

2022

Region Stockholm

Green Bond impact report



Table of contents

3	A long history of committing to the future
4	Executive Summary
5	Region Stockholm's Sustainability Strategy and Policy
5	Region Stockholm's Green Bond framework 2022 – Dark green with Excellent governance
6	Collaboration within Green Bonds
7	Green Bonds overview
8	Investor relations
9	Region Stockholm's projects for green investments
11	Roslagsbanan expansion programme
14	Karolinska University Hospital, Huddinge
16	Södertälje Sjukhus AB
18	Karolinska University Hospital, Solna
20	Södersjukhuset AB
22	Danderyds sjukhus AB

Green Bond impact report 2022

A long history of committing to the future

Region Stockholm leads the way to a green and sustainable future, with a goal to halve its total climate impact by 2030 and adhere to the regional goals of reaching net-zero emissions by 2045. Green financing is an important part in realising the vision and accounts for the majority of Region Stockholm's debt portfolio. During 2022 10,500 tonnes of CO₂ equivalents were avoided through the green bonds issued during the year, and between 2018 and 2022 more than 53,000 tonnes have been avoided in total.

Region Stockholm's longstanding commitment to reduce impact from its operations, procurement, and investments has led to the successful accomplishment of its latest Environmental Programme in December 2021. This included a reduction of greenhouse gas emissions by more than 50 per cent since 2011, and by over 70 per cent since 1990. On January 1st 2022 Region Stockholm's new Sustainability Policy and Sustainability Strategy entered into force.

“*Region Stockholm will meet its climate targets, and Green Bonds are an important step towards financing the green transition. They reinforce our climate and sustainability work throughout the Stockholm region, based on sound financing. We are now building momentum for the long-term, essential renewal of our sustainability work. It makes a difference.*”

AIDA HADŽIALIĆ
REGIONAL CHAIR FOR FINANCE



Photo: Anna Mihaljević

“*Public transport is an important tool for achieving the green transition. Green bonds enable us to invest even more in the long-term expansion of public transport and make it more attractive for travellers. Competitive and accessible public transport in urban, archipelago and rural areas is essential if we are to achieve our goal of halving our climate impact by 2030.*”

GUSTAV HEMMING
REGIONAL CHAIR FOR CLIMATE, INFRASTRUCTURE
AND THE ARCHIPELAGO

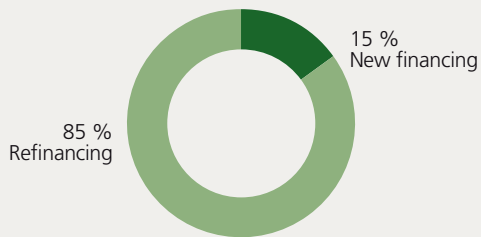
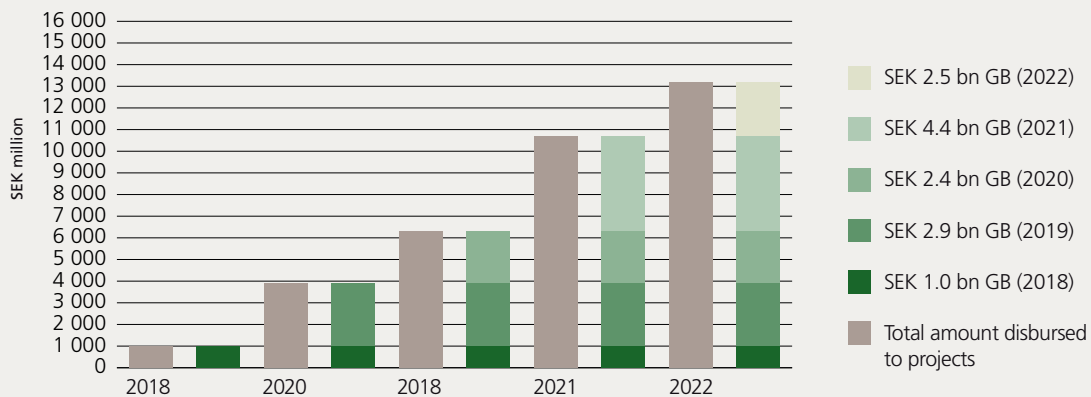


Photo: Jani Uppala

Executive Summary

Region Stockholm reports its Green Bonds impact in accordance with the Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting. Any deviations from the Position Paper recommendations will be indicated in our reports.

Green Bond issuance and Green Bond project portfolio



Distribution between new financing and refinancing

Region Stockholm's Green Bonds can finance both new and existing projects. New financing is defined as green projects financed during the reporting year. Refinancing is defined as green projects financed before the reporting year.

2022 – Green Bond CO₂ impact, based on disbursed amounts to Green Bonds

Project category	GHG emissions reduced/avoided (tonnes CO ₂ e)		Disbursed amounts to projects, SEK M	Impact CO ₂ e/SEK M	
	2022	Accumulated ¹ (5 years rolling)		2022	Accumulated ¹ (5 years rolling)
Clean and Sustainable Transportation	8,200	40,400	7,400	1	5
Green and Energy Efficient Buildings	2,300	12,700	5,800	0.4	2
<i>of which Renewable Energy</i>	450	2,700	–	–	–
Total (Disbursed amounts with CO₂ impact SEK M)	10,500	53,100	13,200	1	5
Annual renewable energy generation, GWh	2.8	GWh			
Annual energy savings, GWh²	5.7	GWh			

¹ The accumulated amount covers year 2018 to 2022.

² Compared to national building requirements, rounded per 0,1 GWh.

Region Stockholm's Sustainability Strategy and Policy

The purpose of Region Stockholm's Sustainability Policy and Sustainability Strategy 2022–2027 is to set the ambitions for the organization's sustainability work and to enable an integrated approach covering social, economic, and environmental sustainability. This approach will reduce the organization's environmental impact, increase social sustainability, and contribute to reducing risk and costs.

The Sustainability Policy establishes the guiding principles of how Region Stockholm's entities shall work in a sustainable way and lays the foundation for the sustainability strategy.

The Sustainability Strategy aims to provide a platform for joint management and development of Region Stockholm's sustainability work and sets the priorities for 2022–2027 needed to reach the long-term goals.

Actions carried out shall be in accordance with the Sustainability Strategy and contribute to the UN Development goals, the Paris agreement and the Regional development plan for Stockholm, RUFSS 2050.

The long-term goals cover all of Region Stockholm's operations. One of the most important goal is that by 2030, Region Stockholm has halved its total climate impact compared to 2019. The long-term goal also includes a larger scope than previous climate targets. Other goals include reduction of harmful substances, creating circular flows within Region Stockholm's operations and creating a resilient organization. Region Stockholm shall also contribute to improved public health for all and ensure that Region Stockholm is accessible for all with equal treatment.

Region Stockholm's Green Bond framework 2022 – Dark green with Excellent governance

Region Stockholm's green financing operations are set up according to its new framework for Green Bonds released on January 25th, 2022. The new framework is based on the EU Taxonomy and Region Stockholm's new sustainability policy and strategy. Region Stockholm's Green Bonds may finance investments undertaken by Region Stockholm or its subsidiaries that promote the transition towards a low-carbon, climate change resilient and environmentally sustainable society. The framework is focused on Region Stockholm's core investment areas Clean and Sustainable Transportation, Green and Energy Efficient Buildings and Renewable energy. Climate change adaptation measures may also be financed under the framework, within each of the three core areas.

Region Stockholm's framework achieved the highest possible environmental rating, Dark green, by the independent and research based second opinion provider CICERO Shades of Green. The framework also received the highest score, Excellent, for its governance processes.

The framework stipulates how the selection process of green projects needs to be conducted, how the proceeds must be managed in separate accounts and

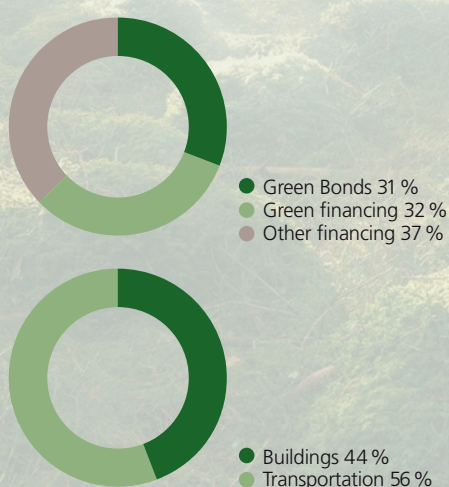
how the communication and reporting of the projects will ensure transparency for investors.

Any financing raised by Region Stockholm within the Green Bond framework is earmarked for environmental projects and is held in a separate traceable account that is allocated for investments that meet specific environmental criterias. The eligible projects are selected jointly by Region Stockholm's Treasury Department and the Sustainability Department. The projects are then approved by a Steering Group for Green Bonds consisting of executive managers from Region Stockholm's local bodies.

The criteria of the Region Stockholm's Green Bond framework have been developed according to the current version of the EU taxonomy, to the best of Region Stockholm's knowledge, on the basis of significant contribution to mitigation of climate change, adhering to social safeguards and do no significant harm (DNSH) criteria achieved by implementing and following Region Stockholm's general policies and guidelines as well as implementing and fulfilling Region Stockholm's companies' particular building and transportation construction guidelines, in addition to national regulations.

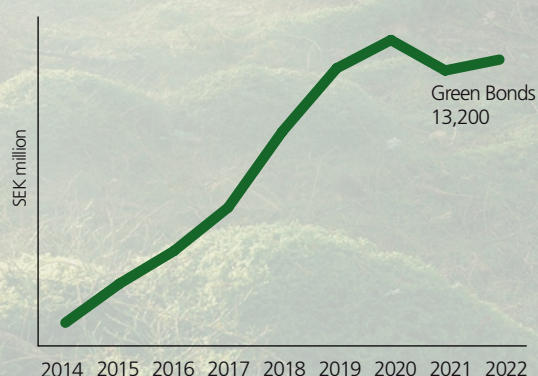
Key procedural aspects

- Each project is selected according to Region Stockholm's Green Bond framework.
- A new Green Bond framework was released January 25th of 2022 and all Green Bonds from that point are issued under the new framework.
- Region Stockholm reports on project basis, and in Swedish kronor (SEK).
- For this document, the reporting period ends on 31st of December.



Key reporting methodology

- Impact is based on outstanding disbursed amounts to projects financed through Green Bonds in Region Stockholm by end of 2022.
- Impact is principally reported on expected impact (ex ante), unless clearly stated as ex post.



Collaboration within Green Bonds

Region Stockholm has cooperated with other Nordic public issuers of Green Bonds since 2016 and developed a common approach to impact reporting. The cooperation resulted in a joint reporting standard for the Nordic issuers published in 2017 as well as valuable insights for other Green Bond issuers and the investor market. The group continually shares experiences and expertise on methodology and reporting. The objective of the Nordic group was to develop a transparent, harmonized and relevant approach to reporting the impact of Green Bonds. During 2022 the focus has been on the EU

Taxonomy and development of individual issuers' frameworks. The latest version of the Nordic impact reporting guide was updated in January 2020. Signatories are: City of Göteborg (Sweden), Kommunalbanken (Norway), Kommuninvest (Sweden), Municipality Finance (Finland), Norrköping Municipality (Sweden), Örebro Municipality (Sweden), Svensk Exportkredit (Sweden), Municipality of Lund (Sweden), Region Skåne (Sweden) and Region Stockholm (Sweden).

Green Bonds overview

The first Green Bond by Region Stockholm was issued in May 2014 and by the end of 2022, 17 Green Bonds were outstanding with a total amount of SEK 13.2 billion. More information about the investments financed through Green Bonds can be found from page 11.

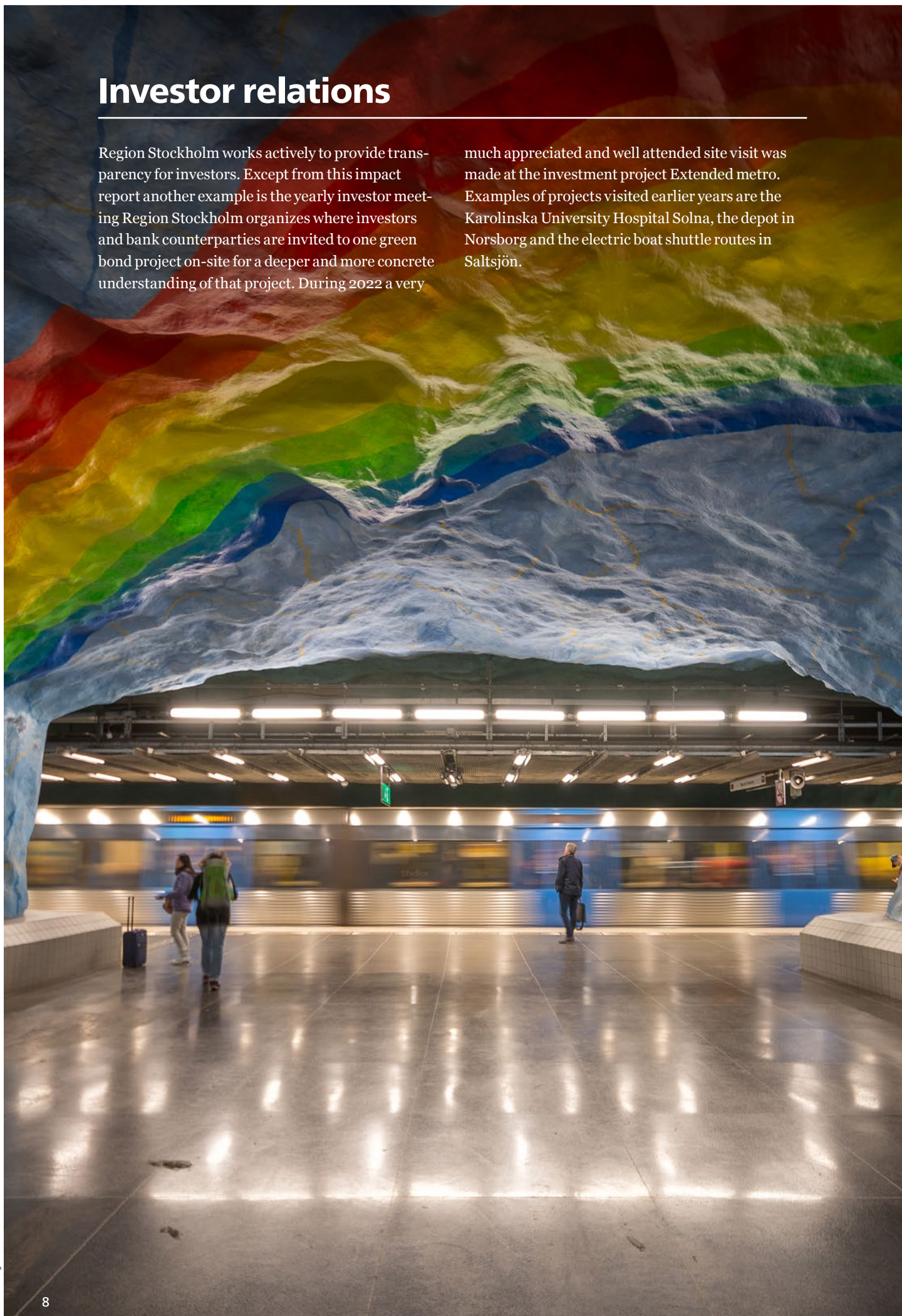
The table below shows Region Stockholm's green investment expenditures. All Green Bonds issued during 2022 are issued under the new green bond framework.

		Expansion of Roslagsbanan	Södertälje sjukhus	New Karolinska Solna	Karolinska Huddinge, Chopin	Söder-sjukhuset	Danderyds sjukhus	Maturity year
Total investment according to budget (of which total disbursed) (whereof Green Bonds disbursed) SEK m		10,450 (8,948) (7,362)	1,219 (1,219) (738)	18,500 (18,500) (1,500)	1,840 (1,649) (1,600)	2,394 (2,394) (1,250)	1,854 (868) (750)	
2022	ISIN:XS2526836668	850						2024
2022	ISIN:XS2526838870	650						2024
2022	ISIN:XS2477812932	400						2028
2022	ISIN:XS2477812858	600						2028
2021	ISIN:XS2382244031	600	85	290	225			2026
2021	ISIN:XS2382242092	1,400	195	680	525			2026
2021	ISIN:XS2337109461	400	120	80	200			2031
2021	ISIN:XS2337108810	1,000	460	210	330			2027
2021	ISIN:XS2291915358	1,000				250	750	2028
2020	ISIN:XS2251312018	1,000				1,000		2027
2020	ISIN:XS2228369729	1,000	832	168				2030
2020	ISIN:XS2106644169	400	400					2027
2019	ISIN:XS2091126800	400	300		100			2023
2019	ISIN:XS2084871594	500	350		150			2026
2019	ISIN:XS2004887761	1,000	700		300			2026
2019	ISIN:XS2004887415	1,000	700		300			2025
2018	ISIN:XS1796266671	1,000	1,000					2023

Investor relations

Region Stockholm works actively to provide transparency for investors. Except from this impact report another example is the yearly investor meeting Region Stockholm organizes where investors and bank counterparties are invited to one green bond project on-site for a deeper and more concrete understanding of that project. During 2022 a very

much appreciated and well attended site visit was made at the investment project Extended metro. Examples of projects visited earlier years are the Karolinska University Hospital Solna, the depot in Norsborg and the electric boat shuttle routes in Saltsjön.



Region Stockholm's projects for green investments

Region Stockholm's Green bond program has currently invested more than 50 percent of its funds into the *Clean and Sustainable Transportation category*. Roslagsbanan expansion program is the key transportation project with more than 7 billion SEK in outstanding green bonds, avoiding more than 7,000 tons of CO₂e emissions each year. The outlook for the coming years is that the Clean and Sustainable Transportation category will continue to grow in accordance with Region Stockholm's investment plan.

In the *Green and Energy Efficient Buildings category* five state of the art hospital buildings have

been funded, with Karolinska University Hospital Solna and Huddinge as the two largest investments followed by Södersjukhuset.

The table below provides an overview of Region Stockholm's Green Project categories. The Green Project categories have been mapped to the SDGs in accordance with the High-Level Mapping to the Sustainable Development Goals published by ICMA in June 2020 and the SDG-mapping in the 2020 version of the Position Paper on Green Bonds Impact Reporting developed by Nordic public sector issuers.

Green Project categories	EU Taxonomy Environmental object	SDG
Clean and Sustainable Transportation	Climate change mitigation	9, 11 and 13
Green and Energy Efficient buildings	Climate change mitigation	7, 11, 12 and 13
Renewable Energy	Climate change mitigation	7 and 13



Clean and Sustainable Transportation





Photo: Le Studio, Fredrik Eriksson



Roslagsbanan expansion programme

All projects selected by Region Stockholm for Clean and Sustainable transportation are fully aligned with the EU Taxonomy criteria and have zero tailpipe emissions.

The Roslagsbanan expansion program is designed to develop and strengthen the capacity of a historical railway line that is of great importance for public transport in the north-eastern sector of the Stockholm Region, creating the opportunity for more people to travel by train which is more climate smart than driving a car.

The overall goals of the program are:

- Increased capacity to meet increasing travelling needs
- Allowing eight trains per hour service for the most frequently visited stations
- Reduced sensitivity to traffic disruption
- Confining with noise limits indicated in the Government's Infrastructure Bill¹ for railways
- Adapting stations and existing carriages for increased accessibility
- Improved safety in the rail system regarding the rail operation, as well as safety improvements along the tracks and for the passengers travelling with Roslagsbanan.

In addition to promoting climate efficient travelling, the program includes many environmental and social initiatives. There is a large focus on reduced environmental impact in the building process and in the processes for designing and manufacturing trains. Reduced climate-impact has also been a result due to criteria applied in the supply chain and through measures to reduce transport by storing and reusing shaft masses.

Since the start of the project in 2016, great achievements have been made. In December 2021 trains began operating the new station Arninge which is the 39th station of Roslagsbanan and will become a central hub for public transport in the northeast. The new double track on the Kårsta line between Täby Kyrkby and Kragstälund was also opened in December 2021 after a couple of years of expansion work. Passengers can now travel from Stockholm Östra in central Stockholm to Vallentuna in the far north on double tracks to enable a more stable, frequent and safe traffic.

¹ Proposition 1996/97:53 https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/infrastrukturinriktning-for-framtida-transporter_GK0353

Roslagsbanan				
Category	Project	Indicators	Unit	Baseline /remarks
Clean transportation	Expansion of Roslagsbanan local train	Total Green financing		165 grammes CO ₂ e/km (190 grammes/km WTW, 1,15 passengers per car), 300 days a year, 40 km car kilometers/person /weekday.
		Net avoided emissions from cars and other vehicles	10,000 tonnes	
		– <i>Attributable to Green Bond</i>	8,200 tonnes	
		Number of people in new means of transportation	5,000 passengers/ travel day	Fifty percent median value for increased travelling, fifty per cent estimated car replacement (modal shift)
		– <i>Attributable to Green Bond</i>	4,100 passengers/ travel day	
		Estimated reduction in car kilometers the project will replace	60,700,000 km	40 km car kilometers/person/ day based on geographic average distance (20 km*2 trips)
		– <i>Attributable to Green Bond</i>	49,940,000 km	
Environmental management	Wildlife preservation	<p>Examples of activities and investments in wildlife preservation that have been carried out so far (accumulated)</p> <ul style="list-style-type: none"> • A preserved and protected woodland, key habitat for rare and endangered species • Approximately 12 fauna passages under the railway • One playroom for sea trout • Approximately 400–500 evacuation pipes in cable wells • One hotel for salamanders • Several culverts demolished to create open ditches • Many stems saved as insect hotels • Relocation of ten trees to avoid logging • Two nature passages • Two fauna depots 		

Green and Energy Efficient buildings





Karolinska University Hospital, Huddinge

The O-building, which is part of Karolinska University Hospital, Huddinge hospital area, is a state-of-the-art building designed for advanced healthcare with the latest medical technology. The hospital, which is located in the south of Stockholm, has been modernized according to Region Stockholm’s plan to accommodate for future health and medical care demand. The new, 29,000 sqm building, contains cutting edge technology and equipment for advanced surgery with 23 operating theaters and a capacity of 18,000 surgeries per year. The new building also hosts radiology and a sterile processing department. The design of the building is based on the requirement that surgery needs to have close access to intervention facilities and advanced image diagnostics.

The construction of the new surgery building started in 2015 and was completed in 2020. The building was constructed in accordance with Miljöbyggnad 2.2 and the project has received an overall rating level of Gold, where 13 of 15 indicators have been preliminary certified at Gold level and two at Silver level. The verification process, which starts when the building is completed and lasts for about two years, is currently in progress.

For example, the calculated energy use in the building is 75 kWh/sqm/year, being 35 per cent lower than the legal demands². Another example is that 100 per cent of the electricity used is from renewable sources and marked “good environmental choice”³.

THE O-BUILDING has been awarded two prestigious awards during 2020 and 2021. The first award is the 2020 Acoustic Environment Award that was established by the Swedish Acoustic Society in 2018 to highlight efforts for a good sound environment in society. The motivation behind this award is that, with great personal commitment, continuity and good cooperation between all the construction parties involved, a functional hospital building has been created where every detail has been studied to create a good and safe sound environment for the benefit of both patients and employees. The second award is the 2021 Healthcare Construction Award in the category of larger healthcare construction projects. This award was established in 2003 by Forum vårdbyggnad with the aim of highlighting good examples of well-executed and innovative healthcare environments as well as good processes.



The new surgery building was completed in year 2020. The building is constructed in accordance with Miljöbyggnad 2.2 and the project has received an overall rating level Gold.

² Swedish National building code BBR21.

³ Certified with environmental label Bra Miljöval for 100 per cent of the electricity 2022.

Karolinska University Hospital, Huddinge O-huset

Category	Project	Indicators	Unit	Baseline /remarks
Green buildings¹	New building standard exceeding building standard requirements	Annual energy avoided compared to the relevant building code	1,100 MWh	Ex ante calculations. National building code BBR21
		– <i>Attributable to Green Bond</i>	1,100 MWh	
		Annual GHG emissions reduced/ avoided compared to the relevant building code	150 tonnes ²	
		– <i>Attributable to Green Bond</i>	150 tonnes ²	
	Annual GHG emissions reduced/ avoided using green energy	350 tonnes ²		
		– <i>Attributable to Green Bond</i>	300 tonnes ²	
	Environmentally friendly materials being used	Percentage of materials being used accepted in Bygghvaru-bedömningen ³	94 %	
Waste management	Resource preserving waste treatment (construction materials)	Material recovery rate	97 % recovery incl. energy	97 % consists of: reuse of construction materials 21 %, material recovery 28 %, energy recovery 47 %. Landfill 3 %. Benchmark: Waste Framework Directive 2008/98/EC.

¹ All data concerning volumes of electricity, heating and cooling are based on the report "Energiberäkning CHOPIN" dated 2017-10-27 written by Helena Engström, Incoord. Ex ante, no actual values are yet included. From the report values with 10 kWh/m², Atemp safety margin have been used. Assumptions on repartition between electricity, district heating and district cooling in relation to BBR21. Calculations on avoided energy aligned with Nordic Position Paper 2020, Appendix A, combined margin for electricity. For calculations on energy efficiency local values are applied for district heating (SFAB, 2021) and cooling. For use of green energy national average is compared to local values for district heating (SFAB, 2021) and cooling.

² Rounded per 50 tonnes.

³ Only products covered by Locums policydocument R.24 "Riktlinje val av produkter" (Guideline for choosing products) and Miljöbyggnad manual 2.2 are reported.



Photo: Locums bildarkiv



Södertälje Sjukhus AB

Södertälje Sjukhus AB, situated about 30 km south of central Stockholm, was part of the extensive development of Region Stockholm’s health and medical care services. Two new treatment buildings at Södertälje Sjukhus AB were completed during 2017, including, among others, a new intensive care facility, a new emergency unit and a new cesarean section. This allows 7,500 additional emergency visits, increasing the total to 42,500 visits/year and making it one of the most modern hospitals in Sweden.

The two new buildings were constructed according to Miljöbyggnad 2.2 and the verification process

was finalized during 2020. The new hospital buildings have received the final certification, with an overall Gold rating (Miljöbyggnad 2.2).

The target energy use was 35 per cent lower than the legal demands⁴ and the result during 2021 achieved this target. Included in the project is the building of a geothermal cooling and heating system which is an environmentally conscious alternative to meet the hospital’s need for cooling and heating. All purchased electricity is 100 per cent renewable and eco-labelled “Bra Miljöval”.⁵

⁴ Swedish National building code BBR19.

⁵ certified with environmental label Bra Miljöval for 100 per cent of the electricity 2022.

Södertälje Sjukhus AB				
Category	Project	Indicators	Unit	Baseline /remarks
Renewable energy¹	Geothermal energy	Capacity of energy generation of plant	170 MWh	
		Annual renewable energy generation	170 MWh	
		Annual GHG emissions reduced/ avoided	30 tonnes CO ₂ e	
Green buildings¹ Ex post calculations	New building standard exceeding building standard requirements	Annual energy avoided compared to the relevant building code	1,000 MWh ^{1,2}	Ex post calculations. National building code BBR19
		– <i>Attributable to Green Bond</i>	600 MWh ²	
		Annual GHG emissions reduced/ avoided, compared to national building requirements	260 tonnes ^{1,3}	
		– <i>Attributable to Green Bond</i>	150 tonnes ³ CO ₂ e	
	Annual GHG emissions reduced/ avoided using green energy	400 tonnes ³ CO ₂ e		
– <i>Attributable to Green Bond</i>	250 tonnes ³ CO ₂ e			
	Environmentally friendly materials being used	Percentage of materials being used accepted in Byggarubedömningen ⁴	92 %	
Waste management	Resource preserving waste treatment (construction materials)	Material recovery rate	97 % recovery incl. energy	The 97 % consists of: material reuse (construction materials) 16 %, material recovery 29 % and energy recovery 52 %, landfill 3 %. Benchmark: Waste Framework Directive 2008/98/EC.

¹ Assumption on distribution between district heating and electricity in accordance with BBR19. Calculations on avoided energy aligned with Nordic Position Paper 2020, Appendix A, combined margin for electricity. For calculations on energy efficiency local values are applied for district heating (Telge Energi, 2021). For use of green energy national average is compared to local values for district heating (Telge Energi, 2021). No district cooling has been used.

² Rounded per 100 MWh.

³ Rounded per 50 tonnes.

⁴ Only products covered by Locums policydocument R.24 "Riktlinje val av produkter" (Guideline for choosing products) and Miljöbyggnad manual 2.2 are reported.



Photo: Shutterstock



Karolinska University Hospital, Solna

New Karolinska Solna (NKS) is one of the world's most sustainable university hospitals both when it comes to facilities and to the environmental work regarding pharmaceuticals, textiles, patient meals and disposables in health care.

To achieve the exceptional environmental and sustainability goals that were set for NKS, the entire project has been carried out from a sustainability perspective, from the choice of materials to the design of the building. NKS was built to achieve the highest quality indoor environment, for example air quality, inflow of day light and temperature for the benefits of both patients and staff.

One of the tools used is environmental certification of the buildings. Two types of certification schemes have been used for NKS: Miljöbyggnad 2.0 issued by the Sweden Green Building Council, and LEED, an international green building rating system. NKS has obtained Gold level in both certification schemes; Miljöbyggnad Gold 2.0 was verified in 2021 and LEED Gold level was achieved in 2018.

NKS has been constructed for significantly reduced energy consumption, the target is 50 per cent below the requirements set by Sweden's Building Regulations⁶. This means substantial savings, both financial and environmental. By switching to renewable energy, emissions of greenhouse gases has been minimized. 100 per cent of the electricity comes from renewable sources⁷, and a large geothermal facility produces most of the buildings' heating and cooling.

Another focus area has been to reduce the use of chemicals and hazardous substances. Thanks to the deliberate choice of flooring material, a significant reduction in the use of softeners with an adverse impact on health has been achieved (at least 70,000 kg compared with conventional construction), and this is only one of all the materials used in the construction.

⁶ Swedish National building code BBR16.

⁷ Certified with environmental label Bra Miljöval for 100 per cent of the electricity 2022.

Karolinska University Hospital, Solna

Category	Project	Indicators	Unit	Baseline /remarks
Renewable energy	Geothermal energy	Capacity of energy generation of plant	43,000 MWh ¹	Ex post calculations
		Annual renewable energy generation	35,000 MWh ²	
		Used renewable energy	33,000 MWh ²	
		– <i>Attributable to Green Bond</i>	2,700 MWh ²	
		Annual GHG emissions reduced/avoided	5,100 tonnes CO ₂ e ³	
		– <i>Attributable to Green Bond</i>	400 tonnes CO ₂ e ³	
Green buildings	New building standard exceeding building standard requirements	Annual energy avoided compared to the relevant building code	19,000 MWh ⁴	Ex post calculations. Result is 45 % below Swedish national building code BBR16. The goal for the project was 35 % below BBR16.
		– <i>Attributable to Green Bond</i>	1,500 MWh ⁴	
		Annual GHG emissions reduced/avoided, compared to the relevant building code	4,000 tonnes CO ₂ e ⁵	
		– <i>Attributable to Green Bond</i>	300 tonnes CO ₂ e ⁵	
	Annual GHG emissions reduced/avoided using green energy	5,800 tonnes CO ₂ e ⁵		
		– <i>Attributable to Green Bond</i>	500 tonnes CO ₂ e ⁵	
	Environmentally friendly materials being used	Percentage of materials being used accepted in Byggarubedömningen	89 %	
Clean transportation	Infrastructure for electric vehicles	Percentage of parking spaces reserved for electric vehicles	10 %	0 % (no local/national legal requirements)
		Total charges made	290 MWh	
		– <i>of which Green Bond</i>	24 MWh	
		Estimated savings in GHG emissions	300 tonnes CO ₂ e	
		– <i>of which Green Bond</i>	24 tonnes CO ₂ e	
Waste management	Resource-preserving waste treatment	Material recovery rate	95 % incl. energy recovery.	National average for the service provider contracted by NKS (SITA) was 92 % 2017.

¹ Total actual production 2021 is the highest to date. The facility also recycles energy from the buildings. Rounded per 1,000 MWh.

² Annual renewable energy generation (formerly Actual production) is defined as total renewable generation minus ingoing electricity. The facility also recycles energy from the buildings. Rounded per 500 MWh.

³ Calculated using baseline emission values from Apendix A (combined margin applied by nordic issuers) and Apendix D (the same baseline emission factor has been applied for district cooling as for district heating) compared with Region Stockholms actual electricity mix (100 % renewable) and local mix of district heating and district cooling from Norrenergi 2021. Rounded per 100 tonnes.

⁴ Measured value for MWh. Rounded per 500 MWh.

⁵ Calculated using baseline emissions from Apendix A (combined margin applied by nordic issuers) and Apendix D (the same baseline emission factor has been applied for district cooling as for district heating) compared with Region Stockholms actual electricity mix (100 % renewable) and local mix of district heating and district cooling from Norrenergi 2021. Rounded per 100 tonnes.



Södersjukhuset AB

The new construction of Södersjukhuset AB (Framtidens Södersjukhus) was part of Region Stockholm’s future plan for health care. Södersjukhuset AB is an emergency hospital located in central Stockholm. During the project Framtidens Södersjukhus, which was completed in 2020, Södersjukhuset AB has expanded by approximately 50,000 square meters.

The new construction includes a new service area, a new emergency department, a care building with single patient rooms and a treatment building with new surgery rooms. All buildings were built at the same time, with maintained care capacity, where two of them, named 70 and 72, are financed with green bonds.

In addition, new streets and park areas were created to suit the new buildings and to make the local environment more attractive and increase the availability in the area for inhabitants of the city. The new buildings have been constructed in accordance with Miljöbyggnad 2.2 and the two buildings that are financed through green bonds received an overall preliminary rating level of Gold. One of the

indicators from Miljöbyggnad linked to indoor environment is daylight that affects the healthcare professionals, patients and visitors. One example of adding daylight is the new care building that holds an indoor courtyard that contributes to more rooms and increased climate comfort. One of the new buildings won the award “Årets Miljöbyggnad” 2018 which is Sweden’s most prestigious price for sustainable construction. Below you can read an extract from the jury’s motivation.

“ Gold level on 14 of 15 indicators. Difficult challenges in a hospital building, such as daylight, ventilation and thermal climate, have been solved through good collaborations and smart solutions. It is a well-executed and ambitious work, where the environmental benefits will benefit staff and patients for a long time to come.”



Photo: Locumsbilderkv

Södersjukhuset AB				
Category	Project	Indicators	Unit	Baseline /remarks
Green buildings ^{1,2}	New building standard exceeding building standard requirements	Annual energy avoided compared to the relevant building code	2,700 MWh	Ex post calculations. The new construction consists of several buildings. Swedish national building code BBR21 was used for all buildings, whereas the energy requirements varies according to the use of each building.
		– <i>Attributable to Green Bond</i>	900 MWh	
Annual GHG emissions reduced/ avoided compared the relevant building code		300 tonnes		
– <i>Attributable to Green Bond</i>		100 tonnes		
		Annual GHG emissions reduced/ avoided using green energy	500 tonnes	
		– <i>Attributable to Green Bond</i>	200 tonnes	
	Environmentally friendly materials being used	Percentage of materials being used accepted in Byggarubedömningen ³	97 %	Building 70: 98 % approved materials, Building 72: 97 % approved materials. Total combined average is an estimate.
Waste management	Resource preserving waste treatment (construction materials)	Material recovery rate	94 % recovery incl. energy	Building 70: Material reuse 15 %, material recycling 29 %, energy recycling 51 %, landfill 5 %. Building 72: Material reuse 31 %, material recycling 21 %, energy recycling 41 %, landfill 7 %. Total combined average is an estimate. Benchmark: National average for the service provider contracted by NKS (SITA Sverige/ Suez recycling) was 92 % for 2017.

¹ Assumptions on repartition between electricity, district heating and district cooling in relation to BBR21. Calculations on avoided energy aligned with Nordic Position Paper 2020, Appendix A, combined margin for electricity. For calculations on energy efficiency local values from Stockholm Exergi are applied for district heating and cooling. For calculations regarding use of green energy national average is compared to local values for district heating and cooling from Stockholm Exergi.

² Rounded per 100 MWh and 50 tonnes.

³ Products reported are those covered by Locums policydocument R.24 "Riktlinje val av produkt – Bedömningskriterier" (Guideline for choosing products) and Miljöbyggnad manual 2.2



Danderyds sjukhus AB

Danderyds sjukhus AB is located in the north part of Stockholm and is one of the largest emergency hospitals in Sweden. At this hospital, university healthcare is provided alongside education and research within the most common public diseases.

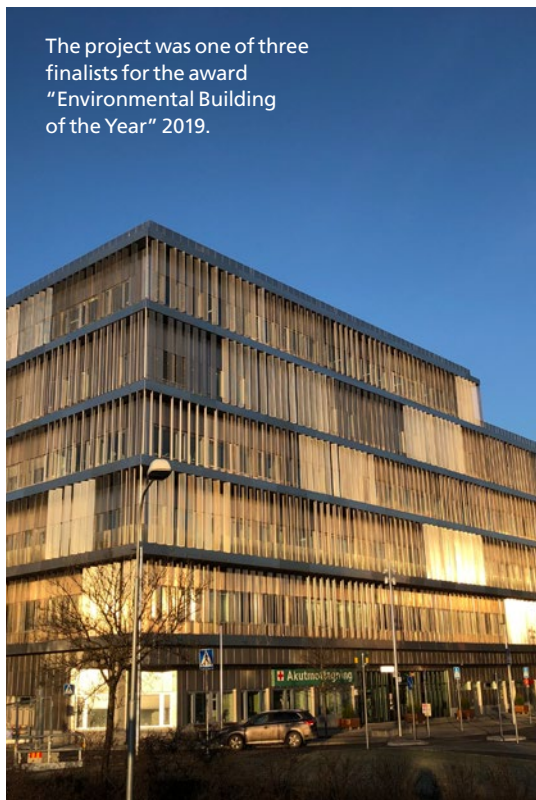
As a part of Region Stockholm’s future health plan, a new emergency and treatment building at this hospital has been completed by the end of 2019. The new building is strategically located in the hospital area and connects with several buildings.

The building has been thoroughly planned with a people-centric approach together with the patient’s safety, efficient patient flows and the working environment. The people-centric approach includes the patient, the patient’s friends and family as well as the hospital staff. The layout of the building facilitates fast movements between floors, units and functions, which is critical in an emergency care building where every second can be of utmost importance to the patient.

The design of the building contributes to more convenient premises for the staff. The architecture is based on an evidence-based design with a clear logistic flow and easy orientation. The design gives corridors and rooms access to greenery. Balconies and slats form a protective layer against solar heat. Light indoor courtyards together with metal facades contribute to light entry as well also connect the indoor and outdoor environment.

The building is constructed in accordance with Miljöbyggnad 2.2 and the project has received an overall rating level of Gold, where 14 of 15 indicators have been preliminary certified with Gold level.

The verification process, which starts when the building is completed and lasts for about two years, is currently in progress. The project was also one of three finalists for the award “Environmental Building of the Year” 2019. The project has focused on low energy use e.g. by using waste heat from the sterile plant to preheat tap water and by using heat from cooling machines to preheat the heating system.



The project was one of three finalists for the award “Environmental Building of the Year” 2019.

Photo: Locums arkiv

FACTS ABOUT THE NEW BUILDING:

- 27,500 square meters
- Around 1,000 people work in the new building (the hospital has approximately 4,000 employees)
- The emergency care estimates a capacity of 95,000 patients yearly
- The emergency care receives 250–300 patients each day where approximately 25 % arrives by ambulance



Photo: Cecilia Larsson Lantz

Danderyds sjukhus AB				
Category	Project	Indicators	Unit	Baseline /remarks
Green buildings¹	New building standard exceeding building standard requirements	Annual energy avoided compared to the relevant building code	1,100 MWh ²	Ex post calculations. National building code BBR20
		– <i>Attributable to Green Bond</i>	450 MWh ²	
		Annual GHG emissions reduced/ avoided compared to the relevant building code	400 tonnes ³	
		– <i>Attributable to Green Bond</i>	150 tonnes ³	
		Annual GHG emissions reduced/ avoided using green energy	500 tonnes ³	
– <i>Attributable to Green Bond</i>	200 tonnes ³			
	Environmentally friendly materials being used	Percentage of materials being used accepted in Byggarubedömningen ⁴	91 %	
Waste management	Resource preserving waste treatment (construction materials)	Material recovery rate	97 % recovery incl. energy	97 % consists of: 20 % material reuse, 31 % material recovery, 46 % energy recovery, 3 % landfill. Benchmark: Waste Framework Directive 2008/98/EC.

¹ Calculations on avoided energy aligned with Nordic Position Paper 2020, Appendix A, combined margin for electricity. For calculations on energy efficiency local values from Norrenergi 2021 are applied for district heating and cooling. For calculations regarding use of green energy national average is compared to local values for district heating and cooling from Norrenergi 2021.

² Rounded to 100 MWh.

³ Rounded per 50 tonnes.

⁴ Only products covered by Locums policydocument R.24 "Riktlinje val av produkter" (Guideline for choosing products) and Miljöbyggnad manual 2.2 are reported.





Agreed-Upon Procedures Report on allocation of net proceeds from Green Bonds to Green Projects

To Region Stockholm, corporate ID: 232100-0016

Purpose of this Agreed-Upon Procedures Report

Our report is solely for the purpose of assisting Region Stockholm in presenting to investors, the use of net proceeds from Green Bonds issued during calendar year 2022 (hereafter "2022"), including allocation to Green Projects of Green Bonds issued during 2022, and may not be suitable for another purpose.

Responsibilities of the Engaging Party

Region Stockholm (the responsible party) has acknowledged that the agreed-upon procedures are appropriate for the purpose of the engagement.

Region Stockholm is responsible for the subject matter on which the agreed-upon procedures are performed.

Practitioner's Responsibilities

We have conducted the agreed-upon procedures engagement in accordance with the International Standard on Related Services (ISRS) 4400 (Revised), *Agreed-Upon Procedures Engagements*.

An agreed-upon procedures engagement performed involves our performing the procedures that have been agreed with Region Stockholm, and reporting the findings, which are the factual results of the agreed-upon procedures performed. We make no representation regarding the appropriateness of the agreed-upon procedures.

This agreed-upon procedures engagement is not an assurance engagement. Accordingly, we do not express an opinion or an assurance conclusion.

Had we performed additional procedures, other matters might have come to our attention that would have been reported.

Professional Ethics and Quality Control

We have complied with the ethical requirements as stated in International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBAs Code of Ethics) and independence requirements in section 4A of IESBAs Code of Ethics.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Region Stockholm in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

Procedures and Findings

We have performed the procedures described below, which were agreed upon with Region Stockholm in the terms of engagement dated March 7, 2023, regarding that an amount equal to the Green Bond net proceeds has been allocated to Green Projects according to Region Stockholm's Green Bond Framework. The procedures performed are summarized as follows (see next page):



#	Procedures	Findings
1.	For each Green Bond issued during 2022, agree the loan amount committed and loan amount issued.	<p>We inspected pricing supplements for the four Green Bonds issued during 2022:</p> <ul style="list-style-type: none"> • ISIN:XS2526836668 – 850 million SEK • ISIN:XS2526838870 – 650 million SEK • ISIN:XS2477812932 – 400 million SEK • ISIN:XS2477812858 – 600 million SEK <p>We found no deviation of loan amount committed and loan amount issued.</p>
2.	For each Green Bond issued during 2022, agree that an amount equal to the net proceed that is not allocated as of 2022-12-31 is credited to a separate bank account(s) and separate account(s) in the general ledger.	We found the procedure not applicable because all funds from Green Bonds issued in 2022 as of 2022-12-31 had been allocated to the project "Roslagsbanan expansion program".
3.	For each Green Project financed by Green Bonds issued during 2022, agree the accuracy of the used amount to the allocated proceed.	<p>We inspected supporting documentation related to criteria in Region Stockholm's Green Bond Framework, which includes technical screening criteria for significant contribution and do no significant harm and minimum safeguards in the EU taxonomy, for the project "Roslagsbanan expansion program", as all Green Bonds issued during 2022 were allocated to this Green Project. We also inspected the outcome of accrued amounts for the above Green Project which in total amounts to 8 948 million SEK and funds from Green Bonds allocated to this Green Project amounts to 7 362 million SEK.</p> <p>We found no deviation between the Green Project for which funds from Green Bonds issued during 2022 were allocated and Region Stockholm's Green Bond Framework.</p>
4.	For each Green Project financed by Green Bonds issued during 2022, agree that the Green Project(s) has been approved by Region Stockholm Steering Group for Green Bonds.	<p>We inspected approval of the Green Project financed by Green Bonds issued during 2022 from Region Stockholm Steering Group for Green Bonds.</p> <p>We found no deviation in respect to approval of the Green Project and Region Stockholm's Green Bond Framework.</p>

Stockholm, 15th June 2023

KPMG AB

DocuSigned by:

Johan Rasmussen

236E200BEB4F450...

Johan Rasmussen
Authorized Public Accountant

DocuSigned by:

Torbjörn Westman

5B8847C64C8749D...

Torbjörn Westman
Head of Assurance