



Climate City Contract 2030

Betweeen Karlstad municipality, the Swedish Energy Agency, Vinnova, Formas, the Swedish Agency for Economic and Regional Growth, the Swedish Transport Administration, the Swedish Environmental Protection Agency and Viable Cities.

VERSION 2023



VINNOVA FORMAS







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Climate City Contract 2030

Major changes are needed throughout society in order to meet climate goals and save our planet. Doing things the way we have always done them is no longer possible, we have to work in entirely new ways. Together, we are building a movement involving many societal stakeholders in order to achieve our mission: Climate neutral cities by 2030, offering a good life for all within the boundaries of our planet.

Climate City Contract 2030 is a tool that will help us to achieve this. This is a long-term commitment ensuring a developed cooperation between cities and the government level. The starting point for the work is that an increasing number of Swedish municipalities and communities are bringing together a wide range of stakeholders and mobilising at many levels – locally, regionally, nationally and internationally – to pave the way for a faster transition to climate neutrality and sustainability in Sweden, Europe and the world. The cities and agencies working on Climate City Contract 2030 with Viable Cities are pioneers, and thus their ambition is to pave the way for a broader transition involving many more people.

Climate City Contract 2030 is a tool for collaboration in respect of governance and is used to work together beyond the direct control of stakeholders in order to realise a common goal, and it represents a systemic shift towards a holistic approach in public administration

Climate City Contract 2030 provides a context as a catalyst for new, innovative forms of cooperation between cities, the business sector, the academic community, research institutes and civil society. This strengthens the conditions for mobilising and driving joint development in a present and a society that are becoming increasingly complex. Climate City Contract 2030 meets a need for developed governance, a governance process (mobilising on multiple levels) for the climate transition. Climate City Contract 2030 is a way of working to enable stakeholders at different levels of governance to go beyond what they are directly able to control as individual stakeholders in order to realise goals and missions that involve systemic shifts. In particular, it involves moving from piecemeal operations to a holistic approach.

Together, we are building capacity step by step so that we can speed up the transition.

1. Purpose of the Climate City Contract 2030

The purpose of this Climate City Contract is to accelerate the climate transition in cities within the framework of the 2030 Agenda while also contributing to the continued recovery and evolution of the Swedish economy at a time shaped by a number of several interlinked crises.

The Climate City Contract expresses the parties' intention to raise the level of ambition in the field of sustainable urban development and climate transition. The Climate City Contract also places Sweden and Swedish cities in a favourable position to act as international pioneers in the urban climate transition. This is to be achieved by means of mutual, long-term commitments to initiatives by the signatory national agencies, the Viable Cities innovation programme and the municipality.

2. Parties

Parties to the Climate City Contract 2030 are:

- Karlstad municipality.
- The agencies: Swedish Energy Agency, Swedish Governmental Agency for Innovation Systems (Vinnova), Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), Swedish Agency for Economic and Regional Growth, Swedish Transport Administration and Swedish Environmental Protection Agency.
- The Viable Cities strategic innovation programme¹.

3. Municipal commitments

Karlstad municipality intends to be a pioneer in the transition to climate-neutral cities and municipalities. Some of the commitments that are expected to have the greatest impact on the climate transition, and that are planned for implementation in 2024, are:

• Application of new approaches and structures because a new governance model for the municipal group is coming into force. This involves enhanced ambitions in respect of environmental sustainability.

¹ Viable Cities is a strategic innovation program funded by the Swedish Energy Agency, Vinnova and Formas. The program runs until 2030 and has approximately 130 memberorganisations. Hostorganisation is KTH.



- Implementation of an action plan on the basis of the recently adopted Energy and Climate Plan
- Implementation of measures on the basis of the communication strategy developed for Karlstad's climate transition
- An increase in the number of Climate City Contracts signed with citizens, companies and organisations
- Implementation of climate and environment training for both elected representatives and employees on the basis of a training concept devised.
- Commencement of implementation of a digitalisation and innovation plan, with the goal of achieving a smart and sustainable city, in line with the EU's Twin Transition Strategy

3.1. Municipal climate goals

The Karlstad municipal council has defined the overall goal that "Karlstad municipality's operations shall be fossil-free by 2026, and the geographical region of Karlstad shall be climate-neutral by 2030". This goal covers the entire municipal group, which means that all councils and municipal companies within the city hall group have to contribute towards the goal.

Karlstad municipality has had a climate goal for many years, but this goal was tightened up in the approach to 2023. The previous wording was "Karlstad shall be a fossil-free, climate-smart municipality". The new wording means that there are two parts to the goal, maintaining both an internal and an external perspective on climate transition. Moreover, this is now the only goal defined by the municipal council with a fixed deadline, and the timeframe is tight.

This goal is described further in the Strategic Plan:

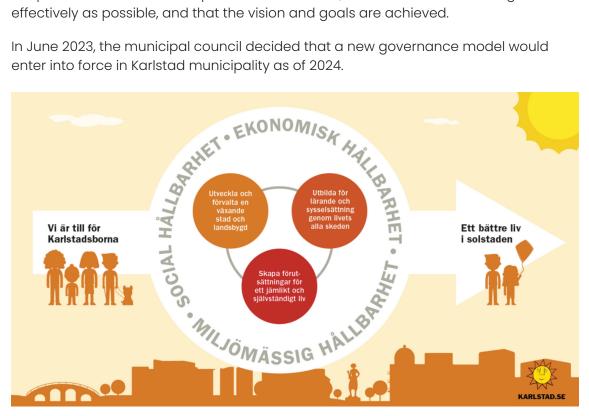
"The green transition is taking place here and now. We need to enhance our environmental and climate ambitions if we are to create a sustainable municipality. Environmental sustainability must guide everything we do. Karlstad shall be an innovative municipality that uses smart solutions to work with climate change adaptation as well as reducing our climate impact. The climate transition shall be just. Everyone in society needs to make the transition away from fossil fuels, change their travel habits and consumption patterns and reinforce the resilience of society."

The municipal council decided in 2017 that the Sustainable Development Goals as part of the 2030 Agenda should be included in Karlstad's internal goal management. This link was reinforced still further by the new governance model adopted in June 2023. As part of the 2030 Agenda, the main climate goal is Goal 13: Climate action.

3.2. Strategy

The municipality's general governance model has a major impact on opportunities to act to bring about climate transition as a governance model includes key principles for operational management, quality management and financial management. The key processes for planning and monitoring activities, with requirements for coordination and joint strategies and priorities, are shaped on the basis of these principles.

A governance model describes what has been decided and what has to be done; how the organisation is managed and controlled, therefore. It has to ensure that the political will makes an impact on the activities, that tax funds are managed as effectively as possible, and that the vision and goals are achieved.



In June 2023, the municipal council decided that a new governance model would enter into force in Karlstad municipality as of 2024.

Figure 1. The governance model in the Karlstad municipal group from 2024 (Swedish).

The reason why a new governance model was deemed necessary can be summed up in three points that describe the desired shift:

- Create a clearer structure that translates political will
- Develop cross-border cooperation in process areas where the whole is greater than the parts
- Develop trust-based governance where we avoid micromanagement

The new governance model creates better conditions for Karlstad municipality in a number of ways, allowing it to increase the pace of the climate transition.

One of the biggest changes compared to the previous governance model is that the three sustainability dimensions are now emphasised even more clearly. According to the decision, the sustainability dimensions should permeate all activities, and it is also obvious that they have to be taken into consideration in everything we do. The Sustainable Development Goals of the 2030 Agenda have also been given a more central role in governance as a result.

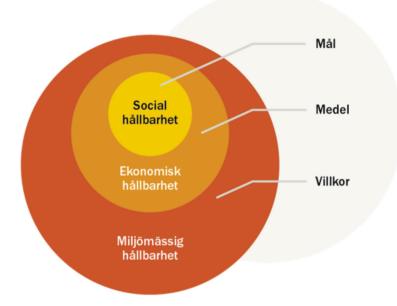


Figure 2. The relationship between the three sustainability dimensions according to the municipality's new governance model (Swedish).

The governance model also includes what Karlstad municipality refers to as a strategic plan. This includes the politically adopted goals and the political will for the next budgetary period. The 2024–2026 strategic plan includes enhanced ambitions in respect of the environment and climate, as is also made clear by the stricter climate goal described in section 3.1 above. The goal is measured, monitored and analysed using defined indicators.

New approaches and procedures were formulated in the autumn of 2023 due to the decision to implement a new governance model. One of the new aspects is the appointment of a goal coordinator for each politically adopted goal. They have to lead a special team of experts from administrations and companies, who will be tasked with monitoring developments in the target area and collaborating to bring about joint development in order to enhance achievement of the goals. This new structure will be a plus point when it comes to the chances of meeting the municipality's climate goals.

The governance model also includes structures for decisions, application and monitoring of policy documents. The importance of working towards greater environmental sustainability is highlighted in a number of group-wide policy documents which have been adopted by the municipal council. Some of the most prominent in this field are presented below.

3.2.1 Comprehensive plan

The municipality's current comprehensive plan was adopted in 2012. The growth rate has been high in Karlstad, and the land identified has now been projected or developed. This is why the municipality has compiled a proposal for a new comprehensive plan that will show how Karlstad will develop up to 2050. The new comprehensive plan is now at the review phase, but there is no estimated schedule for its adoption as yet. The direction for the Karlstad of the future is summarised in eight priority areas, three of which specifically point towards greater environmental sustainability:

- Construction must be climate-smart
- Eco-friendly passenger travel and freight transport
- More cohesive districts

3.2.2 Energy and Climate Plan

The municipal council made a decision on an Energy and Climate Plan for the municipal group in May 2023, including an action plan for measures. This plan is the first of its kind, and it will provide a very important tool for climate transition efforts.

The Energy and Climate Plan highlights the common direction and the opportunities and challenges that need to be addressed by the municipality in terms of energy and climate. The purpose of the plan is to make it possible for Karlstad to grow sustainably, while also securing the energy supply for the municipality in the short and long term. According to the plan, a robust and sustainable energy supply will allow the municipality to contribute to local, regional and national climate goals and the Sustainable Development Goals of the 2030 Agenda.

The plan covers the municipality's energy system, including transport, housing and businesses, and is based on a broad external and system perspective. A central manager has been appointed for the document in order to ensure implementation and compliance, and a working group made up of representatives from relevant organisations is to meet regularly in order to coordinate actions and monitor progress.

3.2.3 Traffic plan

When the municipality is planning for the transport system of the future, its objective is to ensure good accessibility, excellent road safety and long-term sustainability. Good public transport, walking and cycling routes are important. There is an established traffic plan (2014) in order to ensure this.

The traffic plan states that good accessibility and efficiency, excellent safety and enormous respect for health and the environment form a basis for achieving a traffic environment sustainable in the long term that supports the desired development of Karlstad. The measures in the traffic plan aim to support the growth of Karlstad in a sustainable way and lead to achievement of established environmental goals. The traffic plan highlights the value of robust measures that are capable of addressing both today's challenges and future increases in overall travel.

The traffic plan is currently being revised and is expected to be completed in 2024.

3.2.4 Waste plan

The aim of the municipal waste plan 2024–2027 is to steer waste management towards a sustainable society and circular waste flows. The waste plan is made up of four development areas, each with its own overall and long-term goal. Every development area has about 40 measures, many of which are linked to the climate challenge: increasing recycling, increasing the percentage of battery or fuel cellpowered vehicles for waste management and implementing measures to reduce food waste, for example.

3.2.5 Stormwater plan

The municipality's stormwater plan, which was adopted in 2022, aims to achieve stormwater management sustainable in the long term that takes into account water quality, capacity and the urban environment. The plan and associated guidelines and handbook clarify which administration/unit is responsible for what in respect of stormwater and cloudbursts.

3.3. Organisation and management

If the goal of a climate-neutral Karlstad is to be achieved by 2030, the municipality must have an organisation and management that can systematically steer and lead towards the goal in an explicit manner.

3.3.1 Municipal council

In Karlstad, the municipal council defines the goal and ambition levels of the municipal group, which includes overall environmental goals and policy documents in the area, in the form of plans and policies as described in section 3.2 above.

3.3.2 Municipal board

The municipal board bears overall strategic responsibility for environmental issues. This means that the municipal board is responsible for management, governance and monitoring in accordance with the municipal council's adopted goals and policy documents.

According to Chapter 6, section 1 of the Local Government Act (2017:725), the municipal board has to lead and coordinate the administration of the municipality's affairs and supervise the activities of other committees, municipal companies and municipal associations. This is specified in the municipality's Guideline for the Municipal Board's Supervisory Duties. The municipal board's supervisory duties include:

- standing responsible for ensuring that Karlstad municipal group operations are conducted efficiently and in accordance with policy, goals and regulations and within the adopted financial framework
- issuing instructions to the committees for preparation of their draft financial and operational plans
- issuing instructions for the monitoring of financial and operational plans
- evaluating the group's organisation and governance model and suggesting corrections, if necessary

According to the municipal board's regulations, when practising management and coordination, the municipal board must pay particular attention to ensuring that the municipality's overall goals on the basis of economic, social and environmental sustainability are met.

The municipal management office ensures that sustainability perspectives are integrated into the general governance model, which is concretised in the governance of the joint processes for the planning and monitoring of activities.

3.3.3 Environment committee

The environmental strategy tasks within the group have been managed by the environment committee since 2013. Essentially, this involves responsibility for pursuing and coordinating environmental issues in Karlstad. Group cooperation is ensured by means of the internal network of the strategic environmental officials group with its steering committee.

3.3.4 Commitments in 2024 – operational plan

The municipality is planning a number of measures in various areas of activity over the next few years within the framework of Climate-Neutral Karlstad 2030. These measures are divided into four different work packages (API – AP4) in accordance with the municipality's project plan for Climate-Neutral Karlstad 2030.

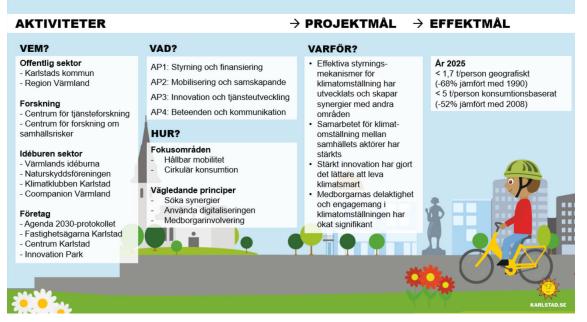


Figure 3. Project plan, Climate-Neutral Karlstad 2030(Swedish).

- API: Governance and funding
- AP2: Mobilisation and co-creation
- AP3: Innovation and service development
- AP4: Behaviour and communication

Development of the four work packages is being coordinated by overall project managers, who are also ensuring coordination with external partners. The key decisions, initiatives and actions of relevance for the coming year are summarised below.

Overall goal management and operational management

Karlstad municipal council has issued a number of assignments with a bearing on environmental sustainability and the opportunity to achieve climate neutrality. These are addressed within the framework of the 2024 operational plan, and some of the assignments expected to have a particularly great impact are:

- Implementation of measures within the framework of the Energy and Climate Plan.
- Implementation of measures on the basis of the communication strategy developed for Karlstad's climate transition.
- Revision of the group's traffic plan and cycling plan.

- An increase in the number of Climate City Contracts signed with citizens, companies and organisations within the framework of the 2030 Agenda Protocol and Viable Cities.
- Implementation of climate and environment training for both elected representatives and employees on the basis of a training concept devised.
- Completion of the investigation of the internal transport organisation and decisions on measures.
- Implementation of the planned restructuring of the municipal management office with a view to reinforcing strategic capacity, focusing on the three sustainability dimensions.

The municipality's Energy and Climate Plan is accompanied by an established action plan containing measures that are to be implemented in the next few years. The first measure in the action plan is very important for continued work as part of Climate-Neutral Karlstad 2030:

"Produce documentation and proposed measures that clarify what is meant by Karlstad having no adverse impact on climate by 2030, and that the municipal group's operations must be fossil-free"

The aim, therefore, is to clarify the municipality's overall climate goals. Work has begun and is set to continue throughout 2024. The climate study conducted in 2020 provides an important foundation for this work. The report demonstrates the challenges faced by the municipality on its way to becoming fossil-free within a few decades and the potential ways of achieving this. Both geographical and consumption-based perspectives on emissions are included in the study, which also calculates Karlstad's emissions allowance. Now that the slightly reworded climate goal has to be clarified, and linked to an updated climate budget as well, the foundation is in place for correct focusing of further climate efforts. This will provide an important tool for coordinating initiatives and providing a basis for communication.

The municipality has also made a decision to sign an Environmental Agreement, as it is known, with the Värmland County Administrative Board. The County Administrative Board is tasked with coordinating regional efforts to achieve the Swedish environmental goals, and the Environmental Agreements are one of the tools used. Karlstad municipality has made a decision to cooperate with a number of stakeholders in the county throughout the 2022–2025 programme period. This collaboration will take place in six priority action areas: "Infrastructure for renewable fuels and rechargeable vehicles" and "Urban planning for renewable energy" are of particular interest in terms of climate transition.

Karlstad municipality is also a signatory to the government's Fossil Free Sweden initiative.

The municipal council has made a decision to allocate SEK 110 million for the 2022–2025 period in order to implement initiatives to reduce climate emissions. The Environment Committee and the Technical and Property Committee, together with the municipal board, are tasked with investigating how best to use these funds to provide the greatest possible climate benefit, thereby helping the municipality to meet its climate budget.

3.4. Collaboration with the business sector, civil society, the academic community and citizens

Long-term and proactive collaboration between residents, businesses and the academic community is required in order meet the major challenge of making the transition to a climate-neutral Karlstad.

Since 2019, Karlstad has had a political mandate to cooperate with companies and organisations in a 2030 Agenda Protocol. The aim of this is to ensure there is structured collaboration between companies, organisations and the municipality in joint efforts towards the Sustainable Development Goals. Initially, the work included the biggest employers in the municipality. A decision was made in 2022 to ensure that the 2030 Agenda Protocol will play more of a role in Karlstad's climate transition. In 2023, therefore, local climate contracts for companies and organisations have been launched, with about 20 companies and organisations expressing an interest.

Karlstad has also assisted with the innovation of a large number of new products and companies thanks to its cooperation with stakeholders in the forest bioeconomy. In the most specific terms, this has involved us financially supporting the Sting bioeconomy incubator for the past five years. This incubator has now been established in Värmland and created a three-stage model analysing the business concept for the new products. The results are very good and there are greater opportunities for commercialisation. A number of them are based on fibre from wood biomass, but digital products and services have also been developed.

Work also continued in 2023 on Industrial Urban Symbiosis (IUC), where the municipality is facilitating a network of companies that aim to explore opportunities to share resources with one another. These are productive enterprises with side streams that can be used, or are already being used but can be expanded/improved upon, within the company or by other companies.

Another initiative in 2023 involves the newly launched Laddbolaget AB, where LBC frakt i Värmland and Ok Värmland, together with the municipality, are launching a joint

initiative to create six fast chargers for heavy transport with the help of the Klimatklivet initiative.

The municipality is also cooperating with the business sector through Karlstads centrumförening, shopping centres and a network of second-hand retailers that was initiated by the municipality. A number of activities are organised annually under the slogan "Global Karlstad" to encourage residents of Karlstad to live in more sustainable ways, and to make little choices that all play a part in the big picture. A round of second-hand sales will be organised in autumn 2023, with over 30 shops participating. Moreover, a circular pop-up gallery had its premiere at the Karlstads centrumgalleria shopping centre on 28 October, and all local companies and stakeholders were invited to display the circular goods and services of the future. More than 40 organisations are currently represented in the Pop-Up Roundtable.

Karlstad is also the first Swedish city to launch a student climate council, which focuses on highlighting the voices of children and young people on environmental and climate issues. In 2023, a student democracy workshop was held for students in Years Four to Six from all municipal primary schools, where they came up with 967 suggestions for how Karlstad could become more eco-friendly and climate-smart. 60 of these suggestions have been submitted to the municipal council and distributed to the relevant administration for processing. This is a way of highlighting the perspectives of children and young people, making their voices heard and making room for their ideas and solutions. All staff at the primary school also received a joint knowledge base on the climate challenge.

Karlstad municipality is also developing a collaboration with Karlstad University. The world-leading Service Research Center and the Centre for Societal Risk Research are particularly important partners in terms of climate action. In late 2022, a new position was created at the municipal management office for a researcher and a municipal doctoral student in political science.

This position is a collaboration between the municipality and Karlstad University. The objective of the newly created position is to reinforce the municipality's ability to lead and manage the growing city in the stress field between growth and sustainability.

Procurement is an area in which the municipality works in partnership with the business sector on a daily basis. The municipality's public procurement procedures aim to contribute to efficient, commercial, legally secure and sustainable purchases that help enhance achievement of goals. Using a strategic purchasing process as a tool, the municipality will be working on accelerating its sustainability work in procurement procedures in order to reduce the climate-impacting emissions linked to our purchases. The municipality also has experience of working with a Demand Accelerator linked to procurement. This is where the municipality works together

with Compare and Vinnova to procure development contracts with a number of companies in order to develop a product or service that does not exist as yet.

3.5. Climate investment plan

Karlstad municipality has procured system support (Svalna) for visualisation of the climate impact of all the municipal organisation's purchases of goods and services. This will form the basis for a pilot version of the Climate Investment Plan. The results of the climate calculations were submitted in the autumn of 2023 (see the illustration below).



Figure 4. The municipal organisation's emissions in 2022 (Swedish).

Emissions from food, energy and transport were monitored internally before, but other areas such as emissions from buildings and services have not been monitored in a systematic manner. Svalna has therefore provided a comprehensive analysis of the current situation in respect of emissions and will provide a better foundation for guiding decisions by the municipal management. Svalna's results also make it possible to compile a trend forecast of how the situation in respect of emissions will develop up to 2030, which will make it possible to develop a "business-asusual" scenario. Based on Svalna's climate calculations, and linked to the group's operational and planning processes, work is also currently in progress on producing an emissions budget linked to the municipality's climate goals. Besides the fact that an emissions budget is more closely aligned with climate research, the goal being to limit the entire volume of emissions accumulating over time, a budget of this kind will make for better governance and monitoring of Karlstad municipality's climate goals.

Hence the initial work on the Climate Investment Plan has focused on performing an analysis of the situation in respect of emissions and creating more of an understanding of the sectors with the highest emissions and the action areas that could lead to the greatest emission reductions. A package of measures will be developed in a next step that includes a more precise estimate of potential emission reductions and the socio-economic effects these may have. The plan is for the technical and property administration, which accounts for about 60 per cent of all emissions within the municipal organisation, to serve as a test bed. Testing the implementation of a Climate Investment Plan in an individual administration will allow useful lessons to be learned that will provide more of an understanding of the opportunities and challenges involved in scaling up a Climate Investment Plan that covers the entire Karlstad municipality and its relevant stakeholders. Development of a more comprehensive Climate Investment Plan of this nature is planned to take place after an administration-specific plan has been tested and evaluated.

3.6. Digital support for implementation

The twin transition strategy is expressed clearly in Karlstad, which has lofty ambitions in terms of climate and sustainability as well as digitalisation and innovation. The opportunities offered by digitalisation are actively used to reduce climate impact and make improvements for citizens and businesses.

A number of different tools are used at present to reduce consumption-based emissions, such as the Smart Map, which provides a guide to circular consumption, a cutting-edge solar map developed by Karlstad municipality, Karlstads Energi AB and KTH Royal Institute of Technology, precise calculation tools for monitoring the climate impact of food purchases (developed with the assistance of RISE), and also a general calculation and visualisation of the municipal organisation's emissions (Svalna CIS).

The calculations of consumption-based emissions will also be visualised in the urban space and online in 2024 as part of a broad PR campaign.

Karlstad municipality is also at the cutting edge of development when it comes to using digital tools for dialogue with citizens, particularly through social media. Karlstad has 41,000 followers on Facebook, and it was ranked second among the 284 municipalities with official Facebook pages in the second quarter of 2022, in terms of ensuring the greatest influence².

3.7. Innovation hub for climate neutral municipalities

A team has been established to work on service innovation for climate transition within the framework of Climate-Neutral Karlstad 2030, as well as what is known as a system innovation team. This team has analysed the climate transition from a system perspective and provided suggestions for directions and initiatives for various stakeholders and groups driving the climate transition for Karlstad. For instance, the analysis has supported the work of the circular pop-up shopping centre that was launched by the service innovation team in late 2023.

A digitalisation and innovation plan has been developed in 2023, and is expected to be adopted in early 2024. This plan identifies areas of activity in order to reinforce

² See kommunikationsanalys.se (Swedish)

our digitalisation capacity, with a view to implementing a smart and sustainable municipality. The plan also emphasises how the municipality will benefit from and cope with the recent rapid development of artificial general intelligence.

Karlstad municipality is also examining the option of implementing a "Demand Accelerator" within the climate area together with the Compare IT cluster and DigitalWell arena, which has a national seal of excellence. The Demand Accelerator combines the approach of innovation procurement with an accelerator and aims to focus on market development.

3.8. Climate change adaptation

Climate change adaptation will be included early on in the planning process as an aspect in Karlstad municipality. This is a prerequisite for creation of sustainable societal development in both the short and the long term. Carefully thought-out solutions and utilisation of ecosystem services contributing to a more resilient and sustainable municipality have to be addressed in the comprehensive plan.

In the detailed development planning process, the municipality works to facilitate multifunctional areas; areas in strategic locations where trees, planted plots, green areas, watercourses and ponds, for example, can serve a number of different functions. These may, for example, include supporting biodiversity, managing stormwater and cloudbursts, lowering temperature, improving air and providing a meeting venue for recreation.

The municipality also has a stormwater plan that aims to achieve stormwater management that is sustainable in the long term.

Work has begun in the municipality on production of an updated cloudburst map for the Karlstad urban area, and for our other urban areas. The municipality is then intending to produce plans for each catchment area (sometimes known as structural plans), describing how extreme rainfall can be managed in terms of storage and drainage.

The Swedish Civil Contingencies Agency (MSB) has designated Karlstad as one of 18 areas in Sweden with significant risks of flooding in lakes and rivers. In Karlstad's case, both the Klarälven river and Lake Vänern pose a significant risk of flooding which could impact large parts of the city. In recent years, therefore, the municipality has been at great pains to increase knowledge and the level of ambition in its work on flooding. Various types of analyses have been performed on the basis of measurements, information, data and experiences, resulting in information and insights for officials and politicians. The internal climate change adaptation network, which has been dormant for some time, will be restarted from 2024 with a view to developing the municipality's climate change adaptation work still further at a strategic level.

The municipality has an established flood programme, a flood contingency plan and risk and vulnerability analyses. Socially important operations that may be affected in the event of flooding are identified and analysed in respect of how operations, functions and accessibility can be maintained when the water level rises. There is also an order of priority indicating which operations should be protected at different water levels. A number of flood defences are now in place thanks to the action plan that was adopted in the 2010 flood programme. The inner harbour has been protected from flooding since 2016, and smaller defences were built in Torpnoret, Skåre in 2017. An extensive protective embankment was completed around the central hospital area in 2018, and the stormwater system was reinforced at the same time. Defences in Mariebergsviken were completed in 2022 in order to protect the road to and from the hospital, while major improvements were made in order to manage cloudbursts in the city centre. Efforts to flood-proof the city of Karlstad are continuing, and are now focusing on finding the opportunity to dredge parts of the Klarälven river and build flood defences 2.5 km long in the Skåre district.

Karlstad municipality is intending to rejoin the Making Cities Resilient (MSR2030) network after a break of several years. MSR2030 was launched by the United Nations Office for Disaster Risk Reduction in 2021. In Sweden, this work is coordinated by the Swedish Civil Contingencies Agency. Joining the network will give the municipality a network and tools that will allow it to build resilience against accidents and create a sustainable, eco-friendly society. It is possible to participate in the network on the basis of three levels, and Karlstad is intending to join the most comprehensive "Stage C". The municipality's participation implies a commitment to implementation and delivery of specific measures for development of sustainability. This includes increasing resilience within internal departments and sections, but also mentoring and sharing experiences with other members of the MCR2030 network.

3.9. Climate smart mobility

Local residents' transport habits and travel patterns play a key role in reduction of traffic work in the municipality, and the proposal for a new comprehensive plan highlights the importance of transport and mobility issues. Urban planning is a key piece of the puzzle when it comes to creating better conditions for transition in the transport sector. Work is currently in progress on production of a new comprehensive plan, public transport plan and parking plan. The municipality's traffic plan and cycling plan will also be revised over the coming year.

As the population of Karlstad increases, so does total travel. The current modal split is unsustainable in the long term if the climate goal for 2030 is to be achieved. The primary emphasis is on increasing the percentage of walking and cycling and

developing public transport as a competitive alternative to individual journeys by car. For many years, Karlstad municipality has been making a conscious effort to create better conditions for greater sustainable travel by expanding the cycling and public transport infrastructure.

A new travel behaviour survey was conducted in 2023 which shows that the majority of journeys are made by car, including short trips where there are plenty of opportunities for sustainable travel. Behavioural change takes time, and going forward it is important to ensure work does not grind to a halt but continues to drive up the percentage of sustainable travel. Cycling should be the primary mode of transport in central areas, and cycling in Karlstad municipality should be easy and without risk. A combination of physical measures and measures to influence behaviour is needed in order to persuade even more people to switch from cars to bikes. There are still shortcomings in the cycling network that need to be addressed in order to meet cyclists' basic needs, and then cycling will be safer and more people will choose to cycle.

The municipality is working to ensure that both private individuals and workplaces streamline their transport and facilitate greater sustainable travel by means of attitudes suited to the target group and behavioural projects such as Vintertramparna (the Winter Pedallers) and Cykelvänlig arbetsplats (Cycling-Friendly Workplace). Work involving storytelling and using role models has been tested in the completed Vägbanarna (Roadways) project, and the experiences and methods are being taken forward into new projects. Network analyses and potential studies will be conducted on the basis of the 2023 travel habit survey in order to identify key destinations and target groups for mobility measures going forward.

More needs to be done in order to make the municipal group's travel and transport fossil-free. A lack of coordination of the municipality's internal traffic and vehicle work is affecting the municipality's ability to achieve the municipal group's goals. A transport project will be implemented in 2022 and 2023 with a view to examining the criteria for a more appropriate internal transport organisation that manages sustainable and appropriate travel and transport solutions, maintaining a holistic approach that provides the opportunity to achieve the goal of freedom from fossil fuels while also being cost-effective.

Karlstad municipality is working in a number of ways to promote the development of rechargeable vehicles, for both the internal vehicle fleet and opportunities for residents in the municipality. Co-planning with stakeholders that are capable of offering charging infrastructure in the long term is important, but the transition of the municipality's own vehicle fleet is also key and includes the expansion of its own charging stations. The Technical and Property Committee has made a decision to expand the charging infrastructure within the administration's buildings. The option of charging at home can be assumed to be a crucial factor in local residents' purchases of electric cars, which means this is mainly an option for homeowners. Municipally owned housing companies that offer charging to tenants will create opportunities for more people to switch to electric cars, which is an issue that has to be examined further in Karlstad. Effective combinations should also undergo further analysis, such as charging for commuters during the day and night-time charging at home for residents.

Karlstad municipality's energy and climate advisory service has been tasked by the Swedish Energy Agency with supporting stakeholders so as to increase the introduction of charging stations. The target group is made up of housing associations, owners of private properties and small and medium-sized enterprises, and the mission includes both information and assistance with taking the step of installing charging stations. The municipality is working with Region Värmland and others on this initiative.

The municipally owned companies Karlstads El- och Stadsnät AB and Karlstads Energi AB have joined the government's Elektrifieringslöftet (Electrification Pledge) initiative, which aims to promote the expansion of infrastructure for electric and hydrogen vehicles.

Karlstadsstråket is the name of an express bus service running through Karlstad, and its services are provided using electric buses. The first phase was completed in 2018, and an expansion spanning several stages is now planned. Karlstadstråket will provide public transport to the city centre, schools, workplaces and shopping areas that is sustainable, fast and easy to use. Phase 1 of Karlstadstråket has received 50 per cent of its funding via the Stadsmiljöavtal government grant scheme. For 2024, Karlstad has received funding from the Stadsmiljöavtal scheme for phase 2 of Karlstadstråket.

3.10. Reporting and monitoring

The contents of this Climate City Contract are evaluated annually, when the contract is revised for the following year. This work follows the municipality's other processes for planning and monitoring of activities and is reported to the municipal board. Monitoring involves reporting the municipality's greenhouse gas emissions in relation to the impact goals specified in the project plan for Climate-Neutral Karlstad 2030.

When it comes to monitoring the climate goal, development is tracked using established indicators that are reported and analysed regularly. Svalna, the tool introduced recently, will provide important assistance with analysing that part of the goal aimed internally at the municipal group's operations. The action plan resulting from the Energy and Climate Plan is also subject to important monitoring. In this regard, the document coordinator is tasked with regularly monitoring the implementation of activities and driving development. An annual follow-up has to be compiled in order to indicate the impact.

4. Viable Cities' commitments

The Viable Cities innovation programme is being conducted in broad collaboration in order to contribute to the transition to climate neutral cities by 2030 as part of the Swedish commitment to meet the goals of the 2030 Agenda and the Paris Agreement. This includes acting as international pioneers in the transition for cities.

Viable Cities is working with a wide range of stakeholders across academic disciplines, industries and sectors of society. It links outstanding research environments with enterprises of all sizes across a range of sectors, as well as public and civil society organisations.

Viable Cities will promote the following as part of its role as a strategic innovation programme:

4.1. Coordination of Climate City Contract 2030

Accelerated mobilisation in respect of the transition on a local, national and international level is now taking place using Climate City Contracts as a tool. This requires more of an ability to coordinate the efforts and go on developing the contracts in order to achieve upscaling, broadening, replicability, prioritisation and more effective coordination of meetings and dialogues between stakeholders.

That is why the Viable Cities programme office is developing a coordination function for Climate City Contract 2030 in Sweden so as to further support the Climate City Contract process, the commitments of agencies, municipalities and other relevant stakeholders being developed and refined step by step. This is being done in parallel with implementation and scaling to drive the transition more effectively. The coordination function will support the building of stakeholders' collective capacity for transition from knowledge to implementation and develop the Climate City Contract to the next level – in a local, national and international context.

The coordination function aims to create better opportunities for municipalities and stakeholders to benefit from and manage at a local level the comprehensive policy packages at EU level that result from the European Green Deal (such as Fit for 55 and the Taxonomy Regulation for sustainable investments).

4.2. Smart policy development

Viable Cities intends to create expertise support in respect of policy and regulations with related initiatives in respect of smart policy development. This will involve providing the municipality with more of an overview of current and future Swedish and European legislation, rules and standards of relevance to the climate transition of cities (such as the Fit for 55 policy package). It will also include process support for amending regulations and standards to facilitate climate transition in practice. This will link to agencies' commitments (section 5.1) and development work on system demonstrators (see section 6).

4.3. Innovation

Viable Cities intends to develop its role as a pioneer and intermediary (linker of systems, manager of gaps, crosser of boundaries) in order to reinforce the coordinating, mobilising and facilitating efforts in the emerging ecosystem for the Climate Neutral Cities mission, offering a good life for all within the boundaries of our planet.

Viable Cities will contribute competence networks and process support to make it easier for the municipality to implement innovation that accelerates climate transition. This will include engaging other strategic innovation programmes in the further development of Climate City Contract 2030. This is particularly applicable to mobility, energy, the built environment, circular economy, health and digitalisation. Working on the basis of the partnership agreement with the Drive Sweden strategic innovation programme on climate smart mobility, collaboration will be developed further with both cities and agencies in this respect, not least with the Swedish Transport Administration.

4.4. Coordinated funding

Viable Cities will be supporting the municipality's need for climate transition funding and promoting cooperation and synergy between agencies and other stakeholders funding climate transition and sustainable urban development in the following ways.

- Viable Cities will go on working with the 23 cities and six agencies involved in Climate City Contract 2030 on developing forms of funding linked with this.
- Viable Cities will cooperate with the Swedish Agency for Economic and Regional Growth as the managing authority for the European Regional Development Fund in Sweden and the initiatives earmarked for sustainable urban development with a view to creating synergy with Climate City Contract 2030.
- Viable Cities will be working together with the agencies to develop work on coordinated funding by means of various ongoing initiatives in respect of sustainable urban development: see 5.3 Coordinated funding.

• Viable Cities will be continuing to develop forms of climate investment plans for cities with a view to supporting all cities as part of the Climate Neutral Cities 2030 initiative.

4.5. Interaction with the EU's Climate Neutral Cities mission

Viable Cities is working in close cooperation with the support structures that are being built around the EU Climate Neutral Cities 2030 mission – both a platform for implementation of the EU mission, NetZeroCities, and CapaCITIES, a network of national nodes such as the Driving Urban Transitions (DUT) partnership programme. At EU level, closer interaction and synergies with the sister mission "Adaptation to Climate Change", as well as with the proposed "New European Bauhaus" mission, are also being discussed.

5. The agencies' commitments

The agencies are committed to working together within the scope of Climate City Contract 2030. In this way, the agencies will contribute to the purpose of the missiondriven effort to make the transition to climate neutral cities by 2030 with a good life for all within the boundaries of our planet.

In 2024, the agencies will go on developing supporting structures and new ways of working for a more coherent, strategic and learning development process. The Sustainable Cities Council (Rådet för hållbara städer) acts as a framework and strategic forum for collaboration between agencies, the Swedish Model for Sustainable Development (Svensk modell för Hållbar utveckling) as an operational platform for collaboration between agencies, and Climate City Contract 2030 as a joint innovation and test lab for the 23 cities and agencies.

As part of this, the innovation teams at the Climate City Contract agencies will hold joint responsibility for driving the following innovation processes: Policy labs (5.1), System demonstrators (5.2) and Local portfolio analysis (5.3). This work also involves participation in the Transition Lab facilitated by Viable Cities. In 2024, the agencies intend to focus in particular on the development of Climate City Contract 2030 as an innovation in governance for the Climate City Contract Arena, the meeting place for dialogue workshops between municipalities and agencies (see 6.1).

The agencies commit to continue their joint efforts in respect of the following developments in 2024 in order to support municipalities' climate transition:

5.1. Smart policy development

The agencies are working together with the municipalities to identify and contribute to development towards more appropriate regulations and other policy instruments for sustainable urban development and climate transition, and also to increase understanding and knowledge of existing regulations. The process will continue to be based on proactive dialogue and mutual learning, focusing on the development needs of municipalities in an accelerated climate transition.

In 2024, work will continue with policy labs in one or more of the challenge areas identified: inclusive mobility that promotes health, land use and land allocation, energy planning and energy streamlining, and circular resource and material flows. Joint development and planning efforts are ongoing through collaboration and dialogue in order to clarify policy challenges and identify key stakeholders, as well as ensuring the transition potential of policy labs.

5.2. Funding for research, innovation and development

The agencies are funding research, innovation, development and system innovation activities that support more rapid climate transition. The agencies' support is aimed at various types of research, innovation, application and demonstration and, to some extent, investment funding. Funding is provided through open calls for proposals and other forms such as, for example, client networks, stakeholder networks and innovation procurement³.

In 2024, the agencies are committing to go on developing and funding new types of initiatives, such as: System Demonstrators for Climate Neutral Cities (see 6.2 for more information) and the Urban Twin Transition Center for the digitalisation of cities.

5.3. Coordinated funding

The agencies are constantly developing coordination in respect of ongoing initiatives in the field of sustainable urban development and climate transition so as to create better advance planning and comprehensive information.

In 2024, the agencies are intending to deliver aggregated output data from some of the agencies' funding to all 23 municipalities, based on the innovation process on methodology development for local portfolio analyses that was conducted in 2023. The innovation work will also continue in 2024 with a view to improving the quality and coverage of data supplied, and by means of one or more in-depth projects in collaboration with certain interested municipalities in order to streamline the process and increase the benefits for recipients. The long-term goal of the portfolio analyses is to assist in efforts relating to cities' climate investment plans.

³ See <u>pressannouncement from the Swedish Internet Foundation</u> (Swedish)

Hållbarstad.se is the joint website of the Sustainable Cities Council. Here, the agencies have undertaken to regularly publish information on funding opportunities and calls for proposals, as well as collective knowledge support from all participating agencies involved in the Sustainable Cities Council⁴.

5.4. Participation in European sustainable cities initiatives

The agencies are part of and working with a number of European initiatives to support the development of sustainable cities and communities.

Efforts to support Swedish participation in the Horizon Europe 2021–2027 research programme include contributing to the formulation of activities and calls for proposals and providing information and advice to stakeholders who are planning to participate in applications regarding various European initiatives. The agencies are also cooperating on the implementation of the EU Regional Development Fund 2021–2027 with initiatives for sustainable urban development.

The agencies are continuing to participate in the Driving Urban Transitions to a Sustainable Future partnership, where calls for proposals and other activities in respect of sustainable urban development will be of relevance in the next few years, as well as the European Commission's "New European Bauhaus" initiative,⁵ European Urban Initiative (EUI)⁶ and Urbact⁷.

The agencies are also helping to develop support functions for the cities selected for the 100 Climate Neutral Cities mission. One example is the "CapaCITIES" programme⁸. CapaCITIES is being used to initiate and reinforce national change processes in order to establish national networks and governance structures.

⁴ The Swedish National Board of Housing, Building and Planning, the Swedish Energy Agency, the Public Health Agency, Formas, the county boards, the Swedish Agency for Participation, the Swedish Environmental Protection Agency, the Swedish National Heritage Board, ArkDes (the Sweden's national museum for architecture and design) the Public Art Agency Sweden, the Swedish Association of Local Authorities and Regions, the Swedish Agency for Economic and Regional Growth, the Swedish Transport Administration och Vinnova.

⁵ New European Bauhaus highlights the importance of aesthetic, social and cultural assets in the green transition.

⁶ The European Urban Initiative is a hub for sustainable urban development at EU level. The EUI aims to offer support to cities to improve and increase their capacity when it comes to formulating sustainable urban development strategies, policies and projects. (urban-initiative.eu)

⁷ Urbact is a European cooperation programme for exchange and learning in the field of sustainable urban development, Swedish Agency for Economic and Regional Growth.

⁸ The Swedish Energy Agency and Viable Cities are participating.

6. Strategic development projects for 2024

The strategic development projects are key accelerators for the emergence of an ecosystem relating to the Climate Neutral Cities 2030 mission and provide a common platform and arena for collaboration and learning.

The following strategic development projects will be conducted in 2024 within the Viable Cities Transition Lab in collaboration with other municipalities, with a view to further developing the content of Climate City Contract 2030 during the upcoming revision of the contract.

6.1. Governance

Developments in climate transition governance, both at local level and between local, national and even EU level, are fundamental to broader mobilisation and more effective systemic changes. This involves coordinating and leading different stakeholders at different levels with a view to accelerating the climate transition and slowing climate change so that a sustainable future can be built. Governance refers to the process and structure of governing, managing and regulating an organisation, society or system. It considers how decisions are made, how authority and responsibilities are allocated, and how rules and guidelines are maintained and followed. This is a complex process involving political, economic, technical and social aspects, which in turn requires cooperation and commitment from a wide range of societal stakeholders.

Mobilisation through Climate City Contract 2030 has proven to be successful and will go on being developed in order to further reinforce, scale up, broaden and accelerate the transition work. Clearer needs orientation/prioritisation and stricter commitments are required from several quarters: from the national agencies and the municipalities, and also linked to the Viable Cities role/commitments.

The Climate City Contract is a new and innovative governance tool that is building a long-term strategic process from local to international level on the basis of the collective mission of achieving sustainable and climate neutral cities by 2030. Commitments from cities, agencies and other stakeholders are revised and refined every year, and implementation takes place in interaction between the public sector, the business sector, the academic community and civil society stakeholders. The whole process is building ever stronger mobilisation of ecosystems of stakeholders and initiatives and constantly reinforcing the collective capacity for faster transition. This is a multi-level governance perspective that has also acted as an international role model when it comes to mobilising cities in a broad partnership between enterprises, the academic community, the public sector and civil society, implementing the EU's "Climate Neutral and Smart Cities" mission, which is aiming to achieve 100 climate neutral cities (municipalities) in Europe by 2030. Being the first to set up Climate City Contracts makes Sweden a pioneer, leading the way for other European countries and the European Commission. This, in turn, will strengthen the Swedish business sector's ability to take its place and contribute to the global transition.

In the run-up to 2024, there is still a major need to develop a more in-depth understanding of what transformative governance involves and how municipalities and cities can work with it in practice. Collective analysis support for Climate City Contracts will be developed further using experience and insights from the initial steps. This work has to be done in close cooperation between Viable Cities, agencies and municipalities. This work will be coordinated by the programme office, which will ensure stronger emphasis on analysis and monitoring in the Climate City Contract Arena in 2024.

6.2. Climate investment plans

A basic tenet of mission-driven innovation is that the state and public organisations at different levels of society play an active role in co-creating and reshaping markets in interaction with the business sector and other societal stakeholders such as the academic community and civil society.

Climate investment planning is a crucial part of the transition in a municipality or from a broader perspective. Such planning makes it possible to understand what measures the various stakeholders in the city – the municipality and other stakeholders – need to implement, how these measures can be implemented in a manner that is economically viable, and which financial instruments can be used to raise the capital necessary for the transition. On average, the municipality itself is estimated to have control over about 15 per cent of the investments needed. That is why a series of stakeholders need to be involved, including citizens, civil society, enterprises (including the financial sector), the academic community and public organisations.

Climate investment plans as a key part of the work on developed governance for the mission, and in 2024 we will be focusing on climate investment plans in a number of areas; analyses and tests on how climate investment plans can be linked to regular decision-making processes, including roadmaps for climate neutrality at city level, analyses of necessary climate investments in areas with a major impact on climate emissions, such as heating/cooling, mobility, food, etc., economic analyses of multiple benefits of climate transition, such as where climate transition can both help to save money and provide quantified benefits such as better health, more jobs, security, etc., how sustainability indicators can be incorporated more systematically into commercial management and contract management

In 2024, the Viable Cities financial dashboard will undergo further development and incorporate the investment plan page, financial indicators and funding flows provided by different national agencies (see section 5.3). The functions of various financial instruments will be mapped, and a number of learning cases will be launched in areas where financial roadmaps are being developed. There will also be a developed collaboration with investors in order to discuss how to mobilise private funding for climate neutral cities.

The work on climate investment plans in Sweden is closely linked to what is happening within NetZeroCities, the platform for implementing the climate neutral cities mission at European level.

6.3. Competitiveness through transition

Strong mobilisation for the transition to climate neutrality may provide the conditions for enterprises in Sweden to develop new business strategies and entirely new markets, which in turn will provide competitiveness by driving a transition to a climate neutral, sustainable society. This is crucial for Sweden's ambition to be the world's first fossil-free welfare state and our climate policy framework. Enterprises play a key role in the climate transition; as major emitters of greenhouse gases, but also as providers of solutions for climate transition and climate change adaptation.

In 2024, Viable Cities is joining forces with the Climate Competitiveness initiative to explore – together with a range of other stakeholders – what systemic changes can accelerate collaboration between municipalities and the business sector in order to achieve the Climate Neutral Cities 2030 mission with a good life for all within the boundaries of our planet Collaboration with the agencies signing the Climate City Contract is a key aspect of this work so that policy change can be driven. The initiative is targeted primarily at the 23 cities signing Climate City Contracts for 2030, with the objective of creating knowledge that can be used in all Swedish municipalities.

The aim is to focus jointly on key areas of activity linked to the cities' transition journeys, where enterprises are mobilised and systematically engaged. One important element in this work is to reinforce one another in handling the opportunities and challenges presented by the EU's "Fit for 55" programme. Examples of areas of activity include procurement, skills supply, business development and establishment. The work includes reviewing the chances of using municipal policy documents such as procurement policy, business programmes and ownership directives for municipal companies in order to drive development. In its work, Viable Cities also engages with business-oriented organisations and initiatives at international, national and regional level where fair and inclusive transition is a key aspect.

6.4. Citizen engagement

Current societal challenges mean that a number of crises coincide with the climate crisis: the pandemic, the war in Ukraine, crises in respect of energy, food, raw materials and critical minerals, biodiversity and demography. These challenges are exacerbated by the fact that we are also experiencing a democratic development where a growing proportion of the population feels excluded.

This increases the need for initiatives aimed at inclusion and putting citizens at the centre of the transition to a climate neutral, sustainable society through initiatives such as new forms of citizen involvement (such as citizens' councils) and the development of attractive living environments (such as New European Bauhaus) and policies for the designed living environment. It is necessary to make the most of citizens' knowledge and expertise with regard to the decisions that affect their lives, and these decisions must be supported by the vast majority so that action and change can be implemented at the pace and to the extent required.

There will be further development of cooperation between cities, agencies and other stakeholders in 2024 in order to pave the way for citizen engagement in the climate transition; not least by developing new forms of citizen involvement in local Climate City Contracts and interaction with European initiatives in this respect.

A number of learning cases, tests and initiatives in respect of citizen participation will be mobilised in 2024 with a view to building on empowering citizens so as to accelerate the climate transition.

6.5. System demonstrators

System Demonstrators for Climate Neutral Cities is a strategic development project under Climate City Contract 2030. The system demonstrators are expected to play an essential role in the ability of cities to accelerate the transition, raise awareness and create plenty of engagement on a local, regional, national and international level.

The initiative focuses clearly on mission-oriented innovation, and clearly emphasises the importance of a systems perspective in the transition process. A portfolio approach, where a number of actions, initiatives and experiments combine to form a larger whole, is an important element in this form of intervention. The system demonstrators are based on key areas of Climate City Contract 2030 and are intended to assist with the development of the contract on the basis of insights from the work.

Viable Cities and the agencies undertake to help raise the profile of the system demonstrators in key contexts at national and international level, and to capitalise on the insights from the system demonstrators with a view to facilitating upscaling. All Climate City Contract 2030 municipalities undertake to capitalise on the insights from the system demonstrators with a view to facilitating upscaling.

6.6. Climate Neutral Cities 2030 mission on an international level

In October 2021, the EU launched five missions for a new and innovative way of working together and improving people's lives in Europe and beyond. These five missions aim to tackle major societal challenges such as health, climate and the environment, and set ambitious goals with deadlines to be achieved by 2030. One of these is 100 Climate Neutral and Smart Cities by 2030 (known as the Cities Mission), which is a key element in delivering the European Green Deal with a view to making the continent climate neutral by 2050. This will involve significant reinforcement of Swedish efforts on the mission of achieving climate neutral cities by 2030 and using Climate City Contract 2030 as a tool for this.

There will be continued mobilisation and development in 2024 in order to reinforce the link between Swedish and European efforts on the Climate Neutral Cities 2030 mission. This is taking place by means of a series of initiatives involving cities, agencies and Viable Cities programmes. Examples include NetZeroCities (a platform for implementing the Cities Mission, with development work on aspects such as Climate City Contracts and Climate Investment Plans), the Driving Urban Transitions partnership (with research and innovation projects focusing on 15-minute cities, energy-positive districts and the circular urban economy) and CapaCITIES (which is developing national support platforms similar to Viable Cities in a number of countries in Europe).

At EU level, closer interaction and synergies between the Cities Mission and its sister mission "Adaptation to Climate Change", as well as with the "New European Bauhaus" initiative, are also being discussed.

Launched by the European Commission in January 2021, the New European Bauhaus initiative links the European Green Deal with our built environment. In the Cities Mission implementation plan, the European Commission points out that EU Climate City Contracts will enable participating cities to integrate the values and principles of the New European Bauhaus initiative in their climate neutrality plans and reinforce them. Work on the New European Bauhaus is taking place in collaboration with the government assignment awarded to the Swedish National Board of Housing, Building and Planning (Sustainable Cities Council, Rådet för hållbara städer) aimed at coordinating Sweden's participation in the New European Bauhaus.

7. Joint efforts on monitoring, evaluation and updating

Viable Cities and the municipality have agreed to conduct annual monitoring of the municipality's performance within the framework of Climate City Contract 2030. Viable Cities will provide documentation annual monitoring at municipal and national level.

7.1. Key updates for the municipality

The 2023 version of Climate City Contract 2030 was the first for Karlstad municipality. That is why that version focused mainly on describing the current situation with regard to the climate transition in the municipality and providing an overview of the governance principles and governance signals applied. However, extensive work was done within the framework of Climate-Neutral Karlstad 2030 during the year. Some of the most important updates are:

- Decision on the Energy and Climate Plan
- Decision on a new general governance model for the municipal group
- Introduction of climate contracts for companies and organisations
- Establishment of a communications strategy for Karlstad's climate transition
- Development of a training concept for training elected representatives in the field of climate and environment, the first training programmes having been completed for ten committees and boards.
- Introduction of Svalna for visualisation, calculation and analysis of the municipal group's internal climate footprint
- Introduction of a student climate council
- Making a switch to green loans for sustainable investments

The 2024 version of Climate City Contract 2030 is more forward-looking and provides more specific details of planned actions.

7.2. Most urgent experiences for the municipality to share

Continuing to work with the complex challenge presented by the climate goal requires new approaches and collaborations, both locally and between the government agencies and other municipalities. This is a multidimensional task, requiring engagement at all levels of society. In this respect, the municipality has an important part to play as a facilitator for collaboration between companies, citizens and organisations in order to increase the chances of having an influence. We also need to develop our own organisational capability in order to work with the climate goal in all governance processes and have the courage to try out new approaches and collaborations.

7.3. Key updates for Viable Cities

The work done by Viable Cities on facilitating the Climate City Contract process has undergone development in 2023. The Viable Cities programme has also prepared a new multi-year phase of the programme. Moreover, significant development work on climate investment plans has taken place and the new system demonstrator intervention has taken new steps. An EU-level process on Climate City Contracts has been established in the international cooperation on the mission and a number of Swedish cities have been successful in becoming involved in the work of the mission regarding climate-neutral cities with funding from Horizon Europe.

7.3.1 The Climate City Contract process

Work has continued in 2023 on developing the role of Viable Cities as a facilitator of the Climate City Contract process in interaction with the 23 cities and 6 government agencies that are signatories to date. The accelerated learning platform has been further developed through the Viable Cities Transition Lab Forum, City Labs, Climate Breakfasts and a series of different formats for meetings between cities and government agencies and other stakeholders. Interaction with the signing government agencies has also been developed in order to further extend the Climate City Contract 2030 process. In parallel, work has continued in the 23 cities on developing different forms of local climate contracts as part of mobilising local transition arenas with companies, the public sector, the academic community and research institutes and civil society. Mobilisation at EU level with the 112 cities that are pioneers in the Climate-Neutral Cities 2030 mission has also involved a process of establishing Climate City Contracts with the participation of Viable Cities. Viable Cities perceives an increased need to create synergies and work on developing support for learning between cities and further developing interfaces between local, national and international levels. The aim of all this is to reinforce the collective capacity for transition.

7.3.2 Strategic efforts prior to new programme phase

Scaling up relevant initiatives in various ways for greater impact and to increase the pace of transition is a crucial element in Viable Cities' work going forward. It is also clear that further work needs to be done in a situation in which multiple crises coincide with the climate crisis. Extensive strategy work took place during the year in preparation for the next multi-year phase of the programme. In October, Viable Cities submitted an application to become one of the programmes under the new, mission-oriented Impact Innovation programme. In parallel, documentation is being submitted for the next phase as a strategic innovation programme in which an evaluation of the first six years of the programme has been completed. In various ways, Viable Cities has also provided input for the Government's forthcoming climate policy action plan and the forthcoming research and innovation bill and contributed to SALAR's planning⁹ of how municipalities and regions can improve and intensify their efforts on climate change adaptation and reduced climate impact.

7.3.3 Strategic upscaling and acceleration initiatives

Continued development work on climate investments for the transition for cities has taken place both in Sweden and in European cooperation as part of the work on Climate City Contracts. Dialogue with relevant financial stakeholders has also been developed in this regard. Digitalisation efforts were also intensified during the year, and November saw the establishment of the Urban Twin Transition Centre in collaboration with Viable Cities. Work has also begun on preparing processes for enhanced citizen engagement/participation in order to create methods and insights that can be used by many cities. A Just Transitions graduate school was launched at Linköping University during the year, in cooperation with Viable Cities. Lund University, in collaboration with Viable Cities, has also launched a Massive Online Open Course (MOOC): Cities, Climate and Change: Pathways and Opportunities. Work on storytelling and communication for transition has also undergone further development. The next step in developing a new form of intervention known as System Demonstrators has been taken with funding from Vinnova and Viable Cities for two system demonstrators: CoAct in Lund, which is focusing on both sustainable mobility and energy-positive districts, and SnabbSam in Stockholm, which is focusing on a fossil-free city centre. Other cities are keen to join in with these collective learning efforts. Fifteen feasibility studies have been funded as part of Viable Cities in order to explore how we can further energise the transition of cities in three respects: citizen engagement, climate investments and regional collaboration.

7.3.4 International alliances in respect of the mission

Efforts to mobilise cities and countries in respect of the mission, in which Viable Cities is involved in a number of ways (e.g. NetZeroCities, Driving Urban Transitions, CapaCITIES, Urban Transitions Mission), are continuing. An evaluation commissioned by the European Commission of the EU's work on the five missions¹⁰ was published during the year. This concludes that the Climate-Neutral and Smart Cities 2030 mission (Cities Mission) has already achieved significant mobilisation to step up the pace of climate transition in cities. The evaluators highlight the fact that establishment of the Cities Mission was an important and timely initiative in order to

⁹ Fair and sustainable transition for the climate - Proposal from SKR's program preparation for sustainable transition, SALAR, September 2023 (Swedish)

¹⁰ Alasdair Reid et al. Study supporting the assessment of EU Missions and the review of mission areas – Mission areas review report. 10.2777/61143, European Commission, 2023

address the "implementation gap" and the systemic challenges that individual cities' climate efforts could never handle alone.

Viable Cities has continued its efforts as one of many international NetZeroCities partners in order to facilitate the transition in the 112 cities (seven of which are Swedish). NetZeroCities, in dialogue with the European Commission, has formulated a Climate City Contract for cities throughout the EU as a tool to accelerate climate transition. Climate investments are a key element in this regard. As with everything else Viable Cities does, the ambition is for methods, tools and lessons learned to benefit many more cities as they make their transitions. Swedish cities have achieved success within the framework of NetZeroCities and been granted funding for a number of initiatives in order to reinforce their climate transition initiatives. Malmö, Uppsala and Umeå, for instance, have received funding as part of the Pilot Cities initiative (totalling around SEK 45 million); and Luleå (matched with Umeå) and Lund are just two of the cities that have been selected and matched with pilot cities under the Twinning initiative, which focuses on learning partners for transition.

New steps are being taken as part of the work that has been conducted at global level within the Climate Smart Cities Challenge for a number of years, and which involves a number of Swedish stakeholders, with a view to further developing the work. This includes linking the four system demonstrators as part of the initiative with the two Swedish ones, and also working to mobilise capital. The partnership with UN-Habitat is key to this, and a dialogue is being conducted regarding broader cooperation with UN-Habitat on the basis of climate transition for cities. Similarly, a dialogue has been initiated regarding broader cooperation with the World Wide Fund for Nature (WWF) regarding climate transition for cities in Sweden and internationally.

7.4. Key updates for the government agencies

The agencies have worked jointly on four innovation processes in 2023 as part of Climate City Contract 2030. Four challenges have been identified for policy labs as part of Smart Policy Development. System demonstrators for climate neutral cities are being trialled in two cities. A local portfolio analysis method has been trialled and scaled up. Climate City Contracts as a model for developed governance have been analysed in depth.

7.4.1 Smart policy development

In 2023, a number of joint workshops with Climate City Contract municipalities and Climate City Contract agencies were organised so that development of more appropriate regulatory frameworks and other instruments could begin. Four challenge areas were identified, and these were mapped and investigated further with a view to making decisions to launch a number of "policy labs" in one or more of the areas identified. Representatives from the agencies continued working between the workshops, processing the data that emerged and planning for future work. All the work involved forms of exploration and learning, with everyone involved.

7.4.2 System demonstrators

The emphasis on system demonstrators for climate neutral cities has continued in 2023. The call for proposals for System Demonstrators for Climate Neutral Cities – Planning Phase took place, and two cities were awarded funding. This call for proposals will be seamlessly followed in 2024 by the call for proposals for System Demonstrators for Climate Neutral Cities – Implementation Phase, which will be open only to the same two cities that were awarded funding for System Demonstrators for Climate Neutral Cities – Planning Phase.

7.4.3 Local portfolio analyses

In 2023, the agencies have carried on developing a methodology for portfolio analysis of the agencies' overall funding to cities. The methodology was trialled in discussion with five of the municipalities during the year. The aim during the year has been to investigate applications in the municipalities and enable all 23 municipalities to scale up. The year's work and completed tests were presented and further developed jointly during the Transition Lab Forum in Kristianstad in the autumn.

7.4.4 Greater collaboration between agencies

In 2023, the agencies forming the Sustainable Cities Council have been granted funding from the European Regional Development Fund's National Programme to develop a more operational inter-authority collaboration platform. This collaboration platform has been named Svensk modell för hållbar urban utveckling, the Swedish Model for Sustainable Urban Development. The aim of this is to focus on the more operational efforts of the agencies and develop a coordinated and joint initiative to reinforce the municipalities' capacity for innovation. The Sustainable Cities Council decided to review in 2023 how the Council can be strengthened in its role as a strategic forum and provide a framework for the operational collaboration platform Swedish Model for Urban Sustainable Development and Climate City Contract 2030 as a joint innovation and test lab for the 23 cities and agencies, as well as other related initiatives identified. The aim of this was to increase synergies and learning between several of the agencies' related assignments and initiatives.

7.4.5 Climate City Contracts as a governance model

Developments in climate transition governance, both at local level and between local, national and even EU level, are fundamental criteria for broader mobilisation and more effective systemic changes. In 2023, collaboration between agencies – with analytical support by Vinnova – focused on governance issues in particular A strategic analysis project entitled "Klimatomställning av städer – en svensk modell för att öka takten i omställning" (Climate transition of cities – a Swedish model to increase the pace of transition) was conducted in close cooperation with Viable Cities, and with the active participation of both the agencies and the cities. From an operational perspective, it has been possible to devise the term "governance" for climate transition on the basis of practical experience from the last two decades. Governance is used when an authority needs to go beyond what it can directly control in order to realise a goal, which also involves systemic shifts from piecemeal operations to a holistic approach to public administration. In governance, the authority collaborates with the business sector, civil society and the academic community.

9. The contract

The Parties agree that these joint commitments, as formulated above, shall apply for 2024. The first version of Climate City Contract 2030 was signed in 2020, the second in 2021 and the third in 2022. The Climate City Contract is to be updated and renewed for each new year.





Climate City Contract 2030

Betweeen Karlstad municipality, the Swedish Energy Agency, Vinnova, Formas, the Swedish Agency for Economic and Regional Growth, the Swedish Transport Administration, the Swedish Environmental Protection Agency and Viable Cities.

stockholm 2023-12-08 The Parties agree that these joint commitments, as formulated above, shall apply for 2024. The first version of Climate City Contract 2030 was signed in 2020, the second in 2021 and the third in 2022. The Climate City Contract is to be updated and renewed for each new year.

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Appendix 1 - Links to documents

Below are the links to the most relevant documents in relation to Climate City Contract 2030 for Karlstad municipality (may be in Swedish).

- Information about Climate Neutral Karlstad 2030
- The municipality's declaration of intent Viable Cities (2021)
- Karlstad municipality Goal analysis and goal fulfillment
- Overview plan 2012
- Overview plan 2050 (samrådshandling)
- Environmental agreement with the Värmland County Administrative Board (2022)
- About Agenda 2030 in Karlstad municipality