Green Bond Impact Report 2018

June 2019



MARKETING MATERIAL

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About this report

Handelsbanken issued its first green bond, 3 July 2018, a fiveyear green senior bond for EUR 500 million. The issue was made possible by the Green Bond Framework which the Bank established earlier the same month. The Framework received a rating of 'Dark Green Shade' – the highest possible – from Cicero, the Center for International Climate Research, an independent body. In the Framework Handelsbanken committed to publishing an annual report that details the allocation of green bond net proceeds and adherence to the Green Terms. This report presents the environmental impact of Handelsbanken's Green Bond including examples of the Eligible Green Asset's adherence to the relevant criteria in the Framework. For the complete Framework please see handelsbanken.com/en/investor-relations/debt-investors/green-bonds.

Handelsbanken's Green Bond

Bond	July 2023, 0.375 per cent, Series Number 336
Issuer	Svenska Handelsbanken AB (publ) 502007-7862
Туре	Senior Unsecured Green Bond
Rating	Aa2 (Moody's); AA- (S&P); AA (Fitch)
Rating by Cicero	Dark Green
Nominal amount	EUR 500,000,000
Issue date	3 July 2018
Maturity date	3 July 2023
Listing	Euronext Dublin
ISIN	XS1848875172
Distribution by region	Germany, Austria (29%); Nordics (22%) France (16%); BeNeLux (16%) UK (9%); Other (8%)
Distribution by investor type	FM (37%); Ins/Pen (31%); Cbk/OI (18%); Bank/PB (14%)

Handelsbanken's label for Green financing

In 2018 Handelsbanken launched a label for green finance. The label signifies that the project that has been financed with a Green Loan meets the Bank's technical criteria, which assesses, among other things, the impact on climate and the environment.



Handelsbanken

Sustainability at Handelsbanken

Climate change is one of the biggest challenges facing our modern world. Banks have a role to play to facilitate the transition to a less carbon intense future while supporting growth in society through economic development. Handelsbanken recognises our role in society and our responsibility towards the local communities and countries where we operate, while striving to reduce and manage the impact we have on both people and planet. Our greatest opportunity to contribute to sustainable development is through our business operations – when we finance our customers' projects and businesses and are entrusted to manage their assets. By means of responsible financing, lending and investments we can participate in the transition of the economy and work towards the achievement of the Sustainable Development Goals. Through our issuance of green bonds, we can finance customer assets and projects that help counteract climate change or that mitigate its effects. We see that the Nordic market for green bonds continues to expand and a strong interest was shown in the Handelsbanken's first green bond, which was more than three times oversubscribed. We expect this interest to continue and look forward to carry on strengthening our efforts to support the long-term growth of sustainable solutions.

Stockholm, 13 June 2019

Carina Åkerström

President and Group Chief Executive Rolf Marquardt

Kels hum

Maria Nordin Wessman

Acting Chief Communications and Sustainability Officer

On the following pages we will, among other things, describe the allocation of our green bond net proceeds and report on the impacts of financed projects.

Responsible financing Responsible investment Environmental and climate impact Responsible employer Responsible purchasing Local presence Financial stability Low Transparent and responsible taxpayer

Key reporting methodology

Key reporting principles

- This report follows the guidelines for impact reporting provided by Green Bond Principles (GPP)¹ and the Nordic Public Sector Issuer's Position Paper on Green Bonds Impact Reporting².
- Handelsbanken reports on the basis of the share of the assets' (projects') total investment cost that the issuer has financed with proceeds from the green bonds. The reported impact is based on amounts disbursed and outstanding to a project.
- Direct environmental impacts such as renewable energy production, energy savings, reduced emissions are reported. Where applicable, indirect emissions, such as avoided emissions are reported.
- European mainland mix including Norway has been used as default baseline emission factor for electricity and emission factor calculated as Combined Margin according to IFI Harmonized Framework methodology³, combining a Build Margin and Operating Margin. Same combination of Build Margin (50%) and Operating Margin (50%) used for all electricity projects.

- Combined Margin applied for this impact reporting is 380 g CO₂e/kWh2.
- For Green Buildings national building standards are used as baseline for measuring impacts and energy saving from green buildings are disclosed as a net value based on energy use per m² and year in relation to national building standards.
- Both expected impact (ex-ante) and actual impact (ex-post) are reported.
- Handelsbanken reports on a portfolio basis and in Swedish kronor (SEK and EUR). Currency rates as per 28 December 2018.

Sustainable Development Goals

Agenda 2030 and the Sustainable Development Goals ("SDG") were adopted by the United Nations General Assembly in 2015. There are 17 global goals with 169 defined underlying targets, aimed at achieving long-term sustainable economic, social and environmental development in order to eradicate extreme poverty, to reduce inequality and injustice in the world, and to fight climate change.

As a financial institution, Handelsbanken has a vital role to play in the long-term fulfilment of these goals. Handelsbanken is an important part of society, with our strong local presence through our nationwide branch network and contribution to the local community. This includes paying taxes and fees, employing personnel, granting credit, offering payment solutions and providing investment services, as well as other banking services. Through the Bank's operations, we can contribute long-term to the global goals.

The use of proceeds of Handelsbanken's green bond 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





































¹ https://www.icmagroup.org/green-social-and-sustainability-bonds/

²https://www.icmagroup.org/assets/documents/Regulatory/ Green-Bonds/Resource-Centre/NPSIPositionpaper2019final-120219.pdf

 $^{^3}$ International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting, November 2015.

Green Bond Framework

In June 2018 Handelsbanken established the "Green Bond Framework" and the document is the foundation on Handelsbanken's view on Green Bonds and Sustainable Finance and our contribution to support the transition to low carbon intensity and sustainable development. Handelsbanken acknowledges the recommendations in the Green Bond Principles.

An independent evaluation of Handelsbanken's Green Bond Framework has been carried out by CICERO (the Center for International Climate Research) as recommended in the Green Bond Principles. The Framework received a Dark Green shading.

Use of proceeds

The net proceeds from the issuance of Green Bonds is used by Handelsbanken, in whole or in part, to finance or refinance loans and investments ("Eligible Green Assets" or "Green Assets") that promote the transition to low-carbon, climate resilient and sustainable economies, as well as environmental and ecosystem improvements. The net proceeds will be used exclusively to finance or refinance loans and investments in Handelsbanken's home markets (the Nordic countries, the Netherlands and the United Kingdom) which comply with one of the six categories currently included in our Green Bond Framework and addressing the following SDGs:





Clean Transportation

Defined as financing of electric vehicles for public transport and financing of low-carbon vehicles for freight and passenger as well as directly associated investments, such as charging stations.





Environmentally Sustainable Management of Living Natural Resources

Defined as financing or refinancing of investments in sustainable forest management and sustainable forestry assets.



III.



Green Buildings

Defined as financing or refinancing of development, acquisition, renovation or otherwise completed residential, public and commercial properties. The buildings must have, or will receive, one or more of specified environmental building certifications and live up to certain energy requirements.





Pollution Prevention and Control

Defined as the financing of environmentally responsible and fossil-free waste-to-energy investments and the financing of waste management or waste treatment in a responsible and environmentally friendly way.





Renewable Energy

Defined as financing or refinancing of installations, plants, related infrastructure within wind energy, solar energy, hydro energy and geothermal energy.



VI.



Sustainable Water and Wastewater Management

Financing of plants and related infrastructure for the supply of fresh water or processing of wastewater.

For more information and details of the green criteria for the above categories, please see the Green Bond Framework.

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.

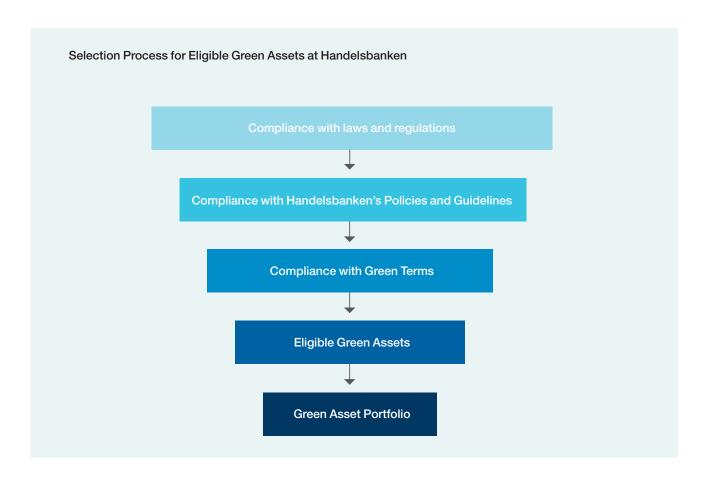
The local branches nominate new and existing loans within the eligible green use of proceeds categories to the Green Finance Committee ("GFC") for review and potential approval. Assessment and analysis are performed on both the asset and the customer. The standardised application and assessment include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



GREEN BOND FRAMEWORK GREEN BOND IMPACT REPORT

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 is 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 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.

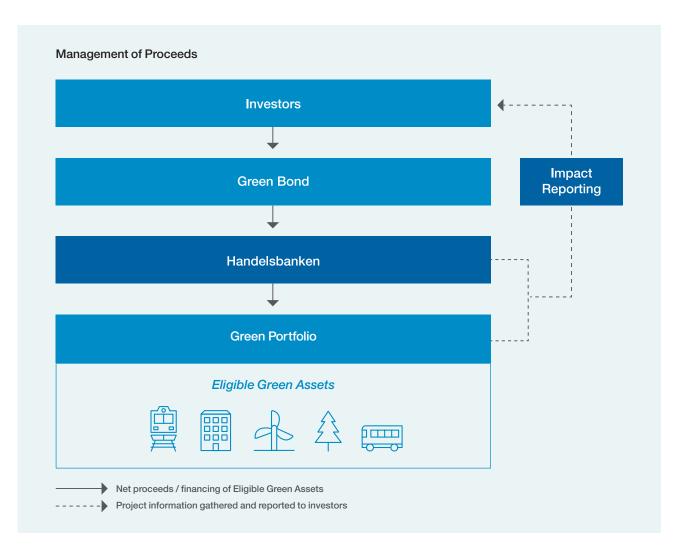
Approval by the Green Finance Committee

Handelsbanken's Green Finance Committee 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, from which it also draws many of its members. 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 Communication Department
- Group Credit Department
- Group Finance
- Group Sustainability Function
- Handelsbanken Capital Markets
- 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 Bank's 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.

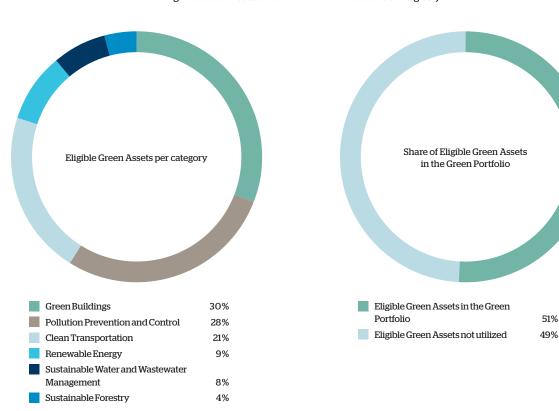
Our ambition is that the supply of eligible Green Assets shall continue to grow as the Bank's technical criteria for green loans are further developed and the focus on green financing and sustainable investment increases among customers. The Bank may need further clarity about the use of proceeds

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.

Second Opinion

Handelsbanken acknowledges the recommendation in the Green Bond Principles regarding a high level of transparency in the issuer's process for Project Evaluation and Selection. The internal documents applicable to the Green Asset process have been made available to Cicero in the Second Opinion process.

Eligible Green Assets of SEK 10 billion in the Green Registry



Quantitative environmental impact

Categories	Sub categories	Disbursed amount (EUR) ¹	Disbursed amount (SEK) ¹	Share, %	Impact 2018 CO ₂ e reductions (tonnes) ²	SDGs
Clean transportation	Public Transport Low Carbon Vehicles	91,146,664 33,853,336	934,526,751 347,098,249	18 7	16,800 1,517	11 SECONDATE THE 13 SCHOOL ACTION ACTION
Pollution Prevention and Control	Waste to Energy	85,000,000	871,505,000	17	94,415	12 distantes and return and retur
Green Buildings	Green Buildings	108,223,237	1,109,612,853	22	1,092	11 SECONDARI CIPE 13 CIPATE 13 Action
Renewable Energy	Wind Energy Hydro Energy	53,065,932 16,934,068	544,085,000 173,625,000	11 3	47,190 15,257	7 INTERCOME MID 13 CINUTE ACTION
Environmentally Sustainable Management of Living Natural Resources	Sustainable Forestry	39,424,554	404,219,948	8	38,384	13 chart 25 chart 27 chart 28 chart 29 chart 20
Sustainable Water and Wastewater Management	Water	72,352,209	741,827,199	14	-	6 READ MAINTEN 14 AUTO AND SAME OF THE PROPERTY OF THE PROPE
Total		500,000,000	5,126,500,000	100	214,655	
Impact, tonnes per CO ₂ per mEUR/mSEK		429	41.9			

Additional Key Performance Indicators

Categories	Sub categories	Quantity of annualy treated wastewater (m³)	Quantity of annualy supplied freshwater (m³)	Certified Forest	Annual energy saving (GWh)	Annual energy generation (GWh)
Clean transportation	Public Transport Low Carbon Vehicles	- -	-	-	-	-
Pollution Prevention and Control	Waste to Energy	-	-	-	-	576
Green Buildings	Green Buildings	-	-	-	3.5	-
Renewable Energy	Wind Energy Hydro Energy	-	-	-	-	124 40
Environmentally Sustainable Management of Living Natural Resources	Sustainable Forestry	-	-	11,596	-	-
Sustainable Water and Wastewater Management	Water	864,379	13,662,000	-	-	-
Total		864,379	13,662,000	11,596	3.5	740

¹ As per 31 December 2018.

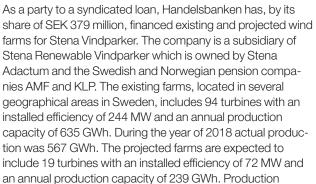
 $^{^{2}\}mbox{See}$ appendix on page 13 for collected data and climate impact calculation.

Example of eligible projects

Renewable Energy

Stena Renewable Vindparker AB

essential to climate change mitigation.



of clean energy and reduced dependence on fossil fuels is







Copyright Stena Renewable Vindparker AB

Green Building

Hyllie Point 4 AB

Handelsbanken has provided a green loan facility of SEK 645 million to a joint venture between the construction company Peab and the real estate owner Volito AB. The loan finances the construction of the office building "the Point", 110 metres high and a landmark in Malmö. When completed, the Point will have the building certification Miljöbyggnad Silver. Buildings certified according to Miljöbyggnad are measured against a large number of values such as construction materials, use of chemicals, and in-door climate, which are reviewed by independent third parties. A follow-up check will be performed within a certain time after completion. The Point is expected to have an energy consumption of about 25 per cent lower energy than the relevant national building regulations (BBR), maximum 61 kWh per m²/year compared to 80 kWh per m²/ year. Reduced energy consumption in buildings is essential for the combat of climate change.

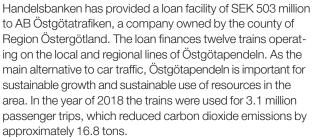




Photographer Klas Andersson

Clean Transportation

AB Östgötatrafiken







Copyright AB Östgötatrafiken – Photographer Göran Billeson

Sustainable Waste water and Wastewater Management

Huittisten Puhdistamo Oy

The water treatment plant in Huittinen, Finland has been modernised and renovated. The reconstruction led to an increased water treatment capacity by 7.9 million cubic meter per year reaching a total capacity of 11.0 million cubic meter per year. For the year of 2018 the treated volume was 3.9 million cubic meter. Handelsbanken financed the improvements through a credit facility of EUR 11.9 million. Minimising environmental impact from waste water by developing and modernising treatment is essential for protecting water assets and for securing access to clean water and thus good health.





Copyright Huittisten Puhdistamo Oy

Auditor's Limited Assurance Report

To Svenska Handelsbanken AB (publ), corporate identity number: 502007-7862.

Introduction

We have been engaged by Svenska Handelsbanken AB (publ) (Handelsbanken) to undertake a limited assurance engagement of the information in Handelsbanken Green Bond Impact Report 2018 ("the Reporting"), concerning the allocation of net proceeds to eligible green assets. The reporting criteria against which this information was assessed are relevant parts of the Handelsbanken Green Bond Framework per June 2018 available on SHB website.

Our assurance does not extend to any other information in the Reporting. We have not reviewed and do not provide any assurance over any individual project information reported, including estimates of sustainability impacts.

Responsibilities of the Executive Management for the Sustainability Report

The Executive Management are responsible for use and management of proceeds, the preparation of the Sustainability Report in accordance with the applicable criteria as well as evaluating and selecting eligible assets. This responsibility also includes the internal control relevant to the preparation of a Green Bond Impact Report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the Auditor

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed.

We conducted our limited assurance engagement in accordance with ISAE 3000 Assurance engagements other than audits or reviews of historical financial information.

A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the

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 scope than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards.

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 Svenska Handelsbanken AB (publ) in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. Consequently, the procedures performed 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.

Our procedures are based on the criteria defined by the 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 Reporting (Handelsbanken Green Bond Impact Report) has not been prepared, in all material respects, in accordance with the criteria defined above.

Stockholm, 13 June 2019 Ernst & Young AB

Jesper Nilsson

Authorized Public Accountant

Marianne Förander

Sustainability Expert Member of FAR

Appendix - Collected data and Climate Impact Calculation

Sub-category	Collected data	Climate impact calculation
Wind & Hydro Energy	 Capacity of energy generation of plant (MW). Annual renewable energy generation in MWh or GWh. 	Annual climate impact (CO_2e) = Annual production of renewable energy in MWh \times (baseline emissions factor-project emissions factor).
Green Buildings	 Heated surface area in square metres (Atemp). Required maximum energy consumption of the building, measured in kWh/Atemp. Estimated / actual annual electricity consumption of the building, measured in kWh/Atemp. Estimated / actual annual heating consumption of the building, measured in kWh/Atemp in accordance with applicable regulations. Estimated / actual annual cooling consumption of the building, measured in kWh/Atemp in accordance with applicable regulations. 	Annual climate impact ($\mathrm{CO_2e}$) = Energy savings is calculated as the difference between energy use per square meter and applicable national building requirements. Annual climate impact ($\mathrm{CO_2e}$) = ((Heat consumption of reference building in MWh × baseline emission factor for heat consumption + electricity consumption of reference building in MWh × baseline emission factor for electricity consumption) – (Heat consumption of project building in MWh × baseline emission factor for heat consumption + electricity consumption of the project building in MWh × baseline emission factor for electricity consumption).
Public transport	– Passenger capacity. – Travel distance in km.	Annual climate impact ($\mathrm{CO_2e}$) = Annual reduction of GHG emission in ton $\mathrm{CO_2}$ is based on travelled distance and passenger capacity with electric trains and the assumption of avoided travel by fossil driven cars × average emission of GHG from existing cars 2018.
Low Carbon Vehicles	 Number of financed cars chargeable from the power grid (PHEV and electric cars). Average emission of green house gas from financed cars chargeable from the power grid (PHEV and electric cars). Average emission of greenhouse gas from new registered cars in 2016–2018. Average mileage per year for cars in Sweden according to statistics from Statistics Sweden, the national statistic agency. 	Annual climate impact ($\mathrm{CO_2e}$) = Number of cars in the fleet × average mileage per year for cars × (average emission of GHG from new registered cars – average emission of GHG from cars chargeable from the power grid).
Sustainable Forestry	– Hectares (size of land) of Sustainable forest holdings.	Annual climate impact (CO₂e) = Hectare sustainable forest × (average net change standing volume × average Biomass Expansion Factor × average Carbon Fraction × (weight CO₂ molecule / weight C molecule) + (average felling per hectare × 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	 Annual energy production (MWh). Annual electricity production (MWh). Annual heat production (MWh). 	Annual climate impact (CO ₂ e) = Project, annual production electricity × (Baseline emission factor for electricity – project emission factor) + Project, annual production heat × (Baseline emission factor for heat consumption – project emission factor) according to average heating production.
Sustainable Water and Wastewater Management	 Quantity of treated wastewater (cubic meters per year). Quantity of supplied freshwater (cubic meters per year). 	n.a.