



Green Bond Framework

Municipality of Lund
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Lund in brief and updated framework 2024

Lund municipality is located in the south of Sweden and is, with its approximately 130,000 inhabitants Sweden's twelfth largest municipality in terms of population. Lund municipality issued its first green bond back in 2017 and has since then been a frequent issuer of green bonds. The municipality is actively involved in the development of the green bond market, while continuously working to build a strong portfolio of green assets.

Through the years as an issuer of green bonds, the municipality has also been an active participant in developing the Nordic Public Sector Issuers: Joint Position Paper on Green Bonds Impact Reporting as part of the Nordic issuer group, which has jointly published the paper.

Thanks to a long tradition of political agreement around environmental issues with a clear will and ambition, sustainability is high on the agenda in Lund. It harmonizes well with Lund's vision "Lund creates the future with knowledge, innovation and openness" together with one of the city council's new goals 'Climate Neutrality 2030'. Another clear testament to that the municipality is at the forefront, is that Lund was named *Sweden's best environmentally friendly municipality* in Aktuell Hållbarhet's ranking Environmentally Best Municipality in 2023. In addition, Lund was named *Global Climate City of the Year* by WWF in the Global City Challenge One Planet City Challenge in 2022. According to the jury, Lund excels with ambitious and clear climate goals, political leadership, and a broad and transparent program of measures.

The municipality strives to be a leader in environmental and climate issues, and environmental thinking permeates the entire operation. As part of this work, Lund chooses to issue green bonds to transparently finance the sustainability work that the municipality carries out.

Lund's updated green bond framework aims to better manage the environmental challenges that Lund municipality is facing and to increase the transparency of Lund's sustainability work for both investors and other stakeholders. The update of the framework has meant that a previously unused project category "Replacement of fossil raw materials" has been taken out from the framework and the two previous project categories "Environmental measures" and "Climate adaptation measures" have been merged into a joint project category. For the remaining project categories, the update has meant that project criteria have been tightened and clarified to increase transparency around what can be financed by Lund's green bonds. In the "Green and energy-efficient buildings" category, a new criterion linked to embodied emissions has also been introduced to reflect the work that the municipality is doing related to their plan for climate-neutral construction.

Furthermore, the project categories include a reference to the corresponding economic activity in the EU Taxonomy to clarify which environmental goal each project category aims to contribute to. It is important for the municipality as a whole that the framework facilitates the financing of a wide range of investments that are needed for Lund municipality to be able to meet its ambitious environmental goals. Thus, Lund municipality finds that deviations from the criteria and activities of the EU taxonomy in some cases are necessary.

Rationale for issuing Green Bonds

Lund's highest decision-making body, the City Council, has decided that Lund shall become climate-neutral and fossil-fuel-free by 2030. In addition, the chairman of the City Executive Committee has signed a national contract on climate neutrality and the EU has designated Lund as one of their first hundred climate-neutral cities. This means that emissions must be reduced by at least 80 percent compared to 2010 for Lund to succeed. The remaining greenhouse gas emissions then need to be able to be compensated by storing the same amount, for example, in the ground. Note that residual greenhouse gas emissions must not be from fossil fuels. The remaining emissions can be methane from grazing livestock, carbon dioxide from burning biogas, and more.

Lund municipality has already done major improvements, but both can and needs to do more to achieve its own climate goals and to be an example for other cities and municipalities that have not come as far. The municipality points to three areas as central to the transition. It relates to 1) transport, 2) circular economy and 3) energy.

The transition to a climate-neutral Lund requires large investments, and Lund sees green bonds as an important tool to be able to direct capital to projects that have a positive environmental impact and that contribute to the municipality's ambitious goals. This update of Lund's green bond framework is made in accordance with the ICMA Green Bond Principles 2021 and aims to promote the transition to a low-carbon and sustainable development.

The framework's consideration of the EU Taxonomy

The purpose of the EU taxonomy is to help companies and investors identify and compare environmentally sustainable investments through a common classification system for environmentally sustainable economic activities. Lund municipality follows the development of this regulation closely and strives to align the investments under this framework with the criteria in the EU taxonomy, to the extent possible.

However, this framework also includes categories of green projects that are either not yet covered by or deviate from the EU taxonomy. It is important for the municipality as a whole that the framework facilitates the financing of a wide range of investments that are needed for Lund municipality to be able to meet its ambitious environmental goals. Thus, the municipality finds that deviations from the criteria and activities of the EU taxonomy are necessary.

The objective remains that the EU taxonomy shall be taken into account and that Lund municipality, to the extent possible, will report on the EU taxonomy alignment of the investments made under this framework.

Policy for Sustainable development

The Policy for Sustainable Development clarifies the municipality's approach to Agenda 2030 and the Sustainable Development Goals. The policy guides the work within the programs for social and ecological sustainability, as well as for the business community program. Ambitions are high and the policy states, among other things, that Lund municipality should be a leader in sustainable development.

This can be seen throughout the organization in everything from the development of the Brunnsög area, where the tramway and a low-temperature district heating network are taking place, to the meals organization's efforts to, for example, reduce food's climate impact and food waste.

The policy states that the work should be carried out in an innovative, goal-oriented and systematic way. Lund municipality actively collaborates with others to develop a sustainable society, and for the municipality, sustainable development has three dimensions – ecological, social and economic, which together are prerequisites to one another.

- A socially sustainable Lund strives to create equal living conditions and realize human rights for everyone who lives and works in Lund - A Lund for everyone.
- An ecologically sustainable Lund strives to create a resource-efficient society where ecosystems and their functions are maintained in the long term and the planet's boundaries are not exceeded.
- An economically sustainable Lund strives to create a society where economic resources are used in a way that promotes ecological and social sustainability, where the business climate is good, and where the economic well-being of the inhabitants is promoted.



Social sustainability development

The Program for Social Sustainability is a municipal-wide governance document that specifies what shall be achieved, the shared direction for these efforts and the long-term priorities. The Program for Social Sustainability, together with the Program for Ecological Sustainability constitute the municipality's overall governance for systematic work with sustainable development. The program is divided into six priority areas and each area has specific goals attached to it:

- Democracy
- Education and learning
- Living habits
- Work and employment
- Housing and local environment
- Equality

The program is one of several tools for realizing and embodying the municipality's vision, "Lund creates the future with knowledge, innovation and openness". The Program for Social Sustainability aims to create equitable living conditions and realize human rights for everyone who lives and works in Lund - A Lund for everyone. It shall be achieved by getting residents, elected officials and employees of Lund municipality involved, along with other stakeholders in the society, such as universities, the business community and civil society in a collaborative effort, with dialog and innovation, for a socially sustainable Lund. Communication is one of the municipality's tools for achieving sustainable development.

In Lund, work with human rights is included Program for Social Sustainability through analyses, goals and follow-up. In addition, the City Council in Lund decided in August 2018 on a systematic way of working with human rights in Lund municipality. The decision means that Lund, as the first city in Sweden, is a Human Rights city (HR city). Being an HR city means, among other things, that the municipality works internally to counteract discrimination and promote people's opportunities to have their rights satisfied on equal terms. In the external work, the municipality cooperates with companies, associations, the university and other actors to develop and implement positive measures for human rights.

At the same time, work with social inclusion and equality is a necessity to be able to effectively meet other societal challenges such as climate change, given that they - ecological, social and economic sustainability - form prerequisites for each other.

Ecologically sustainable development

A sustainable life within the planet's boundaries - that is something that everyone in Lund needs to relate to. Lund municipality's work is led by the program for ecologically sustainable development. The program strives to create a resource-efficient society where ecosystems and their functions are maintained in the long term and the planet's boundaries are not exceeded.

Lund policy for sustainable development



- Leader in sustainable development
- Constantly improve and develop
- High level of knowledge
- Innovative, goal-oriented and systematic
- Active co-operation
- Transparency

Programme for ecological sustainability, LundaEko

Consumption and production	Hazardous substances	Climate and energy	Housing and local environment	Biodiversity and ecosystem services	Surface water and groundwater



The program is based on Agenda 2030 and Sweden's environmental quality goals. The program is divided into six priority areas and each area has specific goals attached to it:

- Consumption and production
- Substances hazardous to human health or the environment
- Climate and energy
- Housing and local environment
- Biodiversity and ecosystem services
- Surface water and groundwater

The overarching climate goal is that Lund shall be a climate-neutral and fossil-fuel free municipality that is adapted to a changing climate. In the work to become a climate-neutral city, Lund has made both national and international commitments. In December 2022, the municipality signed a renewed national climate contract with Viable Cities and five authorities to jointly continue developing the work toward climate neutrality. In 2022, Lund was also appointed to become one of the EU's first 100 climate-neutral and smart cities.

Even if greenhouse gas emissions decrease significantly, the climate is already affected with clear effects as a result. Climate adaptation means taking measures to adapt society to climate change and reducing the risk of negative consequences. Since 2018 there have been statutory requirements for the municipality to assess risks for damage to the built environment, linked to climate change. To support Lund municipality's long-term work with climate adaptation, both a stormwater management plan and a heat vulnerability assessment have been carried out. The assessments form a valuable basis for getting a picture of vulnerabilities and risks in the municipality and for identifying climate adaptation measures.

In the program, it is also expressed that the municipality should become a leader in circularity and climate-neutral construction, to reach net zero emissions by 2030 in the area.

Plan for climate-neutral construction

Lund municipality's plan for climate-neutral construction strives to clarify how the municipal organizations and companies must work to reduce the climate impact in construction. By climate-neutral and circular construction, Lund municipality means that new buildings and large renovation projects should contribute with net zero emissions to the atmosphere, over the buildings' life cycle. Buildings should be prepared for future reuse, and materials should be reused after a building's life span.

The starting point in the plan is that projects completed in 2025 should achieve a halving of the climate impact, compared to the current situation.

Projects that are completed in 2030 must be climate neutral, which is achieved by reducing emissions as far as possible during the entire life cycle and that remaining emissions are compensated in a long-term and verified way.

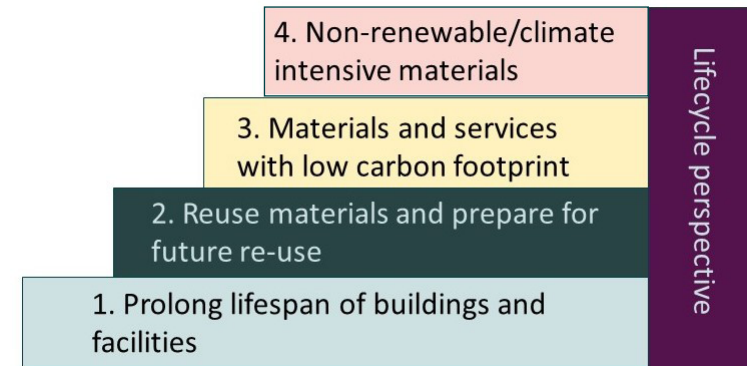
The approach to climate-neutral and circular construction can be described based on the illustration on the right, with inspiration from the "waste hierarchy " and its principles for preventing waste as well as the "energy hierarchy " and its approach to energy.

1. As a first step in climate-neutral construction, buildings and facilities should be used for as long as possible. Continuous maintenance is a prerequisite for a long service life and to avoid premature major renovations. In cases where demolition is in question, the possibility of renovation, rebuilding or adaptation of the building should be investigated in the first stage. With such an approach, it is possible that even if demolition is carried out, in whole or in part, to let parts of the construction live on.

2. In the second step, the possibility of material reuse should be investigated. Materials can be reused in a qualitative way where building materials/parts are reused in the corresponding function, such as in a facade or frame. Reuse can also take place in lower-quality ways to meet, for example, quality and energy requirements, such as in indoor environments, complementary buildings or in the public environment. In connection with the reuse of construction products, potential environmental and health hazardous substances need attention. Levels hazardous to the environment and health need to be managed to ensure a healthy environment in new or renovated buildings and environments. Circular mass handling is an opportunity in construction projects.

3. The next step is to choose materials that are renewable, recycled and/or with as little climate impact as possible. Using the quantities, qualities and dimensions needed to satisfy the need is an important starting point.

4. Finally, there will be materials that are difficult to replace and where the use of climate-harming materials will continue to be required. These materials should be used where they are specifically needed and in the right quantities and quality.



The climate staircase, which describes climate neutral construction, based on the waste and energy staircases' principles. The emissions that remain are handled with climate compensation. (Freely interpreted from Mistra Carbon Exit 2020)

Machines on construction sites, handling of construction and demolition waste and transport are other important processes to pay attention to in order to reduce emissions. All choices and decisions need to be based on a life-cycle perspective on environmental and climate impact, the quality and lifespan of the materials, and cost-effectiveness over time.

In climate-neutral construction, it is still important that what is built is energy efficient. In the case of new construction and renovation, high energy efficiency and low resource use must be sought based on the lifespan of the entire building/facility. Balances between energy use and material use should be preceded by analysis in order to choose the best option for the environment and climate. To reach net zero emissions in projects, remaining emissions will need to be compensated, in a long-term and credible way.

Use of proceeds

An amount equal to the net proceeds of the Green Bonds will be used to finance or refinance, in whole or in part, investments undertaken by Lund municipality, which promote the transition to a low-carbon and sustainable development in accordance with the green project categories defined below (Green Projects). New financing is applicable to planned and ongoing Green Projects as well as Green Projects completed during the last 12 months/reporting year. Refinancing is applicable to Green Projects that are older than 12 months/completed before the reporting year.

Lund municipality's green bonds can be issued either for general green purposes or for category-specific purposes. Green bonds for general green purposes finance Lund municipality's green project portfolio, which consists of project categories specified in this framework. Category-specific green bonds can be allocated to specific projects within any of the project categories and aim to highlight and promote specific environmental challenges and solutions in a specific area. In all cases, this green bond framework will apply in its entirety.

Exclusions

Green bond net proceeds will not be allocated to projects for which the purpose is fossil energy production, nuclear energy generation, weapons and defence, potentially environmentally harmful resource extraction (such as rare earth elements or fossil fuels), gambling or tobacco.



Green project categories	Project description	EU environmental objective	UN SDG
Clean Transportation	<p>Fossil free vehicles Passenger cars, vehicles and machinery with zero direct (tailpipe) CO₂ emissions.</p> <p>Infrastructure supporting clean transportation Infrastructure required for the operation of zero emission road transport and for operating public transport including electric charging points and electrified tram system.</p> <p>Infrastructure for personal mobility Infrastructure dedicated to personal mobility such as pavements, bike lanes, pedestrian zones and electrified tram systems.</p>	<p>Climate change mitigation</p> <p>6.5. Transport by motorbikes, passenger cars and light commercial vehicles</p> <p>6.13. Infrastructure for personal mobility, cycle logistics</p> <p>6.15 Infrastructure enabling low-carbon road transport and public transport</p>	9,11
Renewable energy	<p>Solar energy Energy generation using solar power.</p> <p>Wind power Energy generation using wind power.</p> <p>Bioenergy Bioenergy production from agricultural residues, forest residues and other residual flows.</p> <p>Storage of renewable energy Storage facilities for electricity, for the purpose of managing the intermittency of renewable energy.</p>	<p>Climate change mitigation</p> <p>4.1. Electricity generation using solar photovoltaic technology</p> <p>4.3. Electricity generation from wind power</p> <p>4.10. Storage of electricity</p> <p>4.24. Production of heat/cooling from bioenergy</p>	7,13
Energy efficiency	<p>Energy efficiency measures Investments in various municipal activities to increase energy efficiency such as:</p> <ul style="list-style-type: none"> • Energy-efficient equipment (energy-efficient windows, doors and light sources) • Instruments and devices for measuring, regulating and controlling the energy performance of buildings • Renewable energy technology (such as heat pumps, storage units and heat exchangers/recovery systems) • Replacement and new installation of LED lighting <p>Investments should improve energy efficiency in each area by at least 30 percent.</p>	<p>Climate change mitigation</p> <p>7.3. Installation, maintenance and repair of energy efficiency equipment</p> <p>7.5. Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings</p> <p>7.6. Installation, maintenance and repair of renewable energy technologies</p>	7



Green project categories	Project description	EU environmental objective	UN SDG
Green and energy-efficient buildings	<p>New construction</p> <ul style="list-style-type: none"> • New premises¹ that have or will have a primary energy demand at least 30 percent lower than the level required by the national building regulation (BBR) • New residential buildings that have or will have a primary energy demand at least 20 percent lower than the level required by the national building regulation (BBR)² <p>All new buildings allow a maximum amount of embodied carbon of 270 kg CO₂e/m² GFA based on the scope according to legislation on climate declarations.³</p> <p>Existing buildings⁴ Residential buildings and premises with an Energy Performance Certificate (EPC) of class A, or qualifying within the top 15% most energy efficient buildings within the national building stock.⁵</p> <p>Major renovations Renovation of existing buildings leading to a total reduction of the primary energy demand per square meter and year (kWh/m²/year) by at least 30% compared to the primary energy demand before renovation.</p>	<p>Climate change mitigation</p> <p>7.1. Construction of new buildings 7.2. Renovation of existing buildings 7.7. Acquisition and ownership of buildings</p>	<p>7,11,12,13</p>
Water and wastewater management	<p>Supply systems</p> <p>Investments in the processing of wastewater and supply of fresh water, such as upgrades, efficiency improvements, capacity expansions, enabling infrastructure, new network infrastructure or new build within the Lund municipality water and wastewater management.</p>	<p>Sustainable use and protection of water and marine resources</p>	<p>6,14</p>



1. New premises and residential buildings are defined as buildings where the building application was filed after 1 January 2021.
2. Premises are built according to the requirements for Miljöbyggnad Silver.
3. A climate declaration is made for the construction phase in accordance with legislation and, in addition to this, climate calculations are also made in accordance with LFM30's more comprehensive methodology that covers all modules (A1-A5).
4. Existing buildings are defined as buildings where the building application was filed before 1 January 2021
5. Determined through a specialist study assessing the criterion and applicable thresholds in the relevant national context

Green project categories	Project description	EU environmental objective	UN SDG
Waste and circularity	<p>Waste management and sanitation</p> <ul style="list-style-type: none"> Waste disposal where non-hazardous waste that is segregated at source is intended for preparation for reuse or recycling operations. Remediation of contaminated land, where contamination of land, water area, groundwater, buildings or facilities poses a risk to health or the environment. Technical infrastructure for the collection of sorted waste that contributes positively to the urban environment, e.g., through reduced land use or reduced traffic. <p>Circular processes</p> <ul style="list-style-type: none"> Biochar plants, where e.g., waste from the city's parks and residents' gardens are used to create a local cycle. 	Transition to a circular economy	11,12
Environmental and climate-adaptation measures	<p>Environmental and climate-adaptation measures</p> <p>Climate adaptation measures in buildings, infrastructure and sensitive habitats as well as other environmental measures, such as:</p> <ul style="list-style-type: none"> stormwater reservoirs, rain gardens larger, wider ditches along streets, roads, green areas and between the streets, cycle paths and walkways green roofs preservation and planting of trees for shading and cooling create wetlands local measures for recirculation of water stormwater management 	Climate change adaptation	3,11,14,15



Process for project evaluation and selection

Evaluation and selection of Green Projects is an important process to ensure that green bond net proceeds are allocated to Green Projects. Lund municipality has thus established a committee for green bonds which is responsible for the selection process. The committee consists of selected representatives from the Municipal Office's finance department and environmental strategy unit as well as representatives from building/construction administrations, municipal companies and municipal associations. All decisions are made in consensus and are consulted with executive administrations and municipally owned companies/associations.

Green projects that will be financed with Lund's green bonds will be evaluated and selected in accordance with the project categories and criteria in this framework. Through Lund municipality's already established guidelines and processes, environmental and social risks are taken into account for potential Green Projects. The Committee for Green Bonds will, to the extent possible and provided that documentation is available, prioritize Green Projects that are aligned with the EU Taxonomy in the selection process.

If a Green Project loses its eligibility for any reason, the proceeds will follow the procedure under management of proceeds until redistributed to other eligible Green Projects.



Management of proceeds

Green Bond net proceeds will be followed up at a portfolio level, and to ensure that the net proceeds are allocated to Green Projects, Lund municipality will use a Green Register.

Projects can be removed or added to the list of Green Projects at any time. If for any reason a Green Project ceases to meet the requirements of this framework, such project will be removed from the list of Green Projects. If the outstanding net proceeds exceed the amount allocated, proceeds will temporarily be placed in Lund municipality's general liquidity reserve. Should there be unallocated proceeds, Lund municipality strives to allocate it within one year.

Reporting

Lund municipality will annually, until full allocation and in the event of a significant change, provide investors with an impact report that describes the allocation of proceeds and impact of green bonds issued.

Allocation reporting

The allocation report will include:

- Nominal amount of outstanding green bonds
- Relative share of new financing versus refinancing
- Descriptions of selected Green Projects financed
- The balance of unallocated proceeds, if any.

In addition, Lund municipality intends to report on the EU Taxonomy alignment of the projects financed, to the extent possible.

Impact reporting

The impact report aims to demonstrate the environmental impact of the Green Projects financed under this framework, based on Lund municipality's share of each project, provided data is available. Below are examples of impact indicators in the report:

- Project description
- Annual energy savings (kWh)
- Annual energy production (kWh)
- Estimation of avoided greenhouse gas emissions (tons of CO₂) annually

In addition to reporting on environmental impact, Lund municipality has the intention to report and/or describe the social impact associated with the Green Projects, to the extent possible.

External review

Lund municipality has engaged Sustainalytics as an external reviewer to issue an independent Second Party Opinion of this Green Bond Framework, verifying its credibility, impact and alignment with the ICMA Green Bond Principles.

An independent external party appointed by Lund municipality will provide a review, confirming that an amount equal to the net proceeds has been allocated to eligible Green Projects.

The Green Bond Framework and the second party opinion will be publicly available on Lund municipality's website, together with the post-issuance review and the annual Green Impact Report once published.

