Uppsala kommun

Translation of official document

Date:
30.05.2022

Registration number:
KSN-2022-00082

Decision makers:
Municipal Council

Document owner: Municipal Executive Board (KS)

Environmental and Climate Programme

An English translation of the official document Miljö- och klimatprogram

Översiktsplan

Mål och budget

Verksamhetsplaner och affärsplaner

Program

Handlingsplaner och övriga planer

Table of contents

Introduction

Uppsala's Environmental and Climate Programme is part of the Municipality's long-term actions for sustainable development.

Such actions are defined in Uppsala Municipality's indicative goal 3 *The city of Uppsala and its surrounding area will grow through sustainable town planning* and Policy for Sustainable Development, with connection to Agenda 2030 and the 17 Sustainable Development Goals.

The programme is one of the Municipality's six environmental programmes based on the challenges outlined in:

- The National Environmental Quality Objectives
- The Environmental Status in Uppsala as outlined in the Regional Development Strategy
- Uppsala's Master Development Plan

Uppsala's Policy for Sustainable Development brings together the Municipality's six environmental programmes:

1. Waste Management Plan for Uppsala Municipality 2014–2022
2. Energy Programme 2050
3. Action Plan for Traffic Noise
4. Environmental and Climate Programme
5. Water Programme for Uppsala Municipality
6. Action Programme for Nitrogen Dioxide, Uppsala Municipality's Action Plan for Air Quality for the Period 2022–2027.

The Environmental and Climate programme will focus on:

- A toxin-free environment and sustainable resource flows
- Reduced Impact on the climate
- Mitigating the effects of climate change

Its objectives are based on a municipal geographical perspective, of which the Municipality’s activities form a part.

Purpose

The main purpose of The Environmental and Climate Programme is to describe objectives for the Municipality's strategic environmental and climate action. The programme clarifies the orientation of Uppsala Municipality's long-term environmental and climate action to achieve:

- a toxin-free environment
- sustainable resource flows
- climate transition
- climate adaptation.

The programme functions as a coherent and comprehensive platform for the strategic action within environment and climate and provide a common starting point for prioritization and planning of the Municipality's efforts.

Scope

The programme is aimed at all municipal boards and municipal company boards. The action plan, which is part of the programme, addresses prioritized measures which will enable the programme to be implemented.

The programme complements these comprehensive governing documents, with complementary action plan, within the Municipality:

- Waste Management Plan for Uppsala Municipality 2014–2022
- Energy Programme 2050
- Rural Programme for Uppsala Municipality
- Enterprise Programme
- Mobility and Traffic Programme
- Action Programme for Nitrogen Dioxides – Uppsala Municipality's Action Plan for Air Quality
- Master Development Plan 2016.

Responsibility, implementation, follow-up and dissemination

The Municipal Board is responsible for the programme regarding implementation, coordination, follow-up and dissemination.

All boards are responsible for integrating environmental and climate action in their operations. They also have an operational responsibility to contribute to the programme's coordination, follow-up and goal fulfilment.

Milestones are designed so that all the Municipality's activities can contribute to the goal fulfilment, albeit to varying extents.

A complementary action plan has been drawn up to clarify the Municipality's measures to achieve the programme's goals. See Action plan for the Environmental and Climate Programme (in Swedish). It defines the actions to be taken and the division of responsibilities between boards and company boards.

Innovation, collaboration and procurement have been encircled as enablers to achieve the goals of the programme.

Collaboration: Uppsala Municipality collaborates with external operators in its environmental and climate actions to mobilize everyone who lives, works and resides in Uppsala Municipality in the climate transition and thus achieving Uppsala's climate goals. Developments within the environment and climate can be achieved through effective collaboration between local businesses, the community and the Municipality - both in the Municipality's operations and in business - and lead to new green jobs.

Innovation: Social changes are needed which require new ways of leading and working to meet the challenges of climate change. Therefore, methods and processes from the area of innovation are central to Uppsala's action with climate transition.

The Municipality's work with innovation is designed to find, implement and scale-up solutions to challenges in society within, among other, climate, energy and environment. The core mission initiated by the Municipality can be combined with a proactive business and job policy.

Procurement: Uppsala Municipality works strategically and actively to reduce greenhouse ga emissions and increase sustainable resource flows in procurement and purchasing. When the Municipality enters into an agreement, environmental and climate requirements are therefore placed on the suppliers. This implies that the suppliers in turn contribute to the Municipality's

environmental and climate goals being achieved along with national environmental goals and, in the long run, the Agenda 2030 goals.

Uppsala Municipality's Environmental and Climate Goals

Uppsala Municipality's overall environmental and climate goals are described here:

- A Toxin-free Environment 2050 and Sustainable Resource Flows
- A Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 at the latest
- A Climate-Adapted Uppsala

The associated milestones are described below. They will speed up the achievement of the overall goals.

Overall goal – A Toxin-free Environment 2050 and Sustainable Resource Flows

Reducing the use and exposure to hazardous chemicals is one of the greatest global and local environmental and health challenges of our time. Substances with dangerous properties are found in places where they are not meant to be – in human bodies, plants, animals, oceans, lakes and land. Children are especially vulnerable. Research shows that several of the chemicals found in food, textiles, furniture, packaging, cleaning and hygiene products and building materials etc., have negative health effects on people, animals and nature, which cause great personal suffering as well as economic impact on society (Sveriges Miljömål, 2021).

Within the framework of the overall goal, Uppsala Municipality will contribute to the realization of Sweden's national environmental goals by focusing on a non-toxin environment:

The existence of substances in the environment manufactured or extracted must not threaten human health or biodiversity. Concentrations of non-naturally occurring substances close to zero and their impact on human health and ecosystems negligible. Concentrations of naturally occurring substances close to background levels (Sveriges miljömål, 2017).

The overall goal is also in line with Sweden's national aim of transitioning to a circular economy and the realization of several global sustainability goals within Agenda 2030 (Regeringskansliet, 2020).

The Municipality carries out mapping and remediation of contaminated areas linked to the overall goal. The Municipality is also responsible for supervising groundwater quality within its area. In addition, this goal area is managed within the framework of the Municipality's waste plan, including through measures of waste reduction and demands for increased recycling.

The Municipality will implement its action by:

- Setting requirements linked to the goal when purchasing goods and services.
- Informing people who live, work and reside in Uppsala Municipality about the need to work together for a toxin-free environment.

Finally, the Municipality will ensure the quality assurance of toxin-free construction by, among other things, setting requirements for environmental assessment systems, certifications for Sweden Green Building Council, CEEQUAL, BREEAM or the like for its own construction projects and when parcelling land.

The following milestones are linked to the overall goal *A Toxin-free Environment 2050 and Sustainable Resource Flows.*

Milestone 4:
Uppsala Municipality must reduce the presence of environmental and health-hazardous substances in procured and purchased goods, services and contracts.

Milestone 5:
Food purchased by businesses financed by Uppsala Municipality will consist of 100 per cent organic food by 2023. The climate impact will be no more than 1.25 kg of CO2e per kg of food purchased by 2030.

Milestone 6:
Uppsala Municipality's new goods with plastic content will contain only recycled or renewable plastic by 2030.

Milestone 7:
The Municipality of Uppsala will reduce its emissions of greenhouse gases from completed construction projects every year to ensure climate-neutrality by 2030. The goal refers to both the Municipality's own projects and projects which are carried out through land sales.

Overall goal – A Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 at the latest

Uppsala is to be a climate-neutral welfare municipality and a regional, national and international node for climate transition, to be achieved in harmony with Agenda 2030's overarching principle: *Leave no one behind.*

Uppsala's emissions of greenhouse gases must continue to decrease in order to achieve the overall environmental and climate goals for A Climate-Neutral Uppsala by 2030 and a Climate-Positive Uppsala by 2050 at the latest. The number of inhabitants in Uppsala is also expected to increase from 220,000 to 350,000 creating 70,000 new jobs by 2050.

Use of fossil-free energy and fossil-free transport and machinery are still important means of achieving climate-neutrality. In order to achieve this sharp reduction, major adjustments are required in most areas of society and new innovative solutions, technical and organizational.

Climate-Neutral Uppsala by 2030 implies that:

- Greenhouse gas emissions[1] will decrease at the rate required to be in line with the Paris Agreement and sustain global warming to 1.5 degrees Celsius. The reduction in Uppsala shall be 10–14 per cent per year.
- Total greenhouse gas emissions in the municipality may amount to a maximum of 28 percent of the emissions 2020[2] or 297 kilotons of CO2e by 2030.
- Net zero emissions must be achieved by 2030 at the latest. This implies that absorption of greenhouse gases (negative emissions) must amount to at least the same amount as residual emissions after the annual emission reduction of 10 to 14 per cent within the Municipality. Negative emissions cannot replace reduction of emissions, but are means of achieving climate-neutrality and climate-positivity.

[1] The emissions referred to are Uppsala's climate impact from electricity and use of heat, transport, agriculture and industrial processes and the long-distance travel of Uppsala residents. Emissions from construction and facilities are not currently included, but is an issue of priority under development.
[2] Based on a normalized value of 1,068 Kt of CO2e in 2020 and an average emission reduction rate of 12 percent per year between 2021–2030. Compared to 1990, emissions by 2030 must have decreased by 80 percent.

Examples of how negative emissions can be achieved within the Municipality's borders are:

- uptake of carbon dioxide in forests and land as a result of additional measures, in addition to the measures already implemented to reduce emission
- separation and storage of carbon dioxide from burning fuel based on biomass (known as bio-CCS)
- carbon binding in building materials, for example by using timber. [3]

A Climate-Positive Uppsala implies that:

- greenhouse gas emissions within the municipality continue to decrease in line with the carbon budget even after climate-neutrality has been achieved
- negative emissions within the municipality exceed residual greenhouse gas emissions
- the climate impact from consumption by Uppsala residents is also included in the goals, actions and follow-up.[4]

Uppsala's carbon budget implies that:

- The emission goal set consists of total greenhouse gas emissions during 2021–2100. That means 8,057 kilotons of CO2e based on an average emission reduction rate of 12 per cent per year relative to the previous year[5]
- The emission goal set must not be exceeded. If emissions are too high one year, the reduction in emissions must be compensated by being greater the following year.

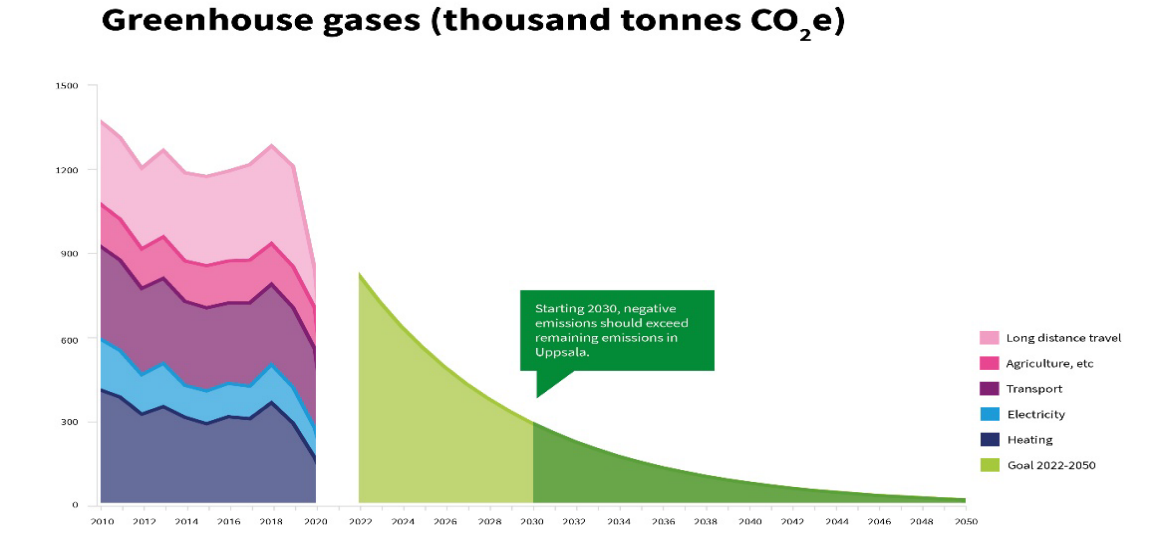

Figure 1. Greenhouse gases, one thousand tons of carbon dioxide equivalents from Uppsala Municipality. The graph shows historical emissions 2010-2019 and goals for emissions 2022-2050.

[3] From a life cycle perspective, construction using timber can contribute to significant negative emissions during the life cycle of the building, assuming sustainable harvesting from forests. However, negative emissions are limited in time because timber can be energy-recycled after the end of its useful life. Construction in timber is nevertheless considered to be an important means of achieving climate neutrality during the building's life cycle.

[4] The element of climate impact from consumption by Uppsala residents monitored today are based on national data. The goal is for the follow-up to be based on local data.

[5] The emission goal set refers to actual emissions and cannot be compensated with negative emissions. The carbon budget is based on a normal year-corrected value in 2020 and includes all greenhouse gas emissions in the municipality emissions follow-up. 'Uppsala municipality' also includes all methane and nitrous oxide emissions which are included in climate monitoring, unlike carbon budgets which are prepared according to the methodology used by the Tyndall Center and Uppsala University. The budget can be updated in September 2022 when all the hard data for 2020 emissions are available.

Within the framework of the overall goal, Uppsala Municipality contributes to international and national objectives and frameworks such as:

- The climate convention which deals with stabilizing the concentration of greenhouse gases in the atmosphere at a level which does not involve a dangerous impact of the climate system (UNFCCC, 2021) and (Naturvårdsverket, b).
- The Paris Agreement, which states that the global average temperature should be kept well below 2 degrees Celsius compared to pre-industrial levels and that efforts should be made to limit temperature increase to 1.5 degrees Celsius (UNFCCC, 2021) and (Naturvårdsverket, c).
- The United Nations Sustainable Development Goals - Agenda 2030. 17 sustainable development goals for the three dimensions of sustainable development: economic, social and environmental sustainability (FN-förbundet, u.d.).
- The United Nations goal of limiting global warming and climate-neutrality (Europeiska rådet och Europeiska unionens råd, 2021).
- Sweden's long-term climate goal to have no net emissions of greenhouse gases into the atmosphere by 2045 at the latest and to achieve negative emissions thereafter (Naturvårdsverket, d).

The following milestones link to the overall goal *Climate-Neutral Uppsala by 2030 for Climate-Positive Uppsala by 2050.*

Milestone 1:
Within Uppsala Municipality's geographical area, approximately 100 megawatts of solar energy will have been installed by the year 2030. Uppsala Municipality will ensure, where possible, that municipal properties will have solar panels on their roofs by 2025.

Milestone 2:
The Municipality's fleet of vehicles, machines and contract transportation is fossil fuel-free by 2023. Procurement contracts will be fossil fuel-free by 2027.

Milestone 3:
Uppsala Municipality will reduce its direct energy use every year through energy efficiency-measures for properties and operations to ensure climate-neutrality by 2030.

Milestone 5:
Food purchased by undertakings financed by Uppsala Municipality will consist of 100 per cent organic food by 2023. The climate impact will be no more than 1.25 kg of CO2e per kg of food purchased by 2030.

Milestone 7:
The Municipality of Uppsala will reduce its emissions of greenhouse gases from completed construction projects every year to ensure climate-neutrality by 2030. The goal refers to the Municipality's own projects and projects implemented through parcelling out land.

Overall goal – A Climate Adapted Uppsala

The goal of Uppsala Municipality's climate adaptation is for Uppsala to be a robust community adapted to the changes caused by climate change taking place today and which cannot be prevented in the future. Within the framework of the overall goals, the Municipality of Uppsala will work on adaptation to climate change.

Uppsala, like most cities and communities, is designed in such a way that the effects of climate change are often amplified. There are, for example, hard surfaces and densely populated areas which can exacerbate the effects of floods and heat waves. The climate factors which principally affect Uppsala Municipality are:

- higher temperatures with milder winters and longer periods of vegetation growth
- more heat waves and greater risk of local heat islands
- increased risk of drought
- higher precipitation and heavier cloudbursts
- increased risk of flooding and changed flows in watercourses, including in Fyrisån.

The overall management of climate adaption is regulated in the Municipality's Master Development Plan and the Environmental and Climate Programme. The former sets out the direction for climate adaptation, including the land use map. There are also a number of prioritized measures and climate adaptations with general goals for all land and water areas within the Municipality.

Apart from addressing the problem of flooding, the Municipality's climate adaptation focuses on managing an increased amount of precipitation in new developments, increased load on the stormwater system and measures for the infrastructure, especially wastewater treatment plants, all within the framework of the programme period.

Some work has been done in existing built-up areas and public health related to heat waves and local heat islands. In 2018, tree planting was carried out in the urban environment within the framework of the City Tree Year.

Uppsala Municipality's climate adaptation in the areas of natural environment, cultural environment and agriculture have only been implemented to a lesser extent during the programme period because such areas have been managed by the county administrative board.

Climate adaptation must be planned after the effects of climate change which are deemed likely when the world meets (or gets close to) the 2-degree goal. The goal of a climate-neutral Uppsala 2030 for climate-positive Uppsala by 2050 at the latest will ensure that Uppsala contributes to the world meeting the 1.5-degree goal in accordance with the Paris Agreement. Climate adaptation is based on the 2-degree goal to provide extra security. The probability of other climate scenarios will have to be considered in some cases, as well as events with extreme weather.

Several measures taken within the framework of climate adaptation can provide positive synergies within other areas, for example

- a pleasant and more attractive urban environment
- better opportunities for recreation
- cleaner air
- reduced noise
- enhanced stormwater management.

And vice versa – many measures the Municipality takes to facilitate and develop a good environment and a more attractive city also make the city better adapted to climate changes, particularly concerning action with social and ecological green values.

No milestones link to the overall goal *A Climate Adapted Uppsala*. Several goals and measures which contribute to climate adaptation and goal fulfilment are stated in a number of governing documents within Uppsala Municipality, for example the Action Programme for Nitrogen Dioxide, Uppsala Municipality's Action Plan for Air Quality for the Period 2022–2027 and the Master Development Plan 2016.

Milestones

The milestones link to the programme's overall goals for a Toxin-free Environment 2050, Sustainable Resource Flows and a Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 are described here. They are intended to stimulate rapid development to a sustainable society in general and the overall goals in particular.

Milestone 1

Within Uppsala Municipality’s geographical area, approximately 100 megawatts of solar energy will have been installed by the year 2030. Uppsala Municipality will ensure, where possible, that municipal properties have solar cells on their roofs by 2025.

Origin and purpose: Milestones are intended to increase the pace of action linked to the overall goal Climate-Neutral Uppsala by 2030 for Climate-Positive Uppsala by 2050. By increasing the expansion of Uppsala Municipality's solar energy facilities, the development of renewable energy production will be pursued.

Demarcation: The milestone refers to installed solar power in Uppsala's municipal geography. Installation of solar power plants is done where possible.

Prerequisites for implementation: This milestone means that the Municipality's undertakings and boards work for the expansion of solar energy on their own properties and that the Municipality works for development in society at large. To achieve it, all major property owners must make a systematic inventory of roofs and other possible surfaces and build a number of large facilities every year. The contributions of all partners are needed, such as homeowners, co-operative housing associations and companies that own their own property. In addition to roof surfaces, other surfaces and structure surfaces can also be used.

Milestone 2

The Municipality's fleet of vehicles, machines and contracted transportation will be fossil fuel-free by 2023. Procurement contracts will be fossil fuel-free by 2027.

Origin and purpose: The milestone must ensure that action linked to the comprehensive goal of Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 is accelerated by accelerating the transition to renewable fuels and propellants.

Demarcation: The milestone refers to Uppsala Municipality's operations and procured transport and contracts with a focus on vehicles and fuel.

Prerequisites for implementation: The milestone is supported by several governing documents relating to the transport system as a whole, primarily through descriptions in the Master Development Plan, Energy Programme 2050, and in programmes and the Action Plan for Mobility and Traffic. In addition, the Municipality's efforts for lower transport-related emissions of greenhouse gases interface with the Municipality's action programmes for high quality air and lower noise from traffic.

As the Municipality takes the lead with an earlier goal date for its own activities and higher ambitions, Uppsala can become an attractive place for innovation and business development in the transport and fuel sector, focusing the energy and ideas needed to reach the goal. A key success factor is collaboration and joint development ambitions with the local business community, the region and the university and coordination for setting requirements for fossil fuel-free transport.

Several factors affect the possibilities of achieving the goal, such as the availability of and price trends for renewable fuels, as well as the development and maturity of the vehicle and fuel industry.

Milestone 3

Uppsala Municipality will reduce its direct energy use every year through energy efficiency initiatives for properties, and activities to ensure climate-neutrality by 2030.

Origin and purpose: This milestone will ensure accelerated action linked to the overall goal of Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 with a focus on energy efficiency. It will reduce the need for energy used such as electricity and district heating in the Municipality's operations.

Demarcation: The milestone concerns Uppsala Municipality's operations. The use of district heating and electricity and the purchase of fuel for heating are included.

Prerequisites for implementation: In terms of population, the municipality is growing. Therefore, new business premises and homes are being built, which means growing demand for energy. The goal assumes that all new construction within the Municipality's operations is built with the goal of the lowest possible energy use in operation. In addition, energy efficiency during renovation is a key factor linked to realization of the goal.

Milestone 4

Uppsala Municipality must reduce the presence of environmentally and health-hazardous substances in procured and purchased goods, services and contracts.

Origin and purpose: The milestone will ensure acceleration of action linked to the overall goals A Toxin-free Environment 2050 and Sustainable Resource Flows, focusing on phasing out goods containing substances hazardous to health and the environment.

Demarcation: The milestone refers to Uppsala Municipality's operations.

Prerequisites for implementation: There are a number of systems and labels for environmental assessment of goods, materials and chemical products on the market in use. For example, in the construction industry there is Byggvarubedömningen the Miljövarubedömningen and BASTA and Sunda Hus at product level. In addition, there are various environmental labelling schemes for entire buildings such as Svanen or Sweden Green Building Council.

For services and goods in general there are labels such as Svanen (Nordic Ecolabel), KRAV and Bra miljöval. Some of them have several levels of eco-labelling and different ways of carrying out assessments. It requires readiness to handle several different assessment systems related to environmental and health hazards in parallel.

Milestone 5

Food purchased by undertakings financed by Uppsala Municipality will consist of 100 per cent organic food by 2023. The climate impact will be no more than 1.25 kg of CO2e per kg of food purchased by 2030.

Origin and purpose: The milestone will ensure that action linked to the overall goals of A Toxin-free Environment 2050, Sustainable Resource Flows and A Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050 at the latest is accelerated, with focus on the purchase of food.

Demarcation: The milestone refers to Uppsala Municipality's operations. The goal includes the Municipality's own purchases and contracted operations.

Prerequisites for implementation: The goal assumes that the Municipality's operations demand organic food and food with a low climate impact when purchasing and procurement within the respective operation and area, from foods and ready meals to pastries.

A challenge linked to the goal of 100 per cent organic is that there must be a sufficiently large range of organic foods on the market. The range of foods is continuously increasing but is still relatively small compared to conventionally produced foods. Experience from other municipalities shows that when large operators demand organic products, the pace of change increases. Uppsala Municipality will influence supply through clear goals and strong demand.

Systematic follow-up is a prerequisite for implementing the goal of low climate impact from food purchases, both for the Municipality's own purchases and contracted operations. Joint development will be needed with the Municipality's suppliers. Another prerequisite for reaching the goal is interaction with the goal of achieving 100 per cent organic food and a maximum of 1.25 kg of CO2e per kg of purchased food. Purchasing plant-based food to a greater extent generally lowers the climate footprint.

Costs will also often be lower. This in turn makes it possible to reach the goal linked to organic foods, where the price of some foods can be higher.

Milestone 6

Uppsala Municipality's new goods with plastic content will contain only recycled or renewable plastic by 2030.

Origin and purpose: The milestone must ensure that action is accelerated linked to the overall goal of A Toxin-free Environment 2050 and Sustainable Resource Flows. By reducing the use of plastic products made from fossil raw materials, such as oil and natural gas, and replacing them with products produced from recycled or renewable materials, the impact on the climate is reduced when using energy recovery for the production of district heating.

Demarcation: The milestone refers to Uppsala Municipality's operations. The goal includes the Municipality's own purchases and contracted operations.

Prerequisites for implementation: The milestone is connected to the Municipality's waste management plan, and milestone 4. This makes it possible for operators to work together to reach the goal by 2030.

However, there is a risk that by 2030 there will be a lack of alternatives for certain special plastics produced from crude oil. In such cases, the Municipality will support the development of replacement alternatives. Development of operations within Uppsala Municipality may also be needed to enable the phasing out and replacement of plastic produced from crude oil.

Milestone 7

The Municipality of Uppsala will reduce its emissions of greenhouse gases from completed construction projects every year to ensure climate-neutrality by 2030. The goal refers to both the Municipality's own projects and projects which are carried out through parcelling out land.

Origin and purpose: The milestone will ensure that action linked to the overall goals of A Toxin-free Environment 2050, Sustainable Resource Flows and Climate-Neutral Uppsala by 2030 for a Climate-Positive Uppsala by 2050, all focusing on Uppsala's municipal building and construction projects.

Demarcation: The milestone refers to the Municipality's own and parcelled-out land building and construction projects, new construction, as well as renovation and extensions.

Prerequisites for implementation: The milestone is linked to milestone 2, focusing on reduced greenhouse gas emissions from contracted and own transport and milestone 3, focusing on energy efficiency and reduced use of energy. Furthermore, it’s linked to milestone 4 with the aim of A Toxin-free Environment 2050 and Sustainable Resource Flows.

To reduce climate impact in the building and construction process, development of all steps from planning, design of constructions and choice of materials to work on the construction site is required. Important elements are:

- increased amount of timber buildings
- reduced quantities of concrete
- use of concrete with lower impact on climate
- increased reuse in construction
- climate calculations at an early stage for all construction and civil engineering projects.

Early calculation is a means of making climate emissions visible and to choose solutions which will reduce the climate impact during the entire period of the project based on the original calculation.

Follow-up

The Municipal Executive Board is responsible for the program and thus has the overall responsibility for following up and evaluating the program. All boards and municipal company boards must annually report the results of their work in fulfilling the set objectives to the Municipal Executive Board. The Municipal Executive Board annually follows up the program and the action plan in the regular routine for programs. The Municipal Executive Board can then revise the action plan if it deems it necessary. The revision must take place through a joint preparation.

Related documents

- Waste Management Plan for Uppsala Municipality 2014–2022
- Energy Programme 2050
- Rural Programme for Uppsala Municipality
- Enterprise Programme
- Policy for Sustainable Development
- Mobility and Traffic Programme
- Regional Development Strategy and Agenda 20230 – Strategy for Uppsala County
- Water Programme for Uppsala Municipality
- Action Programme for Nitrogen Dioxides - Uppsala Municipality's Action Plan for Air Quality for the Period 2022–2027
- Master Development Plan 2016

References

Boverket. (2019). *Exempel på gröna tak*. Hämtat från https://www.boverket.se/sv/PBL-kunskapsbanken/teman/ekosystemtjanster/praktiken/grona/grona-tak/exempel-pa-grona-tak/ december 2021

Ceurstemont, S. (2020). *Biobaserade? Återvinningsbara? Biologiskt nedbrytbara? Så fungerar de hållbara plasterna*. Hämtat från Neste: https://www.neste.se/om-neste/nyheter-inspiration/artiklar/sa-fungerar-de-hallbara-plasterna december 2021

European Council. (2021). *5 facts about the EU's goal of climate-neutrality.* Hämtat från https://www.consilium.europa.eu/en/5-facts-eu-climate-neutrality/ december 2021

Europeiska rådet och Europeiska unionens råd. (2021). *Klimatförändringarna: vad gör EU?* Hämtat från https://www.consilium.europa.eu/sv/policies/climate-change/ december 2021

FN-förbundet. (u.d.). *Globala målen för hållbar utveckling*. Hämtat från https://fn.se/globala-malen-for-hallbar-utveckling/ december 2021

Naturskyddsföreningen. (2014). *Allt du (inte) vill veta om plast*. Hämtat från https://old.naturskyddsforeningen.se/sites/default/files/dokument-media/rapporter/Plastrapporten.pdf december 2021

Naturvårdsverket. (a). *Mikroplast*. Hämtat från https://www.naturvardsverket.se/amnesomraden/plast/om-plast2/mikroplast december 2021

Naturvårdsverket. (b). *Klimatkonventionen och förhandlingsarbete*. Hämtat från https://www.naturvardsverket.se/amnesomraden/klimatomstallningen/det-globala-klimatarbetet/klimatkonventionen-och-forhandlingsarbete/ december 2021

Naturvårdsverket. (c). *Parisavtalet*. Hämtat från https://www.naturvardsverket.se/parisavtalet december 2021

Naturvårdsverket. (d). *Sveriges klimatmål och klimatpolitiska ramverk*. Hämtat från https://www.naturvardsverket.se/amnesomraden/klimatomstallningen/sveriges-klimatarbete/sveriges-klimatmal-och-klimatpolitiska-ramverk/ december 2021

Naturvårdsverket. (u.d.). *Sveriges klimatmål och klimatpolitiska ramverk*. Hämtat från https://www.naturvardsverket.se/amnesomraden/klimatomstallningen/sveriges-klimatarbete/sveriges-klimatmal-och-klimatpolitiska-ramverk/ december 2021

Regeringskansliet. (2020). *Sverige ställer om till en cirkulär ekonomi*. Hämtat från https://www.regeringen.se/pressmeddelanden/2020/07/sverige-staller-om-till-en-cirkular-ekonomi/ december 2021

RUS. (2021). *Uppsala län*. Hämtat från https://www.rus.se/regional-arlig-uppfoljning/uppsala-lan/ december 2021

Sveriges miljömål. (2017). *Giftfri miljö - saker kommuner kan göra*. Hämtat från https://www.sverigesmiljomal.se/stod-och-rad-i-miljoarbetet/7-saker-kommuner-kan-gora---giftfri-miljo/ december 2021

Sveriges Miljömål. (2021). *Giftfri miljö*. Hämtat från https://www.sverigesmiljomal.se/miljomalen/giftfri-miljo/ december 2021

UNFCCC. (2021). Hämtat från United Nations Climate Change: https://unfccc.int/ december 2021

UNFCCC. (2021). *The Paris Agreement*. Hämtat från https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement december 2021

Uppsala universitet. (2020). *Sveriges klimatmål långt ifrån tillräckliga för att klara Parisavtalet.* Hämtat från https://www.uu.se/press/pressmeddelande/?id=5102&typ=pm december 2021

Viable Cities. (2021). *Klimatkontrakt 2030*. Hämtat från https://www.uppsala.se/contentassets/c54606aacb764b168c78bcaf09a69b6e/klimatkontrakt_2030_uppsala_swedish_combined.pdf december 2021

WRI, C40 Cities, ICLEI. (2021). *Global Protocol for Community-Scale Greenhouse Gas Inventories.* Hämtat från https://ghgprotocol.org/sites/default/files/standards/GPC_Full_MASTER_RW_v7.pdf december 2021

WWF. (2019). *Ekonomin och planetens gränser*. Hämtat från https://www.wwf.se/ekonomi-och-finans/inom-planetens-granser/ december 2021 december 2021

Appendix – definitions and terms

Term/Definition	Explanation
Circular economy	In a circular economy, everything produced is used by reusing and recycling as long as possible instead of discarding useful products and purchasing new ones.
Direct	A direct activity is one carried out under the Municipality. Examples of direct use of energy are, for example, energy used for heating and electricity. In the same way, direct procurement is made to carry out an activity.
Contract	Contracting refers to works, construction and operating contracts.
Renewable fuels and propellants	Renewable fuels and propellants are defined bioethanol (ED95/E85/75), biogas, biodiesel (HVO100, RME100 or other FAME100), electricity, hydrogen or other fuels and propellants made from renewable raw materials.
Renewable plastic	Renewable plastics are plastics which have been manufactured in whole or in part from renewable materials which have been extracted from biomass. Renewable raw materials are defined as resources which are constantly renewed. A few common raw materials are stalks from corn and sugarcane and cellulose, but it is also becoming increasingly common using various oils and fats from renewable sources (Ceurstemont, 2020).
Fossil-free fuel	Fossil-free fuel energy is derived from fossil-free energy sources. Fossil-free fuel and renewable energy are defined as bioethanol (ED95/E85/75), biogas, biodiesel (HVO100, RME100 or other FAME100), electricity produced with fossil-free fuels, hydrogen or other fuels made from renewable raw materials.
Climate adaptation	Climate adaptation implies making preparations and adapting society for the challenges which increased global warming is leading to.
Climate-neutrality	Uppsala Municipality uses the EU Commission's definition of climate-neutrality for cities (European Council, 2021). Climate-neutrality is achieved when annual greenhouse gas emissions have ceased, or is managed with carbon capture and/or carbon storage (WRI, C40 Cities, ICLEI, 2021) In general, climate-neutrality means that the total climate impact from a certain activity, service or product has a net sum of zero. To ensure the climate-neutrality of a service or product, the life cycle of the entire product with materials must be considered. See also 'net zero emissions'.
Term/Definition	**Explanation**
Climate-positive	There is no independent standard stating how businesses or products can become climate-positive at this time. However, there is a standard for climate-neutrality: ISO 14021:2017, or the specification PAS 2060:2014, with associated references. In order for a product, activity or municipality to be climate-positive, it must be climate-neutral and climate compensate for additional emissions of greenhouse gases that, despite neutrality, are

	released in connection with an activity or product in the entire value chain.
Carbon budget	A carbon budget is total emission set for carbon dioxide. There is a strong connection between a global carbon budget and the long-term global average temperature. A carbon budget is based on cumulative emissions and which emission set, for example, a country, a municipality or an organization needs to stay within, in order to meet the global climate goals. The climate budget thus specifies goals and shows the speed at which emissions need to be reduced.
Climate transition	The social change that needs to be implemented in order to limit the increase of the earth's temperature to below two degrees, preferably below 1.5 degrees.
Machinery	Machinery is a set of machines intended for individual use in, for example, industry, earthwork or agriculture.
Net zero emissions	According to Sweden's long-term climate goals, the country will achieve net zero emissions by 2045 through reducing emissions by at least 85 percent from the 1990 level. Remaining emissions must be covered by supplementary measures. See also climate-neutral.
Heat islands	Local heat islands are areas in a city or urban area which are significantly warmer than surrounding land areas. The emergence of heat islands is due, among other things, to the fact that cities and other urban areas have more hard surfaces which absorb a large part of the solar radiation instead of reflecting it. This causes the local temperature to be higher. The difference in temperature between city and rural centre and surrounding land can be over 10 degrees Celsius.