February 2023

Sustainability-Linked Bond Framework

Uppsala kommun

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Uppsala Municipality at a glance

Uppsala Municipality ("Uppsala" or "the Municipality") is located close to Sweden's capital Stockholm. With its 230,000 inhabitants, Uppsala is the 4th largest city in the country. The Municipality has roughly 15,000 full time employees in its administrations and municipality owned companies. Uppsala is also one of Sweden's fastest growing cities. By 2050, it is expected to have 100,000 more inhabitants than today. The rate of construction is high, and growth evolves around sustainable development. Uppsala is developing as a city, but also in rural areas. A quarter of the Municipality's inhabitants live in the countryside. This makes Uppsala the largest rural city in Sweden, in terms of number of inhabitants.

Swedish municipalities have extensive fiscal autonomy and can issue bonds to fund the delivery of public services. Uppsala Municipality is responsible by law for providing vital services such as schooling and social care. Other mandatory responsibilities include libraries, planning and building issues, health and environmental protection, waste-, water- and wastewater management. The Municipality also provide voluntary services that are of value to society, such as cultural and recreational activities, public housing, park maintenance and other technical services.

ESG – a natural part of Uppsala's operations

Uppsala is committed to lead the transition towards a sustainable and climate positive municipality. The Municipality has integrated ESG as a natural part of governance which spans over the entire organisation including the municipality owned companies. Uppsala also collaborates with universities, businesses, and organizations on cutting edge climate solutions and wants to show other cities and municipalities it is possible to set necessary targets and take powerful measures to become climate positive by 2050, at the latest. In addition, Uppsala has received several awards for its work on ESG: World Climate City (2018) and Sweden's Climate City (2020) by the World Wide Fund for Nature (WWF), best city of the year for public health, best city in Sweden for climate adaptability, and best city for cycling, to name a few examples.

E – Environmental responsibility

Uppsala aims to be a climate-neutral welfare municipality and a regional, national and international node for climate transition. The overarching climate goal of Uppsala is climate neutrality by 2030 and climate positivity by 2050, at the latest. Emissions should be reduced by 10-14% each year from 2021. This means that by 2030, the remaining emissions should be less than 17% of the emissions in 1990.

To achieve climate neutrality, negative emissions within the territory of the municipality should be equal to or higher than the remaining emissions of CO_2e by 2030. To become climate neutral by 2030, Uppsala invests in renewable fuels, takes measures that ensures cycling is the preferred mode of local transportation, and coordinates local delivery transports to reduce emissions. In parallel, Uppsala is working to recycle and phase out fossil plastics, which otherwise is burnt in the combined heat and power plant for district heating, operated by Vattenfall.

Uppsala also promotes and invests in the expansion of solar energy facilities with the target of 100 MW installed solar energy in the geographical area of Uppsala Municipality by 2030. Further, Uppsala has, in collaboration with construction companies, established a construction logistics centre to streamline transportation to areas of construction sites. Additional climate initiatives include using low carbon building materials like wood as well as sustainable urban planning.

The Environmental and Climate Programme

The Environmental and Climate Programme focuses on the climate challenge and an environment free of toxic substances. In the programme there are 7 milestones, each with their own goal, to help concretize climate action and make action plans and support Uppsala to reach its climate goals. For example, the programme has milestones for how transports should be converted to use renewable energy, how solar energy will be expanded and how energy efficiency will be accelerated.

The Energy Programme 2050

The Energy Programme 2050 describes Uppsala's vision for the long-term development of the energy system. Uppsala's goals for resource efficiency, health, the environment and climate, rural and urban development are all foundations of the programme. Thus, the Energy Programme is a cornerstone in making Uppsala climate neutral by 2030 and climate positive by 2050, at the latest.

S – Social responsibility

Social responsibility is at the forefront of Municipal operations as Swedish municipalities are a central welfare-provider and the platform for democratic participation at the local level. In addition to providing welfare services Uppsala Municipality is responsible for ensuring that its residents have equal rights and opportunities. Social responsibility and promotion of human rights are an integrated part of municipal operations and governance in the Municipality's capacity as

a societal and democracy actor, as a large employer and as a consumer of services and goods. The Municipality also strives towards being a municipality that promotes human rights, combats violence against women, ensures full participation for people with disabilities and enables elderly inhabitants to continue to lead active lives as they age by adopting overarching and specific programmes targeting such issues. Priority measures include applying methods and formats so that under-represented groups can always participate in citizen dialogues, policy, and planning within the municipality and to be at the forefront through trust-building dialogue and communication. All communication must be accessible, comprehensible, and useful for everyone.

G – Governance and Policy for sustainable development

For several years Uppsala has been integrating ESG as a natural part of its operations. Also, ESG aspects are integrated in all of the Municipality's programmes. For example, Uppsala Municipality's Policy for Sustainable Development describes how the Municipality will work to achieve sustainable development. That is, Uppsala aims to be a guiding force – this involves taking an active role – for sustainable development globally, nationally, regionally and locally.

Uppsala's Policy for Sustainable Development supports the 17 Sustainable Development Goals and Agenda 2030. There are also numerous guidelines that are linked to the Policy for Sustainable Development. The guidelines clarify the governance within more specific areas, such as forms for Uppsala's gender-equality award, management of polluted areas, land use in consideration of groundwater, and sustainable use of premises and facilities. Please see appendix for more information on Uppsala's policies, plans and programmes.

Agenda 2030 and the Sustainable Development Goals

Uppsala started to integrate Agenda 2030 in its governance and operations in 2016. The Municipality supports all of the UN's 17 sustainable development goals (SDGs) and Agenda 2030 which also has been integrated in the Municipal Councils' four overarching and principal city objectives in Objectives and budget, the Municipality's overall plan.

Uppsala's four focus-objectives	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Uppsala shall ensure a strong economy and safeguard welfare. *Uppsala ska säkra en stark ekonomi och värna välfärden.*	■			■	■					■		■				■	
Uppsala shall have thriving businesses and create more jobs. *Uppsala ska ha ett välmående näringsliv och skapa fler jobb.*	■	■			■	■		■	■	■	■						■
Uppsala shall lead the climate transition. *Uppsala ska leda klimatomställningen.*			■				■		■			■	■	■	■		■
Uppsala shall be safer with equal living conditions. *Uppsala ska bli tryggare med jämlika livsvillkor.*	■		■	■	■					■	■					■	

ESG awards and significant initiatives

Uppsala – the best climate city: Uppsala was selected the World Climate City (2018) and Sweden's Climate City (2020) by the World Wide Fund for Nature (WWF) for its ambitious climate goals, overall ESG performance and strong leadership and efforts to share knowledge on best practices

Uppsala – the best cycling city: Uppsala was declared Sweden's Best Cycling City by the national cycling advocacy organization Cykelfrämjandet for four consecutive years between the years 2018-2021. Uppsala received this award because of its pervasive cycling paths, mandate that cycling paths have priority in snow removal, and its work to certify bicycle-friendly workplaces

Biking before driving: Uppsala has been focusing on cycling issues for several years. Promotion and information on bicycling has made it easier to choose the bicycle as a first-hand transportation mode. This includes for example bicycling courses for both adults and children, traffic information, maps, safer bike paths to schools, and more.

No fossil-based plastic: Measures are taken to ensure that all new plastic products procured by the Municipality will be made from recycled plastic or renewable materials by 2030. So far, the estimated reduction of emissions from the reduction in use of fossil-based plastic is more than 2474 tonnes of CO_2-eqvivalent per year. A wide range of products, procured by the Municipality and other organizations have been changed to recycled plastic or plastic from renewable materials, or been discontinued.

Reduced climate impact from building and construction: The Municipality has, in collaboration with construction companies, established a construction logistics centre to streamline transportation to areas of construction sites. Uppsala's climate initiatives also include using low carbon building such as wood and systematically calculating the carbon footprint to mitigate the impact from construction.

Solar power to charge electric cars: The combined use of electric vehicles and renewable energy sources such as solar power has the potential to greatly reduce CO2 emissions, impacting both the power and transport sectors. Uppsala Municipality's parking company has piloted utilization of batteries in electric vehicles to store solar electricity and continuously installs solar power in its mobility hubs to charge electrical vehicles.

Public Procurement: Uppsala works strategically to reduce emissions and increase sustainable resource flows in procurement and purchasing. Through active procurement in close dialogue with market actors, Uppsala promotes renewable fuels, renewable and recycled materials, recycled and climate efficient construction materials, waste minimization, circular business models and sharing economy.

Uppsala – Viable Cities: Uppsala is a member of Viable Cities which is a national initiative focused on the transition to climate-neutral and sustainable cities by 2030.

Uppsala Climate Protocol: Uppsala Climate Protocol is a local climate agreement initiated by the Municipality in 2010, in which approximately 40 members from the private sector, public agencies, universities and local NGOs work together to secure Uppsala's long-term energy and climate goals as a local Paris Agreement.

Pilot city for circular economy: Uppsala has been selected as a pilot city within the Circular Cities and Regions Initiative, launched and funded by the EU as part of the Circular Economy Action Plan, which focuses on implementing circular economy across Europe's cities and regions.

Innovative new neighbourhoods: For the new residential area in Ulleråker, a sustainable mobility action plan has been developed to contribute to achieving Uppsala's ambitious goals, which, among other things, indicate that at least 80% of the inhabitants' trips will come about by walking, cycling or public transport. In addition, material choices in new buildings are made with regard to climate impact. A life-cycle perspective characterizes both the construction of houses and the design of public spaces. In another new area, Rosendal, parks and green spaces are designed with the ecosystem in mind, which includes, features that preserve and improve living conditions and well-being for plants and animals. The development of both areas is carried out with the ambition of making them climate positive.

Uppsala produces its own biogas: Since the end of the 1990s Uppsala has had its own production of biogas made from organic waste from households, restaurants and industries. It is one of the world's leading facilities for producing biogas from organic waste and sewage. Apart from being a renewable energy alternative, biogas makes an effective use of waste in a circular economy. The biogas plays an important part in Uppsala's path to a climate neutral and fossil fuel free community.

Local market for power flexibility: Uppsala has been part of the innovative project CoordiNet (2019–2022), where a pilot market for local power flexibility was implemented as one of the first in Sweden. The area has suffered from congestion in the national electricity grid since 2017, and the local market was implemented to cut peaks in power demand to enable future expansion.

EU Taxonomy

Uppsala has high ambitions in all areas of sustainability and acknowledges the importance of uniform requirements for activities to qualify as sustainable. Currently, Uppsala's municipality owned companies are not in scope for any mandatory Taxonomy reporting. However, the reporting requirement is proposed to be extended to companies with more than 250 employees starting financial year 2025.

Sustainability-Linked Bond Framework

Uppsala has established this Sustainability-Linked Bond Framework (or "Framework") with the aim to link its funding with targets that are connected to the Municipality's long-term sustainability performance. The Framework is aligned with the five components of the Sustainability-Linked Bond Principles 2020 (SLBP)[1]:

- Selection of Key Performance Indicators (KPIs)
- Calibration of Sustainability Performance Targets (SPTs)
- Bond characteristics
- Reporting
- Verification.

Final terms for each Sustainability-Linked bond (SLB) issued under this Framework shall provide details on chosen KPIs and SPTs as well as details of bond characteristics such as adjustment of the coupon step-up or the redemption price etc.

Swedbank has acted as advisor to Uppsala in the establishment of this Framework. Further, the Framework is reviewed by an impartial firm, which has provided a second opinion to confirm its alignment with the applicable principles and verifies that the Sustainability Performance Targets outlined in this Framework are ambitious in the context of Uppsala's broader sustainability strategy. The Framework and second opinion from S&P are available on Uppsala's website. For more information about commitment to ongoing reporting please read the reporting section in this Framework.

The **Sustainability-Linked Bond** Principles

1. SLBP published in June 2020 are voluntary process guidelines for issuing Sustainability-Linked bonds (SLBs) established by International Capital Markets Association (ICMA). In June 2022, ICMA released a KPI registry which includes high-level recommendations and examples for the selection of key performance indicators for SLBs.

Selection of the Key Performance Indicators

Uppsala has selected the following KPIs, which are core, relevant and material to Uppsala's operations and measure the sustainability improvements by Uppsala.

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

Description of emissions: The KPI includes CO2e emissions in the geographical area of Uppsala Municipality. Emissions stem from energy use (electricity, district heating and cooling), transport, construction vehicles, non-energy related emissions from industrial processes, agriculture and waste. The KPI includes emissions from all activities and sectors, such as the Municipality, companies, governmental organizations etc., within the geographical area of Uppsala Municipality.

Calculation methodology: The KPI is calculated by combining data from both national and local sources. Emissions from transport, industrial processes, agriculture and waste are collected from the National Database for Emissions presented by RUS (Sw. Regional Utveckling och Samverkan). The National Database for Emissions presents Sweden's national emission statistics on a county and municipal level. At the municipal level, emission figures are available in ~18-20 months after the year the emissions occurred. The data in the database is based on Sweden's official emission statistics and is updated annually: Nationella emissionsdatabasen. The data is provided and verified by SMED (Sw. Svenska Miljöemissionsdata), which is a consortium between Swedish environmental research institute (Sw. IVL), Statistics Sweden (Sw. SCB), Swedish University of Agricultural Sciences (Sw. SLU) and the Swedish meteorological and Hydrological Institute (Sw. SMHI). The Swedish Environmental Protection Agency (Sw. Naturvårdsverket) finance the database.

For full methodology please see: Metod- och kvalitetsbeskrivning av geografisk fördelning av emissioner till luft. For additional information on calculation methodology, please see appendix.

As a member of the Global Covenant of Mayors, Uppsala Municipality has committed to use the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), commonly known as the GHG Protocol for Cities, to report greenhouse gas emissions. Uppsala's KPI covers scope 1 and scope 2, not scope 3. Uppsala divides the emissions in each scope according to the standard Common Reporting Framework (CRF) sectors: stationary energy, transport, waste (including sewage), industrial processes and product use (IPPU) and agriculture, forestry and other land use (AFOLU).

Rationale behind the KPI: The KPI focuses on one of the main challenges our society is facing – greenhouse gas (GHG) emissions reduction. Further, the KPI supports Uppsala's long-term goal to become climate neutral by 2030 and climate positive by 2050, at the latest, which aims at making a relevant contribution to the global effort to reach the 1.5C goal in the Paris Agreement at the local level. Municipal operations have an impact on climate change therefore a systematized effort on climate mitigation at the municipal level requires a greater transition of operations to reduce emissions while maintaining a socially and economically sustainable society. Examples of required transitions include reducing and avoiding emissions caused by construction, coordinating trans-

ports, shifting toward a more circular waste management, as well as providing sustainable welfare to residents by reducing emissions from food, heating and use of electricity. The Municipality's strategy on climate mitigation recognizes the need to involve all local actors in the climate transition.

Uppsala Municipality's Environmental and Climate Programme states that negative emissions may not replace the required reduction in emissions but are means to achieve climate-neutrality and climate-positivity. This means that by 2030 negative emissions within the Municipal geography must amount to at least the same amount as or exceed residual emissions. Examples of how negative emissions in line with climate-neutrality can be achieved within the geographical area are uptake of CO_2 in forests and land, bio-CSS-techniques, and carbon binding in building materials. Note that, negative emissions are not to be mis-

taken with carbon off sets. Carbon off sets are not used by Uppsala Municipality.

Uppsala recognizes the importance of reducing consumption-based emissions and is therefore working on developing methods to collect data and develop strategies and targets further. As an example, the Municipality estimates and includes emissions from municipal inhabitants' long distance travelling by air or road as a factor in the follow-up of the Municipality's goal on climate neutrality. However, given the challenge of obtaining and accurately calculating robust emission data from consumption and travel, Uppsala has decided not to include such emissions for the purpose of this Framework.

Contribution to EU Environmental Objective: Climate Change Mitigation

Contribution to UN SDGs 13.

Uppsala's long-term goal is to become climate neutral by 2030 and climate positive by 2050, at the latest.

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

Description: The KPI includes the installation of solar energy measured as megawatts (MW) in the geographical area of Uppsala Municipality. This includes solar energy facilities installed by the Municipality as well as all other solar energy facilities connected to the electricity grid.

Calculation methodology: The data on installed power of solar panels within the geographical area of Uppsala Municipality is collected from the Swedish Energy Agency's (Sw. Energimyndigheten) statistical database. The database has been developed by the Swedish governmental statistics agency, Statistics Sweden (Sw. Statistiska centralbyrån, SCB). Statistics Sweden collects data on the installed power from all solar facilities connected to the electricity grid from all distribution system operators in Sweden and is updated annually. The data is verified by Statistics Sweden and the Swedish Energy Agency.

Rationale behind the KPI: Renewable energy is a critical solution to help reduce GHG emissions across geographies and sectors. The KPI supports Uppsala's long-term goal to become climate neutral by 2030 and climate positive by 2050, at the latest. In contrast to other Swedish municipalities similar to Uppsala, Uppsala Municipality does not own a municipal energy company. In addition, Uppsala Municipality does not have the potential to use hydropower and possibilities to install wind power are limited due to national interests, which makes solar power a feasible solution for sustainable energy transition in Uppsala. However, the Municipality is a large property owner and land-owner which makes expansion of solar energy production a suitable contribution in the transition to a sustainable and resilient energy system as well as meeting the future needs of fossil-free energy.

Contribution to EU Environmental Objective: Climate Change Mitigation

Contribution to UN SDGs 7.

7 AFFORDABLE AND CLEAN ENERGY

Calibration of the Sustainability Performance Targets (SPTs)

SPT 1: By 2030, reduce emissions in kilo-tonnes of CO2e in the geographical area of Uppsala Municipality by 72% vs baseline 2020.

The SPT trajectory below illustrates the annual SPTs available for securities issued under this Framework. The trajectory is based on the carbon budget for the geographical area of Uppsala. Each SPT is based on a yearly reduction rate of 12 % from the baseline 2020 (711 kilo-tonnes of CO2e emissions). Historical data: 2019 (850 kilo-tonnes of Co2e emissions) and 2018 (940 kilo-tonnes of Co2e emissions).

Strategy to achieve SPTs

The key sectors for Uppsala include energy, transport & mobility and urban planning & the built environment. Uppsala municipality is committed to reducing the climate impact of its own activities while actively promoting a lower impact among Uppsala's citizens and businesses.

**Expansion of renewable energy sources**
The transition to a resource-efficient and accessible energy system based on renewable local resources will be achieved by expansion of solar power, phasing out fossil-based plastics in district heating production and scaling up energy efficiency efforts, including socially sustainable retrofitting of buildings and development of energy-efficient processes. Uppsala works with pilot projects on, for example, climate positive city districts and energy communities.

Fossil-free transport system and infrastructure
Transport is the largest source of greenhouse gas emissions in Uppsala, of which approximately two-thirds are from personal transport and one-third from the transport

SPT trajectory	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Emission targets kilo-tonnes of CO2e	625	550	484	426	375	330	290	255	225	198
CO2e change in % in comparison to 2020	12%	23%	32%	40%	47%	54%	59%	64%	68%	72%

Calculated performance – Reported emissions in the geographical area and SPTs
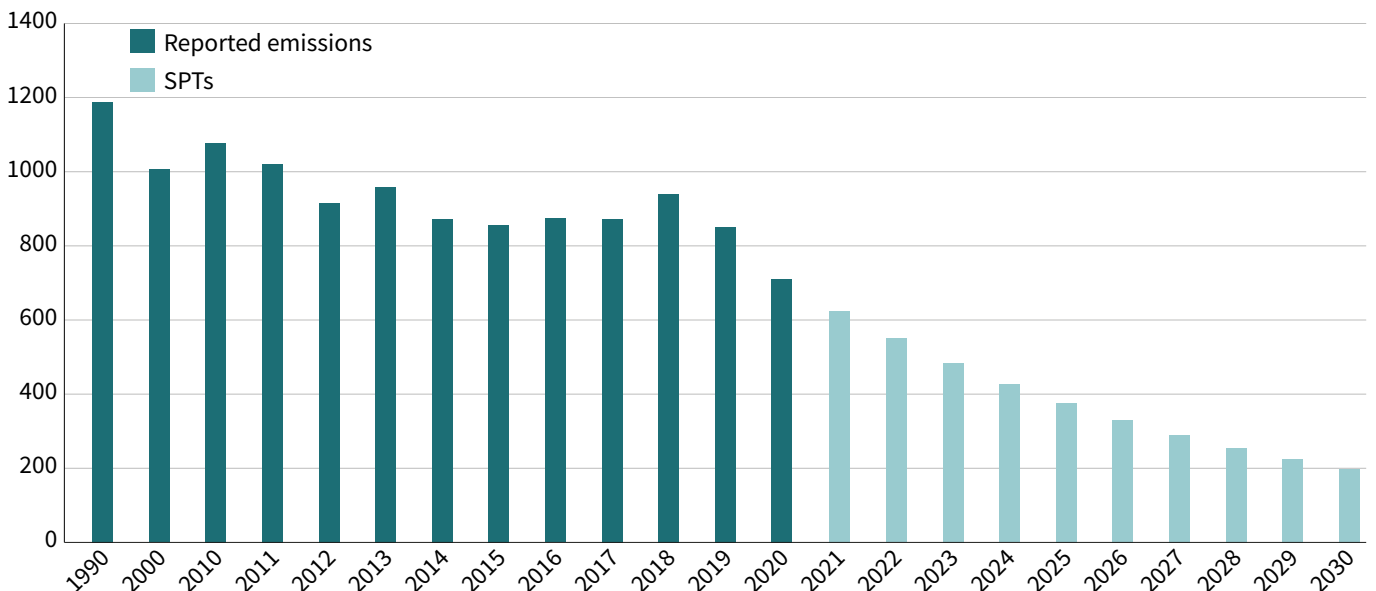
of goods. To reduce emissions, Uppsala continues to expand a fossil-free transport system and infrastructure for walking, cycling and public transport. Infrastructure for electrification of the transport system will be scaled up as well as the production of biogas and hydrogen fuel. Together with market actors, Uppsala develops solutions for sustainable logistics.

The city of Uppsala is growing fast. Through urban planning, Uppsala works towards a transport-efficient society to achieve the 15-minute city. Uppsala works with developers to minimize emissions from construction and land use changes and are currently developing new city districts that aims to be climate positive.

Circular economy – reuse and recycling
Circular economy is an important tool for climate neutrality and Uppsala has adopted a programme for circular economy to achieve an Uppsala with no waste where reuse and recycling are the norm. This will be achieved through investments in attractive spaces for reuse and recycling, collaboration with market actors and civil society to develop circular business models, as well as increasing the share of reused building materials in construction projects and making sure materials can be reused after demolition.

Collaboration – Uppsala Climate Protocol
Uppsala has identified collaboration as a key enabler to scale up climate action. Through Uppsala Climate Protocol, the 40 member organizations have agreed on an emission reduction goal of 14% per year for 2021-2024. The ambition for Uppsala Climate Protocol is to take the lead in climate action and reduce Uppsala's emissions.

Increase pace of climate transition – carbon budget
Since 2021, the Municipal Councils' Objectives and budget has included a specific task to increase the pace of climate transition to reduce emissions by 10-14 % per year which is directed at the entire municipal organisation. One of the tasks directed at the municipality as a whole in the Objectives and Budget 2023 is to increase the pace of the climate transition, which focuses on the development of an activated carbon budget, planning and implementation of citywide climate measures with other stakeholders and citizen engagement. The activation of a carbon budget is prioritized as a leading activity to further Uppsala's work with decrease of greenhouse gas emissions.

Level of ambition and benchmark

Benchmark against national target and Paris Agreement

Firstly, the Swedish national target for CO2e reduction is set with a higher ambition than the EU-level targets found in the Green Deal. Secondly, Uppsala strives to be more ambitious and go beyond the national target. This means that Uppsala aims to become climate neutral already by 2030 compared to the national goal by 2045 - indicating a higher level of ambition compared to EU level and national level.

Furthermore, Uppsala is committed to lead the transition towards a sustainable and climate positive municipality. Thus, Uppsala aims to reduce emissions in line with the Paris Agreement for the most ambitious scenario (1.5C). That is, the SPTs for emissions reduction are calculated by an annual reduction rate of 12% from the baseline year 2020 until 2030, when Uppsala Municipality should be climate neutral. The SPTs and reduction rate is based on a carbon budget aligned with the 1.5C-scenario.

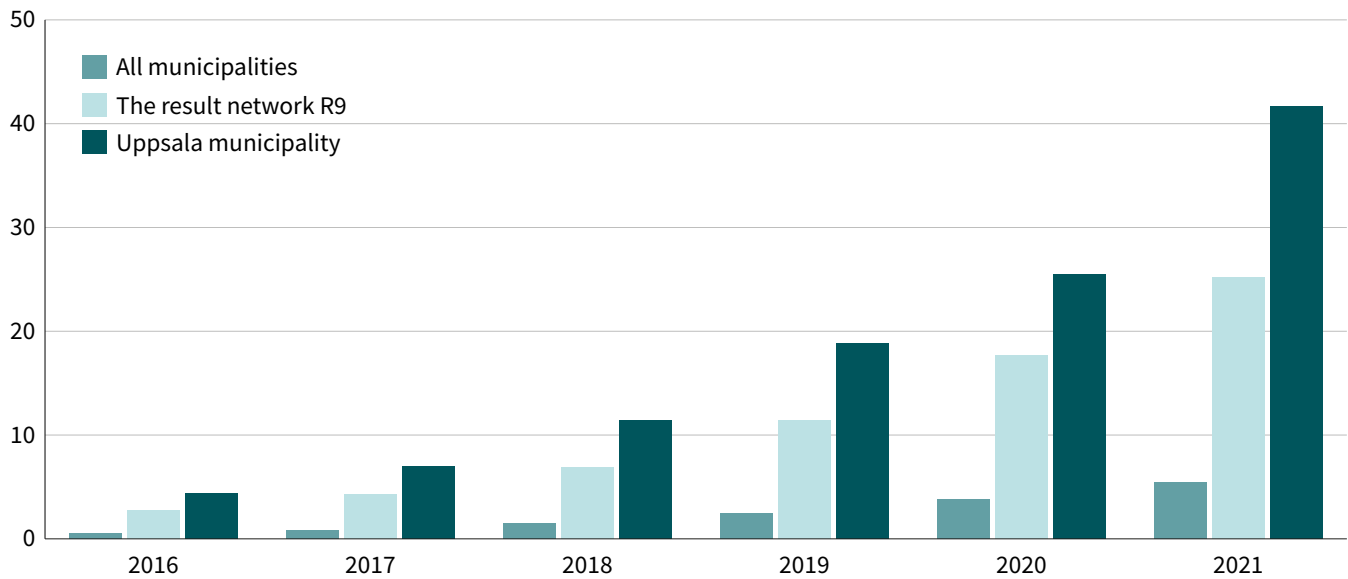### Benchmark against other municipalities

Uppsala Municipality's target has been benchmarked against the eight other municipalities within the R9 result network[2], a network designed to enable benchmarking between peers. Municipal organizations have generally equal assignments, but emission composition and needed reduction efforts differ vastly.

Out of the eight municipalities in the benchmark four municipalities have directly comparable targets. First, recalculating baselines to 1990 levels it can be concluded that two municipalities should reduce emissions by 85% by 2040 and 2045 respectively, which is in line with how the national target is set. This can be compared to Uppsala Municipality's target which corresponds to a reduction of more than 80% by 2030. Second, recalculating baselines to 2020 levels one municipality has a target to reduce emissions by 80% by 2030 which is set slightly higher than Uppsala's target. Third, recalculating baselines to 2005 levels, one municipality aims to reduce emissions by 85% by 2040. This can be compared to Uppsala's target which corresponds to a 78% reduction from 2005 by 2030.

Next, one municipality has developed a carbon budget using the same rate of reduction as Uppsala's target, two other municipalities have also set their target year for climate neutrality to 2030 and 2035 respectively, but not defined what reduction rate or absolute tonnes of emission this would entail in the territorial scope. Finally, one municipality has instead focused on how large net-emissions per inhabitant should be to be considered climate neutral with the target year 2045.

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2. The result network R9 is a network first established in 2012 between 9 Swedish municipalities, including Uppsala Municipality, designed to enable comparison of results to enable benchmarking between peers.

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

Strategy to achieve SPTs

The Energy Programme 2050 describes Uppsala's vision for the long-term development of the energy system in the Municipality and is a cornerstone in the efforts to make Uppsala fossil-free and renewable in 2030 and climate positive in 2050, at the latest.Also, the Environmental and Climate Programme has milestones for how solar energy will be expanded and how energy efficiency will be accelerated. For instance, solar panels are to be installed on all municipal buildings by 2025, where possible. Uppsala aims to promote and facilitate installation of solar energy within the municipal geography. Some examples in the Municipality's strategy for promoting installation is the Energy- and Climate advisors who provide households, tenant owners' associations and small businesses with counsel and support concerning, for instance, installation of solar panels free of charge. Another example is facilitating the process and revising the requisites on building permits for solar energy installations, which includes a Municipal decision to not exact administrative fees for processing such applications.

Level of ambition and benchmark

Benchmark against other municipalities – historical and current performance
Uppsala's performance has been benchmarked against two groups: all municipalities and the result network R9[3]. The below graph shows that historically Uppsala Municipality has outperformed its peers. Given Uppsala's exceptional historical performance, the Municipality starts from an already high baseline. Going forward, the forecast is ambitious but does not have as high or rapid development growth compared to the past. The rate of installation has historically not followed a linear trajectory, which is in part explained by installation of larger solar power facilities. Such larger facilities raise the rate of installation for the year the facility was taken into service and boosts the mean rate of installation for the time period. However, such facilities have not been installed every year and cannot be assumed to continue to be installed in a linear way. For more information on benchmarking see appendix.

3. The result network R9 is a network first established in 2012 between 9 Swedish municipalities, including Uppsala Municipality, designed to enable comparison of results to enable benchmarking between peers.

The SPT trajectory below illustrates the annual SPTs available for securities issued under this Framework. The SPT trajectory's starting point for measurement is 2015.

SPT trajectory	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Megawatt (MW)	–	–	–	–	–	30	37	44	51	58	65	72	79	86	93	100
Historical data	2,0	4,4	7,0	11,4	18,8	25,5	41,7									

Solar panel facilities, installed power (MW)

Explaining level of ambition behind SPT 2
Uppsala has had high ambitions regarding the installation of solar power in the geographical area for almost a decade. The goals for installation of solar energy were adopted by the Municipal Council in 2014, before the costs for solar energy installations decreased and installations started to grow on a general level in society, which has given the Municipality an advantage to achieve the goals in the long-term. Uppsala has set an ambitious target that stretches outside the Municipality's own operations and that is also affected by the fact that the Municipality does not own a municipal energy company. That is, Uppsala not only needs to increase solar energy capacity for its municipality owned companies but also promote solar energy in the geographical area of Uppsala at large. The latter mentioned covers large real estate owners, housing associations etc. are instrumental stakeholders to Uppsala in order to successfully reach the target by 2030.

Furthermore, it is challenging to benchmark the level of ambition of goals on installed solar power against other municipalities' goals, due to varying local conditions, such as total energy use, population, availability of land, ownership of land and buildings, ownership of a Municipal energy company etc.

In addition, there is no national goal concerning installation of solar power at a national, regional, or local level. However, there has been a goal regarding renewable energy at the national level, which stated that Sweden should have 100% renewable energy in 2040. The goal was based on the energy-agreement on the Swedish energy policy of the previous government. Solar power is included in the definition of renewable energy, as is wind power, hydropower, and other fossil-free sources of energy. There are no guidelines for how goals concerning renewable energy or solar power, should be formulated.

Bond Characteristics

The structural bond characteristics issued under this Framework will be specified in the corresponding final terms for each SLB including but not limited to the KPIs, SPTs, along with the date in which the relevant SPTs are to be achieved the ("Target Observation Date") and reported ("Reporting End Date").

Failure to reach the applicable SPTs at the Target Observation Date, as disclosed in the Sustainability-Linked Progress Report, will result in a Trigger Event. The Trigger Event may result in a coupon step-up or an adjustment of the redemption price. The size of the increase in the coupon step-up or redemption price will be specified in the final terms for each SLB issued under this Framework.

In the event the performance level against each SPT cannot be calculated or observed, in a satisfactory manner (e.g. regarding KPI 1, if RUS would stop or fail to produce the underlying data), the new performance level will be calculated from the two consecutive performances[4]. Likewise, if Uppsala fails to publish reporting related to the relevant SPT after the Reporting End Date, it will result in a Trigger Event. All reporting is published at Uppsala's website. Should there be a notable change, at least 5 %, e.g. due to change of methodology or improved data availability, the baseline may be adjusted to inherit this change.

Only changes that are beneficial for bondholders are allowed to take place. Adjustments to the baseline must be reported in the Sustainability-Linked Finance Progress Report.

Target Observation Date

- KPI 1: For municipalities, emission data is available ~18 months after the year the emissions occurred. Since the data is lagging behind, the Target Observation Date for the applicable SPT is set to 30th of September in the second year after the emissions occurred, e.g. the SPT for 2024 will be observed 2026-09-30.

- KPI 2: The Target Observation Date for the applicable SPT is set to 30th of September the year after the installation of solar panels occurred, e.g. the SPT for 2024 will be observed 2025-09-30.

4. Through: SPT(n) Performance = Performance(n-1) – (Performance(n-2)-Performance(n-1)/2) n=year.

Reporting

To be fully transparent towards investors and other stakeholders, Uppsala will commit to reporting on an annual basis 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. The Sustainability-Linked Bond Progress Report will be published on Uppsala's website and cover some of 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
- Any other information deemed being relevant to the investors in Uppsala's bonds

Verification

Second opinion

To confirm the transparency, robustness, and ambitiousness of Uppsala's Framework, it is verified by an approved external second opinion provider. The Framework and second opinion from S&P are available on Uppsala's website.

Verification certificate

- KPI 1: Uppsala will obtain an external verification of the KPI's performance relative to the applicable SPT on an annual basis. The verification certificate will be published on Uppsala's website
- KPI 2: Uppsala's performance in relation to the KPI is calculated, measured and

presented in a database by the Swedish Energy Agency (Sw. Energimyndigheten) and the data is publicly available. Thus, Uppsala performs no own calculations, whether the performance on the KPI meets the relevant SPT and as long as no own calculations are performed there is no need for an external verification of the performance. If Uppsala performs a recalculation of the SPTs, an independent third party, assigned by Uppsala, will issue a verification certificate confirming any recalculations. The verification certificate will be published on Uppsala's website.

Appendix

Calculation methodology – Greenhouse gas emissions (KPI 1)

Data regarding combusting of fuels (oil, wood pellets, LPG etc.) are retrieved from the Swedish Governmental Statistics Agency, Statistics Sweden (Sw. Statistiska centralbyrån, SCB). Emission figures for combustion of oil are calculated by converting data on the yearly volume of delivered fuel oil to final consumers within the geographical area of Uppsala Municipality (report: "Leveranser av bränsle efter kommun, bränsletyp och förbrukarkategori"), available in Statistic Sweden's database ~9 months after the year the emissions occurred. Emission figures for combustion of wood pellets, LPG etc., are calculated by multiplying emission factors with end use of delivered fuels (report: "Slutanvändning MWh efter län och kommun, förbrukarkategori samt bränsletyp") available in Statistic Sweden's database ~14 months after the year the emissions occurred. In both cases the data is provided and verified by the Swedish Energy Agency.[5] Emission factors for combustion of the fuels above is retrieved from the Swedish Environmental Protection Agency website (report: Emissionsfaktorer och värmevärden). Since the distribution between light fuel oil and heavy fuel oil is classified as confidential in the data from Statistics Sweden, an average value of the respective emission factors of the two types is calculated and used for all combusted oil. Similarly, an average emission factor is used for the combustion of wood fuels, which is calculated from the respective emission factors of industry and household combustion of wood fuels.

In addition, emission figures for heating, cooling, steam and electricity are collected from local sources, available ~5 months after the year the emissions occurred. For emissions regarding electricity use, data is retrieved from the two grid owners in the municipality – Vattenfall Electricity Distribution (data is bought from the Swedish governmental statistics agency, Statistics Sweden (Sw. Statistiska centralbyrån, SCB) and Upplands Energy. The data are summed up and multiplied with the emission factor for the Nordic electricity mix. Regarding emissions from heating, cooling and steam, data on yearly delivery of district heating, cooling, electricity and steam together with emission factors for each product are collected from the local heating company Vattenfall and calculated. In addition, data on delivered small-scale heating to facilities within the municipality and emission factor of the product is collected from the provider Solör and calculated. Emissions from district heating, small-scale heating and electricity used for heating houses is then adjusted by means of standard year correction with the help of degree-days provided by the Swedish Meteorological and Hydrological Institute (Sw. SMHI).

Benchmark – installation of solar power (KPI 2)

Out of Sweden's 290 municipalities, Uppsala's target for installation of solar power has been benchmarked against the three larger municipalities, the municipalities within the R9-result network, complemented by targets from some municipalities within the association Klimatkommunerna[6] as well as one Swedish region. From the comparison it can be concluded that the definition of targets varies and there are three reoccurring ways to define targets within the municipalities that have relatable targets. These are:

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5. Since Uppsala begun calculating emissions, certain data points have been classified as confidential. In these cases, Uppsala Municipality has used previous years' data as a template.

6. Klimatkommunerna is an association of cities and regions in Sweden aiming at being frontrunners in the transition towards a fossil free future, where Uppsala Municipality is a member along with the majority of Municipalities within the R9-network.

- Installed power within the municipal geography in absolute terms (MW or GW), such as Uppsala

- The produced electricity as a share of total use of energy within the geography based on net generation, or

- Targets on produced renewable energy within the municipal organization in relation to the municipal organizations' energy consumption

Inclusion of other renewable energy sources within targets occur and most often include wind-power or does not define specific sources at all

The first two ways to define targets are relatable to each other and to the target set by Uppsala municipality since they concern electricity within the overall geographical area, whereas targets that concerns production and consumption within the organization are not comparable. Furthermore;

- Targets defined in installed solar power ranges from 40MW to 29 MW[7] in 2030.

- Targets defined in net generation include a target of 150GWh in 2030 including both solar and wind power and a target of increasing net generation from all renewable sources by 129GWh by 2030.

- Targets defined in terms of produced electricity from installed solar power within the municipality are 5% of total energy consumption in 2025 and then 10% in 2030[8] or 2035[9]. These targets are in line with the Swedish Energy Agency's estimation that solar power could account for 5-10% of the total energy consumption in Sweden by 2040. At the next tier targets are for instance 3–4%[10] by 2030.

All in all, Uppsala's target of 100MW installed solar power can be assumed to generate on average 100GWh[11]. Using this assumption and the energy consumption in 2020 as a baseline the target set for 2025 would correspond to between 4-5%, and 6-7% in 2030. Using the current increase in the trajectory for the SPTs Uppsala Municipality would have 135MW[12] installed by 2035. Both municipalities that include wind or other renewable sources have wind power installed that by 2020 generated approximately 48GWh and 27,5GWh respectively in 2020. Assuming both municipalities would only install solar power to reach their respective goal going forward this would be roughly the same as Uppsala's target for 2030.

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7. The targets are set between 2020-2023 with 1-2MW increase per year (i.e., 10, 12, 13, 15MW). To get an estimate target for 2030 the increase rate was set to the higher rate used, 2MW, for the subsequent years until 2030.

8. Target values are set to 5% by 2025 and at least 20% in 2040, which gives a five-year average increase of 5%, which is aligned with the Swedish Energy Agency's calculations of possible expansion of solar power by 2040. The values are calculated from the use of energy in 2017, which was 1,24TWh. Using a template value for estimation this would give appr. 124MW installed solar power by 2030.

9. The target of 10% is set in relation to an estimation of energy use by 2035. Based on this estimation production of solar power should amount to approximately 148GWh, or 148MW installed power in 2035.

10. The target of 4% is set by a Swedish region, consisting of 12 Municipalities, where the largest of these are included in the R9-network. This region has a population of appr. 300 thousand inhabitants, in comparison to appr. 240 thousand in Uppsala Municipality.

11. Template value, 1kW installed solar power generates 1000kWh, or 1GWh per 1MW installed power, given that the surface is approximately 7 square-meters, from Swedenergy (sv. Energiföretagen), a non-profit industry and special interest organization for companies that supply, distribute, sell and store energy.

12. Assuming the rate of 7MW installation per year between 2030-2035, 7*5=35).

Uppsala's governing documents

Environmental

- Action programme for nitrogen oxides – Uppsala Municipalitys action plan for Air quality (in Swedish)

- Action programme for environmental noise (in Swedish)

- Energy programme 2050

- Environmental and Climate programme

- Mobility and Traffic programme (in Swedish)

- Waste management plan – programme for a circular Uppsala without waste (in Swedish)

- Water programme (in Swedish)

Social

- Action plan – Gottsunda 2021–2030 (in Swedish)

- Action plan to promote human rights and counteract discrimination and racism in Uppsala municipality

- Agreement between the municipality and associations (in Swedish)

- Housing for all 2021–2024 (in Swedish)

- Programme to combat violence against women (in Swedish)

- Programme for an age-friendly municipality (in Swedish)

- Programme to promote full participation of people with disabilities (in Swedish)

- Programme on safety, security and crime prevention (in Swedish)

Governance

- Objectives and budget (in Swedish)

- Policy for sustainable development

- Procurement and purchasing policy (in Swedish)