

# Climate City Contract 2030

Between Mariestad Municipality and the government agencies 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 2022**



# Contents

<b>1. Purpose of the Climate City Contract 2030</b>	<b>4</b>
<b>2. Parties</b>	<b>4</b>
<b>3. Municipal commitments</b>	<b>4</b>
3.1. Municipal climate goals	4
3.2. Strategy	6
3.3. Organization and management	6
3.4. Collaboration with business, academia and citizens	7
3.5. Climate Investment Plan	9
3.6. Digital support for implementation	10
3.7. Innovation hub for climate-neutral municipalities	10
3.8. Climate adaptation	11
3.9. Climate-smart mobility	11
3.10. Reporting and follow-up	12
<b>4. Viable Cities' commitments</b>	<b>13</b>
4.1. Better regulation	13
4.2. Innovation	13
4.3. Coordinated funding	14
4.4. Cooperation with the EU Cities Mission	14
<b>5. Commitments by the government agencies</b>	<b>14</b>
5.1. A learning approach in policy development	15
5.2. Funding for research, innovation and development	15
5.3. Coordinated funding	16
5.4. Participation in European initiatives for sustainable cities	16
<b>6. Strategic development projects 2023</b>	<b>17</b>
6.1. System demonstrations	17



6.2. Competitiveness and funding.....	17
6.3. Citizen engagement.....	18
6.4. International Cities Mission 2030.....	18
<b>7. Joint monitoring, evaluation and updating.....</b>	<b>19</b>
7.1. Most important updates for the municipality.....	19
7.2. Most urgent experiences to share for the municipality.....	20
7.3. Most important updates regarding Viable Cities.....	20
7.4. Most important updates regarding government agencies.....	22
<b>8. The contract.....</b>	<b>25</b>
<b>Climate City Contract 2030.....</b>	<b>26</b>
<b>Appendix 1 – document links.....</b>	<b>27</b>



# 1. Purpose of the Climate City Contract 2030

The purpose of this Climate City Contract is to accelerate the pace of the climate transition in cities within the framework of the 2030 Agenda, while contributing to the recovery of the Swedish economy in the wake of the coronavirus pandemic. The Climate City Contract expresses the partners' intention to raise the level of ambition in sustainable urban development and climate transition. The Climate City Contract also provides Sweden and Swedish cities with a good foundation to be international role models for climate transition in cities. This will be achieved through mutual, long-term commitment to efforts on the part of the undersigned government agencies, the Viable Cities innovation programme, and the city/municipal authority as set out below.

## 2. Parties

**Parties in the Climate City Contract 2030 are:**

- Mariestad Municipality.
- The government agencies: The Swedish Energy Agency, Vinnova, Formas, the Swedish Agency for Economic and Regional Growth, the Swedish Transport Administration and the Swedish Environmental Protection Agency.
- The Viable Cities strategic innovation programme.<sup>1</sup>

## 3. Municipal commitments

### 3.1. Municipal climate goals

The 2030 Agenda and the 17 Sustainable Development Goals (SDGs) point the way for the Municipality's work on sustainability, now and in the future. In May 2021, the Municipal Council adopted the *Strategi för Agenda 2030 Mariestad/Strategy for Agenda 2030 Mariestad*. The strategy interweaves the Municipal Council's aims regarding the SDGs, and clarifies the political priorities regarding efforts on environmental, social and economic sustainability.

In the Strategy for Agenda 2030 Mariestad, the Municipal Council has decided on the following goals:

<sup>1</sup> Viable Cities is a strategic innovation programme funded jointly by the Swedish Energy Agency, Vinnova and Formas. The programme runs 2017–2030 and has approximately 130 members. The host organization is KTH Royal Institute of Technology.



## **The Municipality**

- provides opportunities for good health among its inhabitants, through safe environments and proximity to recreation.
- makes it possible for all students to acquire the knowledge and skills they need to promote sustainable development and have a sustainable lifestyle.
- enables children and young people to participate in the development of society.
- The Municipality's operations
- shall be climate neutral in terms of electricity, heating and transport.
- build and renovate smartly and resource efficiently, with circular and toxin-free materials.
- contribute to the development of technology and methods, partly through procurement, participation in development projects and locally adapted solutions.
- use procurement to develop local and sustainable production opportunities and services.
- use its own land to strengthen ecosystem services and biodiversity.

The strategy also encompasses the municipal enterprises Mariehus AB and VänerEnergi AB.

### **Housing company Mariehus AB has the following climate goals:**

- Reduce the volume of unseparated waste.
- Reduce consumption of fossil fuels.
- Reduce energy and water use.

### **Energy company (shared with Töreboda Municipality) VänerEnergi AB has the following climate goals:**

- Reduce carbon dioxide emissions by 1,200 tonnes per year.
- At least 40% of total electricity consumption by district heating shall be produced in own facilities.
- Streamline and reduce energy use in own premises.

## **Climate 2030 – Västra Götaland in Transition**

Through Climate 2030 – Västra Götaland in Transition, the Municipality has committed to contribute to the climate goal for the West Swedish economy to be fossil independent by 2030. The goal means that greenhouse gas (GHG) emissions in Västra Götaland must decrease by 80% on 1990 levels by 2030. Moreover, GHG emissions from consumption by West Swedes, wherever in the world they occur, must decrease by 30% compared to 2010.



The various sources of GHGs will be analysed as closely as possible, and based on the overall situation, appropriate measures will be identified and prioritized. See also 3.5 Climate Investment Plan.

## 3.2. Strategy

For Mariestad, climate neutrality means achieving net zero GHG emissions, 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 also contribute to the EU's European Green Deal. The strategy aims to transform the EU into a fair, thriving society with a modern, resource-efficient, competitive economy, where in 2050 there are no longer any net emissions of GHGs, and where economic growth is independent of resource consumption. Another aim of the European Green Deal is to protect, preserve and improve the Union's natural capital, and protect public health and well-being against environment-related risks and consequences.

Strategy for Agenda 2030 Mariestad is an umbrella strategy for the Municipality's sustainability efforts. All the Municipality's operations shall work to achieve the goals in the strategy. In addition to this, the Municipality's Comprehensive Plan and Climate Adaptation Plan, for example, contain position statements on climate and sustainability. Through the Climate City Contract, the Municipality adds a further dimension by working strategically with players beyond municipal operations, i.e. the business community, civil society and citizens.

Climate efforts involve decisions, investments and activities that encompass several of the global SDGs. Careful balancing to promote synergies and avoid conflicts between different global goals will permeate the process. The efforts shall lead to a Mariestad that works for the people who live here, is good for citizens', businesses' and society's finances – and is good for the climate and our planet.

## 3.3. Organization and management

Climate Neutral Mariestad 2030 is part of the Urban Planning Administration, where the Municipality's strategic efforts for sustainability are coordinated. The urban planning process is the focal point of the Municipality's role of developing a long-term sustainable Mariestad based on the three dimensions of sustainability: environmental, social and economic. The ambition is, over the years to come, to develop and/or implement tools that make it easier to make climate-smart choices in the different parts of the process, and for different target groups.



From Mariestad Municipality's Comprehensive Plan 2030 (2018, in translation):

"New development shall promote sustainable lifestyles and ensure energy efficiency in both the production and the operating stage, for example renewable energy."

The Municipality's Agenda 2030 Group works across administrations and serves as a coordinator for strategic efforts on sustainability. The group includes several key functions such as a sustainability strategist, an environmental strategist, an urban planning strategist, a public health strategist, a controller and a communicator.

### **3.4. Collaboration with business, academia and citizens**

The Municipality's Strategy for Agenda 2030 is partly about how the Municipality will work with other stakeholders.

"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 Agenda 2030 Mariestad, in translation.

The Municipality's Public Health Plan also highlights the necessity of engaging citizens in the transition process, and that this creates 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/Everybody's Mariestad – Public Health Plan 2022–2030 – Mariestads Municipality*, in translation.

Efforts as part of Climate Neutral Mariestad 2030 will further develop the Municipality's work with individual stakeholders and groups of stakeholders in the same area, and also collaborations relating to the common denominators for business, academia, the non-profit sector and citizens on transition-related issues. One aim is to work with participant-led processes to ensure the greatest possible understanding and engagement, and create results that the stakeholders themselves own.



## **Business**

Trade and industry is in an expansive phase in Mariestad with companies growing, new companies setting up business, and one major establishment that will lead to thousands of new jobs up to 2030. This places demands on mobility solutions, a work force with the right skills, attractive living environments, access to schools and care services, and also leads to brand new districts emerging. The Municipality has an important task in creating the conditions for business expansion by planning and structuring long-term, and this also includes climate- and sustainability-related management.

Local business can have a major influence on the transition process in their sector or geographical area, be it acting as pioneers or working on their own transition. To foster these driving forces, the aim is to interest more companies in getting involved in the process of making Mariestad climate neutral, whether forming sectoral clusters, joint sectors or networks with other stakeholders. Both the city and rural communities need to be involved in the work, and this also presents opportunities to develop the Municipality's work on rural development.

The Municipality's regular work includes directing companies with ideas and innovations to existing forms of support, and organizations that can develop their ideas. For several years, the Municipality has been working goal consciously with industrial renewal, partly through the ElectriVillage concept; see 3.7 Innovation hub for climate-neutral municipalities.

## **Academia**

Collaboration with academia takes places in several areas. Both Linköping University and the University of Skövde are involved in Mariestad's efforts towards climate neutrality. The Department of Conservation at the University of Gothenburg has both education and research activities in Mariestad. This takes place in association with the Municipality's own education platform, Dacapo Mariestad, which offers vocational courses in areas such as crafts and green planning, integration and design of eco-system-based solutions for green transition. Dacapo is an important player in helping to ensure that the local business sector has the right skills, and offers both short- and long-term courses based on identified needs.

The Municipality will continue to develop its collaboration with the academic sphere in line with its Strategy for Agenda 2030.

"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 Agenda 2030 Mariestad, in translation.





### **Non-profit associations and study associations**

Mariestad has a great many clubs and societies, in everything from sports to interests of different kinds. Some of these associations have extensive operations including premises and events. One ambition is to look into whether any of these associations want to take the step towards being climate neutral. As well as aiding transition, this encourages engagement among members and sets a good example, while also strengthening the association's own brand.

The study associations work in public education, and often reach groups that are under-represented in society's development. The ambition is to develop cooperation with local study associations on transition-related issues, and coordinate this with the Municipality's public health work.

The non-profit association Biosphere Reserve Vänerskärgården with Kinnekulle has an important part to play in serving as a meeting arena for complex matters relating to sustainability, where different interests need access to forums for dialogue. Biosphere Reserve is a UNESCO designation signifying a model area for sustainable development.

### **Citizens**

Much of the transition needs to take place among individual citizens, and the Municipality's work lays the foundation for this. One of the key areas is communication to show good examples and create personal incentives to make climate-smart choices.

Another aspect of the Municipality's work entails providing the conditions for a sustainable lifestyle through infrastructure, mobility and different processes. Citizens are also a part of the business sector as owners or employees, they are members of associations, go to school, work for the Municipality and so on. Consequently, dialogue with citizens of all ages, whether they were born here or have moved here, is important. The forms for this kind of dialogue will be further developed in the years to come. One concrete initiative within Climate Neutral Mariestad 2030 is the development of a digital game tool, a 'climate game', which will inspire and encourage engagement for climate transition; read more under 3.6 Digital support for implementation. Depending on the eventual design, the 'climate game' could also include solutions for citizen dialogue.

## **3.5. Climate Investment Plan**

Investment flows have great potential for the climate transition. A Climate Investment Plan that includes both an economic and a socioeconomic perspective will be prepared. This could for instance form a basis for decisions on municipal investments, or contribute to a holistic perspective to provide opportunities for financial solutions for the business sector. Municipal investments and municipal authority constitute only



a small part of the transition that needs to take place. The main difference needs to be made by other stakeholders and citizens.

Climate investments relate to both direct investments in climate action, but also to fine-tuning ongoing investments and guiding existing consumption, for instance by investing in electric rather than petrol-driven cars.

The Climate Investment Plan will be based on an estimation of emissions in 2030, climate goals 2030, and will include actions to be taken and the lower emissions they will lead to. Analyses and calculations will then be performed. The results will encompass e.g. investments, cost effectiveness, societal benefits, and also overall economy for the climate transition.

### **3.6. Digital support for implementation**

Digital support is an important component of efforts to enable a climate-neutral municipality. This includes digital solutions, and also harnessing digital technology to transition to more sustainable habits and change behaviours.

The Municipality has an extensive IoT network that enables municipal operations to use more climate-smart solutions, such as sensors that read air quality or indicate when a flower bed needs watering. This means the right action can be taken at the right time and lead to less transport. The vision is to increase the use of climate-smart solutions using the IoT network, and also to work with innovative new solutions based on local needs.

Efforts to create a more effective, climate-governing process for the built environment using digital technology is under development within the Municipality. There are also great opportunities to use available data, i.e. open data, to spread knowledge and increase awareness about climate-smart choices in the every day.

To promote citizen engagement, a digital game tool is being developed, called the 'climate game'. The aim is to encourage initiatives, ideas and actions among Mariestad residents to reduce their climate impact, by gradually increasing interest and nudging them in the right direction.

### **3.7. Innovation hub for climate-neutral municipalities**

Mariestad is working on ElectriVillage, the Municipality's testing and demonstration platform concept for sustainable transition and industrial renewal. The concept also enables societal development locally with new business models, more jobs, new skills and enhanced attractiveness.

ElectriVillage is based on the needs of the medium-sized city, but aims to make the development projects scalable to suit large and small 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 filling station, and a study into the value of harnessing waste products from the hydrogen production. A pilot study into a large-scale conversion of the Kinnekullebanan train line to run on hydrogen has been conducted. It includes a solution to extend the hydrogen infrastructure with combined filling stations for trains, cars, heavy vehicles and ships; read more under 3.9 Climate-smart mobility.

The municipal energy company, VänerEnergi, is working with various initiatives to reduce climate impact. For example it is conducting a pilot study, via a part-owned subsidiary, on capturing and storing the carbon dioxide released in the production of electricity and heat at a cogeneration plant.

Through Biosphere Reserve Vänerskärgrården with Kinnekulle, the Municipality can disseminate knowledge and experiences in UNESCO's network of Biosphere Reserves around the world (of which there are more than 700). Mariestad is working alongside its neighbouring municipalities Töreboda and Gullspång in technical areas, as well as the natural and built environment.

### **3.8. Climate adaptation**

Climate adaptation is an increasingly important issue, and entails measures to adapt society to the climate changes that have already happened and those that cannot be stopped in the future. It is necessary both to make efforts to reduce emissions, and to adapt society to the developments that are no longer stoppable. For Mariestad, this includes e.g. managing heat waves and flooding in order to avoid unacceptable consequences. The Municipality's role in this process is to ensure spatial planning that is resilient to climate change. Some of the key areas are safety, physical investments, and preparedness to adapt the Municipality's operations. One important aspect is to highlight and incorporate the matter of climate adaptation early on in the spatial planning process. The Municipality also needs to work alongside property owners, farmers, foresters and other stakeholders to identify and implement measures.

The Municipality monitors climate adaptation efforts in line with the adopted Climate Adaptation Plan. Forward-looking efforts focus on identifying potential risks, their consequences and appropriate adaptation actions, and to integrate solutions into different operations, governing documents and so on.

### **3.9. Climate-smart mobility**

Transport is one of the largest sources of GHG emissions, and there are increasing demands to use new and existing infrastructure in the most efficient way possible. The transport system needs to offer the right balance of mobility and accessibility, and be part of a good urban environment. Climate-smart mobility is 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 increasingly important to plan for and work on citizens' transport, both in the city and in rural areas.

"The Municipality shall strive to reduce short journeys by car in favour of walking and cycling, so that the increase in population does not contribute to an increase in traffic and environmental impact."

From Mariestad's Comprehensive Plan 2030 (2018, in translation).

"The Municipality wants to work for sustainable travel with well-developed public transport, and for an infrastructure that enables sustainable lifestyles. The municipality strives for more frequent services in rural areas."

From Mariestad's Comprehensive Plan 2030 (2018, in translation).

To meet mobility requirements in the future as regards work/study commuting, freight transport and tourist travel, the Kinnekullebanan train line represents a key function. The line runs through five municipalities and connects to main lines to Stockholm and Gothenburg. Mariestad has recently been notified of a major industrial establishment that will bring several thousand new jobs. This will alter the structure and the landscape both in Mariestad Municipality and in neighbouring municipalities, based on brand new perspectives. Implementing this change while maintaining clear climate and sustainability governance calls for utilizing what already works and adapting it accordingly. Kinnekullebanan is currently served by diesel engines, and a pilot study has been conducted to transition to using locally produced fossil-free hydrogen. The study looks at a solution whereby the trains are part of a hydrogen infrastructure that also includes heavy vehicles, cars, ships and construction vehicles. The Municipality will continue striving to realize a transition of Kinnekullebanan; the Municipality does not, however, have authority over all parts of the process.

Mariestad already has access to five alternative fuels designed for cars: ethanol E85, biogas, HVO100, electricity, and hydrogen. The Municipality produces its own fossil-free hydrogen at a facility with solar cells and a refuelling station. During 2023 a further refuelling station for hydrogen, also for heavy vehicles, will be established adjacent to the E20 European Highway which runs past Mariestad.

Sharing services aim to promote shared use of products by hiring or lending rather than buying personally. Part of Climate Neutral Mariestad 2030 is to test a sharing service among citizens for fuel-cell cars. The dual aims are to test the actual sharing service and also increase the percentage of fossil-free passenger transport.

### **3.10. Reporting and follow-up**

The Municipality's follow-up and reporting take place in line with the municipality's procedures and governance model. This includes, for example, reports throughout



the year from the operations, and also results reporting in the Municipality's Annual Report.

The Municipality regularly reports good examples and results from a sustainability perspective to citizens via its website and social media.

## 4. Viable Cities' commitments

The innovation programme Viable Cities is implemented in a broad collaboration in order to contribute to the transition to climate-neutral cities by 2030 as part of Sweden's commitment to meet the Sustainable Development Goals (SDGs) of the 2030 Agenda and the aims of the Paris Agreement. This includes being international role models for climate transition in cities.

Viable Cities works with a wide range of stakeholders across disciplinary boundaries, industries and societal sectors. The programme connects centres of research excellence with large, small and medium-sized enterprises in a range of industries, as well as with public sector and civil society organizations.

Within the framework of Viable Cities' strategic innovation role, the programme shall strive to achieve the following:

### 4.1. Better regulation

Viable Cities intends to create competence support with policy labs to provide the municipality with a better overview of current and proposed Swedish and European legislation, regulation and standards of relevance to the cities' climate transition. This includes process support for changing regulations and standards to facilitate the climate transition in practice. In the initial phase, this will be linked to work to develop system demonstrators (see Section 6).

### 4.2. Innovation

In order to make it easier for the municipality to implement innovations that can accelerate the pace of climate transition, Viable Cities will provide a competence network and process support, including by engaging other strategic innovation programmes in the ongoing development of Climate City Contract 2030, particularly in the areas of mobility, energy, built environment, the circular economy, health and digitalization. Based on the collaboration agreement on climate-smart mobility signed with the strategic innovation programme Drive Sweden, this area of collaboration will be further developed with both cities and government agencies, not least the Swedish Transport Administration.



### 4.3. Coordinated funding

Viable Cities will work in the following ways to support the municipality's funding needs for the climate transition and to promote collaboration and synergies between government agencies and other stakeholders that fund climate transition and sustainable urban development.

- Viable Cities shall continue to work with Climate City Contract 2030 with the 23 cities and five government agencies involved in the programme.
- Through the Council for Sustainable Cities, Viable Cities has launched a collaboration to create synergies between urban climate transition grants from government agencies and Climate City Contract 2030. The agencies are currently working to coordinate the various initiatives under way in the field of sustainable urban development, see Section 5.3 Coordinated funding.
- Viable Cities collaborates with Kommuninvest and the European Investment Bank (EIB) among others in order to develop forms for strengthening the long-term funding of municipal climate investment plans.

Viable Cities continues to develop forms for climate investment plans for cities, the aim being to support all cities in their efforts towards climate neutrality by 2030.

### 4.4. Cooperation with the EU Cities Mission

Viable Cities cooperates closely with the support structures built up around the EU's Cities Mission – including the NetZeroCities platform (an EU mission platform), CapaCITIES (a network of national nodes), and the Driving Urban Transitions (DUT) Partnership programme.

## 5. Commitments by the government agencies

The government agencies commit to collaborating within the strategic innovation programme Viable Cities. The agencies thereby contribute to the purpose of the mission-led work to transition to climate-neutral cities by 2030 with a good life for all within planetary boundaries.

Climate City Contract 2030 means that new working methods need to be developed, both between different actors and organizations, and between different levels of governance.

During 2023, the agencies will continue to develop work in the interagency innovation team. Continued dialogue with cities and regions is important in order to capture



needs and contribute to systems transition. This work entails active participation in the Transition Lab Forum facilitated by Viable Cities, in which joint workshops, reflective discussions and teaching seminars are important aspects. New working methods may also entail that government agencies initiate experiments and pilot projects.

The agencies undertake to continue joint efforts to support the municipalities' climate transition in the following areas in 2023:

## **5.1. A learning approach in policy development**

The government agencies work together to create the conditions for proactive dialogue and learning regarding policy development, and existing and proposed regulations on sustainable urban development and climate transition.

During 2023, the agencies will explore and test forms, such as policy labs, for identifying obstacles and challenges in policy and regulations for sustainable urban development and climate transition.

The agencies will continue to contribute to activities that promote the development of climate investment plans, digitalization and data sharing, system demonstrators and collaboration processes that relate to multi-level governance.

During Sweden's EU Presidency in the first half of 2023, the government agencies will be involved in several of the 150 or so EU meetings to be held in Sweden. The meetings are forums for learning and policy development, and cities and regions are important participants. Planned discussions include the EU's urban agenda on sustainable urban development and a conference on Green Cities.

## **5.2. Funding for research, innovation and development**

The government agencies fund initiatives for research, innovation, development and systems innovation that support accelerated climate transition.

The agencies' funding focuses on different types of research, innovation, application and demonstration, and to some extent investment support. Funding is provided through open calls and other forms, such as client networks, needs-owner networks and innovation procurement.

As part of the transition process, the agencies<sup>2</sup> and Viable Cities have launched an initiative on urban system demonstrators. During autumn 2022, an initial 'design phase' was carried out as part of the initiative. A follow-up call will be made in 2023. The purpose of the effort is to create a form of initiative that takes a clearer systems perspective to the transition process.

<sup>2</sup> Vinnova



### 5.3. Coordinated funding

To create better foresight and centralized information, the government agencies continuously develop coordination of the various efforts under way in the field of sustainable urban development and climate transition. Development takes place within the framework of several of the agencies' existing tasks and assignments, such as the Council for Sustainable Cities, strategic innovation programmes, the national research programmes for climate and sustainable community building, as well as the European Regional Development Fund.

During 2022, the agencies have begun initial tests with some of the cities, in order to develop, in dialogue, a method for portfolio analysis of the agencies' collective funding for cities. The innovation work is planned to continue in 2023. The long-term goal is for the work to contribute to work on cities' climate investment plans.

Hallbarstad.se is the Council for Sustainable Cities central website. Development work on the website will continue in 2023, partly to publicize upcoming funding opportunities, and partly to make it clearer and more user-friendly.

### 5.4. Participation in European initiatives for sustainable cities

The government agencies are involved in and work with several different European initiatives to support the development of sustainable cities and communities.

Work to support Swedish participation in the Horizon Europe 2021–2027 research programme includes contributing to the design of calls and activities, and informing and advising actors planning to take part in applications for different European efforts. The government agencies also collaborate in the execution of the EU's Regional Development Fund 2021–2027 with efforts for sustainable urban development.

The agencies will continue to collaborate in the Driving Urban Transitions to a Sustainable Future Partnership<sup>3</sup>, where there will be calls and other activities in the field of sustainable urban development in the years to come, as well as the European Commission's New European Bauhaus<sup>4</sup> initiative, the European Urban Initiative (EUI)<sup>5</sup> and URBACT<sup>6</sup>.

<sup>3</sup> The Swedish Energy Agency, Formas and Vinnova

<sup>4</sup> New European Bauhaus highlights the significance of aesthetic, social and cultural values in the green transition.

<sup>5</sup> The European Urban Initiative is a hub for sustainable urban development on an EU level. The EUI will offer funding for cities to improve and increase their capacity in designing strategies, policies and projects for sustainable urban development ([urban-initiative.eu](http://urban-initiative.eu)).

<sup>6</sup> URBACT is a European collaboration programme for exchange and learning in sustainable urban development, Swedish Agency for Economic and Regional Growth,





The agencies will also contribute to develop support functions for the cities selected to participate in the Cities Mission. One example is the CapaCITIES<sup>7</sup> programme. Through CapaCITIES, national change processes are initiated and strengthened to establish national networks and governance structures.

## 6. Strategic development projects 2023

The following strategic development projects will be conducted during 2023 within the framework of Viable Cities Transition Lab in collaboration with other municipalities, with the aim of further developing the content of the Climate City Contract 2030 during its upcoming revision.

### 6.1. System demonstrations

In collaboration with the involved government agencies, Viable Cities is developing a new form of initiative to drive systems innovation for transformation in line with the Cities Mission. A system demonstrator will be conducted to demonstrate the transition of entire social systems in a real-life environment. An important part of this kind of approach is a portfolio of efforts where new solutions, models, initiatives and experiments are linked to a greater whole. Many actors from different sectors are being mobilized in order to learn how to scale up. The system demonstrators start from central areas in the Climate City Contract 2030 and are intended to contribute to revisions of the contract based on insights arising from the work.

During 2022, Vinnova and Viable Cities have jointly begun a design phase to explore how system demonstrators can be a powerful tool in the transition to climate-neutral cities. In collaboration with a number of cities, six consortiums began the design phase in autumn 2022. A call is planned during 2023 for the establishment phase, with the ambition of enabling a number of system demonstrators in Sweden. In tandem, four system demonstrators are being planned Bogotá (Colombia), Bristol (UK), Curitiba (Brazil) and Makindye Ssabgabo (Uganda) within the Climate Smart Cities Challenge alongside UN-Habitat. The aim is to strengthen the exchange of experiences between system demonstrators both nationally and internationally in 2023.

### 6.2. Competitiveness and funding

One of the foundations of mission-oriented innovation is that the state and public organizations at different levels of society play an active role in co-creating and redesigning markets in collaboration with business and other players in society, such as academia and civil society. Concerted mobilization for the transition to climate neutrality can lay the foundation for companies in Sweden to develop new business strategies that enhance competitiveness by driving a transition to a sustainable,

<sup>7</sup> the Swedish Energy Agency and Viable Cities are taking part.



climate-neutral society. This is crucial to Sweden's ambition of being the world's first fossil-free welfare nation, and to our climate policy framework. During 2023, Viable Cities will further strengthen its collaboration with business in order to muster forces for transition. This will take place on several levels, particularly through collaboration in initiatives such as Fossil Free Sweden and The Green Transition Leap. In addition, there will be development to strengthen the local mobilization of companies in the Climate City Contract 2030.

A central aspect of the Climate City Contract 2030 is to create a Climate Investment Plan with a broad perspective on what investments need to be made to achieve climate transition in a city by 2030 (with broad referring to a wide range of stakeholders such as citizens, civil society, companies, academia and public organizations). The municipality is believed to have control over about 15% of the required investments on average. One crucial task is to bring together the right actors from business (including the financial sector), public bodies and civil society to bring about the necessary investment and redirect financial flows to transition to climate neutrality, while also securing auxiliary benefits from the climate transition such as jobs, improved health, inclusivity and attractive living environments. Procurement is also a pivotal issue here. Viable Cities' work will continue in 2023 in order to secure the mobilization of investments and develop methods for climate investment plans.

### **6.3. Citizen engagement**

Various societal challenges currently exist, adding further crises to the climate crisis. For example the pandemic, the war in Ukraine, crises relating to energy, food, raw materials and critical minerals, biodiversity and demographics. This also presents a demographic challenge where a growing percentage of the population feels excluded.

This increases the need for efforts aiming at inclusivity, and at putting citizens front and centre for the transition to climate neutrality and a sustainable society, for instance through new forms for citizen involvement (e.g. citizens' councils) and the development of attractive living environments (e.g. New European Bauhaus). During 2023, Viable Cities will further develop collaboration with cities, government agencies and other actors in order to create conditions for citizen engagement in the climate transition. This will be done primarily by developing new forms for citizen involvement in local climate city contracts and collaboration with European efforts in the area.

### **6.4. International Cities Mission 2030**

In October 2021, the EU launched five missions as a new and innovative approach to working together to improve the lives of people in Europe and beyond. The five missions are intended to tackle major societal challenges such as health, climate and the environment and to formulate ambitious goals and deliver solutions by 2030.



One of these missions is 100 Climate-Neutral and Smart Cities by 2030 – by and for the citizens (known as the Cities Mission), an important element of the delivery of the European Green Deal and a climate-neutral continent by 2050. This will considerably strengthen Swedish efforts to achieve climate-neutral cities by 2030 and to utilize the Climate City Contract 2030 as a tool to do so.

During 2023, work will be done to further strengthen links between Swedish and joint European efforts to achieve climate-neutral cities by 2030. This will take place within a range of initiatives involving cities, government agencies and the Viable Cities programme; for example, NetZeroCities (a platform for the implementation of the Cities Mission which will be developing e.g. an EU Climate City Contract and climate investment plans), the Driving Urban Transition Partnership, CapaCITIES, New European Bauhaus and others. Launched by the European Commission in January 2021, the New European Bauhaus initiative connects the European Green Deal to our built environment. In the implementation plan for the Cities Mission, the European Commission highlights that the EU Climate City Contract will also enable participating cities to integrate and promote the values and the principles of the New European Bauhaus initiative in their plans for climate neutrality. The Swedish National Board of Housing, Building and Planning (through the Council for Sustainable Cities) has been tasked by the Government with coordinating Swedish participation in New European Bauhaus.

Work on achieving climate-neutral cities by 2030 will continue to be developed globally. This will primarily be based on several already ongoing projects, e.g. linked to Sweden's EU Presidency in the first half of 2023, and the continuation of the Climate Smart Cities Challenge in the four cities outside of the EU in association with UN-Habitat.

## 7. Joint monitoring, evaluation and updating

Viable Cities and the municipality agree to conduct an annual review of the municipality's results within the framework of Climate City Contract 2030. Viable Cities shall prepare documentation for annual follow-up at municipal and national levels

### 7.1. Most important updates for the municipality

During the year since the Municipality signed a declaration of intent to prepare a Climate City Contract, the following has taken place (in 2022):

- The politically decided goals for the 2030 Agenda and Mariestad have been implemented in the Municipality's operational planning.



- Work on Climate Neutral Mariestad 2030 has begun, and with it various processes in e.g. spatial planning and gamification as a method for enabling sustainable lifestyles.
- It was announced in August that Volvo Group would be locating its new battery factory in Mariestad. In the longer term, the establishment will create a great many new jobs. Mariestad is facing an exciting future as an important enabler in the industrial renewal towards a climate-neutral society.
- A fossil-free pre-school that gets its electricity from locally produced hydrogen has been opened, and it also represents a future-looking model for how sustainability can be incorporated into education at an early age.

## **7.2. Most urgent experiences to share for the municipality**

The most significant experiences from 2022 are that work on the 2030 Agenda can be integrated into the operations' regular planning. Activities aiming to achieve the goals have been 'tagged' against the 2030 Agenda, thus making it possible to monitor them both against local objectives and key metrics defined in the strategy. This is a good start on a longer journey, where it will eventually be possible to show citizens too how the process is developing.

Another significant experience from 2022 worth sharing is the work on development of system solutions for fossil-free hydrogen: production, storage and use. The Municipality has invested in a refuelling station for hydrogen, and a pre-school that will be virtually self-sufficient in terms of energy. During the year, a pilot study has also been conducted looking at the potential to harness waste products such as oxygen and heat from hydrogen production, the starting point being production at the refuelling station.

## **7.3. Most important updates regarding Viable Cities**

During 2022, far-reaching efforts have been made to lay a good foundation for all 23 signatory cities to deepen their work on the Cities Mission, as 14 cities were added in October 2021. The platform for faster learning has been evolved through the Viable Cities Transition Lab Forum, City Labs, Climate Breakfasts and a range of other formats for meetings between cities, government agencies and other actors. The collaboration with the signatory government agencies has been enhanced so as to further hone the Climate City Contract 2030 process. Viable Cities has also provided documentation for the government's task relating to local and regional climate transition, which is one of the foundations for the government's upcoming climate policy action plan.

During the year, efforts to develop practical, research-based tools and methods for climate investment plans have intensified. An initial prototype of a calculation tool has been available to all 23 signatory cities since October. Development of



the system demonstrator concept also continued during the year, and in the autumn a design phase for a brand new effort was launched in a partnership between Vinnova and Viable Cities, which involves several cities.

During 2022, Viable Cities has had responsibility for a government assignment, Thriving North (support for innovation work for sustainable urban and community development in Norrbotten and Västerbotten). An initial prototype of a regional climate contract has been developed with a working group of representatives from the regions and county administrative boards in Västerbotten and Norrbotten. Moreover, a platform for regional societal transition has been initiated in northern Sweden. The platform is called Thriving North, and is now being carried forward by several players in Sweden's four northern regions.

The EU's work on the Cities Mission has been intensified during the year. September 2021 saw the launch of the Cities Mission, one of five EU missions. Cities across Europe were invited to register their interest in becoming forerunners in the transition to climate neutrality. As many as 377 cities applied. In June 2022, 112 cities were chosen to be pioneers in the climate transition, 100 in the EU and 12 in associated nations. These 112 include seven of the Swedish cities that are among the 23 signatories of the Climate City Contract 2030.

Over the past year, the European platform NetZeroCities has begun efforts to support implementation of the Cities Mission within the EU, primarily to facilitate the transition in the 112 cities. Viable Cities is also involved in this work. NetZeroCities is currently designing a Climate City Contract for cities throughout the EU as a tool for accelerated climate transition. Climate investments are an important aspect of this.

Two new complementary initiatives were begun during 2022 to support the Cities Mission in the EU. The first is the Driving Urban Transitions Partnership, in which Viable Cities is taking part together with Swedish organizations Vinnova, the Swedish Energy Agency and Formas. The partnership is a collaboration between national bodies from a large number of nations. The focus is on funding international efforts in three sectors that can help accelerate the climate transition: Positive Energy Districts, Circular Urban Economies and 15-minute City. The other is the CapaCITIES initiative. This EU collaboration aims to facilitate the establishment of national structures to enable climate transition in cities similar to Viable Cities in Sweden and CitiES2030 in Spain.

The Climate Smart Cities Challenge, a global innovation competition, has entered a new phase during the year, and teams of companies and organizations are now working in the four cities outside the EU in association with UN-Habitat.



## 7.4. Most important updates regarding government agencies

### Work in the interagency innovation team

During 2022, the government agencies in the Climate City Contract have continued to develop work in their interagency innovation team. For instance, the team has compiled a summary of the government agencies' various forms of funding and financing instruments, and helped in ensuring that calls related to climate transition and sustainable cities are continually published on the [hallbarstad.se](https://hallbarstad.se) website.

The innovation team has participated in Viable Cities Transition Labs, as well as workshops and meetings, in order to learn more about cities' climate investment plans and the agencies' role in the process. Alongside some of the cities, the innovation team has tested developing support and forms for analysing the government agencies' joint funding (including various research and innovation (R&I) programmes, city environment contracts) over the past five years. The aim in the longer term is that this work should contribute to commitments regarding coordinated funding and the cities' work on planning climate investments.

The government agencies' ongoing work includes many measures and initiatives that are of significance to the cities' work on climate transition. Compiling and providing information about these are important tasks for the government agencies. Below is a selection that relate to the cities in some way.

### Funding for research, innovation and development

During the year, the government agencies have announced several calls aiming to facilitate the transition in cities.

Vinnova has worked with Viable Cities to publish a call for a design phase for urban system demonstrators, for instance. A follow-up call will be published in spring 2023. Other examples from Vinnova include Sustainable accessibility across Sweden, on mobility in sparsely populated areas, in association with Drive Sweden and Viable Cities, Civil society's solutions for climate transition, and Innovations to reduce electricity consumption in cooperation with the Swedish Energy Agency.

The Swedish Agency for Economic and Regional Growth has had calls from the European Regional Development Fund: Produce a local strategy for sustainable urban development and Drive a platform for collaboration and experience exchange. The city as a hub for green and digital transition is an initiative within The Green Transition Leap which is also financed by the Regional Development Fund. The initiative aims to develop practical new working methods for working with system innovation for local green transition.

Formas has published the call Climate-neutral and inclusive municipalities to increase the capacity and ability of municipalities to accelerate transition work towards



climate neutrality which is characterized by social inclusion and equal living conditions. Within the national research programme for sustainable community building, Formas has published a call for Research schools for sustainable community building. The aim of the research schools is to bolster skills and knowledge development, and they are all distinctly interdisciplinary, practically oriented and challenge driven. Several municipalities are included in the research schools. Formas also funds many R&I projects every year in the fields of environment, community building and areal industries in many national and international calls.

In the Swedish Transport Administration's calls for City Environment Contracts, municipalities and regions can apply for funding that leads to a higher proportion of passenger transit by public transport or cycling and sustainable freight solutions.

The Swedish Energy Agency has published calls in the following programmes that are relevant to sustainable cities and communities: Humans, Energy Systems and Society (MESAM), Energy efficiency in cultural heritage buildings, Design for Everyday Energy Efficiency, Transport-Efficient Society and E2B2 (energy-efficient building and living), Graduate School in Energy Systems, and Bio+ (biobased society).

For many years, the Energy Agency has funded client groups and networks to create a platform for close collaboration between business operators and the state, with the aim of reducing energy use in buildings. The Energy Agency also finances the municipal and energy/climate advice service intended for households and private players.

Impact Innovation is the name of the next-generation strategic innovation programme. A call for preparatory projects was opened during the year. One of the three focus areas is Attractive, functioning communities, with cities being a particularly important target group.

On an international level, Formas, the Swedish Energy Agency and Vinnova jointly announce funds enabling bodies active in Sweden to take part in international R&I projects tackling urban challenges in the European Driving Urban Transition (DUT) Partnership. The first call includes 27 nations. On a general level, the partnership addresses issues relating to energy, mobility and use of resources in an urban context.

### **Government agency work and special government assignments**

The Swedish Energy Agency has worked alongside the Swedish Agency for Growth Policy Analysis, Transport Analysis and the Uppsala County Administrative Board to draft supporting documentation for the government's next Climate Action Plan. The assignment regarding local and regional climate transition involved a great many dialogues with municipalities, regions, government agencies, research bodies, business and other relevant players, which form the basis for the barrier analysis, and the proposed means of control or suggested actions that were presented.



Many assignments are under way at the Energy Agency related to the electrification strategy, energy efficiency and secure energy supply, as well as the establishment of a national centre for carbon capture and storage (CCS).

The Climate City Contract agencies are also five of the 14 members on the government's Council for Sustainable Cities. In March 2022, the council was given an extended and modified remit, with more of a focus on working towards the 2030 Agenda's Sustainable Development Goal 11, Sustainable Cities and Communities. Several of the agencies have been involved in the National Board of Housing, Building and Planning's coordination assignment as part of New European Bauhaus (NEB). One example is the call Ideas for future habitats in Kiruna, Gällivare, Boden, Luleå, Skellefteå and Umeå – idea sketches ready in the project *Visioner: i norr – Hållbar Stad* ([hallbarstad.se](http://hallbarstad.se)).

The Swedish Transport Agency's knowledge forum – Arena for Transport-Efficient Urban Environment – is part of a government assignment (2019–2022) to carry out communication and knowledge-enhancing measures for the transport sector's transition to fossil freedom. An R&I programme for geofencing, financed by the Swedish Transport Administration and run by Closer at Lindholmen, brings together the necessary players in society, business and academia to jointly develop solutions to promote the use of geofencing in controlling the transport system.

Some of the projects related to the development of systems innovation are Evolved working methods and processes for greater synergies between regional, national and international innovation efforts, Systems innovation in cities (Vinnova), Strengthening the regional work on sustainable development (various government agencies), Contributing to upcoming discussions on the EU's urban agenda (Formas), and Vinnova's initiative to support cities' ability to lead and organize innovation, for instance through the companion researcher network which for nearly ten years has been following the development of the Innovation Platforms for Sustainable Cities initiative, and the *Accelerera* project, which is developing and offering support for innovation management in municipalities to ISO standard.

### **New signatory agency**

The Swedish Environmental Protection Agency decided to sign the Climate City Contract 2030 in December 2022, and will therefore participate in the process moving forward.





## 8. The contract

The parties agree that their joint commitments as formulated above shall apply for 2022. The first version of Climate City Contract 2030 was signed in 2020. The Climate City Contract shall be updated and renewed prior to each new year.

# Climate City Contract 2030

Between Mariestad Municipality, the government agencies 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, 8 December 2022.** The parties agree that their joint commitments as formulated above shall apply for 2023. The first version of Climate City Contract 2030 was signed in 2020. The Climate City Contract shall be updated and renewed prior to each new year.

---

**Johan Abrahamsson**

Mayor,  
Mariestad Municipality

---

**Olga Kordas**

Programme Manager,  
Viable Cities

---

**Robert Andrén**

Director General,  
Swedish Energy Agency

---

**Darja Isaksson**

Director General,  
Vinnova

---

**Johan Kuylenstierna**

Director General,  
Formas

---

**Elisabeth Backteman**

Director General,  
Swedish Agency for Economic  
and Regional Growth

---

**Roberto Maiorana**

Director General,  
Swedish Transport  
Administration

---

**Björn Risinger**

Director General,  
Swedish Environmental  
Protection Agency



## Appendix 1 – document links

Below are links to the most relevant documents in relation to Climate City Contract 2030 for Mariestad.

### **Links to relevant documents**

[Strategy for Agenda 2030 Mariestad \(in Swedish\)](#)

[Mariestad Municipality's Comprehensive Plan 2030 \(in Swedish\)](#)

[Public Health Plan Mariestad \(in Swedish\)](#)

[Climate Adaptation Plan Mariestad \(in Swedish\)](#)