



Uppsala Municipality, Executive Office Publication date: 2025-12-01

Sustainability-Linked Bond Progress Report 2025

Uppsala has committed to reporting annually until no bonds are outstanding. The Sustainability-Linked Bond Progress Report will form the basis for evaluating the impact on the respective structural bond characteristics. This report will cover the following areas:

- The performance of the KPIs and SPTs as per the relevant reporting period, including the calculation methodology
- Information about recalculations, if any
- Examples of progress within sustainability in Uppsala during 2025
- Any other information deemed relevant to the investors in Uppsala's bonds

In addition to this progress report, Azets conducted a limited assurance review in accordance with the framework for KPI 1.

The limited assurance statement will be published on our website.

For more background and information on our Sustainability Linked Bond's see uppsala.se: https://www.uppsala.se/kommun-och-politik/sa-arbetar-vi-med-olika-amnen/ekonomi/ramverk-for-hallbarhetslankade-obligationer/

Uppsala's Key Performance Indicators (KPIs)

Uppsala has selected the following two KPIs for our Sustainability-Linked Bond Framework.

KPI 1: Absolute emissions in tonnes of CO2e in the geographical area of Uppsala Municipality

KPI 2: Installation of solar energy (MW) in the geographical area of Uppsala Municipality

Calculation Methodology

KPI 1:

This KPI is calculated by combining data from both national and local sources. All emissions are then combined to calculate the absolute emissions in tonnes of CO2e in the geographical area of Uppsala Municipality. Climate statistics in general are prone to uncertainties due to the number of assumptions necessary to perform the calculations.



Likewise, our calculations contain assumptions to be able to categorise and prepare emissions in accordance with the Common Reporting Framework (CRF) simplified reporting level and the Global Protocol for Community-Scale Greenhouse Gas Inventories (GHG Protocol for Cities) basic reporting level, as explained in the Sustainability-Linked Bond Framework. As specified in the Sustainability-Linked Bond Framework, Uppsala's KPI covers scope 1 and scope 2, not scope 3.

Emissions from transport, industrial processes, agriculture, and waste are collected from the National Database for Emissions presented by SMHI (Sw. Sveriges meteorologiska och hydrologiska institut).

The National Database for Emissions can be accessed here.

Emissions from electricity are collected from the local grid owners, Vattenfall and Upplands Energi. All used energy, high and low voltage, for the municipal geography is summarised and multiplied with an emission factor for the Nordic electricity mix.

Emissions from district heating and cooling are collected from the local heating companies, Vattenfall and Solör. All delivered heating and cooling in the municipality are summarised and multiplied by emission factors delivered by Vattenfall and the Swedish Environmental Protection Agency (Sw. Naturvårdsverket).

Emissions from heat production with other fuels, such as heating oil, wood fuels and alike, are collected through Statistics Sweden (Sw. Statistiska centalbyrån) and multiplied by emission factors collected through the Swedish Environmental Protection Agency.

Statistics Sweden's database can be accessed here.

KPI 2:

This KPI includes all solar energy facilities installed by the Municipality and all other solar energy facilities connected to the electricity grid in Uppsala's geographical area. The data on the installed power of solar panels within Uppsala Municipality's geographical area is collected from the Swedish Energy Agency's (Sw. Energimyndigheten) statistical database.

The database can be accessed here.

Documented changes in Internal Calculation Methodology

The limited assurance review provided valuable insights into how we can enhance transparency and formalize the documentation of our KPI 1 calculation methodology.

Throughout 2025, we conducted a comprehensive review of all calculations in alignment with the limited assurance process. Minor calculation errors were identified and have since been corrected. Additionally, outdated proxy values were flagged and subsequently updated.

To improve accuracy, a new methodology was introduced for summarizing electricity usage within the geographical area. This change prevents double-counting of electricity used in district heating production. The update has been applied retroactively to baseline and subsequent years. The combined effect of correcting



calculation errors, updating standard values, and applying the new electricity usage method has had a minor impact on the total absolute emissions.

Moreover, the emissions factor for electricity has been revised. Previously, this factor was calculated by Stockholm stad based on the Nordic electricity mix and then adapted to reflect Uppsala's local electricity production. However, local electricity production has declined, and since 2021, no locally produced electricity has been fed into the grid. Consequently, from 2021 onwards, the emissions factor has been based solely on the Nordic electricity mix.

In 2025, Stockholm stad adopted a new methodology for calculating the Nordic electricity mix emissions factor, transitioning from their own approach to the internationally recognised Greenhouse Gas Protocol for Cities (GPC) Basic methodology. This method, recommended within the GPC framework, excludes life cycle assessment (LCA) to avoid double-counting within the geographical area—an issue present in the previous LCA-inclusive method.

Uppsala has adopted this updated emissions factor retroactively from the baseline year and for subsequent years. Uppsala applies the five-year average and updates the factor annually.

This update impacts emission calculations in the electricity and heating sectors, as well as a minor portion of the transportation sector. Notably, the revised emissions factor has resulted in a substantial decrease in Uppsala's absolute emissions for the baseline year 2020 and the years that follow.

Although the update has lowered emissions for both the baseline and subsequent years, it has not significantly changed the overall emissions trend. The new emissions factor provides a more accurate reflection of the actual energy production and the energy mix used.

Documented Changes in External Calculation Methodology

Every year, the data distribution methodology and calculations are updated and improved for the National Database of Emissions to increase data quality. The scope of the update varies from year to year and can include retrospective data updates.

No major updates have been made to the data distribution methodology in 2025's submission compared to 2024's. Anyhow, the minor updates made have altered the calculated emissions retrospectively, which has decreased the absolute emissions for Uppsala's baseline (the year 2020).

Please see SMHI's publication for detailed description: <u>Metod- och kvalitetsbeskrivning</u> för geografiskt fördelade emissioner till luft (submission 2025).

Change to baseline

Changes in both internal and external methodologies have affected the baseline's absolute emissions. The updated electricity emission factor is the primary driver of this change, while other methodological adjustments have had a smaller, yet noticeable, impact.



2020 CO2e absolute levels per 2024's methodology	2020 CO2e absolute levels per 2025's methodology	Change in baseline +/-
702 kilo-tonnes	632 kilo-tonnes	- 70 kilo-tonnes

KPI and SPT Performance

KPI 1

The KPI 1's performance is tracked by the Sustainability Performance Target (SPT) 1. The SPT 1 is: By 2030, reduce emissions in kilo-tonnes of CO2e in the geographical area of Uppsala Municipality by 72% vs baseline 2020. The SPT 1 trajectory is based on a yearly reduction rate of 12 % from the baseline of 2020.

KPI 1											
Report year		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Data year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
KPI 1: Absolute emissions (kilo-tonnes CO2e)	632	635	564	544							
Change from 2020 (%)		+0,5	- 11	-14							
SPT 1 trajectory (kilo-tonnes of CO2e)		555	488	430	378	333	293	258	227	199	176
Performance vs. SPT 1 (%)		+ 14,4	+15,6	+26,5							

The absolute emissions for the Uppsala geographic area have decreased in 2023 compared to 2022. Larger decreases have been made in the sectors of heating and electricity. The sectors of transportation and heavy machinery have decreased slightly, while the sectors of industry and agriculture remain at the same level of emissions. In total, the absolute emissions have decreased by 14 per cent in the Uppsala geographical area from 2020 to 2023.

Compared to the SPT 1 trajectory, emissions in 2023 are 26,5 per cent higher than projected. If Uppsala stays within the projected path of emissions decrease, a 40 per cent decrease in total emissions needs to occur in 2024 compared to 2020.

KPI2

The KPI 2's performance is tracked by the SPT 2. SPT 2 is: By 2030, 100 megawatts (MW) of solar power should be installed in the geographical area of Uppsala. The SPT 2 trajectory is calculated from a linear increase of 7 MW of installed solar power per year.



KPI 2										
Report year		2023	2024	2025	2026	2027	2028	2029	2030	2031
Data year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
KPI 2: Installation of solar energy (MW)	41,7	52,1	76,9	92,3						
Change in installed solar energy (MW)		+10,4	+24,8	+15,4						
SPT 2 trajectory (MW)	37	44	51	58	65	72	79	86	93	100
Performance vs. SPT 2 (MW)		+8,1	+25,9	+34,3						

The installation of solar energy in Uppsala has increased by 15,4 MW from 2023 to 2024. Compared to the SPT 2 trajectory, the speed of new installations has outperformed the expected projection with 34,3 MW.

Sustainability Linked Bonds Issued by Uppsala

During 2025, no new bonds in the SLB-format have been issued.

SE number	SEK (Mkr)	Issuance	Maturity	SPT1* Data year	SPT2** Data year	Target Observation Date
SE0013105442	300	2023-04-20	2028-04-20	2025	2026	2027-09-30
SE0013105434	300	2023-04-20	2028-04-20	2025	2026	2027-09-30
SE0013361086	300	2023-05-31	2028-05-31	2025	2026	2027-09-30
SE0019177155	300	2024-05-15	2029-08-15	2026	2027	2028-09-30

^{*}SPT 1: By 2030, reduce emissions in kilo-tonnes of CO2e in the geographical area of Uppsala municipality by 72% vs baseline 2020

Examples of Progress During 2025

Over the past year, we have initiated and successfully concluded numerous crucial processes to achieve our goal of a climate-neutral Uppsala by 2030.

Over the past year, we have developed a climate budget that is now being
integrated into the municipality's regular governance system from 2026
onwards. It is continuously developed and updated as part of the
municipality's annual budget cycle, linking climate actions to economic
planning and financial resources. The measures included in the budget have
been designed to ensure that Uppsala can achieve climate neutrality by 2030.

^{**}SPT 2: By 2030, 100 megawatts (MW) solar power should be installed in the geographical area of Uppsala



In this way, we have a clear overview of both ongoing initiatives and prioritized measures for the coming years.

- A Climate Framework that sets climate and energy requirements applicable to
 municipally allocated development projects has been implemented. When
 planning a new construction project, an annual threshold value is used for the
 construction phase, specifying the maximum allowable emissions per square
 meter. Developers must also report which climate-compensating measures are
 undertaken within the project, such as biogenic carbon storage, net export of
 renewable energy, or other mitigation actions.
- We have investigated how the development of energy systems and other technical infrastructure should be designed in a climate-positive urban district. The study area includes Uppsala's south-eastern districts, which by 2050 will comprise 21,500 new homes, a new railway station and a business area. The conclusions show that it is possible to create a resource-efficient and climateneutral energy system in the area (and potentially a climate-positive one) primarily through the design of the heating system.
- Uppsala Municipality has worked actively with SLU and the County
 Administrative Board to improve knowledge of carbon balance in local soils.
 The total carbon stock in Uppsala's land and forest is estimated at over 31
 million tonnes of carbon, equivalent to 112 million tonnes of CO₂. The
 municipality is using this data to identify potential sites for wetland restoration
 and to incorporate soil carbon information into urban planning. Work also
 continues to explore bio-char production and bio-CCS solutions, which could
 enable long-term carbon storage and local climate compensation.
- We continue to build and plan more mobility hubs. A mobility hub combines
 parking with services such as bike rentals, car-sharing, and parcel delivery to
 promote sustainable travel. In Rosendal, two hubs, Dansmästaren and
 Brandmästaren, are already in operation. For example, Dansmästaren
 provides 450 parking spaces (60 with EV chargers), 133 student apartments,
 and a grocery store. It also functions as a test and research facility for practical
 applications of smart energy technology. A solar PV system on the roof,
 combined with battery storage, allows self-produced energy to relieve the
 power grid during peak charging periods.
- Collaboration remains central to Uppsala's climate transition. The municipality
 works closely with the Uppsala Climate Protocol, which gathers over 50
 partners from business, academia and civil society. During 2025, joint efforts
 have focused on developing circular construction practices, scaling local
 energy and mobility solutions, and coordinating communication around the
 new climate budget.