

Green Bond  
**Impact Report**

2022



**Handelsbanken**

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## About this report

Handelsbanken established its first Green Bond Framework in 2018 and has since issued two bonds within this framework – one in 2018, and one in 2020. In order to develop the green offering, the Green Bond Framework was updated in August 2022 and in September 2022, a third green bond was issued within the updated framework.

The first issue in 2018, a senior unsecured green bond, amounted to EUR 500 million with a maturity of five years. The second issuance was in 2020, a senior non-preferred green bond, also to an amount of EUR 500 million, with a seven year maturity. The third issuance was in 2022, a senior preferred green bond, to an amount of EUR 750 million, with a seven year maturity.

Handelsbanken commits to publish an annual report detailing the overview of our Green Assets and examples adherent to the relevant criteria in the Framework. The figures included in this report are for 2022 and refer to continuing operations (Finland is excluded). For the complete updated Framework please see [handelsbanken.com/handelsbankens-green-bonds](https://handelsbanken.com/handelsbankens-green-bonds).

## Handelsbanken's Green Bonds

Bond	July 2023, 0.375 per cent, Series Number 336	December 2027, 0.01 per cent, Series Number 351	September 2029 2.625 per cent, Series Number 358
<b>Issuer</b>	Svenska Handelsbanken AB (publ)	Svenska Handelsbanken AB (publ)	Svenska Handelsbanken AB (publ)
<b>Type</b>	Senior Unsecured Green Bond	Senior Non-Preferred Green Bond	Senior Preferred Green Bond
<b>Rating</b>	Aa2 (Moody's); AA- (S&P); AA (Fitch)	A3 (Moody's); A (S&P); AA (Fitch)	Aa2 (Moody's); AA- (S&P); AA+ (Fitch)
<b>Nominal amount</b>	EUR 500 000 000	EUR 500 000 000	EUR 750 000 000
<b>Issue date</b>	3 July 2018	2 December 2020	5 September 2022
<b>Maturity date</b>	3 July 2023	2 December 2027	5 September 2029
<b>Listing</b>	Official List of Euronext Dublin	Official List and to trading on the Global Exchange Market of Euronext Dublin	Official List and to trading on the Global Exchange Market of Euronext Dublin
<b>ISIN</b>	XS1848875172	XS2265968284	XS2527451905
<b>Distribution by region</b>	Germany, Austria (29%); Nordics (22%); France (16%); BeNeLux (16%); UK (9%); Other (8%)	Nordics (27%); Germany, Austria (25%); France (19%); UK & Ireland (11%); BeNeLux (7%); Southern Europe (6%); Other (5%)	France (22%); DACH (20%); BeNeLux (17%); Nordic (15%); UK&Ireland (15%); Asia (6%); South Europe (3%); Other (2%)
<b>Distribution by investor type</b>	FM (37%); Ins/Pen (31%); Cbk/OI (18%); Bank/PB (14%)	FM (57%); Ins/Pen (16%); OI (16%); Bank/PB (10%); Other (1%)	FM (57%); Ins/Pen (16%); OI (16%); Bank/PB (10%); Other (1%)

# Sustainability at Handelsbanken

Handelsbanken's business opportunities and successes are dependent on the Bank gaining the trust and confidence of customers, employees, the general public, investors and public authorities. A condition for this trust is that the Bank's operations follow high ethical standards and that we take responsibility for our actions. The constant development of our sustainability work is important for future generations and for confidence in, and the stability of, the financial system.

## Customer-centric approach

Handelsbanken always focuses on the customer, and emphasises the importance of being close to the customer and the communities in which the Bank operates. Handelsbanken's greatest impact on sustainable development, whether in a positive or negative direction, lies in its business operations: through financing customers' projects and businesses, and being entrusted to manage customers' assets. On issues such as the climate, environment, biodiversity, human rights and inclusivity, the Bank has the greatest chance to make a positive difference by supporting customers through their sustainable transition. By helping our customers – whether large companies, SMEs or private customers – to be more sustainable, Handelsbanken itself becomes more sustainable.

Handelsbanken thus works actively to support and accelerate its customers' sustainable development. This takes the form of dialogue and advice, within the framework of financing, in discussions regarding savings and by building close relationships with customers. A relevant, concrete example is energy efficiency, which is one of the most effective ways to make a difference, both financially and environmentally.

## Our Sustainability goals

Our overarching climate goal is to achieve net zero emissions of greenhouse gases as soon as possible, and by 2040 at the latest. This applies to our business operations, for example lending, leasing and investments, but also the emissions deriving from our own operations such as energy consumption, business travel and the purchases of goods and services.

Handelsbanken has adopted an ambitious schedule, as the Bank is convinced that a rapid, organised transition with the aim of limiting global warming to close to 1.5°C is best for customers, society, and thus also for Handelsbanken. The Bank's goals are not just a question of taking responsibility for sustainability issues, but are also meant to create opportunities for the Bank and its customers in the sustainable transition that society stands poised to take.

The Bank's transition plan places the Bank in a larger context, whereby customers and society as a whole must also play active roles. Effective climate work cannot be achieved by acting alone: climate change is a global problem requiring co-operation and cross-border solutions.

We have also set strategic business goals within financing, investments and advisory services:

- Responsible financing – by 2025, 20 per cent of the Bank's financing volume shall consist of green financing, social financing or financing that contributes to the borrower's measurable, sustainable transition.
- Responsible investments – the investment portfolios shall be in line with the goals and transition pathway of the Paris Agreement, achieve net-zero emissions of greenhouse gases by 2040 at the latest, and increase the funds' contributions to the 2030 Agenda.
- Advisory services – by 2023 at the latest, through business development and training initiatives, in a measurable way create conditions for gender-equal savings and thus contribute to reducing the wealth gap between men and women.

## Handelsbanken's green bonds

A sustainable solution to finance projects with the environment in mind.

Handelsbanken strives to be a responsible actor within the financial sector and lead the way towards a sustainable banking industry. By issuing green bonds, the Bank supports the long-term development of sustainable solutions through the financing of green projects. Handelsbanken established its first Green Bond Framework in 2018 and issued two green bonds under it - one in 2018 and one in 2020. To further advance our Green Bond offering, the Green Bond Framework was updated in 2022. A third green bond was issued in September 2022 under the updated framework, and in March 2023 we issued, together with our wholly owned mortgage arm Stadshypotek, an inaugural green covered bond.

“*Being Handelsbanken, having a long-term perspective is a necessity to create value for all our stakeholders. I hope this impact report will offer valuable insight into how we fund and finance projects supporting climate change adaptation and improved energy efficiency, thereby demonstrating our strong commitment to a sustainable future.*”

Carl Cederschiöld, CFO Handelsbanken



# Methodology

## Reporting principles

- This report is based on the guidelines for impact reporting provided by Green Bond Principles (GBP)<sup>1</sup> and the Nordic Public Sector Issuers Position Paper on Green Bonds Impact Reporting, February 2020<sup>2</sup>.
- Handelsbanken reports on the basis of the share of the project's total investment cost that has been financed with proceeds from the green bond.
- Handelsbanken uses a pro-rata allocation to each outstanding bond.
- Direct environmental impacts such as renewable energy production, energy savings, reduced emissions are reported. Where applicable avoided emissions are reported.
- The reported distribution and impact are based on the status of the Green Registry as of December 31, 2022. The full year impact is accounted for regardless of when an asset is included in the Green Registry.
- The report includes both expected impact (ex-ante) and actual impact (ex-post).
- Currency rates as per 30 December 2022.

## Impact methodology

- Energy production and energy savings are converted into greenhouse gas emissions savings using an emission factor for electricity production in mainland EU and Norway of 315 g CO<sub>2</sub>e /kWh. For details see Nordic Position Paper on Green Bond Impact Reporting.
- For Green Buildings national building standards are used as baseline for calculating impact and energy savings. Impact is calculated as the net value of a specific building's energy consumption per m<sup>2</sup> and year, and a reference building.
- For further details regarding impact methodology, see Appendix – Collected data and Climate Impact Calculation at page 17.

## Sustainable Development Goals

The proceeds from our green bonds mainly targets the following Sustainable Development Goals

- Goal 6** ► Clean water and sanitation
- Goal 7** ► Affordable and clean energy
- Goal 11** ► Sustainable cities and communities
- Goal 12** ► Responsible consumption and production
- Goal 13** ► Climate action
- Goal 14** ► Life below water
- Goal 15** ► Life on land



<sup>1</sup> [icmagroup.org/green-social-and-sustainability-bonds/](https://www.icmagroup.org/green-social-and-sustainability-bonds/)

<sup>2</sup> [kommuninvest.se/wp-content/uploads/2020/02/NPSI\\_Position\\_paper\\_2020.pdf](https://kommuninvest.se/wp-content/uploads/2020/02/NPSI_Position_paper_2020.pdf)






# Green Bond Framework



Handelsbanken established its first Green Bond Framework in 2018 and issued two green bonds under it - one in 2018 and one in 2020. To further advance our Green Bond offering, the Green Bond Framework was updated in 2022 and has been developed to also include green mortgages and to more broadly, comply with the technical screening criteria assuring substantial contribution to at least one of the first two environmental objectives “climate change mitigation” and “climate change adaptation” under the EU Taxonomy (the Climate Delegated Act, December 2021).

The framework is aligned with the 2021 ICMA Green Bond Principles.

An independent evaluation of the Framework has been carried out by CICERO Shades of Green and was graded Medium Green. Included in the overall shading an assessment of the governance structure was made with the outcome “Excellent”.

GBP Category	Eligible Green Assets	Sustainable Development Goals
<p><b>Clean transportation</b></p>	<p>The financing or refinancing of zero emission transport solutions for passenger, public and freight purposes, low carbon public transport as well as related infrastructure<sup>3</sup> including, but not limited to:</p> <ul style="list-style-type: none"> <li>• Transport by road: zero direct (tailpipe) CO<sub>2</sub> emissions vehicles such as buses, cars and trucks as well as public transport vehicles that run on biofuels<sup>4</sup></li> <li>• Transport by rail: trains, wagons, coaches, underground trains and trams with zero direct (tailpipe) CO<sub>2</sub> emissions</li> <li>• Relevant supporting infrastructure related to electric transportation such as charging stations for electric vehicles</li> </ul>	
<p><b>Climate change adaptation</b></p>	<p>The financing or refinancing of adaptation measures contributing to the reduction of negative impacts of climate change related to e.g. temperature, wind, water or solid mass such as drought, storms and flooding. Including adaptations measures to increase the climate resilience in buildings.</p>	
<p><b>Energy efficiency</b></p>	<p>The financing or refinancing of energy efficient solutions, infrastructure, technologies and related R&amp;D contributing to a low carbon and energy efficient society<sup>5</sup>.</p> <p>Eligible assets includes but are not limited to:</p> <ul style="list-style-type: none"> <li>• Energy efficient products, technologies and processes in buildings including installation, replacement, maintenance and repair of energy efficient equipment such as light sources, HVAC (heat, ventilation and air conditioning), windows, doors and insulation as well as instruments for measuring and controlling the energy performance of buildings</li> <li>• Production and development of energy efficient products, technologies and processes such as energy efficient electric heat pumps<sup>6</sup>, ventilation systems and household appliances<sup>7</sup></li> <li>• Storage of energy including electricity, batteries, pumped hydropower, hydrogen, thermal energy</li> <li>• District heating/cooling distribution<sup>8</sup></li> <li>• Smart grid technology</li> <li>• Infrastructure for the transmission and distribution of electricity</li> <li>• Green iron and steel produced with green hydrogen</li> <li>• Data-driven solutions for GHG emissions reductions</li> </ul>	

<sup>3</sup> Transportation solutions will not be dedicated to the transport of fossil fuels.  
<sup>4</sup> Public transport driven by biofuels will be aligned with the EU's Renewable Energy Directive 2018/2001. For installations starting operation from 1 January 2021 this means that the GHG emission savings shall be at least 65%.  
<sup>5</sup> Projects that improve energy efficiency of fossil fuel production will be excluded.  
<sup>6</sup> For electric heat pumps the Global Warming Potential of the refrigerant will not exceed 675.  
<sup>7</sup> Where applicable, products will be rated in the highest two populated classes of energy efficiency in accordance with Regulation (EU) 2017/1369 and delegated acts adopted under that Regulation.  
<sup>8</sup> District heating/cooling distribution will be using at least 50% renewable energy, 50% waste heat, 75% cogenerated heat or 50% of a combination of such energy and heat.

GBP Category	Eligible Green Assets	Sustainable Development Goals
<p><b>Environmentally sustainable management of living natural resources and land use</b></p>	<p><b>Sustainable forestry</b></p> <p>The financing or refinancing of investments in sustainable forest management and sustainable forestry assets:</p> <ul style="list-style-type: none"> <li>• Forest holdings exceeding 1500 hectares are required to have a sustainable forestry certification from either the Forest Stewardship Council (FSC) and/or the Programme for the Endorsement of Forest Certification (PEFC)</li> <li>• Forest holdings between 50 and 1500 hectares, located in Sweden with an up to date Forest Management Plan<sup>9</sup>, including conservation action plans for at least five per cent of the productive area (nature protection and habitat management) and a minimum of five per cent deciduous trees</li> </ul> <p><b>Biodiversity</b></p> <p>The financing or refinancing of investments in activities that promote, restore and/ or preserve biological diversity including but not limited to:</p> <ul style="list-style-type: none"> <li>• Protection and restoration of natural resources and ecosystems<sup>10</sup></li> <li>• Conservation and restoration of forest, woodlands and wetlands</li> </ul>	
<p><b>Green buildings</b></p>	<p>The financing or refinancing of buildings which meets the following criteria:</p> <p><b>Commercial buildings</b></p> <p>New buildings (built after 31 December 2020):</p> <ul style="list-style-type: none"> <li>• Primary energy demand is, or will be, at least 10% lower than the threshold set for nearly zero-energy building (NZEB) requirements in national measures<sup>11</sup></li> <li>• The building must also have, or intend to receive, a design stage certification or a post construction certification in any of the following building certification schemes at the defined threshold level or better: <ul style="list-style-type: none"> <li>o BREEAM “Very Good”</li> <li>o LEED “Gold”</li> <li>o Miljöbyggnad “Silver”</li> <li>o Svanen</li> <li>o DGNB “Gold”</li> </ul> </li> <li>• Or the building is determined to be Taxonomy aligned<sup>12</sup></li> </ul> <p>Existing buildings (built before 31 December 2020):</p> <ul style="list-style-type: none"> <li>• The building has an Energy Performance Certificate (EPC) demonstrating class A, or the building is within the top 15% of the national or regional building stock expressed as Primary Energy Demand (PED)<sup>13</sup></li> </ul> <p><b>Residential buildings</b></p> <p>New buildings (built after 31 December 2020)</p> <ul style="list-style-type: none"> <li>• Primary energy demand is, or is designed to be, at least 10% lower than the threshold set for nearly zero-energy building (NZEB) requirements in national measures<sup>14</sup></li> <li>• Or certified as described under new commercial buildings</li> </ul> <p>Existing buildings (built before 31 December 2020):</p> <ul style="list-style-type: none"> <li>• The building has an Energy Performance Certificate (EPC) demonstrating class A, or the building is within the top 15% of the national or regional building stock expressed as Primary Energy Demand (PED)</li> <li>• Or certified as described under new commercial buildings</li> </ul> <p><b>Renovation of existing buildings</b></p> <p>Renovation of an existing building that either leads to a reduction of Primary Energy Demand (PED) of at least 30%, or where the building meets the applicable requirements for ‘major renovations’</p>	

<sup>10</sup> Where applicable, the recommendation of Natura 2000 will be taken into consideration. For more information, please visit: Natura 2000 - Environment - European Commission (europa.eu).







<sup>11</sup> These commitments do not apply to the Bank’s operations in Norway as Norway lacks a definition of “NZEB”. Instead, the Bank complies with regional requirements for EPC and/or building regulations.

<sup>12</sup> Including the technical screening criteria for do no significant harm.

<sup>13</sup> The top 15% PED applicable under this Framework will be updated continuously. Handelsbanken will reference an external benchmark when determining the top 15%. Such a benchmark could be e.g. guidance by national governments or a specialist study. Until such time guidance by a national government or a specialist study is established, Handelsbanken will reference national statistics.

<sup>14</sup> These commitments do not apply to the Bank’s operations in Norway as Norway lacks a definition of “NZEB”. Instead, the Bank complies with regional requirements for EPC and/or building regulations.

<sup>15</sup> A renovated building that fulfils the criteria for Existing buildings in this Framework can be classified as an Eligible Green Asset as a whole. If the building does not fulfil the criteria for an Existing building in this Framework but succeeds in a reduction of PED of at least 30% only the cost of the renovation can be financed.

GBP Category	Eligible Green Assets	Sustainable Development Goals
<p><b>Pollution prevention and control</b></p>	<p><b>Waste to energy</b>                      The financing or refinancing of environmentally responsible and fossil-free waste-to-energy investments</p> <ul style="list-style-type: none"> <li>• Waste to energy plants with an emission intensity of <math>\leq 100\text{gCO}_2\text{e/kWh}</math> for electricity generation</li> <li>• Waste hierarchy and plastic content in waste considered in the assessment</li> <li>• No peat, coal, oil, gas or other fossil fuels (except as required to start the incineration process)</li> </ul> <p><b>Waste management</b>                      The financing or refinancing of waste management or waste treatment in a responsible and environmentally friendly way. Waste management activities includes electric collection trucks, waste prevention measures, waste reduction or waste recycling<sup>16</sup> where projects are assessed both on their direct and indirect environmental credentials, including the collection and transport of waste and the greater societal impact of circular material use.</p>	 
<p><b>Renewable energy</b></p>	<p><b>Wind energy</b>                      The financing or refinancing of wind power installations (offshore and onshore) and related infrastructure investments such as grid connections and electric substations.</p> <p><b>Solar energy</b>                      The financing or refinancing of on-site solar power installations or stand-alone solar farms, as well as related infrastructure investments such as grid connections and foundations.</p> <p><b>Hydro energy</b>                      The financing or refinancing of hydro power plants and related infrastructure such as renovation of dams, new or refurbished grid connections and electric substations. To be eligible the asset must comply with either of the following requirements:</p> <ul style="list-style-type: none"> <li>• The electricity generation facility is a run-of-river plant and does not have an artificial reservoir</li> <li>• The power density of the electricity generation facility is above 5 W/m<sup>2</sup></li> <li>• The life-cycle GHG emissions from the generation of electricity from hydropower, are lower than 100gCO<sub>2</sub>e/kWh</li> </ul> <p><b>Geothermal energy</b>                      The financing or refinancing of geothermal heating and cooling installations and related infrastructure, such as network, heat pumps and heat exchangers. To be eligible the asset must comply with the following requirement:</p> <ul style="list-style-type: none"> <li>• The life-cycle GHG emissions from the generation of electricity from geothermal energy are lower than 100gCO<sub>2</sub>e/kWh</li> </ul> <p><b>Hydrogen</b>                      The financing or refinancing of investments in production of green hydrogen and the manufacture of equipment for the production and use of green hydrogen.</p>	 
<p><b>Sustainable water and wastewater management</b></p>	<p>The financing or refinancing of investments in sustainable management of water and/or wastewater such as plants, technologies and related infrastructure for the supply of fresh water or processing of wastewater, such as:</p> <ul style="list-style-type: none"> <li>• Ultrafilters</li> <li>• Energy or other energy efficiency improvements</li> <li>• Capacity expansions</li> <li>• Enabling infrastructure</li> <li>• New network infrastructure</li> <li>• New-build or investment in the water purification processes</li> </ul>	 

<sup>16</sup> The recycling facility must convert at least 50% of waste to secondary raw materials (in terms of weight).

### Process for Project Evaluation and Selection

All customers of Handelsbanken are managed and approved in the standard credit process, which includes a Know-Your-Customer procedure, an environmental and sustainability risk assessment, credit risk analysis and a credit decision. Further procedures to identify, analyse and approve Eligible Green Assets are in place, whereby Eligible Green Assets are defined in the Framework, proposed by the local branches, approved by the Bank’s Green Finance Committee and documented and monitored in the Green Registry. Additional information about this process is provided below.

The local branches nominate new and existing loans within the eligible green use of proceeds categories to the Green Finance Committee (GFC) for review and potential approval. Assessment and analysis are performed on both the asset and the customer. The standardised application and assessment include the following:

- A local branch nominates loans to the GFC and acknowledges that the financed asset complies with the legal requirements in the local jurisdiction, as well as with Handelsbanken’s policies and guidelines.

- Review and ESG assessment of the financed asset(s) and the customer, using both public and non-public information, including a screening for ESG incidents or controversies.
- Assessing and confirming the type of Green Asset, its compliance with the Use of Proceeds categories in the Framework, validating the purpose of the financing and a review of compliance with the Exclusion criteria (see ‘Methodology and Scope’ in Green Bond Framework).
- Assessing the benefit of the asset(s) in relation to the Sustainable Development Goals.

### Risk Assessment and Management

The assets must be compliant with applicable national laws and regulations, Handelsbanken’s policies and guidelines as well as the Green Terms. This includes the Bank’s sector guidelines, Credit policy, Sustainability policy, Guidelines for environmental impact and climate change, Ethics policy as well as specific environmental certification schemes (such as those outlined in the Framework for Green Buildings and Forestry) and the UN Global Compact, OECD Guidelines for Multinational Enterprises and the Equator Principles.

## Selection Process for Eligible Green Assets at Handelsbanken





### Management of Proceeds

An amount equal to the net proceeds of any issue under the Green Bond Framework is credited to an earmarked portfolio (the 'Green Portfolio') in the Bank's internal information system managed by the Treasury Department. Deductions are made from the Green Portfolio by an amount corresponding to the financing or refinancing of Eligible Green Assets that have qualified according to the Process for Project Evaluation and Selection or to repay a Green Bond. If an Eligible Green Asset no longer qualifies according to the Green Terms or if the underlying eligible loan is repaid or divested, an amount equal to the funds is re-credited to the Green Portfolio pending reallocation to other Eligible Green Assets. Net proceeds may be reallocated to other Eligible Green Assets by the Treasury at any time during the term of a Green Bond. The Bank's Treasury Department will keep a record of the purpose of any change in the Green Portfolio.

Pending the allocation of an amount equal to the net proceeds and while the Green Portfolio has a positive balance, including the unlikely event of there being no Eligible Green Assets, the proceeds may be invested or utilised by Treasury in accordance with the Bank's internal sustainability policy and the requirements of the liquidity reserve.

### Approval by the Green Finance Committee

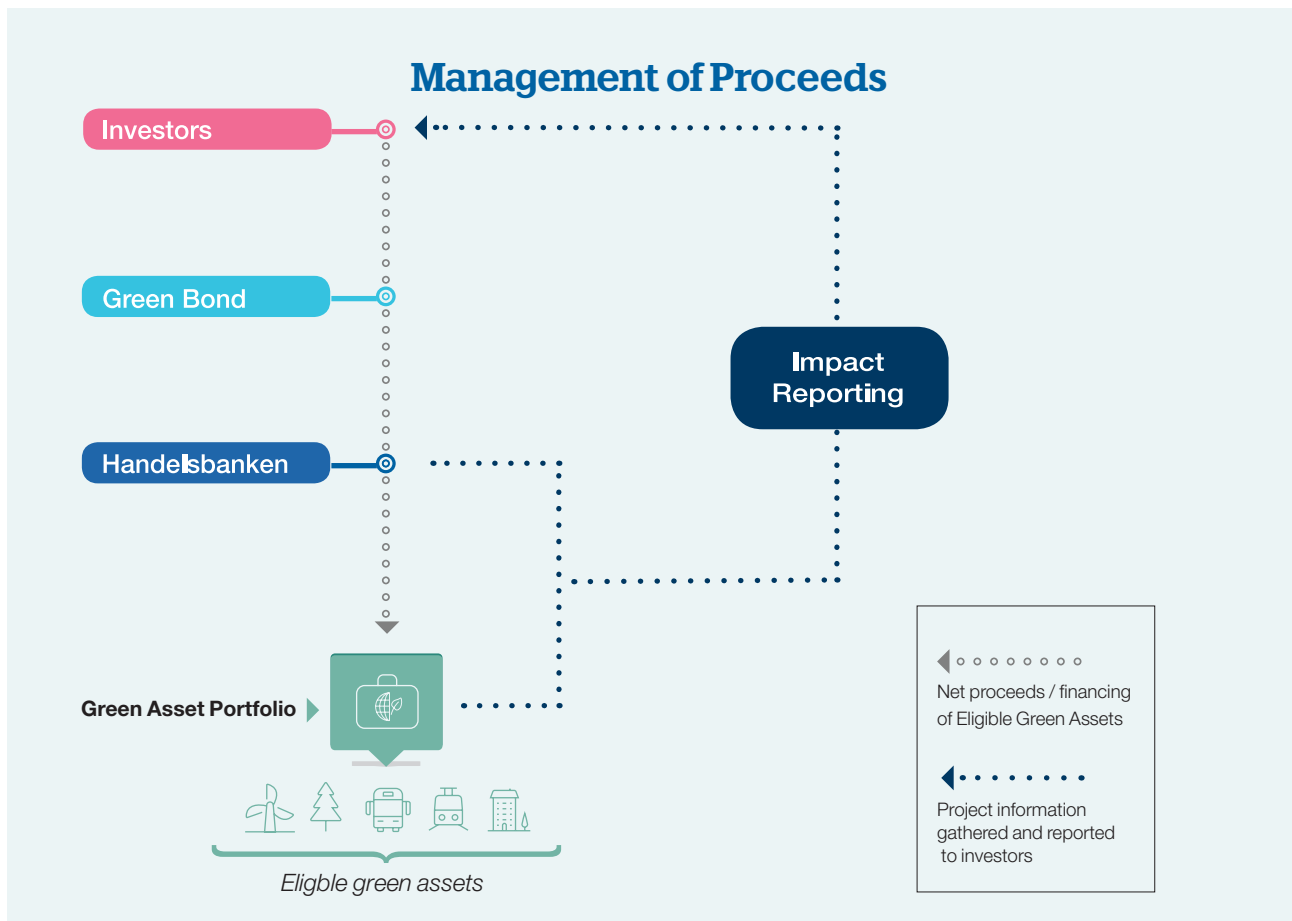
Handelsbanken's Green Finance Committee (GFC) has the mandate to approve (i) Green Assets, (ii) technical criteria for green loans and (iii) the Bank's Green Bond Framework.

The GFC is a sub-committee of the Group Sustainability Committee. Handelsbanken's Chief Sustainability Officer chairs the Group Sustainability Committee and the Green Finance Committee, and is responsible for sustainability strategy and implementation throughout the Bank.

The GFC currently consists of representatives from the following units:

- Group Sustainability
- Group Finance
- Group Credit Department
- Handelsbanken Capital Markets
- Handelsbanken Fonder
- Stadshypotek

The GFC reviews information about the assets and evaluates the overall environmental benefit according to a standardised process that includes life cycle considerations, potential rebound effects, resilience and scientific targets. If there is doubt about the environmental benefits or compliance with the Bank's Green Bond Framework, such assets will not be included. Eligible Green Assets are approved by majority vote by the GFC, where the Chief Sustainability Officer holds a veto. The decisions made by the GFC are documented.



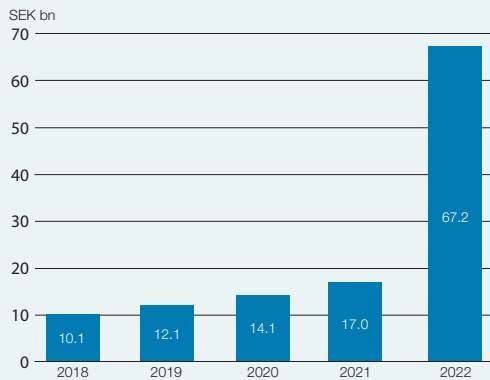
# Green Registry

## Green Registry and Documentation

The information gathered in the approval process is recorded along with loan and ESG information in a database (the 'Green Registry'). The Green Registry allows the Green Assets to be monitored by the Bank and will be used as a tool to determine if there is a current or expected headroom to issue a Green Bond. If a loan ceases to meet the Green Terms, the green status of the loan will be removed from the Bank's Green Registry.

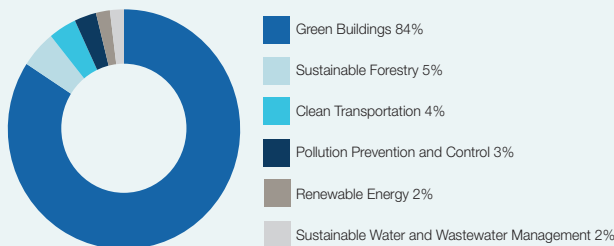
Handelsbanken's ambition is that the supply of eligible Green Assets shall continue to grow as the Bank's technical criteria for green loans are further developed and the focus on green financing and sustainable investment increases among customers. The Bank may need further clarity about the use of proceeds for both existing and future loans. In such cases the Bank will require the customer to sign a side letter confirming the purpose of the financing and/or that information may be provided to investors regarding the specific asset that has been financed.

### Eligible Green Assets per year-end

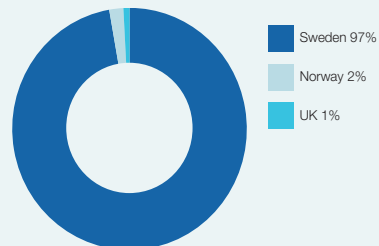


During 2022 the green assets which comply with the requirements and criteria stipulated in Handelsbanken's green bond framework grew to SEK 67.2 billion, corresponding to 295 per cent. The increase in volumes is largely explained by the conversion of certain mortgages into green mortgages during 2022. The conversion was applied to customers living in Sweden in energy efficient residential which met the criteria for Handelsbanken's green mortgages.

### Eligible Green Assets per category



### Eligible Green Assets per geography



# Example of eligible projects



Photographer: Emma Dahl

## Härjeåns Kraft AB

Running water is the energy source that has powered Härjeåns for over 100 years. Currently they refine it at eleven hydropower plants in Härjedalen, Jämtland and Medelpad. Härjeåns Kraft AB:s constantly strives to extract maximum power with the least possible environmental impact, which is why they see the work of streamlining their hydropower plants as crucial. Handelsbanken has signed a SEK 615 million green loan with Härjeåns Kraft AB for hydropower and investments in electricity grids in the "Renewable energy" category under Handelsbanken's green bond framework and the EU taxonomy's economic activities "Electricity generation from hydropower" and "Transmission and distribution of electricity". Härjeåns Kraft AB produces renewable energy at eleven run-of-river hydropower plants without artificial reservoir with a total effect of 18.2 MW (Produced energy 2022 was 81.4 GWh)



Photographer: Kretslopp Syd

## Kretslopp Sydost

Handelsbanken has signed a SEK 40 million green loan with Kommunalförbundet Kretslopp Sydost in the "Waste management" category under Handelsbanken's Green Bond Framework and the EU taxonomy's economic activity "Collection and transport of non-hazardous waste in source segregated fractions". Kommunalförbundet Kretslopp Sydost, based in Kalmar, collects food waste and residual waste from private individuals and businesses in the member municipalities of Kalmar, Mörbylånga, Nybro, Oskarshamn, Torsås, Vetlanda, Sävsjö and Uppvidinge. The collected waste is separated and disposed of by using different methods. In 2022, total volume of the collected waste amounted to 126 644 tons. 50 per cent of the treated waste and material are recycled. 100 per cent of the food waste is converted into biogas, which powers the garbage trucks and the local buses. Residual waste is for example used for district heating and in cement production.

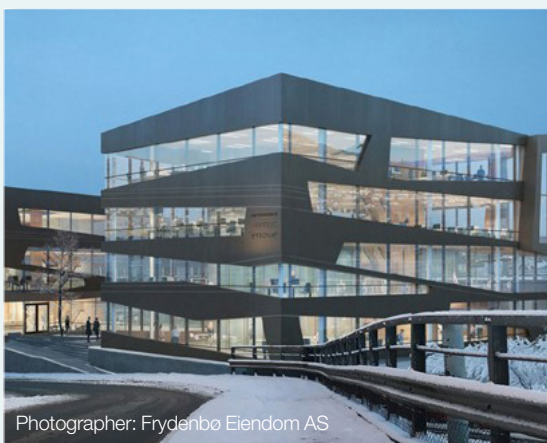
# Example of eligible projects



Photographer: Roos & Tegnér

## Sydvatten

Handelsbanken has signed a SEK 575 million green loan with Sydvatten AB in the "Sustainable water and wastewater management" category under Handelsbanken's Green Bond Framework and the EU taxonomy's economic activity "Construction, extension and operation of water collection, treatment and supply systems". Sydvatten AB, headquartered in Malmö, is a municipally owned company that produces drinking water for almost one million inhabitants in western Skåne. The company was founded in 1966 and is today one of Sweden's largest producers of drinking water. Sydvatten owns and operates the Bolmen tunnel, the two waterworks Ringsjöverket and Vombverket, as well as the main pipeline system for the distribution of drinking water. Handelsbanken finances Vombverket which delivers close to 31 million cubic metres of drinking water. Recent and planned investments are, besides maintenance investments, investments in ultraviolet technology and a fourth production line.



Photographer: Frydenbø Elendom AS

## Frydenbø

Handelsbanken has signed a NOK 144 million green loan with Frydenbø Marina III AS ("Frydenbø") in the "Green buildings" category under Handelsbanken's Green Bond Framework and the EU Taxonomy's economic activity "Construction of new buildings". Kilen is a new, commercial building in the heart of Damsgård in Bergen, Norway. Damsgård is undergoing significant development, and Frydenbø is one of the driving forces behind making this district attractive to both residents and tenants. With its proximity to the city center of Bergen and the other business clusters, Kilen is an important addition to the maritime and technological cluster at Damsgård. Kilen has been certified in accordance with BREEAM-NOR Very Good. BREEAM is a collection of certification schemes and is managed by the Building Research Establishment ("BRE") in the United Kingdom. BREEAM-NOR is a Norwegian adaptation, and it is today Norway's oldest and most widely used environmental certification for new buildings and major rehabilitations. Kilen has an energy performance certificate ("EPC") of class A.

# Quantitative environmental impact

Category	Sub categories	Disbursed amount (EUR)	Disbursed amount (SEK)	Share (%)	GHG emissions avoided (tCO <sub>2</sub> e) <sup>17</sup>	SDGs
Clean transportation	Public transport	36,650,550	408,120,071	2	2,303	 
	Zero direct (tailpipe) CO <sub>2</sub> emissions vehicles	21,905,440	243,926,752	1	1,305	
Climate change adaptation		-	-	-	-	   
Energy efficiency		-	-	-	-	 
Environmentally sustainable management of living natural resources	Sustainable forestry	95,460,195	1,062,991,463	6	69,583	 
	Biodiversity	-	-	-	-	
Green buildings		651,397,013	7,253,593,655	37	992	 
Green mortgages		828,937,736	9,230,588,076	47	4,378	 
Pollution prevention and control	Waste to energy	33,708,927	375,363,803	2	48,444	 
	Waste management	16,664,159	185,562,771	1	-	
Renewable energy	Wind energy	16,258,197	181,042,215	1	14,040	 
	Solar, Hydro and Geothermal energy	19,725,318	219,650,137	1	6,376	
Sustainable water and wastewater management	Water management	29,292,466	326,184,558	2	-	 
<b>Total New Loans<sup>18</sup></b>		<b>1,750,000,000</b>	<b>19,487,023,500</b>	<b>100</b>	<b>147,421</b>	
<b>Impact, tonnes CO<sub>2</sub>e per mEUR / mSEK</b>		<b>1,402,311,077</b>	<b>15,615,353,669</b>	<b>80</b>		
		<b>84</b>	<b>8</b>			

<sup>17</sup> See appendix on page 17 for collected data and climate impact calculation.

<sup>18</sup> Loan disbursements that have been made since the last reporting period.



# Alignment with the EU Taxonomy

The Taxonomy Regulation (June, 2020) and associated legal frameworks contain six environmental objectives. In December 2021, the Climate Delegated Act, covering the first two environmental objectives, Climate Change Mitigation and Climate Change Adaptation, was formally adopted by the European Council and entered into force on January 2022. Any eligible activity must substantially contribute towards one or more of these six environmental objectives, while at the same time not significantly harming any other environmental objective. Furthermore, the EU Taxonomy defines sustainable economic activities through categorisation, Technical Screening Criteria (“TSC”), including Do-No-Significant-Harm criteria (“DNSH”) and Minimum Safeguards (“Minimum Safeguards”). The assessment of the eligible green assets has been made against the criteria for substantial contribution within the environmental objective of climate change mitigation. No assessment has been made with regards to the Do-No-Significant-Harm criteria (“DNSH”) and Minimum Safeguards (“Minimum Safeguards”).

Category	Sub categories	Green Assets mSEK	Aligned	Most likely aligned	Insufficient data for assessment	Not aligned
Clean transportation	Public transport	1,408	1,408	-	-	-
	Zero direct (tailpipe) CO <sub>2</sub> emissions vehicles	841	841	-	-	-
Climate change adaptation		-	-	-	-	-
Energy efficiency		-	-	-	-	-
Environmentally sustainable management of living natural resources	Sustainable forestry	3,666	-	-	3,666	-
	Biodiversity	-	-	-	-	-
Green buildings		25,017	11,610	9,325	4,082*	-
Green mortgages		31,836	14,396	14,658	2,782*	-
Pollution prevention and control	Waste to energy	1,295	506	-	789	-
	Waste management	640	640	-	-	-
Renewable energy	Wind energy	624	624	-	-	-
	Solar, Hydro and Geothermal energy	758	758	-	-	-
Sustainable water and wastewater management	Water management	925	925	-	-	-
	Waste water	200	200	-	-	-
<b>Total mSEK</b>		<b>67,210</b>	<b>31,907</b>	<b>23,983</b>	<b>11,319</b>	<b>-</b>
<b>Share %</b>		<b>100</b>	<b>47</b>	<b>36</b>	<b>17</b>	<b>-</b>

\* Includes primarily buildings with environmental certification in accordance with the Green bond framework that not yet have a valid EPC.

# Additional Key Performance Indicators

Category	Sub categories	Quantity of annually treated wastewater (m <sup>3</sup> )	Quantity of annually supplied freshwater (m <sup>3</sup> )	Amount of Certified Forest (hectares)	Annual energy saving (MWh)	Annual energy generation (MWh)
Clean transportation	Public transport	-	-	-	-	-
	Zero direct (tailpipe) CO <sub>2</sub> emissions vehicles	-	-	-	-	-
Climate change adaptation		-	-	-	-	-
Energy efficiency		-	-	-	-	-
Environmentally sustainable management of living natural resources	Sustainable forestry	-	-	132,144	-	-
	Biodiversity	-	-	-	-	-
Green buildings		-	-	-	6,784	-
Green mortgages		-	-	-	18,332	-
Pollution prevention and control	Waste to energy	-	-	-	-	354,597
	Waste management	-	-	-	-	-
Renewable energy	Wind energy	-	-	-	-	44,571
	Solar, Hydro and Geothermal energy	-	-	-	-	20,241
Sustainable water and wastewater management	Water management	1,007,775	11,885,124	-	-	-
<b>Total</b>		<b>1,007,775</b>	<b>11,885,124</b>	<b>132,144</b>	<b>25,116</b>	<b>419,409</b>

# Auditor's Limited Assurance Report

To Svenska Handelsbanken AB (publ), Corporate identification number 502007-7862

## Introduction

We have been engaged by the Executive Management of Svenska Handelsbanken AB (publ) (Handelsbanken) to undertake a limited assurance engagement of the information in Handelsbanken Green Bond Impact Report 2022 ("the Report") including allocation of net proceeds to eligible green assets and impact calculations on page 2-10, 13 and 15.

## Responsibilities of the Executive Management

The Executive Management is responsible for preparing the Report in accordance with applicable criteria. The reporting criteria is stated in Handelsbanken's Green Bond Framework dated August 2022, available on Handelsbanken's website. This responsibility includes the internal control relevant to the preparation of a Report that is free from material misstatements, whether due to fraud or error.

## Responsibilities of the Auditor

Our responsibility is to express a limited assurance conclusion on the selected information specified above based on the procedures we have performed and the evidence we have obtained. Our assurance does not extend to any other information in the Report.

We have conducted our limited assurance engagement in accordance with ISAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information issued by IAASB. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the selected information in the Report, 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 IAASB's Standards on Auditing and other generally accepted auditing standards.

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, we do not express a reasonable assurance conclusion.

The firm applies ISQM 1 (International Standard on Quality Management) 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 towards Handelsbanken in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

Our procedures are based on the criteria defined by Executive Management as described above. We consider these criteria suitable for the preparation of the Report.

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 selected information disclosed in the Report has not been prepared, in all material respects, in accordance with the reporting criteria.

**Stockholm, 31 May 2023**

Öhrlings PricewaterhouseCoopers AB

**Johan Rippe**

*Authorized Public Accountant*

**Karin Juslin**

*Sustainability specialist*

# Appendix – Collected data and avoided emissions calculation

Sub category	Collected data	Avoided emission calculation (tCO <sub>2</sub> e)
Wind & Hydro Energy	<ul style="list-style-type: none"> <li>- Capacity of energy generation of plant (MW)</li> <li>- Annual renewable energy generation in MWh or GWh</li> </ul>	Annual production of renewable energy in MWh x (baseline emissions factor – project emissions factor).
Green buildings in Sweden	<ul style="list-style-type: none"> <li>- Heated surface area in square metres (Atemp).</li> <li>- Permitted maximum energy consumption of the building, measured in kWh/Atemp.</li> <li>- Estimated / actual annual electricity consumption of the building, measured in kWh/Atemp.</li> <li>- Estimated / actual annual heating consumption of the building, measured in kWh/Atemp in accordance with applicable regulations.</li> <li>- Estimated / actual annual cooling consumption of the building, measured in kWh/Atemp in accordance with applicable regulations.</li> <li>- Year of construction</li> </ul>	<p>Avoided emissions are calculated using the difference in terms of energy efficiency between the financed building (The building) and the energy efficiency of a reference building (reference value).</p> <p>The energy efficiency of the building is the value expressed in accordance with an EPC. The reference value depends on year of construction and is either energy efficiency requirements according to applicable building code or average energy efficiency based on data from Boverket.</p> <p>To avoid double counting between tenant-owner association and the tenant-owned apartments, please see methodology in Handelsbanken's climate change progress report 2022, p.20</p> <p>Avoided emissions per building is calculated as (reference value - kWh/m<sup>2</sup> of The building) x m<sup>2</sup> of The building x (share of The buildings energy consumption per energy carrier x emission factor of energy carrier).</p> <p>The reference value used is:</p> <ul style="list-style-type: none"> <li>• Buildings built before 2021 <ul style="list-style-type: none"> <li>- Single-family houses: 115 kwh/m<sup>2</sup></li> <li>- Multi-family houses &amp; apartments: 128 kwh/m<sup>2</sup></li> <li>- Premises: 147 kwh/m<sup>2</sup></li> </ul> </li> <li>• Buildings built after 2020 <ul style="list-style-type: none"> <li>- Single-family houses: &gt;130 m<sup>2</sup>: 90 kwh/m<sup>2</sup>; &gt;90–130 m<sup>2</sup>: 95 kwh/m<sup>2</sup> ; &lt;90: 100 kwh/m<sup>2</sup></li> <li>- Multi-family houses &amp; apartments: 75 kwh/m<sup>2</sup></li> <li>- Premises: 70 kwh/m<sup>2</sup></li> <li>- Building specific requirements</li> </ul> </li> </ul>
Green buildings outside Sweden	<ul style="list-style-type: none"> <li>- Heated surface area in square metres (Atemp).</li> <li>- Permitted maximum energy consumption of the building, measured in kWh/Atemp.</li> <li>- Estimated / actual annual electricity consumption of the building, measured in kWh/Atemp.</li> <li>- Estimated / actual annual heating consumption of the building, measured in kWh/Atemp in accordance with applicable regulations.</li> <li>- Estimated / actual annual cooling consumption of the building, measured in kWh/Atemp in accordance with applicable regulations.</li> </ul>	<p>Energy savings is calculated as the difference between energy use per square meter and applicable national building requirements.</p> <p>Annual climate impact (CO<sub>2</sub>e) = ((Heat consumption of reference building in × baseline emission factor for heat consumption + electricity consumption of reference building in × baseline emission factor for electricity consumption) – (Heat consumption of project building × baseline emission factor for heat consumption + electricity consumption of the project building in × baseline emission factor for electricity consumption)).</p>

Sub category	Collected data	Avoided emission calculation (tCO <sub>2</sub> e)
Public transport	<ul style="list-style-type: none"> <li>- Passenger capacity</li> <li>- Travel distance in km</li> </ul>	Annual reduction of GHG emission in ton CO <sub>2</sub> is based on travelled distance and passenger capacity with electric trains and the assumption of avoided travel by fossil driven cars x average emission of GHG from existing cars 2018.
Zero direct (tailpipe) CO <sub>2</sub> emissions vehicles	<ul style="list-style-type: none"> <li>- Number of financed electrical cars</li> <li>- CO<sub>2</sub> emission from financed electrical cars (tailpipe emission)</li> <li>- Average CO<sub>2</sub> emission from new registered fossil fuels driven in the previous three years (2019-2021)</li> <li>- Average yearly car mileage according to national statistics</li> </ul>	Number of cars in the fleet x average yearly car mileage x (average emission of GHG from new registered fossil fuel driven cars – tailpipe emission of GHG from financed electrical cars).
Sustainable Forestry	<ul style="list-style-type: none"> <li>- Hectares (size of land) of Sustainable forest holdings</li> </ul>	Hectare sustainable forest x (average net change standing volume x average Biomass Expansion Factor x average Carbon Fraction x (weight CO <sub>2</sub> molecule / weight C molecule) + (average felling per hectare x estimated substitution effect)), i.e. Hectare x (1.38+1.93). Model for impact calculation has been developed together with Swedish University of Agricultural Sciences.
Waste to Energy	<ul style="list-style-type: none"> <li>- Annual energy production (MWh)</li> <li>- Annual electricity production (MWh)</li> <li>- Annual heat production (MWh)</li> </ul>	Project, annual production electricity x (Baseline emission factor for electricity - project emission factor) + Project, annual production heat x (Baseline emission factor for heat consumption - project emission factor) according to average heating production.
Sustainable Water and Wastewater Management	<ul style="list-style-type: none"> <li>- Quantity of treated wastewater (cubic meters per year)</li> <li>- Quantity of supplied freshwater (cubic meters per year)</li> </ul>	



