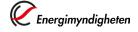




# Climate City Contract 2030

Between Växjö 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**

1. Purpose of the Climate City Contract 2030.	
2. Parties	4
3. Municipal commitments	4
3.1. Municipal climate goals.	4
3.2. Strategy	5
3.3. Organization and management	8
3.4. Collaboration with business, academia and citizens	8
3.5. Climate Investment Plan.	9
3.6. Digital support for implementation	9
3.7. Innovation hub for climate-neutral municipalities	9
3.8. Climate adaptation	g
3.9. Climate-smart mobility	
3.10. Reporting and follow-up.	10
4. Viable Cities' commitments	10
4.1. Better regulation	
4.2. Innovation.	
4.3. Coordinated funding	
4.4. Cooperation with the EU Cities Mission	
5. Commitments by the government agencies	12
5.1. A learning approach in policy development	
5.2. Funding for research, innovation and development	
5.3. Coordinated funding.	
5.4. Participation in European initiatives for sustainable cities	13
6. Strategic development projects 2023	14
6.1. System demonstrations.	]4



6.2. Competitiveness and funding	15
6.3. Citizen engagement	15
6.4. International Cities Mission 2030.	16
7. Joint monitoring, evaluation and updating	16
7.1. Most important updates for the municipality	16
7.2. Most urgent experiences to share for the municipality	17
7.3. Most important updates regarding Viable Cities	17
7.4. Most important updates regarding government agencies	18
8. The contract	21
Climate City Contract 2030	22
Appendix 1 – document links	23



## 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:

- Växjö 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.

## 3. Municipal commitments

## 3.1. Municipal climate goals

Växjö's vision is to be a fantastic place to stay, live and work for our residents, companies and visitors today and in the future. The goals described in the "Sustainable Växjö 2030" programme show how we approach this vision. The "Sustainable Växjö 2030" programme states that "We who stay, live and work in Växjö in 2030 have as a society no negative impact on the climate". When we talk about the "Climate-neutral Växjö 2030" goal, it is the essence of this formulation we strive for. This contract also includes climate impact from a consumption-based perspective.

In 1996, the municipal board decided that Växjö would become a fossil fuel-free municipality. This is to be achieved by 2030 and includes the entire municipality as

<sup>&</sup>lt;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.



a geographical area. There is political unity on the goal and not least the business community has also embraced it.

The overall climate ambitions are described in Växjö's sustainability programme. The Climate City Contract contributes mainly to achieve the "Climate and Environmental Smart" target in the sustainability programme by developing solutions within all the challenges of the programme but mainly in the fields of "Community Planning", "Transport and Travel" and "Consumption and Production". The work is concretized through development areas and initiative areas in various plans, see Annexe 1.

#### 3.2. Strategy

To achieve a climate-neutral Växjö 2030, Växjö's strategy mainly consists of a combination of sustainable community planning, a larger share of renewable energy, more efficient energy application and a sustainable transport system. Intensified work on sustainable consumption and production, as well as measures to compensate for the emission of other greenhouse gases, in the agricultural sector in particular, are other important elements. Digitalization creates several opportunities for faster transition.

#### 3.2.1 Power generation

Power generation in Växjö has been renewable since 2020. In autumn 2021, a new energy plan was adopted that clarifies development and focus areas. Particular emphasis is placed on the ambition to increase local electricity production so that it at least corresponds to local use. This means continuing to actively participate in increased electricity production from wind, solar, water and bio-based cogeneration. Bearing in mind developments regarding electricity supply in Sweden and Europe during 2022, this will be an even more important focus area for the work ahead. Meanwhile, there is a need to ensure that the "unnecessary" and uneven electricity use continues to decrease while produced electricity is used for the right purpose. This contributes to making Växjö more resilient to power shortages and to reducing the climate impact from Nordic electricity production. We are starting work on enabling the production of renewable fuels, such as bio-aviation fuel and hydrogen, adjacent to the Sandvik CHP plant, and have an ambition to increase the production of biogas.

We secure energy feedstocks without sacrificing biodiversity, which is important as the majority of Växjö's energy production originates from forest residuals.

#### 3.2.2 The transport sector

As of 2021, transport and work machines account for 95% of Växjö's emissions of fossil carbon dioxide and almost 60 per cent of greenhouse gas emissions. The proportion of renewable energy must increase, while the sector's total energy application must decrease.



A new Transport Plan was adopted in 2021. It shows that sustainable community planning and mobility management are the municipality's most important tools in the transition to sustainable passenger and freight transport throughout the municipality, where the strategy is to prioritise travel on foot, bicycle and public transport in various ways, while at the same time restricting our approach to increasing capacity for cars. This will increase mobility for necessary motor traffic. We work actively with car-free areas, which also increases safety and attractiveness. In Växjö, we want to study the concept of circulation plans.

We are continuing to expand charging infrastructure in accordance with the charging infrastructure plan. Access to renewable fuels must be available throughout the municipality. Once city buses have been electrified, we will find a new outlet for biogas together with other actors with an ambition also to increase the production of biogas.

It is particularly important to engage in dialogue with residents and businesses in order to achieve a rapid transition in behaviour and attitudes. We work with schools, associations and the business sector to ensure more sustainable travel behaviour, while the municipality takes responsibility to enable a safe and attractive infrastructure.

#### 3.2.3 Energy use and energy efficiency

Although all district heating and locally produced electricity is renewable in Växjö, there is a need for a transition to phase out the last oil and LPG use within mainly the industrial sector. In addition, more efficient use of energy is needed, not least electricity. This has been very starkly highlighted by developments in the energy supply situation in Sweden and Europe in 2022. Växjö's energy plan particularly emphasizes the importance of building, renovating and managing buildings in a way that promotes low primary energy use. New buildings are accordingly energy-smart and built from materials with a low climate impact from an LCA perspective, which mainly means continued wooden construction and reuse of materials. We also want to develop work on ecosystem services linked to the built environment. Växjö continues to be a demonstration centre for sustainable construction, which also continues to attract private developers.

When renovating municipally owned homes and premises, energy use is drastically reduced through a combination of well-proven and innovative solutions. As in the transport sector, spatial planning is an important tool to enable connection to district heating and district cooling, for instance.

The new Bäckaslöv district is designed as a district where sustainability permeates everything from building materials, energy and transport solutions to the sharing economy and ecosystem services. Solutions implemented here can then be spread to other parts of Växjö and the wider world.



#### 3.2.4 Land-based industries

As Växjö's emissions of carbon dioxide have fallen sharply, emissions of other green-house gases account for an increasing share of Växjö's greenhouse gases. In 2021 this was 38%, mainly methane and nitrous oxide. Two-thirds of this is linked to the land use and livestock farming in the agricultural sector. We therefore need to develop solutions to address these emissions in cooperation with different players.

Future strategies and measures linked to carbon sinks are also covered in this section.

#### 3.2.5 Waste

The new waste plan – *Towards a Småland without waste* – points out the direction for waste management and consequently resource management and circularity. We are committed to climbing higher up the waste ladder where the highest level is to avoid waste generation. The total amount of waste must therefore be reduced and the waste we do produce must be recycled and reused to a greater extent. Above all, we are focusing on reducing the waste that is sent for incineration. Another important strategy is to increase the reuse of materials in the construction sector.

#### 3.2.6 Consumption

Our climate impact not only depends on what happens within Växjö's geographical boundaries. What is important from a global perspective are the consumption-based emissions generated by the people who live and work in Växjö. Even though we do not know exactly what this looks like for Växjö, we are working on the issue. There is an ongoing and intensified dialogue with the public to reduce consumption-based emissions.

Through climate-smart investments and consumption patterns among residents, the public sector and industry, economic growth can gradually reduce it's climate impact.

Food becomes more climate-smart and food waste decreases. There is a need for increased opportunities for local farming and small-scale production. Sustainability requirements permeate municipal procurements.

#### 3.2.7 Compensatory measures

Not all emissions can be eliminated by phasing out fossil energy, and this mainly applies to methane and nitrous oxide. Växjö Energi plans to invest in the capture and storage of biogenic carbon dioxide. By installing it at the Sandviksverket CHP plant, the capture of 180,000 tonnes of carbon dioxide can compensate for emissions of e.g. methane and nitrous oxide from agriculture.



#### 3.2.8 Need for funding

For Växjö to be successful in its quest to achieve climate neutrality, various types of funding from e.g. the government and the EU are needed. It is above all a question of regulations, legislation, tools and support structures being designed in such a way as to simplify and accelerate climate transition and not hinder or slow down local work. It is also about efforts that make it easier for individuals and the commercial sector to live and operate climate smart and that all subsidies in fossil energy cease.

#### 3.3. Organization and management

Politically, the climate issue has been a unifying matter for all parties since the early 1990s. The decision on a fossil fuel-free Växjö was made unanimously in 1996. The Municipal Executive Board and the sustainability committee take political responsibility for ensuring that Växjö remains a leading climate municipality.

Since the mid-1990s, the municipal group's climate work has been decentralized to all administrations and companies, while central functions contribute coordination, development, support and follow-up. The fact that sustainability work is carried out within the ordinary control model and process structure of the group ensures that the climate issue continues to be conducted in an integral way by all parts of the group, based on their different responsibilities, without being a parallel track.

The work of developing the climate city contract is well rooted in the group management, which takes responsibility and ownership and wants to be a leader in the transition process.

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

To achieve the major transition, it is important that everyone is on board with the journey towards a climate-neutral Växjö. Collaboration, dialogue and information are needed in all areas, with people of all ages and with different backgrounds, and this is a natural part of the implementation of Växjö's sustainability programme. The municipality adopts a leading role to achieve this. Växjö's Earth Week is an important platform, but not the only one. We want to develop methods for handshakes with different players on how we can contribute to a climate-neutral Växjö together.

Dialogue is under way with private individuals, housing associations and the business sector on how they can reduce their own energy consumption and be part of the climate transition. By educating and involving children in various sustainability issues, we can make a serious impression.

A new version of the Växjö Declaration was developed in 2021. It serves as a tool for handshakes between the municipality and other players to realize the ambitions of the sustainability programme and the Climate City Contract, so that together we can contribute to a climate-neutral Växjö.



#### 3.5. Climate Investment Plan

During 2022, Växjö Municipality has begun development of a Climate Investment Plan based on the knowledge available from Viable Cities and Växjö Municipality. It will describe in more detail the actions required by different players in various sectors by 2030, and will try to define the costs and benefits to society. The Climate Investment Plan can also be helpful in prioritizing measures.

## 3.6. Digital support for implementation

We need to learn more about how digitalization can facilitate climate transition and in which contexts digital tools can contribute to behavioural change. Since much of the transition is about making it easier for citizens to live without negative climate impact, the focus on digital support needs to be linked to this.

Växjö Municipality runs the EU-funded digitalization project DIACCESS. In it the municipality, together with digital innovators, wants to develop smart societal functions and contribute to finding innovative solutions to challenges, such as climate transition. DIACCESS is also regarded as a breeding ground for various innovation teams.

Climate-neutral Växjö 2030 has developed digital tools that help the construction industry estimate climate impact at an early stage.

## 3.7. Innovation hub for climate-neutral municipalities

Växjö municipality will continue to share its experiences and learn from those of others through the various networks and organisations in which we are active, such as Sustainable Småland, Kronoberg County environmental network, Klimatkommunerna, Viable Cities, Fossil-free Sweden, Energy Cities, ICLEI and European Green Leaf Network.

Also of great importance is the exchange of experience with municipalities and other players in Sweden's entire south-east region. Not least, we see that we can drive the regional transition in collaboration with Kalmar Municipality, which is also part of climate-neutral cities, and Karlskrona Municipality.

## 3.8. Climate adaptation

It is important to not only focus on how society's climate impact can be reduced. We must also create the conditions for being better equipped for the consequences of climate change, today and in the future. A new climate adaptation plan was adopted in Växjö in 2021. The plan's development and action areas address, among other things, the design and location of buildings, ecosystem services, and the impact of climate on human health.

Climate adaptation work is strongly integrated into the processes that handle spatial planning.



## 3.9. Climate-smart mobility

Climate-smart mobility is clearly highlighted in Växjö's Transport Plan and has been described generally in Section 3.2.2 above. Mobility management and community planning are the cornerstones of the transition to sustainable travel. The Transport Plan contains development areas and focus areas which show how the municipality can work to switch to sustainable travel where walking, cycling and public transport have the highest priority.

## 3.10. Reporting and follow-up

For 25 years, Växjö Municipality has followed up data on energy and climate (see Annexe 2), which has served as a good basis for identifying challenges and areas of priority. Internally, this is done as part of the ordinary governance model linked to budget and financial accounts. Information on data and follow-up of measures is also reported to the European Covenant of Mayors, Global Covenant of Mayors, CDP, One Planet City Challenge and Cities' Race to Zero.

In other respects, follow-up of the Climate City Contract will take place in accordance with the guidelines set by Viable Cities, see section 7 below

## 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 authorities 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.

## 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.

<sup>2</sup> Vinnova



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 Partnership³, 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 Bauhaus⁴ initiative, the European Urban Initiative (EUI)⁵ and URBACT⁶.

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 within the framework of Viable Cities Transition Lab during 2023 in collaboration with 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

 $<sup>^{\</sup>scriptscriptstyle 3}\,$  The Swedish Energy Agency, Formas and Vinnova

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

<sup>&</sup>lt;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).



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, 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.



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.

Work on achieving climate-neutral cities by 2030 will continue to be developed globally.

## 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

This is Växjö's third Climate City Contract. The main features of the various versions are the same in terms of structure, strategy content, and how the contract relates to governing documents and objectives, as well as how it is anchored in management.



Due to developments in 2022 regarding more costly electricity production and higher electricity prices both in Sweden and more widely in Europe, in sections 3.2.1 and 3.2.3 of this Climate City Contract we highlight the importance of greater renewable electricity production and more efficient use of electricity.

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

In Växjö we usually emphasize that our strengths when it comes to sustainability work are a combination of the political agreement across block boundaries, the courage to set ambitious goals, and the insight that the solution lies in collaboration between many players. This is how we have been working on the climate goal for 25 years, and this is how we have been working with the sustainability programme on which the Climate City Contract is clearly based.

More concrete aspects that deserve to be highlighted are the transition to 100% renewable energy production, halved energy consumption in apartments after renovation, wooden construction, and climate requirements in procurement.

## 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 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 II, 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 a future Kiruna, Gällivare, Boden, Luleå, Skellefteå and Umeå. Idea sketches ready in the project *Visioner. i norr – Hållbar Stad* (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 funding 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 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.





## Climate City Contract 2030

Between Växjö 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.

#### **Pernilla Torneus**

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## Appendix 1 – document links

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

#### Links to relevant documents

Växjö Municipality Climate City Contract 2030 (v. 2021)

Sustainability programme, Sustainable Växjö 2030 (2019)

Energy Plan (in Swedish, 2021)

Transport Plan (in Swedish, 2021)

Climate Adaptation Plan (in Swedish, 2021)

Wooden Building Strategy (in Swedish, 2018)

Plan for preventing and managing waste – Towards a Småland without waste (in Swedish, 2020)

Charging Infrastructure Plan (in Swedish, 2020)

Cycle Path Plan (in Swedish, 2019)

Pedestrian Plan (in Swedish, 2020)

Food and Mealtime Plan (in Swedish, 2020)

Digitalization Strategy (in Swedish, 2019)