HELSINGBORG

Sustainable bond impact report 2023

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Sustainable bond impact report– 2023
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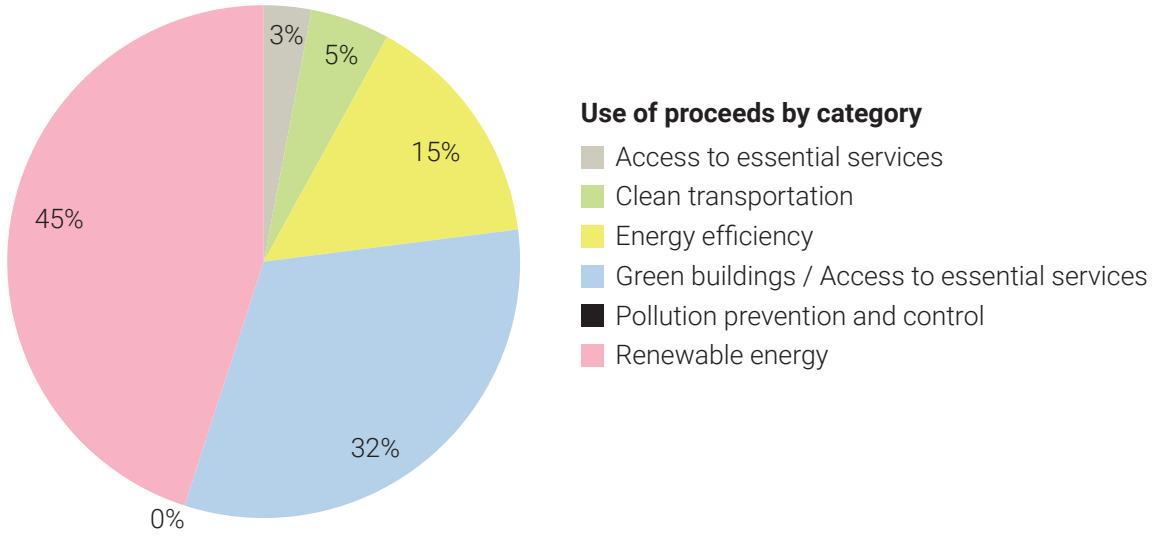
Excecutive Summary

Bond	Value	Date of issue	Maturity date	ISIN
MTN 155 Sustainable	500 Million SEK	2023-06-19	2025-03-14	SE0013361110

Investment category	Invested 2023 (msek)
Access to essential services	13,5
Clean transportation	23,6
Energy efficiency	74,8
Green buildings / Access to essential services	159,8
Pollution prevention and control	3,1
Renewable energy	225,2
Sum	**500**



Investment category	Number of individuals in target group benefited	Reduced/Avoided ktonnes CO2 eq/year
Access to essential services	794	-
Clean transportation		0,12
Energy efficiency		37,6
Green buildings / Access to essential services		239
Pollution prevention and control		9,3
Renewable energy		92,5
Sum	**794**	**378,52**

Introduction

The City of Helsingborg has been working strategically with sustainability, as an overarching theme, for many years. One of our focus areas, at the core of this framework, is the breadth of climate and environmental work. We collaborate both within and outside the group to develop a sustainable society with increased quality of life, together with the citizens, civil society, businesses and academia of Helsingborg. Another strength is how the City of Helsingborg encourages innovation in relation to sustainability. Both in terms of the development of new technical solutions but also by finding a different approach to one's daily work.

Helsingborg has worked long-term and methodically to tackle environmental challenges associated with air, water, and noise pollution, waste management, energy efficiency and climate change mitigation. Furthermore, the City is engaged in a multitude of concrete initiatives linked to the increase of resource efficiency, renewable energy generation, sustainable consumption and circularity. Apart from environmental sustainability, some of the City of Helsingborg's primary challenges going forward are found within the realm of social sustainability. This involves ensuring human rights for all, reducing the health inequality between different socioeconomic groups, increase employment, improve gender equality, ensure a good integration process for newcomers, and bolstering the perceived sense of safety and security in the city.

Development of Strategic Work

In order to achieve sustainable development, the city works according to, among other things, the focus areas of the quality-of-life program, the climate and energy plan, the waste management plan as well as the equal opportunities plan. During the last year, new plans have been drawn up to supplement the existing documents and to update the sustainability work.

In 2023, the city submitted a plan to the EU on how to implement the Green City Accord agreement, which aims to create a greener and healthier city by 2030.
A sustainability program with a high environmental and sustainability profile has been developed for the new city district Östra Ramlösa.

A proposal for a new climate and energy plan for the period 2025–2030, is currently out for review. It aims for climate neutrality by 2030. A broad group of representatives from business and academia has contributed to the development of the goals and actions in the plan. Researchers from Lund University have also been engaged to assess the plan's impact on Helsingborg residents from a social justice perspective.

Follow-up on Sustainability Work

The follow-up of existing steering documents shows both positive and negative trends for the city's focus areas. Progress is often moving in the right direction, but often not quickly enough.

Social sustainability

The follow-up of the quality-of-life program shows the development since 2016. Fewer people are receiving financial assistance, health issues have decreased, and the level of education has slightly increased. However, eligibility for vocational programs in high school has slightly decreased. The follow-up also clearly shows that there are differences in the opportunities to achieve quality of life between different groups and neighborhoods. For example, more men are employed today, but the same positive development has not happened for women. We also see differences in employment rates, health and other living conditions based on disability, gender identity, foreign background, and neighborhood.

The follow-up of the plan for equal opportunities presents many good examples from our city departments and municipal companies on how they have addressed the plan's measures. These examples can contribute to inspiration and learning in the ongoing work. The follow-up also shows that there is potential for improvement in implementation of the plan and more efforts are needed for equal opportunities to be fully integrated into our welfare mission and development work.

Minimize climate impact and use of resources

Between 1990 and 2022 (the latest available statistics), greenhouse gas emissions in Helsingborg have decreased by 58%. This can be compared to the rest of Sweden, where emissions decreased by 37% during the same period. To achieve climate neutrality by 2030, emissions need to decrease at a faster rate. The largest emissions sources are transportation, industry, and district heating production, due to the combustion of residual waste for energy recovery. From 2021 to 2022, the largest emission reductions occurred in the transportation and industry sectors.

A good indicator of resource use or resource loss is the total amount of waste. Since the current waste management plan was adopted in 2017, the quantities of waste have steadily decreased to below 400 kg per capita. If the trend is maintained, the waste plan's goal for 2024 can be achieved.

Increase Biodiversity and Strengthen Ecosystems

Strong ecosystems with high biological diversity create services for us humans that are necessary for a good quality of life. The larger and more connected the green areas and water environments are, the better the conditions. There is fierce competition for the land in Helsingborg because the land is needed for several purposes such as for increasing the degree of self-sufficiency in food in Sweden, the need to develop buildings for housing, services, businesses and with the need for recreation for a growing population. The municipality has protected the natural land that the municipality itself owns.

Helsingborg has a long way to go to reach EU targets for protected nature and proportion of canopy cover. According to EU-targets, 10 percent of the land should be protected nature by 2030 and 25 % of the land area should be covered by trees. In Helsingborg we reach 3,9 % of protected nature and 9.5 percent canopy cover.

Sustainable bond framework

In April 2023, the city's framework for sustainable bonds was completed. The framework is relatively unique in its kind and enables the issuance of both green and social bonds separately, but also sustainable bonds that are a combination of the two.

Second party opinion

A second party opinion of the framework was carried out by Sustainalytics who assess the framework to be credible and impactful and aligned with the sustainability bond guidelines 2021, Green bond principles 2021 and social bond principles 2021.

Sustainable bond issuance

On June 19th 2023 the city of Helsingborg issued the first sustainable bond under the new framework. The value of the bond was 500 million SEK and the maturity was set to March 2025. All of the proceeds has been used to finance new projects within various types of investment categories during the year. The proportion of refinance is therefore zero as is the balance of the green account.

Bond	**Value**	**Date of issue**	**Maturity date**	**ISIN**
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Project categories and use of proceeds

Investment category	**Invested 2023** (msek)
Access to essential services	13,5
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Name of project	"Administration/ Municipal company"	"Project start"	ICMA GBP and/or SBP category*	SDG	EU invironmental objective	"Reduced/ Avoided ktonnes CO2 eq/year"	"Annual energy savings (MWh)"	"Renewable energy generation"	"Installed renewable energy capacity"	"Average outage time per customer **"	Additional housing opportunities	Number of individuals in target group benefited	Project information	"Invested 2023 (msek)"
Framtidens belysning Phase 2	Stadsbyggnads-förvaltningen	2022	Energy efficiency	7, 12	Climate change mitigation	0,54	990						"Replacing the city's street lighting with smart energy-efficient LED lights"	16,3
Solceller	Helsingborgshem AB	2023	Renewable energy	7	Climate change mitigation	89		465 Mwh/ year	530 MW ***				"10,000 square metres of solar panels on roofs around Helsingborg in 2023-2025"	8,1
Effektivisering Västhamnsverket	Öresundskraft AB	2022	Energy efficiency	7, 12	Climate change mitigation	37,6							"Lifetime extension of the fossil-free plant that produces both district heating and electricity "	57,8
Biokol	NSR AB	2023	Renewable energy	7	Climate change mitigation	3,5							"Biochar plant with a production capacity of 1400 tonnes of biochar per year"	1,8
Dalhem förskola	Fastighets-förvaltningen	2023	"Green buildings/ Access to essential services"	11, 13	Climate change mitigation	83	47					94	Preschool with room for 94 children	43,4
Nya insamlingsbilar	NSR AB	2023	Clean transportation	11	Climate change mitigation	0,12							6 new biogas-fuelled waste collection vehicles	23,6
Deponigasmotor	NSR AB	2022	Pollution prevention and control	11	Pollution prevention and control	9,3							Landfill gas engine	3,1
Nils Poppes vägs LSS-Boende	Fastighets-förvaltningen	2023	"Green buildings / Access to essential services"	11, 13	Climate change mitigation	74	17				10		"Housing adopted for special needs with 10 new apartments"	21,8
Östra Farmarevägen, LSS	Fastighets-förvaltningen	2022	"Green buildings / Access to essential services"	11, 13	Climate change mitigation	27	15				6		"Housing adopted for special needs with 6 new apartments"	23,1
Expansion of electricity grid	Öresundskraft AB	2023	Renewable energy	7	Climate change mitigation	n/a				17,3 min/ year			Extension and upgrading of electricity grids	216
Äldreboende Rydebäck	Fastighets-förvaltningen	2022	"Green buildings / Access to essential services"	11, 13	Climate change mitigation	55	234				72		Nursing home with room for 72 residents	71,5
Dubbelhall i Fredriksdal	Fastighets-förvaltningen	2023	Access to essential services	8, 10	n/a	n/a						700****	A sports arena with two full-sized sports halls	13,5
														500

*ICMA Green bond principles and Social bond principles

**An indicator to measure grid performance recommended by Swedish Energy Market Inspectorate

*** Maximum capacity under ideal conditions

**** Average participation in sport organisations in Helsingborg multiplied by the number of children and young people living in the area.

Examples of new sustainable projects in Helsingborg financed with the proceeds of bonds

Västhamnsverket

Västhamnsverket was built in 1983, originally to burn oil. In 2006, the fuel was converted to wood pellets, which are fully renewable. The lifetime extension means production for another 20 years beyond 2040. The plant is renewing the fuel intake and switching to new burners for start-up with renewable fuel rapseeded methyl ester (RME). This means that all fuel is fossil-free and renewable. In addition to this, the plant is automated. Västhamnsverket produces both district heating and electricity during the colder months of the year from November to March.

Sustainable bond category	Invested 2023	Reduced CO2e
Energy efficiency	57,8 msek	37,6 ktons/year

Framtidens belysning och IoT 2023

Helsingborg currently has around 30,000 lampposts. The lamps in them consume a lot of energy and the technology is outdated. Over the next ten years, the city will be replacing large parts of it´s lighting system with more energy-efficient and much smarter lighting.

Not only will every pole and luminaire be able to tell us how it is doing. We see the lighting system as the backbone of a digital infrastructure. The poles are energised, located throughout the municipality - in the city and in the countryside - and are high enough to provide excellent radio coverage.

In addition to lighting, the poles and luminaires can communicate with nearby sensors that can collect everything from traffic and air quality to congestion and noise. They can tell us when lawns need watering or bins need emptying, detect traffic jams and track available parking spaces. It's a win-win situation for everyone and a safer, more caring city that's easier to live in.The project for future lighting and IOT started in 2019 with investigations and project planning. In 2021, the actual replacement began, where about 1,360 street luminaires and about 200 poles were replaced. In 2023, phase 2 was initiated, where approximately 4,400 street luminaires are planned to be replaced until May 2024. With the same estimated energy savings level as Phase 1, the city expects the savings to be close to 80% or about 990,000 kWh/year.

In addition to energy savings, the better light control of LED technology also reduces the risk of glare, less stray light that disturbs residents through light pollution, less stray light that blots out the night sky and disturbs insects, higher colour rendering and a fresher light. In 2023, the documentation for the procurement of the communication system was started and finalised, which will form the basis for control and further energy and operational efficiency of the lighting, but also enable communication with sensors and sensors in the upcoming Smart City expansion. The control system is intended to be procured in 2024. The geodatabase in GIS environment was completed in early 2023 and now contains all street lighting data, which facilitates operation and maintenance and simplifies all ongoing analyses with a better overview in a graphic environment.

Sustainable bond category	Invested 2023	Energy savings
Energy efficiency	16,3 msek	900 MWh/year

Production of biochar at NSR Helsingborg

The city group waste management company (NSR) has invested in a Biochar Facility with financial support from" Klimatklivet", the national Swedish program for climate smart investments. NSR accepts some 20 000 tons of garden waste every year, in Helsingborg alone. Historically, this material has been shredded and the fine fraction used to produce compost/soil and the course fraction has been incinerated to produce district heating.

The objective was to redirect the coarse fraction from incineration to material recovery. It became evident that the waste fraction could be put to a more beneficial use. The production of biochar through pyrolysis represents a more effective utilisation of this type of biomass than incineration.

The incineration process produces heat, whereas pyrolysis allows NSR to receive dual products, namely biochar and heat. This creates a local 'eco-loop' whereby trimmings from green areas in the city are transformed into biochar, which can then be returned to city parks and gardens as soil improvement. This not only enhances the natural environment but also contributes to the greening of Helsingborg.

The production of biochar in Sweden would be beneficial for the climate and the economy due to its multiple benefits:

- Enhances soil quality by retaining nutrients and water.
- Treats contaminated soil.
- Serves as a filter for water and air purification.
- Contributes to climate-neutral concrete in the cement industry.
- Reduces methane emissions in livestock farming when added to animal feed.
- Stabilizes biogas production and improves biofertilizers.

Today there is a biochar plant in place with a capacity to produce 1400 tonnes of biochar and 2.3 MW of heat from the pyrolysis gas. NSR plans to test other organic materials for biochar production and has established a research lab to explore future applications, emphasizing biochar's role in reducing carbon emissions and promoting sustainability.

Substrate – crushed garden waste and the product - biochar

Sustainable bond category	Invested 2023	Reduced CO2e
Renewable energy	1,8 msek	3,5 ktons /year

Fredriksdalshallen

The city's quality of life programme states that it is important for people's well-being that they have access and opportunities to easily participate in different experiences and activities. Experiences and activities for all have compensatory effects on children and young people who have more difficult growing conditions and can strengthen children's and young people's self-esteem, counteract involuntary loneliness and increase security.

The Public Health Agency of Sweden believes that in order to achieve good and equal health, it is important to strengthen people's room for manoeuvre and opportunities to have healthy lifestyles and to take into account how different groups' living conditions and circumstances affect their lifestyles. Socio-economic conditions and discrimination can affect people's opportunities to be physically active. Cross-sectoral work is therefore needed to design and implement measures that reduce barriers and increase opportunities for physical activity in the population.

Fredriksdalshallen is being built on the border between the Fredriksdal and Drottninghög neighbourhoods and will be the first full-size (20mx40m) sports hall in the north-east of the city. There are currently only smaller halls in the area.

The proportion of children and young people who are active in an association in these neighbourhoods is at low levels, 26-28 participants per 100 inhabitants (aged 7-25) in the three areas compared with an average of 40 in Helsingborg. Fredriksdal is also one of the neighbourhoods with the most children in households receiving financial assistance.

The World Health Organisation (WHO) guidelines are that children aged 6-17 years should have at least 60 minutes of heart rate increasing activity daily. In Nordöstra staden (Dalhem, Drottninghög and Fredriksdal), children's physical activity is lower than the Helsingborg average.

In the public health survey Health on Equal Terms, we can see that adults' physical activity and social participation are also lower in Fredriksdal and Drottninghög than the city average.

The fact that the results look like this can be linked to the socio-economic composition of the north-eastern part of the city and the fact that there are few established associations with a continuous presence in the area.

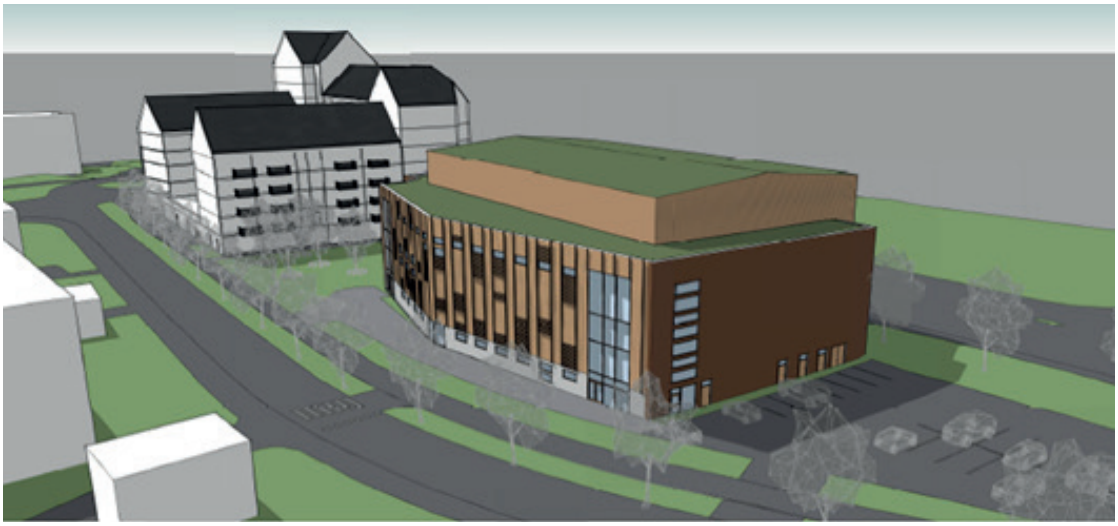
The IM (Individual Humanitarian Assistance) report states that since research into participation in community sport began 80 years ago, children, young people and adults in the higher socio-economic groups have been consistently over-represented, regardless of whether participation is compared to financial resources, parental education, housing type or socio-economic group. Inequality is therefore not a new trend, but it is increasing - both in terms of participation in organisations and health.

Entering an organised leisure activity, where one becomes part of a positive social community, has good adult role models and engages in physical exercise or cultural activities on a regular basis, can be an important step in breaking the negative spiral of exclusion.

The establishment of two full-size sports halls (40mx20m) will create opportunities for associations to conduct activities on a larger scale in the evenings and at weekends. Fredriksdalshallen will also contain association premises that allow associations to have a continuous presence in the area.

Fredriksdalshallen will consist of two sports halls on two floors. In addition to the sports halls, there will also be accessible and inclusive changing rooms as well as simple meeting rooms and office premises.

The location of Fredriksdalshallen will create conditions for increased physical activity and social participation among residents in the neighbourhood. Fredriksdalshallen will promote mobility and meetings between children, young people, and adults in Drottninghög and Fredriksdal, but also become an attractive destination that attracts people from other areas of Helsingborg. By locating Fredriksdalshallen here, we want to contribute to Helsingborg as an attractive and equal city.



Sustainable bond category	Invested 2023	Individuals benefitted in target group
Access to essential services	13,5 msek	700

Reporting approach and how to interpret the result

The City of Helsingborg's ambition is to deliver a transparent and credible report regarding both allocation and sustainability effects. For projects that have been completed or started, there may be access to actual measured sustainability data, but in cases where the projects are newly started, the city needs to use calculations and assumptions. When calculating sustainability and selecting baselines, the city has taken as its starting point the recommendations in the Nordic position paper by the Nordic public sector and ICMA's Harmonised framework for impact reporting. However, in a few cases it has been deemed necessary to go beyond these to find the most appropriate emission factor or baseline. As the actual outcome of the sustainability impact is affected by many external factors such as legal requirements, delays and changes in baseline designs. It may therefore be the case that there is a difference between the calculated and the measured sustainability impacts. The city are continuing to improve the data quality and will as that improve continuously review the estimates and assumptions.

Baselines		
District heating	56 kg CO2 /MWh	Position paper on green bonds impact reporting
Emission factor Nordic electricity grid	191 kg CO2 /MWh	Position paper on green bonds impact reporting
Emission factor alternative waste treatment	28 kg CO2 /MWh	Position paper on green bonds impact reporting
Share of carbon in biochar	81%	Analysis of biochar, Eurofins
Diesel driven cars	1,67 kg CO2 / liter	Stenciled value, Naturvårdsverket

Green account audit

The report has been audited in accordance with ISRS 4400 by the authorised auditing firm Öhrlings PricewaterhouseCoopers AB.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