

 **URGENCE  
CLIMAT**

# **CITY OF GENEVA**

## **CLIMATE STRATEGY**

**[WWW.GENEVE.CH/STRATEGIE-CLIMAT](http://WWW.GENEVE.CH/STRATEGIE-CLIMAT)**

## **IMPRESSUM**

### **CITY OF GENEVA**

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##### **Service d'urbanisme (URB)**

Département des constructions, de  
l'aménagement et de la mobilité (DACM)

##### **Service Agenda21 – Ville durable (A21)**

Département des finances, de l'environnement et du logement (DFEL)

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Direction des ressources humaines  
Direction des systèmes d'information et de communication  
Direction du patrimoine bâti  
Direction et secrétariat du département de la  
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Gérance immobilière municipale  
Muséum d'histoire naturelle  
Musée d'ethnographie de Genève  
Secrétariat de la Délégation Genève Ville Solidaire  
Service culturel  
Service de la jeunesse  
Service de la petite enfance  
Service de la police municipale  
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Service des relations extérieures  
Service des sports  
Service d'incendie et de secours  
Service logistique et manifestations  
Service social  
Service Voirie-Ville propre

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# A WORD FROM THE EXECUTIVE COUNCIL

The City of Geneva declared a climate emergency in February 2020. It intends to reduce greenhouse gas (GHG) emissions by 60% by 2030 and to achieve carbon neutrality by 2050, in order to limit climate change and comply with the Paris Agreement.

The municipal's Climate Strategy marks a new stage in its actions, by incorporating climate change into all its public policies. This innovative and ambitious set of guidelines not only aims to reduce direct and indirect carbon emissions within the territory, but is also focused on its ecological, social and economic transition. It therefore implies a fundamental paradigm shift.

In developing this strategy, the Executive Council has put the common good and the health of the population back at the heart of the world of the future. It firmly believes that the ecological transition will be achieved with citizens who are concerned about social and climate justice, and therefore aspire to a decarbonised future based on a sustainable use of resources. It seeks a fairer, healthier and peaceful society. Geneva in 2050 will be a sustainable, prosperous city whose citizens stand together.

The Executive Council understands the necessity of involving everyone, individually and collectively, to achieve its aspirations for society. It therefore intends to work in a spirit of cooperation with all key players in the public and private sectors to make this essential transition a reality.

**Frédérique Perler**

**Marie Barbey-Chappuis**

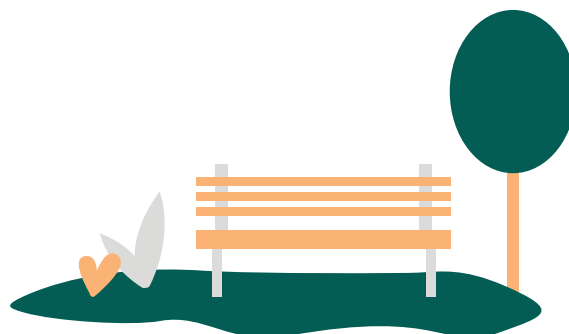
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# WHY A CLIMATE STRATEGY?

Housing, transport, consumption and production all produce direct or indirect emissions of carbon dioxide, a greenhouse gas (GHG) that is responsible for climate change. Its consequences are endangering the fragile balance of nature on which human society is wholly dependent.

Urban environments are involved in two ways: they are not only closely entwined in the causes of climate change but also suffer its consequences more intensely. Viable solutions exist to reduce GHG emissions (estimated at 13 t CO<sub>2</sub> eq. per person per year for the city of Geneva) while also adapting the urban environment to extreme weather events, which are likely to become more frequent.

This strategy is intended to identify the most appropriate solutions for a given territory in order to implement actions to protect the climate. First, it sets out an assessment based on data and scientific facts, followed by a vision and strategic objectives and finally, a series of practical measures. A document of this kind is not a set of instructions that are set in stone, but an evolving road map whose primary role is to set a destination. It is liable to change as knowledge advances and attitudes, technologies and the climate situation evolve.

The City of Geneva has produced a Climate Strategy for the municipal area, comprising 30 objectives and 78 measures, broken down into nine strategic priorities that are commensurate with the issues.

The full version of the Climate Strategy, including all the objectives and measures, is available online.

[www.geneve.ch/strategie-climat](http://www.geneve.ch/strategie-climat)



## Priority 1

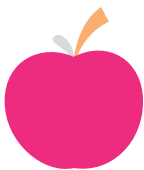
### CONSUMPTION OF GOODS AND SERVICES

# TOWARDS SIMPLICITY AND QUALITY

Consumption is the leading source of greenhouse gas emissions (GHGs).

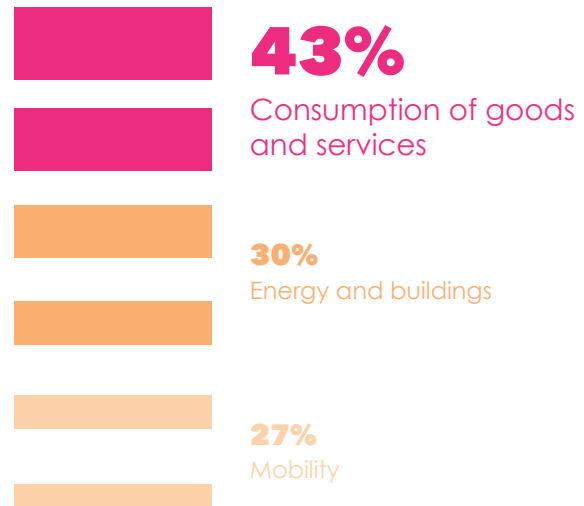
The City of Geneva's aim is to "consume less and better".

The city will therefore be implementing strong measures to support and speed up the transformation of our current modes of consumption to alternative modes that must be more desirable, practical and affordable than they are today. Short supply chains and the circular economy will be central to its actions.



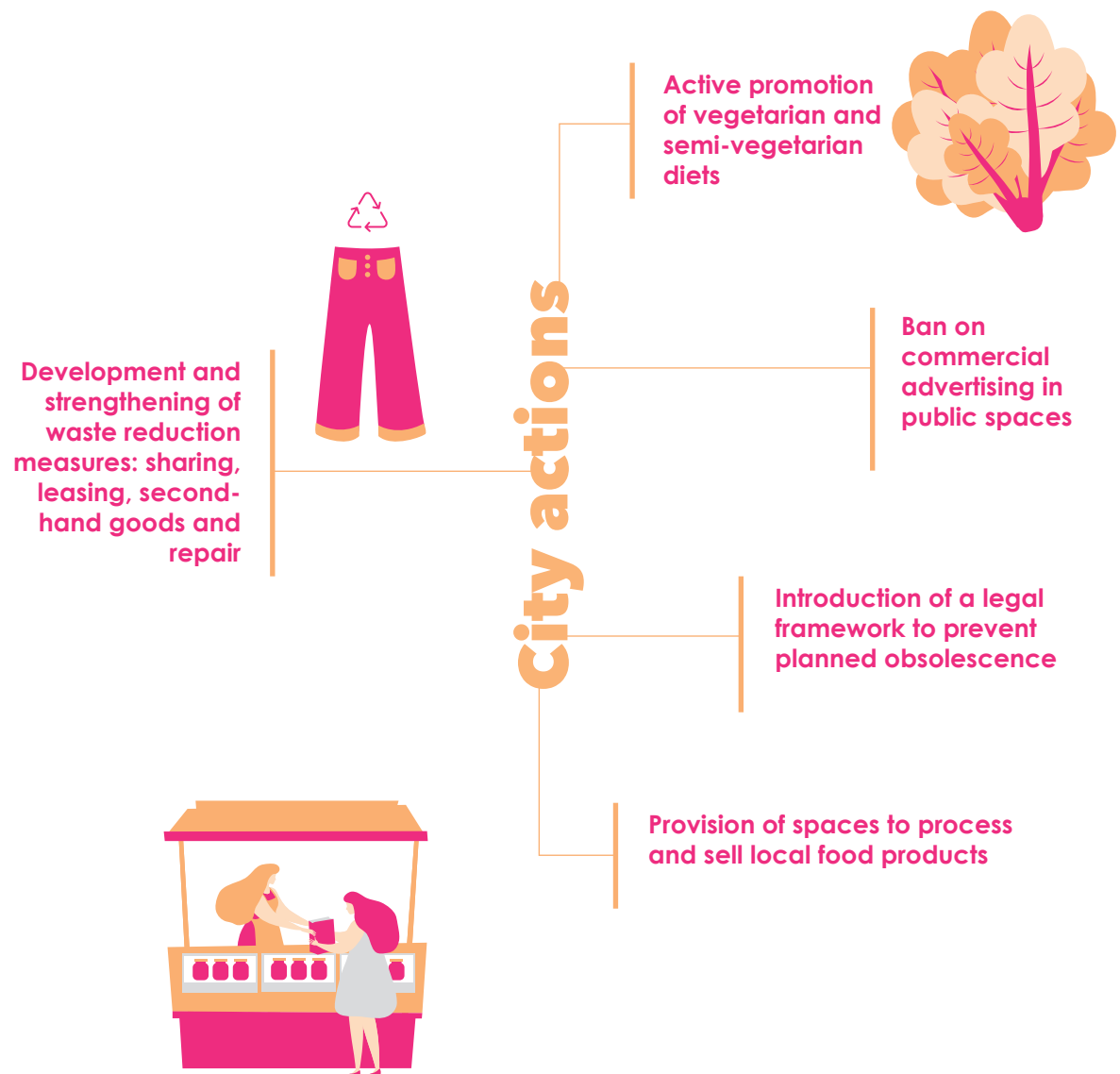
Hyperconsumption, planned obsolescence and high levels of imports make purchasing goods the leading cause of GHG emissions in Geneva. The consumption of goods and services accounts for almost half the city's carbon footprint (43%).

#### Breakdown of GHG emissions in the city of Geneva



Food produces the most emissions of all the various goods consumed. These are derived mainly from the ways in which food is produced, a high level of meat consumption, and food waste. The impact is air traffic due to the city's population. One of the main objectives under this

heading is a healthy, local diet with less emphasis on meat. The City will strengthen its cooperation with the various key players in Greater Geneva to ensure a supply of high-quality food that is accessible to all. The City of Geneva is a small area whose economic activity is primarily in the



tertiary sector. It does not have enough space to satisfy its population's demand for goods and therefore has to import the majority of everyday products, such as clothing and shoes, phones, household appliances, etc. As a result, it is difficult to reduce the GHGs emitted

elsewhere when these goods are being produced. As a result, the City has chosen to act mainly on modes of consumption by supporting the sustainable use of resources, sharing, recycling and the circular economy more generally. The City will ensure that these principles are applied

across the board in culture, sports and recreation, while guaranteeing that multiple dynamic and diverse activities remain on offer.

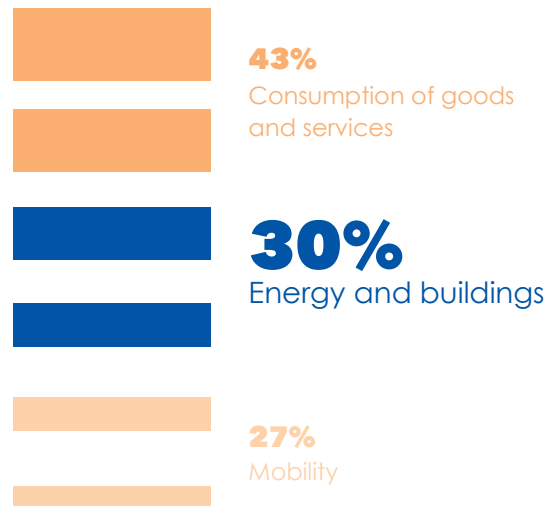


## Priority 2 ENERGY AND BUILDINGS

# CLIMATE TARGETS AT THE HEART OF OUR ENERGY POLICY

The reduction in the city's carbon footprint is inextricably linked with a massive reduction in energy consumption by buildings and infrastructure, which are the second largest source of greenhouse gas (GHG) emissions in the municipal area. Taking action on buildings, reducing their consumption and promoting renewable energy sources – both local and imported – are the cornerstones of the energy transition.

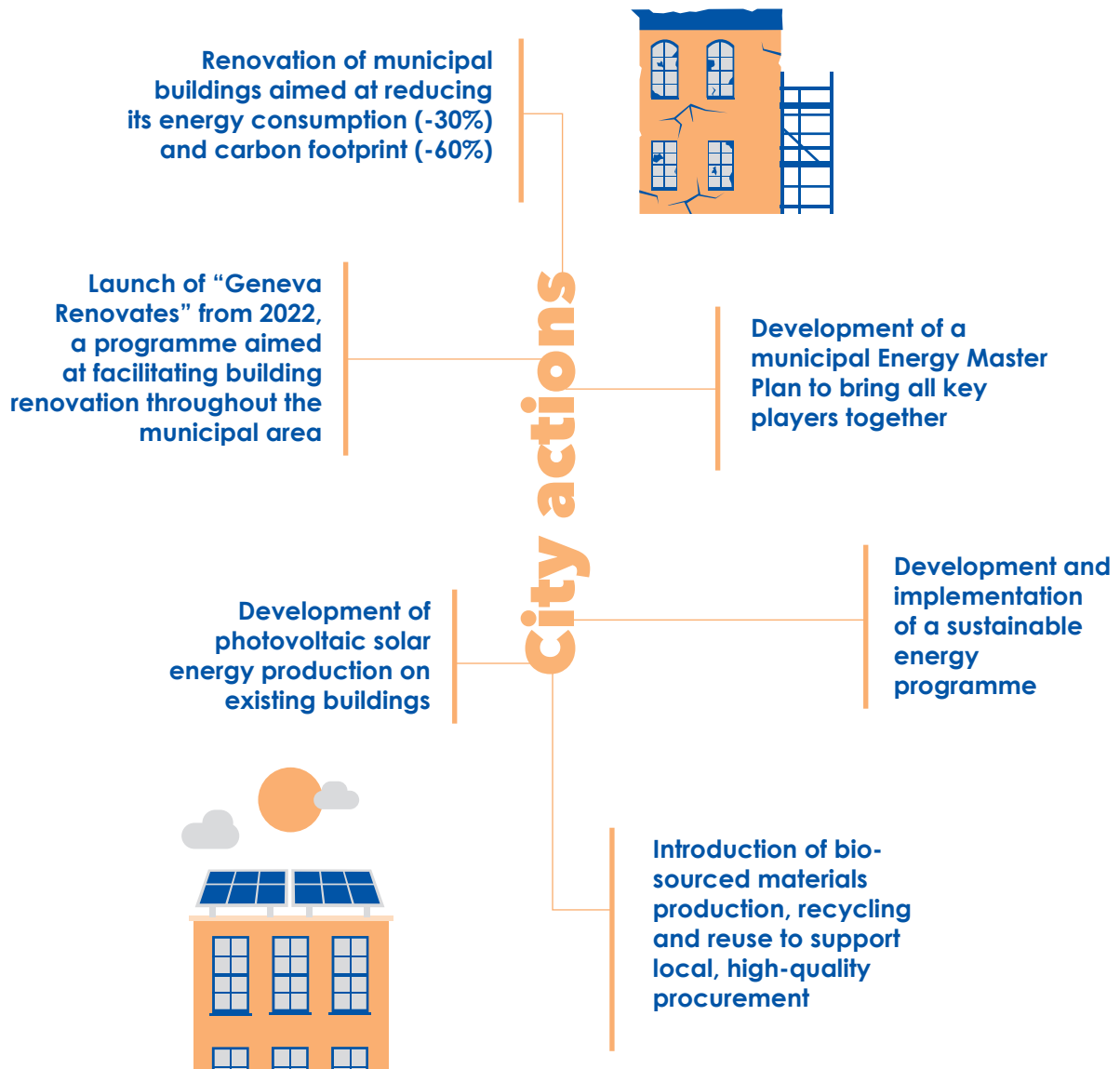
### Breakdown of GHG emissions in the city of Geneva



Energy consumption for constructing and operating buildings and infrastructure alone accounts for 30% of the city's carbon footprint.

The resources required to cover heating and electricity needs are far in excess of what the city is able to produce within its own territory. The challenge we have set is to heat buildings using 100% renewable sources by 2050. This means not only





taking advantage of local resources but also ensuring a high-quality supply at a sufficient level in a market driven by high demand. Technical measures designed to optimise installations, particularly for heating, are planned to improve building energy

efficiency. New buildings will be constructed using carbon-neutral materials. It is not only infrastructure and buildings that consume large amounts of energy. The population and business sector will also have to accept a reduction of almost a third of their needs,

which cannot currently be fully covered by renewable energy sources.

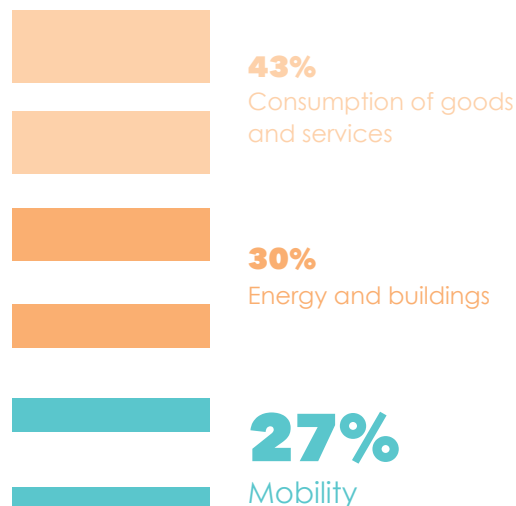


## Priority 3 TRANSPORT

# REAPPROPRIATING URBAN SPACE VIA SHARED AND ACTIVE MOBILITY

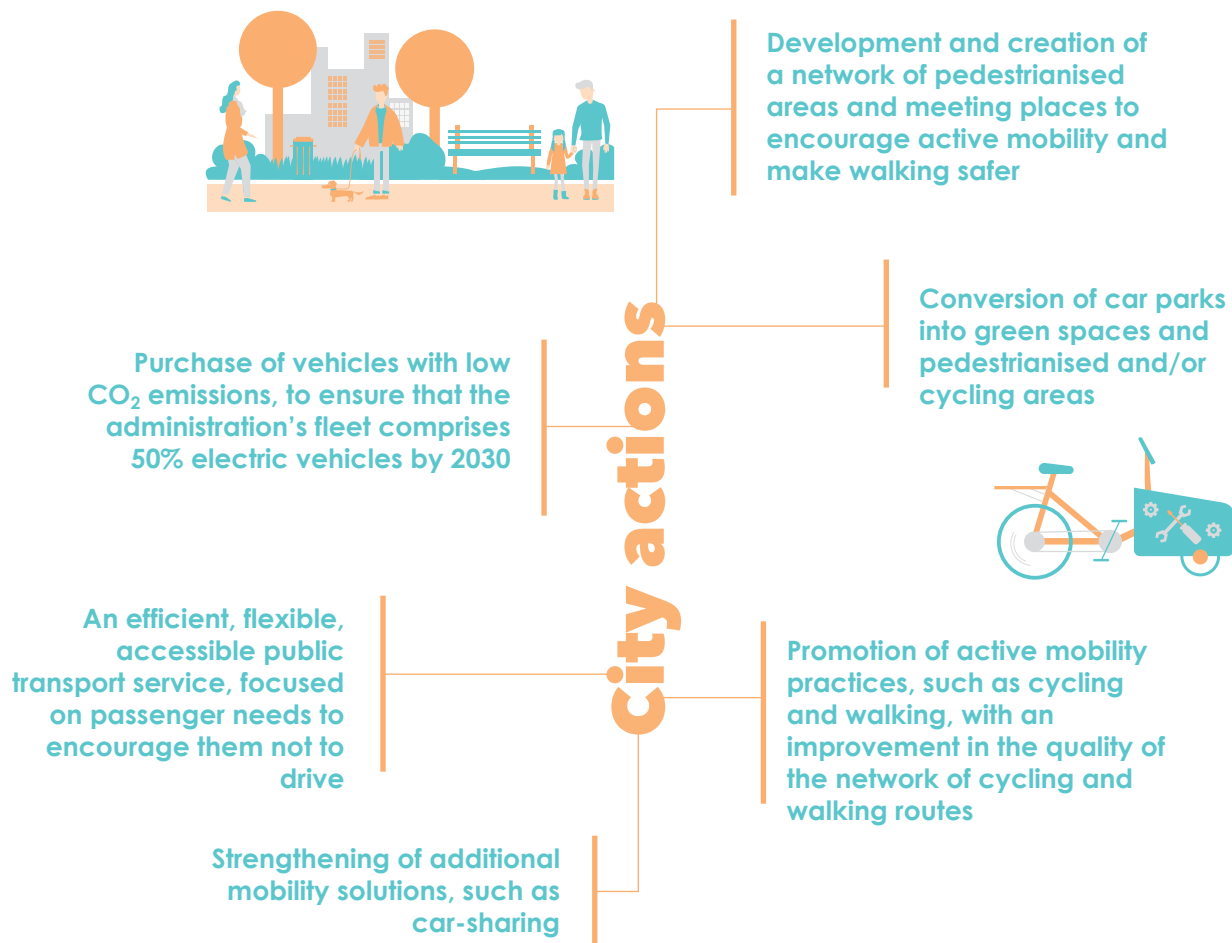
The omnipresence of motorised individual traffic in Geneva prevents optimal use of public space and has a significant impact on the city's carbon footprint. More efficient transport and a switch to active, shared modes of travel are key to shaping mobility in Geneva in 2030.

### Breakdown of GHG emissions in the city of Geneva



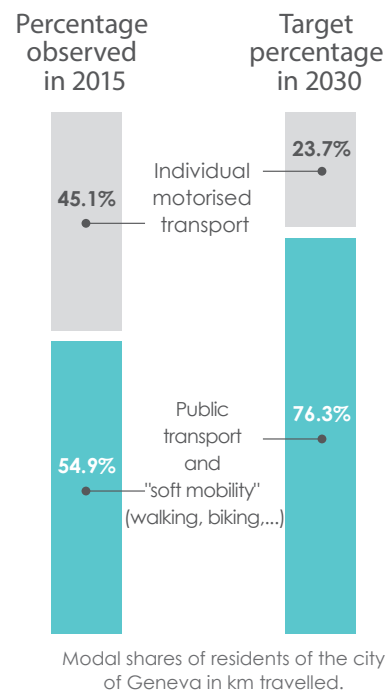
Many people in Geneva walk or cycle, but generally only for short journeys. The majority of longer trips are made using individual forms of motorised transport.

This model of mobility, in which cars play a central role, not only generates a significant volume of greenhouse gas (GHG) emissions but also has a negative impact on air quality and increases noise pollution, affecting the population's health and quality of life. The City will act to reduce the space currently reserved for cars and motorcycles to reduce motorised traffic and limit its negative impacts. In



practical terms, it will convert a proportion of roads and parking spaces into areas that are more welcoming to pedestrians and cycles, into green spaces or into recreation areas (terraces, play areas, etc.). At the same time, it will support the modal shift towards cycling, walking and public transport. It will take all the measures available at a municipal level to ensure that the latter is more affordable, more flexible and provides a better

service. Finally, the city will support the increasing use of electric cars in line with the overall target of halving the distance covered by individual motorised vehicles by 2030.





## Priority 4 TERRITORIAL DEVELOPMENT

# A NETWORK OF OASES IN THE CITY

Most urban land is impermeable. This prevents natural water infiltration and contributes to heat islands as well as flooding, which is a particularly undesirable situation given the acceleration of extreme climate events. The City of Geneva will embark on a process of making part of the urban area more permeable and will create a series of new, interconnected planted areas with trees and water.

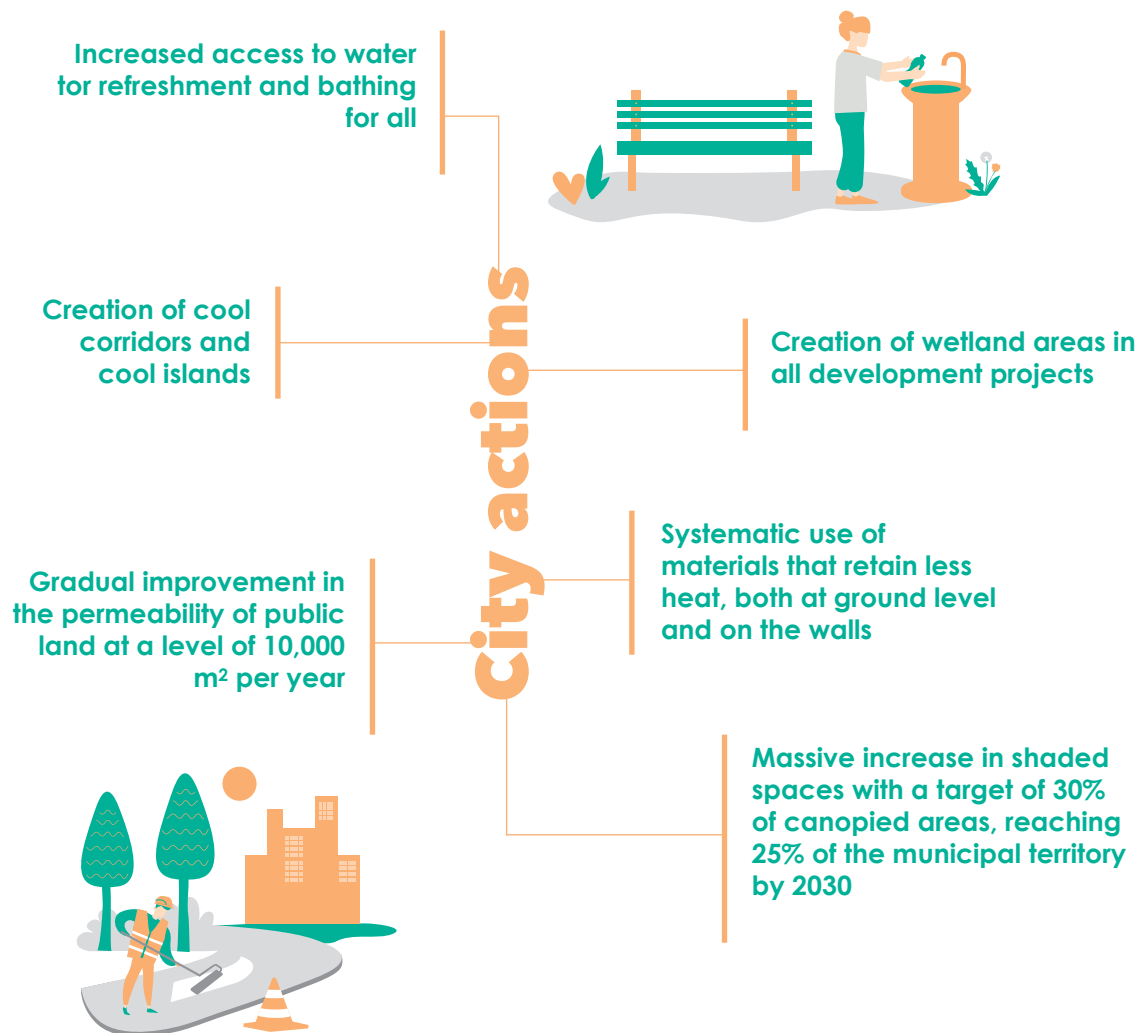


The effects of climate change are particularly apparent in the alpine regions and in Geneva.

These include extreme meteorological events such as tropical nights during the summer – with night-time temperatures above 20°C – and heavy rainfall. Urban concrete and asphalt prevent water from penetrating into the ground, which leads to impoverished soils, increases the risk of flooding and hampers the replenishment of the water table. Moreover, these

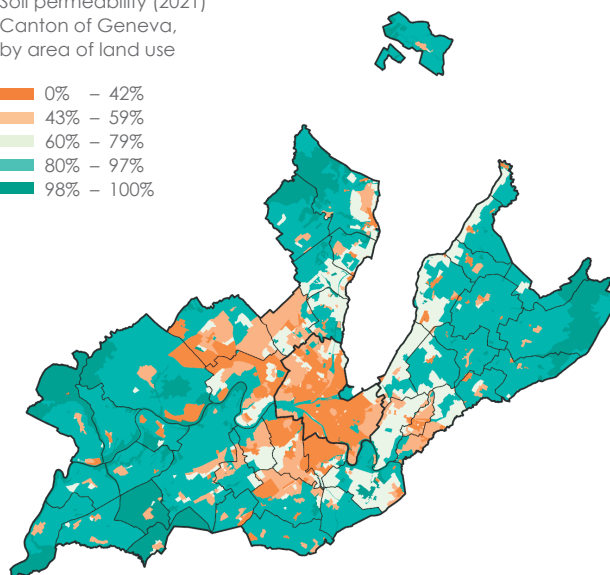
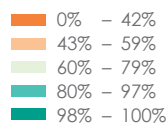
materials retain heat, further raising the temperature of the ground, with a significant impact on the population's well-being.

Geneva is the most densely populated city in Switzerland. Two thirds of its territory are impermeable and this is increasing year on year. More areas will be converted to natural spaces to address this problem. The City will work to modify



its territorial development policy to make preserving and strengthening natural ecosystems a prerequisite for development. Water and nature will feature more strongly and their cycles will be protected, both to improve residents' quality of life and to limit climate change.

Soil permeability (2021)  
Canton of Geneva,  
by area of land use





## Priority 5 HEALTH AND POPULATION

# CLIMATE, HEALTH AND QUALITY OF LIFE: A COMMITMENT TO ALL

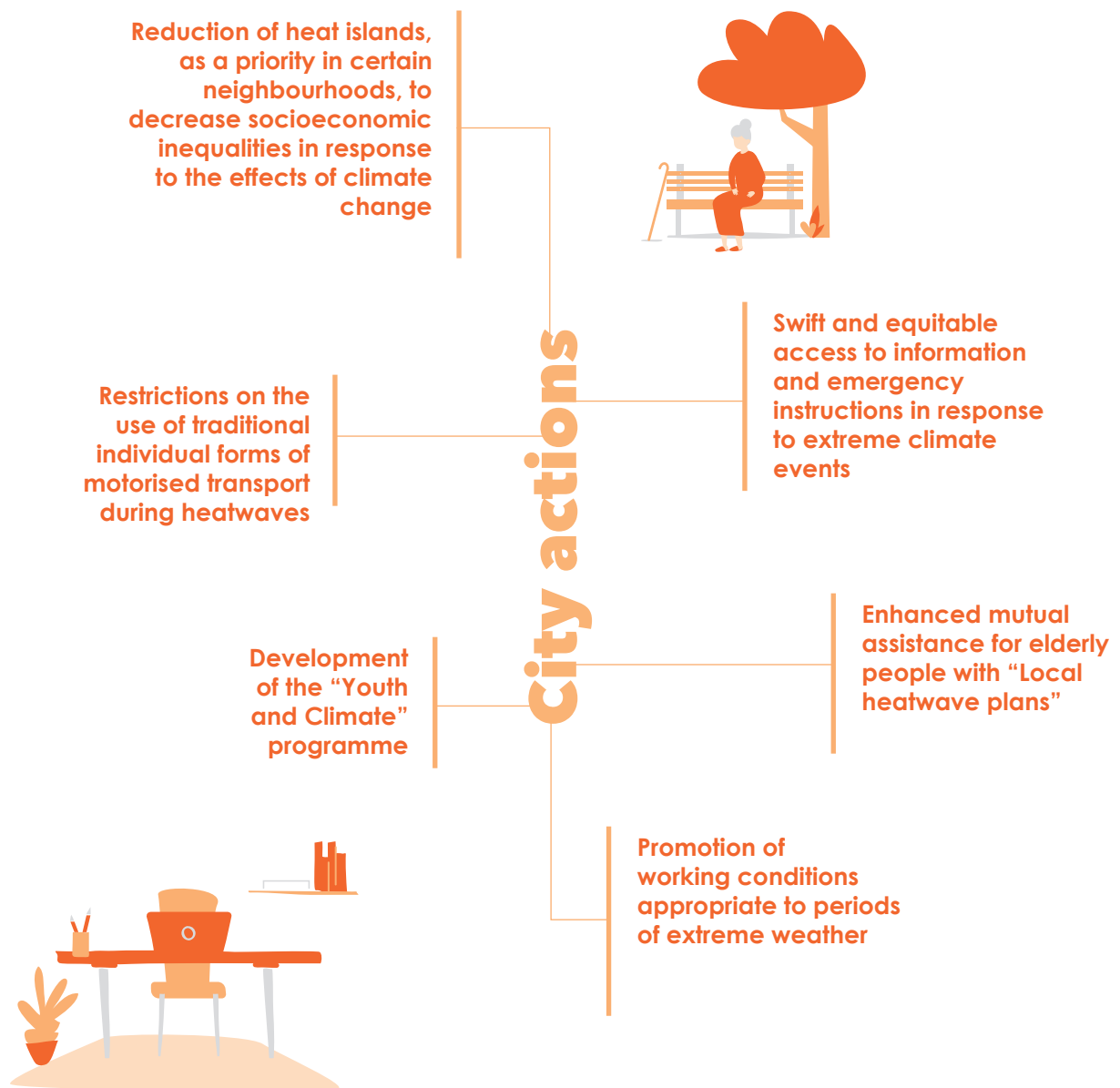
Climate change affects quality of life and health. Geneva faces the challenge of transforming current lifestyles and making judicious use of its available natural resources. This is the only way that the Geneva area and its population will become more resilient. Its priority will be to implement both structural and social changes to protect its most vulnerable populations.



From heavy rainfall to droughts, repeated heatwaves and flooding, the harmful consequences of climate change are now clearly visible, with direct and indirect impacts on living conditions and human health.

Some people are more vulnerable when faced with these events. A transformation of public space is needed to improve the area's resilience and tackle the consequences of climate change. At the same time, lifestyle changes and preventive measures will be implemented with the

city's population to improve everyone's health and quality of life. The City will strengthen its actions to protect its most vulnerable citizens – children, young people, older people and those in precarious situations – as part of its commitment to equality. It will encourage solidarity at



a neighbourhood level while strengthening individual skills so that the population is aware of the appropriate behaviours to adopt in extreme situations. It will also encourage the ecological transition abroad through its international solidarity programme.



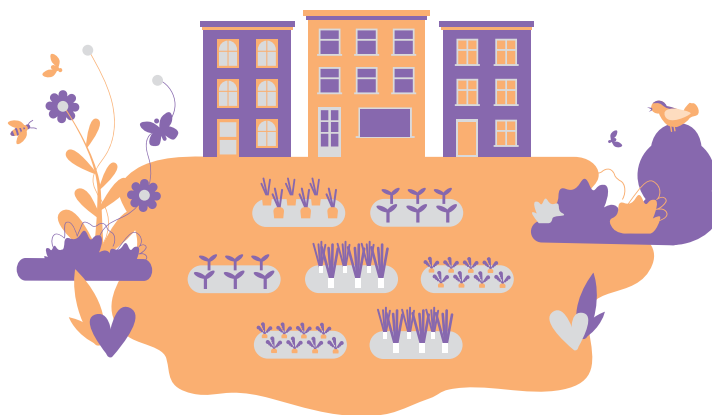


## Priority 6

## BIODIVERSITY AND NATURAL ENVIRONMENTS

# PROTECTING BIODIVERSITY IN THE HEART OF THE CITY

Nature in the city is essential for maintaining biodiversity in the urban environment, regulating Geneva's microclimate and contributing to the well-being of the population and all living creatures. Expanding and protecting urban natural sites to support fauna, flora and their habitats on the outskirts of the city is a priority.

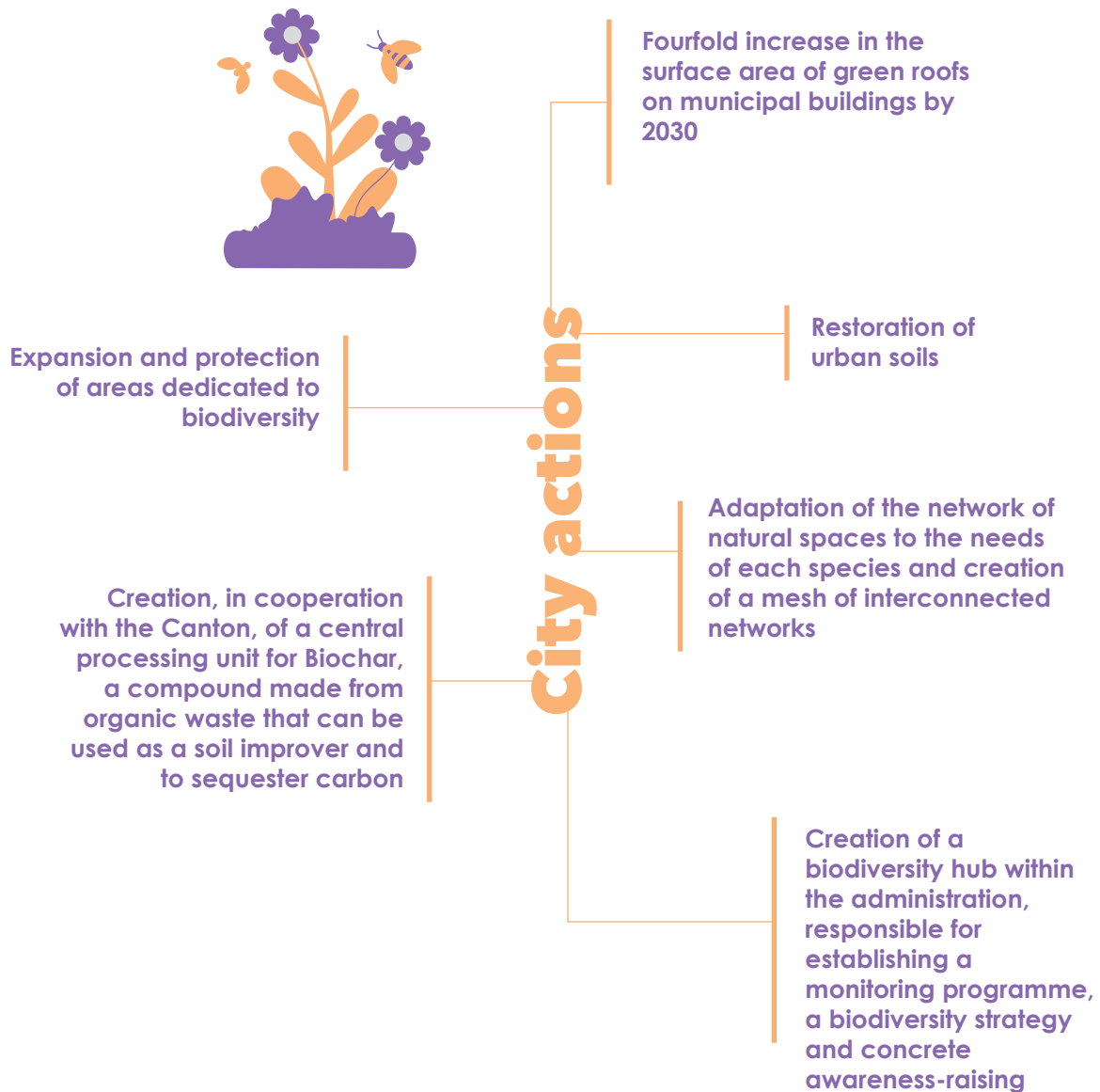


Retaining water, purifying the air, maintaining the diversity of fauna and flora, contributing to carbon capture and to the health and well-being of the city's residents are just some of the many benefits offered by nature in the urban environment.

Protected natural spaces, parks, gardens, balconies and green roofs all have a part to play. These spaces still represent too small a proportion of the municipal territory and face increasing pressure from human activities. Climate change is further aggravating the situation, not least because of the heavy rains that wash away

and impoverish the soil. Rising temperatures also impact ecosystems. This threatens the diversity of the living world as we can see, for example, in the worrying decline in the number of nesting birds in the city. The City of Geneva plans to restore, protect and develop its natural ecosystems. In addition, it will take practical actions to protect the soil





and increase its potential for capturing CO<sub>2</sub>. Measures will be taken in line with a strategic programme designed to increase understanding of urban biodiversity.



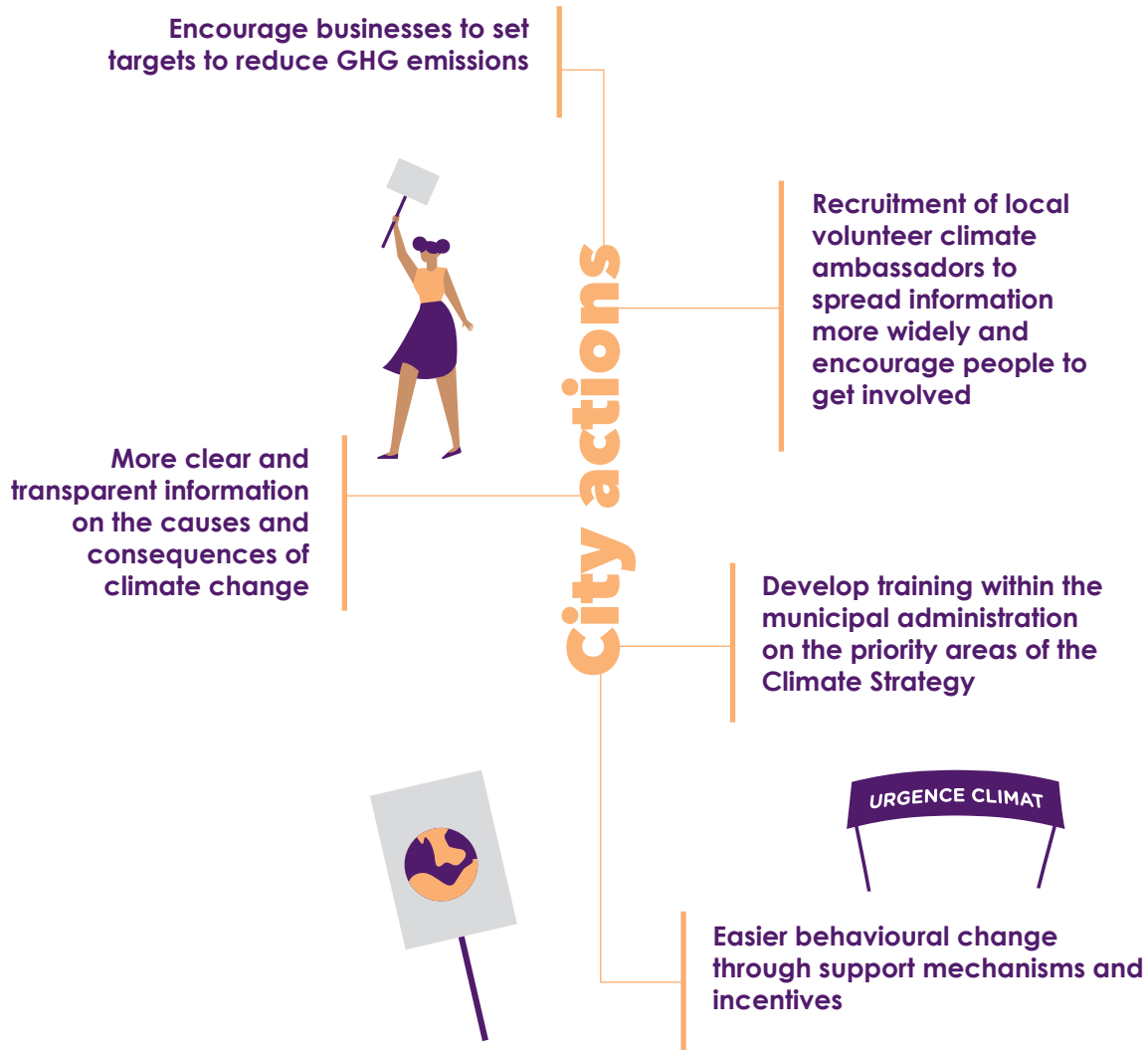
## Priority 7

### MOBILISATION OF THE POPULATION

# A COLLECTIVE EFFORT FOR A VITAL GLOBAL IMPACT

Acting together is an absolute necessity for a rapid reduction in greenhouse gas (GHG) emissions and to protect living conditions for future generations. The City of Geneva will provide its citizens with practical tools to keep them informed, encourage them to take collective action and to support behavioural changes which lower their personal climat impact.





While our society is victim of the climate crisis, it also bears responsibility for it. It is time to acknowledge this and take action.

The City intends not only to accelerate its commitments to protect the climate, but also to encourage businesses and people living or working in Geneva or passing through it to play their part. It is therefore promoting a genuine social project to reduce the city's carbon footprint in a constructive and inclusive manner. Shifting paradigms and changing the ways in which people consume and travel

is a sizeable challenge. The City wants to encourage businesses, international organisations, NGOs and citizens of all generations to overcome the barriers to change and act to support the ecological transition. It will set a clear example to achieve this.



## Priority 8 FINANCIAL CENTRE

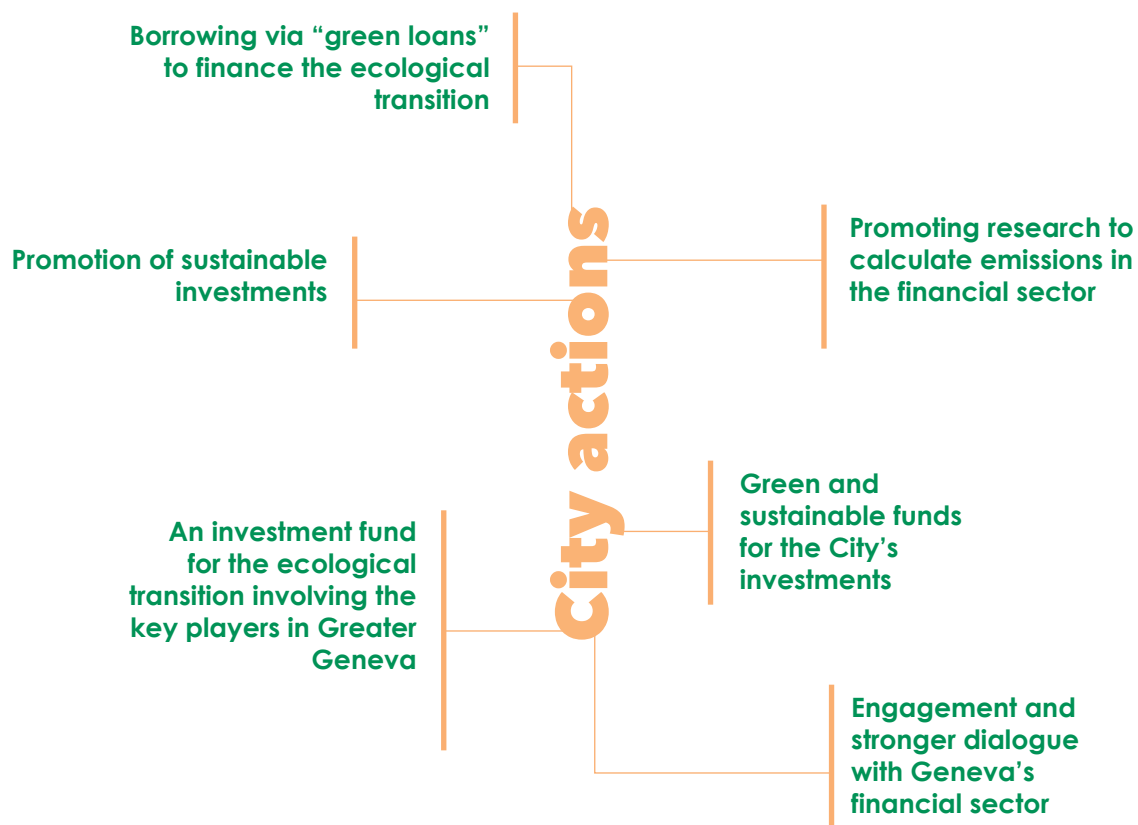
# INVESTMENTS TO PROTECT THE CLIMATE

Geneva's financial centre has a very high indirect carbon footprint, principally because of its investments in fossil fuels and industrial sectors that emit greenhouse gases (GHGs). The City of Geneva is committed to setting an example and supporting strategies that encourage more sustainable finance by mobilising the relevant stakeholders.



Banks, insurance companies and other financial institutions have a significant impact on the climate.

Their investments and loans finance activities that emit high levels of GHGs, mainly abroad. Although there is still some debate over how to calculate these emissions precisely, it is likely that they are very significant. Sustainable finance is a fast-growing approach, but is still underused by the Geneva financial centre.



An approach of this kind invites stakeholders to make investments that help to reduce the use of fossil fuels and support sectors with lower levels of GHG emissions. It also prioritises sustainable technologies and activities in key areas, such as the building, industrial or transport sectors.

The City of Geneva will work alongside the key players in the financial centre to support sustainable finance and encourage them to get involved, in particular to ensure greater transparency in calculating the financial sector's emissions. It will ensure its own investments and financial holdings are

compatible with climate targets to lead the way.

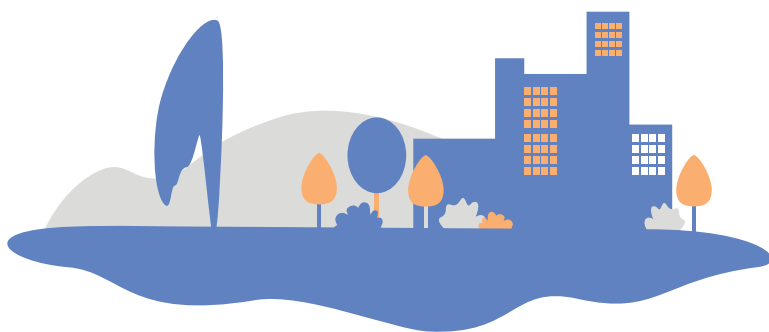


## Priority 9

### EXEMPLARY ACTION BY THE ADMINISTRATION

# THE CITY OF GENEVA: A PIONEER AND MODEL

The municipal administration's emissions currently represent 3% of the territory's carbon footprint. The administration has been striving for several years to reduce energy consumption and greenhouse gas (GHG) emissions in sectors ranging from the consumption of goods and services to the city's built heritage, financial activities and transport. But there is still more to do. Now more than ever, the City of Geneva is committed to leading the way as a pioneer and model and encouraging others to join it.



The City has reduced the GHG emissions of municipal buildings by 29% since 2005, by optimising and renovating heating systems.

This is a promising result and part of a clear target to switch to renewable energy sources only by 2050. Sustainability has also made its mark in other areas of the administration's activities. The strongest measures are mainly connected to building renovation and construction, transport, and the procurement of goods and services. Nonetheless, these results are not yet up to the scale of the challenge. The

municipal administration is committed to embracing its responsibilities and leading the way by accelerating the measures that are already implemented and developing new actions as part of the global effort to achieve carbon neutrality. It is also committed to using all available levers: political, institutional, administrative and awareness-raising.

# WHAT NEXT?

The City of Geneva's adoption of its Climate Strategy marks a new, but by no means the final, stage in its determination to combat climate change.

*What next?* We stand at a key moment in our history, in which everyone has a role to play in protecting the climate.

The City has a decisive ability to take action through its capacity for driving change within its area of jurisdiction, its aptitude for driving new initiatives and its level of rigour in all areas.

Faced with the immense challenge of climate change, it is time to create new opportunities in order to win the support of as many people as possible for the development of an inclusive and resilient society that is capable of adapting, evolving and transforming in the world now being created.



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