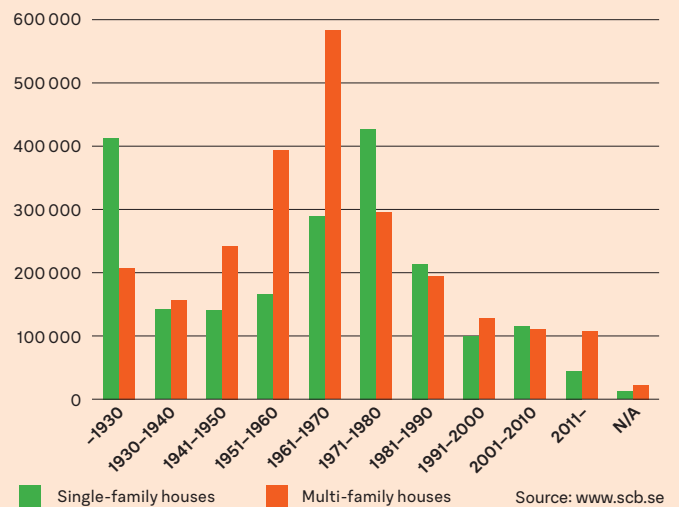
G = EP is > 235 percent of the requirement for a new building.

Source: www.boverket.se

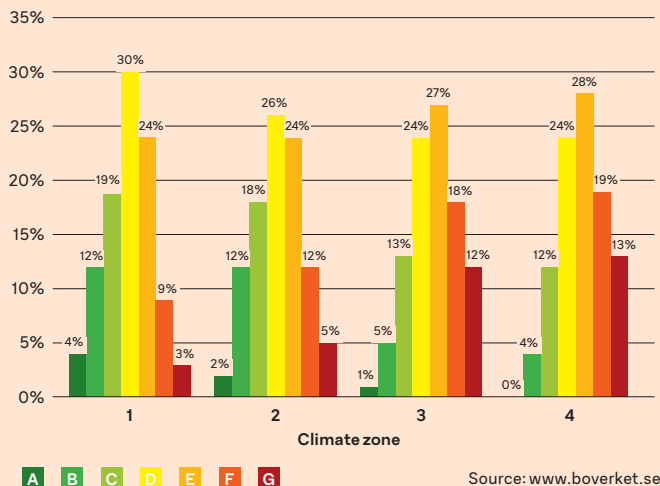
### Distribution of energy classes (A to G) by type of housing



### Number of homes by type of housing and building period



### Distribution of energy classes (A to G) per climate zone



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