



Climate City Contract 2030

Betweeen Mariestad 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.

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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:

- Mariestad 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

3.1. Municipal climate goals

The 2030 Agenda with the 17 Sustainable Development Goals defines the direction for the work of the municipality, and Strategi för Agenda 2030 Mariestad/Strategy for the 2030 Agenda in Mariestad interweaves the municipal council's goals with the Sustainable Development Goals and clarifies the political priorities for efforts on environmental, social and economic sustainability.

The municipal council has decided on the following goals in the Strategy for the 2030 Agenda in Mariestad:

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.



3.1.1 The municipality

- provides opportunities for good health among residents by providing safe environments and recreational facilities in the vicinity.
- make it possible for all learners to acquire the knowledge and skills they need to promote sustainable development and lead a sustainable lifestyle.
- involves children and young people in the development of society.

3.1.2 The municipality's activities

- must be climate-neutral in terms of electricity, heating and transport.
 build and renovate in smart, resource-efficient ways, using circular and toxin-free materials.
- contribute to the development of technology and methodology through aspects such as procurement, participation in development projects and solutions adapted to local conditions.
- uses procurement procedures to develop local and sustainable production opportunities and services.
- uses its own land to enhance ecosystem services and biodiversity.

3.1.3 Bostadsbolaget Mariehus AB has the following environmental goals • to reduce the volume of unsorted waste from its operations.

- to reduce the consumption of fossil fuels.
- to reduce the consumption of energy and water.

3.1.4 The climate goals of energy company VänerEnergi AB (in collaboration with the Töreboda municipality) are:

- to reduce CO2 emissions by 1,200 tonnes per year.
- to ensure that at least 40 per cent of total electricity consumption for district heating purposes is be produced at its own production facilities.
- to improve efficiency and reduce electricity consumption on their own premises.

3.1.5 Climate 2030 – Västra Götaland in Transition

As part of Climate 2030 – Västra Götaland in Transition, the municipality has undertaken to assist with the climate goal of fossil fuel independence for the Western Swedish economy by 2030. The goal involves reducing greenhouse gas emissions in Västra Götaland by 80 per cent from 1990 levels by 2030. Moreover, greenhouse gas emissions from consumption by residents in Western Sweden, regardless of where in the world such consumption takes place, must be reduced by 30 per cent compared to 2010.



The various sources of greenhouse gases will be analysed as thoroughly as possible, and appropriate measures will be highlighted and prioritised depending on the overall situation. See 3.5 Climate Investment Plan for more information.

3.2. Strategy

Mariestad has embarked upon its biggest journey of development in modern times, following AB Volvo's establishment of a battery cell factory in the city. This, together with a number of other ongoing and upcoming green start-ups, is providing impetus, inspiration and opportunities to make climate-smart investments, create good habits and accelerate the transition process. The municipal organisation does not have sole authority or an ability to implement all this alone: the work requires collaboration with the business sector, civil society, the academic community and citizens. Collaboration within the city's own boundaries is not sufficient either: a broader regional and national perspective is needed. Opportunities to reduce greenhouse gas emissions and promote other interests will become increasingly important. Interaction with stakeholders and political decisions which create conditions and rules for climate transition, as well as for other interests, are important pieces of the puzzle in the work.

Most of the work being done as part of Climate-Neutral Mariestad 2030 involves the following areas:

- The urban planning process: opportunities for sustainable mobility and circular and climate-smart solutions in the planning of the city are just a few examples of benefits.
- Cooperation with the business sector on aspects such as developing sustainable personal transport to and from work and creating meeting venues that include other stakeholders.
- Citizen involvement, one example being voluntary activities with climate-neutral associations, as well as work on Klimatspelet Mariestad (Climate Game Mariestad) to make people more aware of the complexity of climate transition.
- Management and governance where commitments in the Climate City Contract and climate pledges, for example, form the framework for policies and policy documents, including the in-depth comprehensive plan that is being produced for the city.

Communication about what Mariestad means by climate neutrality is important as a way of increasing understanding of the common goal and mission of achieving a Climate-Neutral Mariestad by 2030. Creation of useful tales that visualise the future we have not yet encountered is also important.

For Mariestad, climate neutrality means achieving net zero emissions of greenhouse gases, primarily by:



- reducing emissions
- investing in green technology
- harnessing nature's own capabilities.

This definition is based on the European Climate Law and its vision for 2050. Efforts in Mariestad are also contributing to the EU's European Green Deal growth strategy. This strategy aims to transform the EU into a just and prosperous society with a modern, resource-efficient and competitive economy, where there are no net greenhouse gas emissions by 2050 and where economic growth is independent of resource consumption. Another aim of the European Green Deal is to protect, preserve and enhance the Union's natural capital and protect public health and well-being against environment-related risks and consequences.

Strategy for the 2030 Agenda in Mariestad is an umbrella strategy for the municipality's sustainability efforts. All municipal organisations must work to achieve the goals set out in the strategy. In addition to this, the municipality's comprehensive plan and climate change adaptation plan include position statements on sustainability and climate. Through the Climate City Contract, the municipality adds another dimension by working strategically with stakeholders – namely the business sector, civil society and citizens – beyond municipal operations.

Climate action involves decisions, investments and activities that encompass a number of the Sustainable Development Goals. Careful considerations in order to favour synergies and avoid conflicts between different Sustainable Development Goals permeate these efforts. The transition to a circular-based economy that includes circular strategies, design and consumption of services instead of virgin materials is a key instrument. This climate action will create a Mariestad that works for the people who live here, that is good for the finances of citizens, businesses and society – and that is good for the climate and our planet.

In 2023, the municipality has adopted nine climate pledges as part of Climate 2030 – Västra Götaland in Transition. These climate pledges will further accelerate efforts within Climate-Neutral Mariestad 2030 and are incorporated in the 2023 version of Climate City Contract 2030.

3.3. Organisation and management

Climate-Neutral Mariestad 2030 forms part of the Urban Planning Administration, where the municipality's strategic sustainability efforts are coordinated. The administration is answerable to the municipal board. The municipality must strive to develop a Mariestad that is sustainable in the long term, working on the basis of the three dimensions of sustainability: environmental, social and economic aspects. In the coming years, the ambition is to develop and/or implement tools that will make



it easier to make climate-smart choices in different parts of the process, and for different target groups.

The municipality's Agenda 2030 Group works across administrations, serves as a coordinator for strategic sustainability efforts and constitutes the transition function for Climate-Neutral Mariestad 2030. The group includes a number of key functions such as a sustainability strategist, an environmental strategist, an urban planning strategist, a digitalisation strategist, a public health strategist and a PR officer. The transition team for Climate-Neutral Mariestad 2030 is made up of representatives from the business sector, civil society and the academic community. Besides working on specific initiatives, the transition team provides knowledge and expertise and is part of a hub for other stakeholders who need to be involved in the climate transition.

Individual projects and initiatives, regardless of who implements them in the city, need to be highlighted in a wider context. It is necessary to perceive synergies and impacts more clearly, but also to recognise the successes created collectively by all stakeholders. The rapid pace of change in the world, multiple crises and the difficulty of predicting what is around the corner require leadership in change and on the basis of complex contexts. Tools and models to meet these needs must be developed going forward.

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

The municipality's strategy for the 2030 Agenda includes the aspect of how the municipality should cooperate with other stakeholders. The municipality is endeavouring to pave the way for robust collaboration models so as to ensure that collaboration is effective and sustainable over time.

"Collaboration with other stakeholders in society locally, regionally, nationally and internationally, as well as with citizens, is necessary to ensure a powerful process. The business sector is a key player, driving sustainability work forwards with new business solutions in all global goals. Increased collaboration with the research and academic field is very valuable."

From "Strategy for the 2030 Agenda in Mariestad".

The municipality's public health plan also emphasises the need to involve citizens in the transition process, and to create the conditions for good public health.

"Since autumn 2021, Mariestad Municipality has also been part of Viable Cities, mustering forces with other municipalities, business, academia and civil society for climate neutrality and sustainable communities based on the three dimensions of sustainability. For Mariestad Municipality, citizen engagement is a part of this process, and inhabitants are given opportunities for influence and participation, which is



fundamental to good public health."

From "Allas vårt Mariestad – Folkhälsoplan 2022–2030 – Mariestads kommun" (Everybody's Mariestad – Public Health Plan 2022–2030 – Mariestad Municipality).

Efforts as part of Climate-Neutral Mariestad 2030 will further develop the work of the municipality with individual stakeholders and groups of stakeholders in the same field, but also collaborations relating to the common denominators for the business sector, the academic community, the non-profit sector and citizens in respect of issues related to transition. Visualisation of common goals, new forms of funding, promotion of innovations, etc. need to be included in this work. One aim is to work with participant-led processes to ensure the greatest possible understanding and engagement, and to create results owned by stakeholders themselves.

3.4.1 The business sector

The business sector's expansive phase in Mariestad is placing demands on mobility solutions, a workforce with the right skills, attractive residential environments and access to schools and care. New districts will emerge, and the municipality must also create the opportunity to transform an industrial estate near the city centre into a new residential district. The municipality has an important job to do when it comes to paving the way for business expansion through long-term planning and structuring, including climate and sustainability governance, and including and working together with the business sector on these issues.

Local companies in their sector or geographical area can have a significant influence on the transition process. This may involve acting as role models, as well as working on the company's own transition. The climate pledge We are reducing emissions together with the business community involves taking action together with the business sector. This may involve initiating discussions between companies on industrial symbiosis, running joint projects or collaborating in other ways to reduce emissions. Work on sustainable passenger transport to and from major workplaces began during the year, with a number of companies participating. Further development with the business sector includes exploring interest in different types of meeting venues and joint work. An initial dialogue with the building and construction sector has begun, for example, with the aim of joining forces for the climate transition process. The climate pledge We include agriculture as a partner in the municipality's climate transition involves extending cooperation with the green industries, and this will be developed during the year. Mariestad is a municipality rich in both agriculture and forestry, and the potential of this needs to be emphasised even more.

The municipality's regular work includes guiding companies with ideas and innovations to existing forms of support, and organisations that can develop their innovations. The ambition is to further develop cooperation with these stakeholders with a view to making businesses more competitive, for instance.



Climate pledges on procurement reinforce the objectives of the municipality's strategy for the 2030 Agenda, where procurement is identified as an important tool in respect of sustainability. The climate pledges mean that new cars purchased or rented within the municipal organisation must run on renewable electricity, biogas or hydrogen. Similarly, new construction machinery must be able to run on renewable fuels or be electrified, and construction contracts must also meet environmental and climate requirements. The municipality must also identify which procurement procedures have the greatest climate impact and work strategically and systematically with procurement to reduce climate impact.

Dacapo, the municipality's education platform, is an important stakeholder when it comes to creating conditions ensuring that the local business sector has the right skills and offers both short and longer courses based on needs identified, and in collaboration with the business sector. Vocational training on building trades and recycling, as well as training courses on production technology that are more suitable for local circumstances, are offered.

Access to fossil-free energy among local businesses is a make-or-break issue that involves various complex mechanisms, including the electricity transmission capacity in western Sweden. The municipality is working actively on its energy plan in order to create conditions for increasing local energy production, and is also producing documentation that should allow more wind and solar power to be generated. Documentation for charging infrastructure for light and heavy vehicles and leisure boats was produced in 2023 and will be incorporated into the municipality's comprehensive plan going forward.

3.4.2 The academic community

There is collaboration with the academic community in a number of areas, and efforts to make Mariestad climate-neutral are being implemented with the participation of Linköping University and the University of Skövde. The Department of Conservation at the University of Gothenburg is based in Mariestad and offers both education and research. The municipality is involved in a number of development projects where the academy is a driving force and collaborative partner.

The municipality will go on developing its cooperation with the academy in line with what is stated in the municipality's strategy for the 2030 Agenda:

"Today's solutions are not adequate for managing tomorrow's challenges. Scope to test new ideas and working methods in the organization are crucial to success. Efforts must be knowledge based and in line with research, so that actions have the desired effect and lead to greater goal achievement."

From "Strategy for the 2030 Agenda in Mariestad".



3.4.3 Non-profit organisations and study associations

Mariestad has many associations, ranging from sports clubs to interest groups of various kinds. Some of these associations have extensive organisations, which include both facilities and events. In 2023, these associations have been asked whether they want to work on reducing their climate footprint and eventually becoming climateneutral organisations. As well as aiding transition, this encourages engagement among members, sets a good example and strengthens the association's own brand. An initial kick-off meeting was attended by 15 or so associations, and a number of them have since started work that will continue in 2024. Participating associations include large sports clubs, as well as heritage societies and more specialised interest groups.

Study associations work with general education and in many cases reach out to groups that are underrepresented in the development of society. The ambition is to develop cooperation with local study associations on transition issues and coordinate this with the municipality's public health work. An embryonic cooperation has been initiated in 2023, and at least one of the study associations is involved in efforts to implement a climate-neutral association.

3.4.4 Citizens

Much of the transition needs to take place among individual citizens, and the municipality is laying the foundation for this through its work. This includes communication in order to showcase good examples and create personal incentives so that people make climate-smart choices and feel engaged. Mariestad has embarked on its biggest urban transformation in modern times, and this influences many areas besides climate transition. Tools and methods for citizen participation in the climate transition process can help build understanding and confidence in the changes that need to be made, regardless of the area in question.

Another aspect of the municipality's work involves providing conditions for a sustainable lifestyle through infrastructure, mobility and various processes. Citizens also form part of the business sector as owners or employees, are members of associations, go to school, work for the municipality, etc. That is why communication with citizens of all ages, whether they were born here or have moved here, is important. In 2023, work has begun on engaging young Mariestad residents aged 18 to 30 in order to find out their perspectives on sustainable lifestyles and what this could involve for them in their day-to-day lives, in purely concrete terms. It appears, among other things, that transport is a topic that generates engagement, and that many people are in favour of sharing transport. A toolbox of service concepts has been developed, and these should be viewed as seeds to work with. None of the services will overcome the challenges alone, but their impact will accumulate if they are combined and applied in combination with other circular solutions. The target group of people aged 18 to 30 was selected because this is the age at which people



make a number of important life choices, such as education, starting a family or buying a home.

The ambition to develop a digital gaming tool to inspire and encourage commitment to climate transition is one specific initiative involved in Climate-Neutral Mariestad 2030. Students at the University of Skövde have devised a couple of concepts, the most advanced of which is a traditional board game that uses the same game mechanisms as digital games. The objective of using game psychology in local work remains, and an idea in respect of how this could be achieved in relation to the physical city has been developed.

Non-profit association Biosfärområde Vänerskärgården med Kinnekulle/Biosphere Reserve Vänerskärgården with Kinnekulle has an important part to play by providing a meeting venue for complex issues concerning sustainability where discussions need to be conducted on different interests. Biosphere reserves are designated by UNESCO as model areas for sustainable community development. The Biosphere Office participates in public events in the city in order to meet people and talk about climate transition. The aim of this is to encourage more people and get them involved in the transition process.

3.5. Climate investment plan

Investment flows offer major potential for the climate transition and are central to its success. The Mariestad Climate Investment Plan will help to analyse areas with a major impact on climate emissions and identify more benefits from climate investments, such as cost savings, improved health or more jobs. Climate-Neutral Mariestad 2030 is contributing to the development of the dashboard² being devised by Viable Cities and perceives this as being an important tool in the city's work with climate investments. The ambition is for the Climate Investment Plan to serve as a basis for decisions on municipal investments, or to contribute to an overall perspective in order to provide opportunities for financial solutions for the business sector. Municipal investments and authority cover a small part of the transition that needs to take place. Other stakeholders and citizens need to make a big difference, and the Climate Investment Plan can clarify and help visualise what these elements entail. Priorities and investments also need to be in line with the Taxonomy for Sustainable Investments and EU and Swedish goals and policies, for example. Climate investment involves direct investment in climate action, as well as shifting ongoing investments and managing existing consumption; by investing in EVs rather than petrol cars, for example.

The Climate Investment Plan is based on estimated emissions for 2030, climate goals for 2030 and measures and their emission reductions. Calculations and analyses will

² Digital tool for viewing emissions and experimenting with different scenarios.



be carried out on this basis. The results will include investments, cost-effectiveness, societal benefits and overall economics of the climate transition.

3.6. Digital support for implementation

Digital support is an important component of efforts to enable a municipality to become climate-neutral, and helps to accelerate this work. This involves both digital solutions and harnessing digital technology in order to make the switch to more sustainable habits and alter behaviours.

The municipality has an extensive IoT network³ that enables municipal activities to use more climate-smart solutions: This includes sensors that indicate when flowerbeds needs water, or that measure air quality. This means that the right action can be taken at the right time and unnecessary transport is reduced. The municipality's organisations are working together with the IT department on a number of projects to increase the use of climate-smart solutions with the help of the IoT network, as well as other innovative solutions based on the needs of the organisations.

3.7. Innovation hub for climate neutral municipalities

Mariestad is an innovation hub working on the basis of this medium-sized municipality's circumstances for working with climate transition. There is no basis for expanding public transport to the same extent as is possible in a large city, for instance. Regional interaction and cooperation play a major role, and in this respect even Mariestad can be more of a driving force in the field of climate transition; and one ambition is to coordinate a regional Transition LAB Forum in the next few years.

ElectriVillage is Mariestad's concept for a testing and demonstration platform for sustainable transition and industrial renewal, and has laid a foundation for societal development on a local level with new business models, more jobs, new skills and increased attractiveness. ElectriVillage is based on the needs of the medium-sized city, but aims to make the development projects scalable to suit larger or smaller cities as well. The municipality's work on ElectriVillage has involved activities to develop the use of hydrogen. Examples include the world's first solar-powered hydrogen refuelling station and a preschool where solar energy is stored in hydrogen and then used for electricity and heating. A feasibility study has been conducted for the large-scale conversion of the Kinnekulle Line to hydrogen. This feasibility study includes a solution that expands the hydrogen infrastructure through combined refuelling stations for trains, cars, heavy vehicles and ships: see 3.0 Climate-smart mobility for more information.

³ Internet of Things, items with embedded electronics and an Internet connection can be controlled or exchange data over a network.



Municipal education platform Dacapo provides vocational training, continuing education, courses and lectures in a number of different fields. Many of these training programmes are based on traditional technologies and reuse: window renovation, traditional painting, cultivation and processing, but also sustainable urban planning with nature's own functions such as wetlands and trees. Dacapo is also working on projects and knowledge transfer at an international level, and on testing new routes for transition in established areas. One established forum is Rurban Planning Talks, which is a dialogue between the academic community and planning practice in order to clarify the problems posed by ongoing urban and regional transformations.

This involves developing and discussing societal challenges at the points where rural and urban areas meet.

The municipality is able to use the Biosphere Reserve Vänerskärgården with Kinnekulle to disseminate empirical evidence and knowledge in the network of UNESCO biosphere reserves all over the world (almost 750 of them).

3.8. Climate change adaptation

Climate change adaptation is an increasingly important issue and involves measures to adapt society to the climate change that has already occurred and the change that cannot be prevented in the future. It is necessary both to work on reducing emissions and to adapt society to what can no longer be halted. For Mariestad, this will involve dealing with heatwaves and flooding, for example, in order to avoid unacceptable consequences. The municipality's role in this endeavour is to ensure that urban planning remains resilient in the face of climate change. Key areas include safety, physical investments and being prepared to adapt municipal activities. One important element is to raise the issue of climate change adaptation and integrate it into the urban planning process early on. The municipality has decided to apply the 3-30-300 principle as a guide in zoned residential areas, which means that everyone should be able to see at least three trees from their home, that every area should have at least 30 per cent canopy coverage, and that all homes should be no more than 300 metres away to the nearest park or green area. This principle is helping the municipality to assess how much green space a city needs for the well-being of residents, and to ensure that cities are capable of coping with rain, wind and heat, and of absorbing harmful particles in the air. A blue and green structure programme has been adopted by the municipal council in 2023. This programme includes analyses and information, as well as proposals for further work, including expansion of climate change adaptation work to make more use of green areas for cloudburst management, for example.

The municipality is monitoring climate change adaptation work according to the municipality's climate change adaptation plan. This forward-looking initiative involves identifying potential risks, their consequences and appropriate adaptation



measures and integrating solutions into different activities, policy documents, etc. The municipality also needs to work with property owners, farmers, foresters and other stakeholders to identify and implement measures.

3.9. Climate smart mobility

Transport is one of the biggest sources of greenhouse gas emissions, and there is an increasing demand to use new and existing infrastructure as efficiently as possible. The transport system needs to maintain the correct balance of mobility and accessibility, and form part of a good urban environment. Climate-smart mobility is all about people's ability to transport themselves and their goods to the places they want to reach, in a sustainable way. As the municipality's population grows, it is becoming increasingly important to plan and work with transport for citizens in both urban and rural areas. A study on mobility in the city is currently in progress. This should form the basis for planning and investment and help to make the city an attractive place, with good residential environments and the opportunity to maintain a sustainable lifestyle. There is collaboration on sustainable passenger transport with the business sector and other stakeholders: see 3.4.1 for more information.

To ensure that planning and construction help to bring about to a transport-efficient society, the municipality has adopted a climate pledge that comprehensive plans, detailed development plans and other relevant policy documents must include a calculation of climate impact and comparative alternatives. The aim of this is to help increase the percentage of sustainable travel, as measured by the percentage of walking, cycling and public transport. Developing streetscapes to increase access and make them more attractive is a further climate pledge. This may involve reducing motor traffic in central areas, reducing speeds or adapting to walking and cycling speeds in areas where urban life also has the potential to develop.

The Kinnekulle Line has a key part to play in managing future mobility in terms of commuting to work and studies, freight transport and tourist travel. This railway line passes through five municipalities and connects to main lines to Stockholm and Gothenburg. Diesel locomotives run on the Kinnekulle Line at present, and a feasibility study has been conducted regarding conversion of the line to trains that run on fossil-free hydrogen produced locally. This feasibility study covers a solution in which trains become part of a hydrogen infrastructure that also includes heavy vehicles, cars, ships and work vehicles. A Kinnekulle train group involving the municipalities along the line has been formed and is coordinated by the Skaraborg Local Federation. This group's mission is to monitor developments, prepare and act on issues related to Kinnekulle trains and the Kinnekulle Line.

Mariestad already has access to all five alternative fuels intended for passenger cars: ethanol E85, compressed gas, HVO100, electricity and hydrogen. The municipality has a plant for producing fossil-free hydrogen from solar energy and an associated



refuelling station for cars with fuel cells. Going forward, an external stakeholder is planning to establish another hydrogen refuelling station, also for heavy traffic, in connection with European Route 20, which runs just outside Mariestad.

3.10. Reporting and monitoring

The municipality's transition work is monitored and reported according to the municipality's governance model and procedures. This includes reports from activities during the year and presentation of results in the municipality's annual report. The municipality monitors greenhouse gas emissions every year, and this information is frequently used in Climate-Neutral Mariestad 2030 initiatives to analyse the need for measures and to ensure that a reduction takes place.

The municipality regularly reports good examples and results from a sustainability perspective via its website and social media. The transition team is an important channel for communicating the results achieved and what will be important to work on going forward.

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 mission-driven 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 procurement⁴.

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.

⁴ See <u>pressannouncement from the Swedish Internet Foundation</u> (Swedish)



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.

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 Council⁵.

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, European Urban Initiative (EUI) and Urbact.

⁵ 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.

⁶ New European Bauhaus highlights the importance of aesthetic, social and cultural assets in the green transition.

⁷ 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)

⁸ Urbact is a European cooperation programme for exchange and learning in the field of sustainable urban development, Swedish Agency for Economic and Regional Growth.



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" programme⁹. CapaCITIES is being used to initiate and reinforce national change processes in order to establish national networks and governance structures.

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,

⁹ The Swedish Energy Agency and Viable Cities are participating.



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

It was announced in the autumn of 2022 that the Volvo Group would be basing its new battery cell factory in Mariestad. This establishment, together with other ongoing and future establishments, will involve a large number of new jobs, and Mariestad has embarked upon its biggest urban transformation in modern times. In 2023, the municipal council has adopted a goal for Mariestad municipality to have 40,000 residents by 2040, an increase of 60 per cent on the current population. A new vision for Mariestad for 2040, "We're creating dream locations together", has also been adopted.

Mobilisation to manage this expansion is ongoing in the city; but also in Skaraborg, where all 15 municipalities view the establishment of Volvo and other major corporations as a concern that they all share. This also gives confidence in the future and reinforces cooperation, joining forces to meet the need for housing, mobilisation and skills supply. One major challenge in this initiative will be to reduce greenhouse gas emissions at the same time as the city needs to grow. Climate-Neutral Mariestad 2030 ties in with and is reshaping the initiative on the basis of the new circumstances and perceives good opportunities for accelerating climate transition efforts still further.

A selection of specific actions completed or processes started in 2023 is presented below:

Use of the design methodology in urban planning and as a citizen dialogue was
tested as part of the Sustainable Lifestyles project in the spring. The target group
was young Mariestad residents aged 18 to 30, who were invited to share their
perspectives on sustainable lifestyles and what this could involve for them in their
day-to-day lives, in purely concrete terms. It appeared, among other things, that
transport is a topic that generates engagement, and that many people are in
favour of sharing transport. A toolbox of service concepts has been developed



and should be viewed as seeds to work with. None of the services will overcome the challenges alone, but their impact will accumulate if they are combined and applied in combination with other circular solutions.

- Klimatspelet för Mariestad/Climate Game for Mariestad is a board game that
 reflects the complexity of the climate transition. Game sessions with discussion and
 reflection are arranged at schools, associations and companies throughout the
 year. The aim of this is to increase involvement of citizens in the climate transition.
- Discussions with the building, construction and recycling industry have been initiated, including participation in an industry day and the organisation of a seminar entitled "How can Mariestad grow sustainably?". A panel of companies participated in this and talked about their measures, tools and circumstances.
- Work with climate-neutral associations has started, with more than ten
 associations showing an interest in working more with transition in their activities.
 A wide range of associations are involved, including a large sports club, heritage
 societies and special interest associations. All in all, these associations involve
 a large number of people, including children and young people, and these
 associations can provide good role models for the transition process.
- A project has begun that involves working with sustainable passenger transport linked to major establishments in Skaraborg. This involves a number of the major establishments, Västtrafik, Region Västra Götaland, the Swedish Transport Administration, neighbouring municipalities and the local federation.
- The forthcoming establishments will require accommodation for contractors. Work has begun on identifying the potential to resolve this issue in a climate-smart way by considering synergies with future permanent housing, for example.
- Regional cooperation in Västra Götaland between the three climate-neutral cities
 of Mariestad, Borås and Gothenburg has been developed during the year. The
 ambition is to implement a regional Transition Lab in 2024.
- Mapping of charging infrastructure and future needs and opportunities for expansion has been developed.

The municipal board adopted climate pledges¹⁰ in June, which will help to reduce emissions in the following areas

- We are reducing emissions together with the business sector.
- We have included agriculture as a partner in the municipality's climate transition.
- We are actively working on our energy plan.
- We are working strategically to reduce climate impact through procurement.

¹⁰ Climate pledges are part of Climate 2030 https://klimat2030.se/klimatloften/ (Swedish)



- We are ensuring that planning and construction are helping to bring about a society in which transport is efficient.
- We are developing streetscapes in ways that will increase access and attractiveness.
- Our new cars run on renewable electricity, biogas or hydrogen.
- Our new machinery is fossil-free and procurement requirements are defined for contracts.
- We are reducing food waste in respect of public meals.

The city's district heating company has completed a feasibility study on bio-CCS¹¹ (Carbon Capture Storage) in 2023. The ambition is to be able to offer climate-positive district heating and steam supplies going forward. The method is not commercially viable as yet, but support systems are being developed at national level.

7.2. Most urgent experiences for the municipality to share

For Mariestad municipality, the year has involved focusing on and mobilising the effects and opportunities presented by Volvo's multiple establishments. Much of the development work in the municipality has been reorganised and adapted to the new circumstances prevailing. For Climate-Neutral Mariestad 2030, this involves implementing climate goals and the mission-oriented approach in the working groups formed around sustainable transport and housing for contractors, for example. A number of important policy documents and supporting documents are being developed, and this also provides an opportunity to update the information with climate goals and use the tools available to the municipality, such as land allocation competitions or comprehensive planning. Commitment to climate and sustainability work within companies is on the increase. The slightly bigger companies are clear about their climate goals and are also proud to be part of the green transition, which will provide an excellent opportunity for the municipality to also bring together stakeholders in order to discuss these issues from a broader perspective and develop more concrete benefits in the form of collaborations relating to industrial symbiosis, for example. The transition arena with the business sector, civil society, the academic community and the public sector will grow to include more stakeholders, content, innovations and funding. For citizens, the establishments will create a belief in the future and a curiosity that may become a positive force in Mariestad's transition, while the establishments will provide benefits from a broader perspective on the basis of the green transition.

Work on Klimatspelet för Mariestad/Climate Game for Mariestad was originally intended to take place entirely in digital form. Two concepts are being developed,

¹¹ Carbon capture and sequestration from renewable sources.



and the traditional board game has made the most progress. In many respects, this is because of the way in which students at the University of Skövde have chosen to work, but the physical game has proven to be very useful as the climate game has developed. A game along traditional lines stands out in today's digital world, and the discussions that take place in human encounters provide added value. The game is based on mechanisms linked to game psychology, just like with digital games. Concepts for projects have been developed in order to use game mechanisms as tools for citizen dialogue in urban planning.

Mariestad took part in Stockholm Climate Week in April and had the opportunity to spend an hour talking about the work of Climate-Neutral Mariestad 2030, as well as highlighting other stakeholders working on transition. This seminar was broadcast on social media and attracted an audience of over a million people from all over the world. Communication about climate transition work takes place locally, regionally and in some cases nationally in the first instance, but there is also a great deal of value in reaching out to an international audience; to strengthen their own work, but also to strengthen Sweden as a pioneering country in respect of climate transition and innovations in the field.

Mariestad has benefited greatly from being one of the 23 climate-neutral cities in that paths and tools for the future have become clearer and there is now greater courage to try new methods and approaches. The sharing of knowledge and experience between cities is valuable, as are the joint efforts on the processes and pilot projects organised by Viable Cities and the government agencies.

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 planning¹² 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

¹² Fair and sustainable transition for the climate - Proposal from SKR's program preparation for sustainable transition, SALAR, September 2023 (Swedish)



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 missions¹³ 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 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

¹³ 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



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 Mariestad 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 Mariestad municipality (may be in Swedish).

- Strategy for Agenda 2030 Mariestad
- Overview plan 2030 Mariestad municipality
- Everyone's Mariestad Public Health Plan
- Climate adaptation plan
- Program for blue and green structure