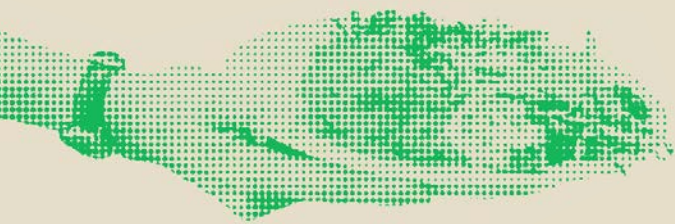


# CPH Climate Strategy 2035



## Foreword

In Copenhagen, we must take on our share of the responsibility for solving the climate crisis.

Copenhagen has all the prerequisites for creating a climate-friendly city that is also a wonderful place to live, work, run a business and visit. We have been well underway for several decades. We are in the process of converting our energy systems to lower climate impact. We have come a long way in developing a transport infrastructure with a low climate footprint: pedestrians, bicycles, buses and trains make more of the cityscape, and public transport predominantly runs on electricity.

But we need to go much further. The current global situation makes it even more necessary for a city like Copenhagen to lead the way. Therefore, we have adopted a new ambitious climate strategy to set the direction for Copenhagen towards 2035.

The severity of the climate crisis means that, as a society, we shouldn't only take responsibility for our city's territorial emissions. By far, the greatest share of Copenhagen's climate impact occurs outside the

municipal boundary. Therefore, Copenhagen's new Climate Strategy 2035 aims to reduce our climate impact within our own city boundary while also reducing Copenhagen's global climate footprint.

This means that we must continue with important structural changes, such as a more efficient and climate-friendly heat and energy supply. And it means that the City of Copenhagen must lead the way and reduce the climate footprint of its own operations. When we, as a municipality, build schools and roads and provide services for Copenhageners, this must be done with a significantly lower climate footprint in the future. At the same time, we have set ambitious targets, for which we do not yet have all the tools needed to reach them.

The experience from our first climate plan is that it is precisely through the setting of ambitious targets that inspiration is sparked and major results are achieved. And we have previously shown that these results can be achieved while further improving the quality of life of our citizens.



Nørrebrogade: Thorbjørn Hansen, Kontraframe

As the strategy describes, this ambitious transition can only succeed if the municipality opens its doors and invites residents, civil society and businesses to take part.

In developing the strategy, many Copenhageners have already contributed their viewpoints, experiences and expectations. At the same time, Copenhagen has a business community that already contributes to the green transition, and many companies that wish to contribute even more.

For many years, Copenhagen has been a city on which the world's eyes have rested. Many have sought inspiration in Copenhagen as a city that

combines quality of life with consideration for the climate. Perhaps it is through this approach that the greatest impact of our climate efforts can be achieved.

We now have a new strategy that sets an ambitious direction for Copenhagen over the next ten years. We must continue to develop solutions that can make a difference both here in the city and in the rest of the world.

– September 2025



Lars Weiss  
Lord Mayor



Line Barfod  
Mayor for Climate, Environment  
and Technical Affairs



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## Introduction

Copenhagen wants an ambitious and realistic green transition. We want to further reduce greenhouse gas emissions and continue the work of shaping the conditions for a low climate footprint and a high quality of life in the city, thereby taking responsibility for our shared future. With the CPH 2025 Climate Plan, Copenhagen has demonstrated its ambitious approach to climate action, both nationally and internationally, since 2012.

The City of Copenhagen has inspired others and created a solid foundation for the transition by significantly reducing CO<sub>2</sub>e emissions from energy production and other sources within the city boundary. This has been achieved particularly through the transition of the energy sector to be almost free of fossil fuels, but also through a strong effort focused on mobility, renewable energy production and energy conservation. The CPH 2025 Climate Plan has brought us close to 80% of the way towards climate neutrality since 2010.

By setting targets and working for the green transition in Copenhagen, we have contributed to the overall transition in Denmark and in other major cities around the world. Since we began work on the CPH 2025 Climate Plan, all municipalities in Denmark have set targets to reduce emissions within their city boundaries -and many cities and municipalities, like Copenhagen, are now also focusing on the global climate footprint we leave outside municipal boundaries. In this way, we are working together to reduce emissions, both locally from industry, transport and energy production, but also by influencing demand in the city that drives emissions in other regions and countries.

Copenhagen's Climate Strategy 2035 builds on the experience that we and other cities and municipalities have gained. This experience will help ensure that national targets can be achieved through publicly acceptable action, and through taking local considerations and conditions into account.

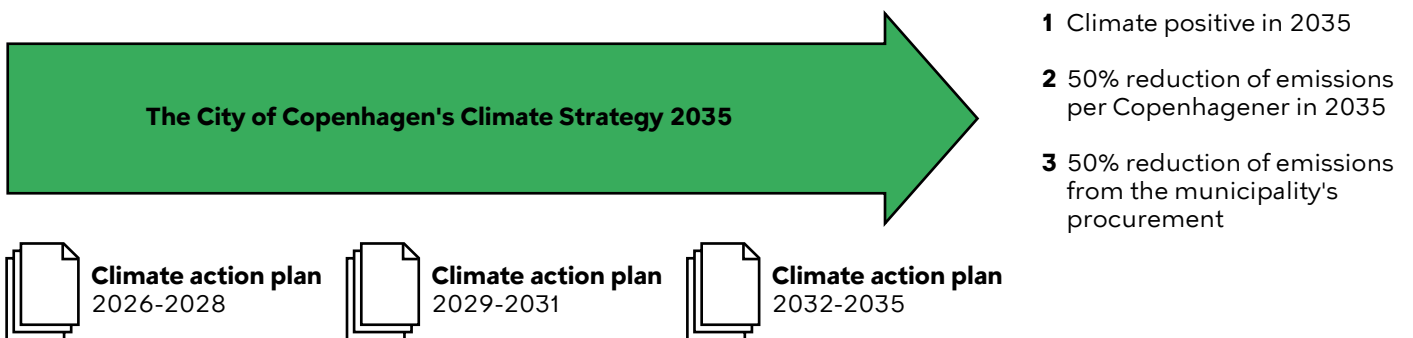
The aims of the Climate Strategy 2035 are: to remove more CO<sub>2</sub>e than we emit within Copenhagen's city boundary, to reduce emissions from consumption in Copenhagen by 50%, to reduce emissions from the municipality's procurement by 50%, and to contribute to the green transition through investments in more renewable energy and forests outside the City of Copenhagen. The Climate Strategy 2035 will also continue to ensure that the city's climate initiatives have the greatest possible global impact through knowledge sharing and participation in Danish and international networks.

The Climate Strategy 2035 begins with a description of its underlying aims and motivation. It then describes its ambitions for reductions towards 2035 and provides a further explanation of territorial and consumption-based CO<sub>2</sub>e emissions. Next, the strategy describes action areas and transition strategies, which support the roll-out and impact of initiatives. The development and cooperation in the city's energy system over the next ten years and more, are described in the Energy Strategy for Copenhagen (Appendix 4). The Energy Strategy forms an important element of the Climate Strategy 2035. The initiatives that will realize the climate strategy's goals will be set out in three consecutive action plans. The first three-year plan was adopted together with the strategy. Finally, 22 sub-goals covering the strategy's nine action areas are defined.



Living Places Copenhagen: Sandra Gonon, Københavns Kommune

Figure 1: The strategy's goals and plans of action



## The pathway to a greater climate transition

The City of Copenhagen wishes to take a leading role in the climate transition and is working purposefully to reduce emissions linked to its operations and procurement.

This action is framed by the goal of halving the climate footprint from the municipality's procurement of products used in operations, in construction projects, and in provision of services. The City of Copenhagen is a major consumer and can, through purchasing agreements and tenders, help push markets for goods and services in a greener direction. The City of Copenhagen is also Denmark's largest public-sector employer. By transitioning our operations, we can demonstrate how to create strong frameworks for municipal welfare with a low climate footprint. A transition of procurement and operations will take us part of the way but is not sufficient to achieve the broader goals of the Climate Strategy.

The municipality has a close relationship with Copenhageners and with local businesses. This relationship covers everything from education, health and elderly care to business promotion and the processing of building permits. Together we shape the city in which we live and work. In addition, the City of Copenhagen owns or co-owns several municipal utility companies. Through these companies, we ensure both a high security of supply and green energy production.

Close collaboration with Copenhagen's business sector will play a central role in reaching the climate strategy's targets. Through innovation and investment in sustainable solutions, businesses can help ensure a green climate transition. Copenhagen is already an international green role model, and its green leadership helps attract new companies, investments and workforce. This is a position the city wants to maintain by continuing to support and stimulate the green transition through close cooperation with the business sector. We will, therefore,

use collaboration and partnerships as central levers in our shared work on the climate transition.

Copenhageners, associations and the city's businesses are invited to take part in the continued shaping of a city with a far lower climate footprint. The City of Copenhagen will create a framework for increased cooperation across the municipality, the city's residents, businesses and civil society. Through strategic partnerships, the municipality will support residents and the city's actors in the continuing climate transition and ensure that their efforts achieve the greatest possible viability and impact. The Climate Strategy also focuses on upskilling. Having a workforce with green competencies is an important prerequisite for successfully implementing the initiatives in the climate strategy.

Through proactive international cooperation, for example via the C40 network, strategic city partnerships and the municipality's visitor service, the City of Copenhagen will continue to share knowledge, gather experience and inspire other major cities worldwide. We will maintain close international cooperation across cities throughout the entire planning period, enabling insight, experience and knowledge exchange that can contribute to delivering the goals of the Climate Strategy and support climate action globally.

### STRATEGIC PARTNERSHIPS

Strategic partnerships are a tool for establishing mutually binding cooperations around shared goals with professional actors who have influence over, and can affect, a given theme. In addition to being an alliance partner, the City of Copenhagen can act as a facilitator by creating meeting places for the city's stakeholders. Two concrete examples of strategic partnerships in the climate area are the 'Energy Leap' partnership and the Energy Strategic Forum. Energy Leap was established in 2016 under the CPH 2025 Climate Plan to bring together building owners

and stakeholders in the building sector to reduce energy consumption in their own buildings and in the city as a whole. The partnership has proven valuable and has, year after year, continued to reduce heat consumption in buildings. The Energy Strategic Forum brings together energy and utility actors in Copenhagen around the Energy Strategy for Copenhagen, for joint coordination and development in the continued transition of the energy system in the period towards 2035.

The climate transition must take place in a socially just way. The Climate Strategy 2035 and the associated action plans aim to plan and implement a transition that ensures that burdens and benefits are distributed fairly. As a municipality, we must focus on both the positive and negative side effects of our climate work, and involve residents as well as businesses along the way.

The ambition for a high degree of co-creation with residents and businesses in the transition requires an approach in which well-known methods are used alongside new approaches. One approach could be to use the municipality's existing services in areas such as business development, employment and welfare more strategically, to also contribute to the climate transition. These are all areas that need to mature in a climate context, and we will therefore continuously assess which tools are suitable to be disseminated and scaled up, and which require further maturation.

The transition may require taking a critical look at familiar ways of doing things and, in some areas, an initial additional cost associated with gaining

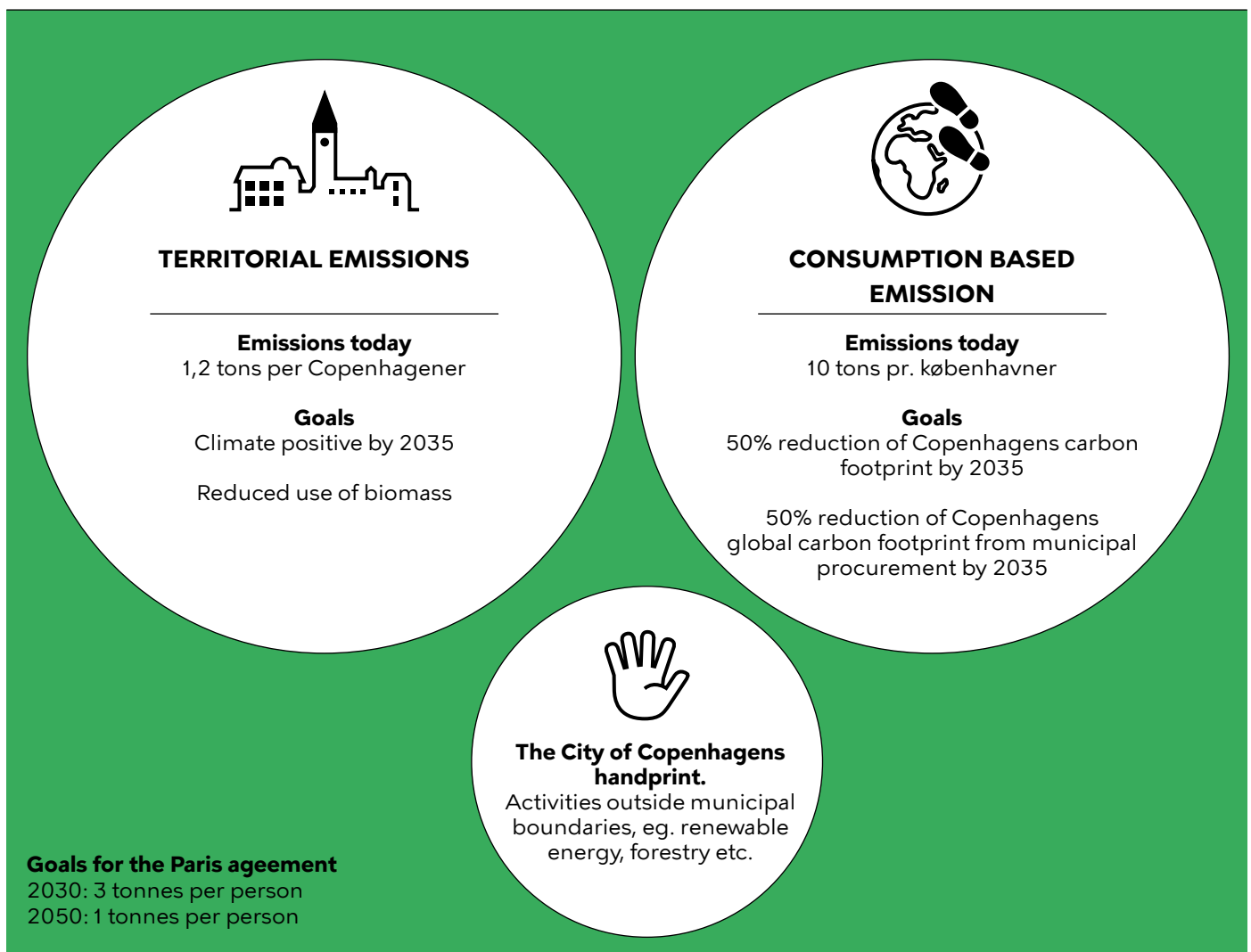
experience with new practices. There will also be a range of positive co-benefits from the transition, where we can address several challenges at the same time. For example, transforming the city's traffic system will improve air quality and could potentially free up space for more recreational areas. The initiatives can also support green job creation and contribute to developing new green skills.

## The strategy's targets

With the Climate Strategy 2035, three overarching goals are set out to express what the municipality, in cooperation with external partners, aims to achieve as well as indicate a clear and ambitious direction for the city's desired development by 2035:

1. Copenhagen must be climate-positive. This means that within the city boundaries we must capture more CO<sub>2</sub>e than we emit.
2. Copenhagen's global climate footprint must be halved e.g. consumption-based emissions per Copenhagener must be reduced by 50% by 2035, compared to 2019.
3. The City of Copenhagen must halve the global climate footprint per person from the municipality's own procurement by 2035, compared to 2019.

Figure 2: Goals for climate strategy 2035



Territorial emissions include all physical emissions within the municipality's boundaries. These are mainly emissions from transport in the city and from our energy facilities. In addition to the ambition of becoming climate-positive, a target has been set to use less biomass for heat production.

Emissions within Copenhagen's city boundary amount to 1.2 tonnes of CO<sub>2</sub>e per Copenhagener at the start of the Climate Strategy and therefore, in principle, meet the objectives of the Paris Agreement for 2050. The ambition of the strategy is to reduce the footprint to below zero by 2035. In other words, to achieve climate positivity and absorb more CO<sub>2</sub>e than that which is emitted.

The consumption-based boundary covers Copenhagen's global climate footprint and includes all emissions locally and globally that are linked to the city and residents' consumption. In other words, CO<sub>2</sub>e emitted along the entire value chain of products and services that we consume.

Copenhagen's global climate footprint, covering consumption-based emissions, is estimated at approximately 10 tonnes of CO<sub>2</sub>e per Copenhagener. The ambition is to halve the global climate footprint by 2035, corresponding to around 5 tonnes of CO<sub>2</sub>e per Copenhagener. The Paris Agreement targets correspond to 3 tonnes per person/capita in 2030 and 1 ton in 2050, as a global average.

For the municipality's own procurement, the target is likewise to halve the global climate footprint per Copenhagener by 2035 compared to 2019, corresponding to a reduction of approximately 325 kg CO<sub>2</sub>e per Copenhagener.

The City of Copenhagen's "handprint" is the municipality's contribution to the wider climate transition in society through the municipality's and municipal companies' investments and activities. The ambition for the handprint includes producing renewable energy from solar and wind by 2050 equivalent

to Copenhagen's total electricity consumption, as well as working to increase the share of green and sustainable investments and to increase CO<sub>2</sub> absorption through nature-based solutions.

The targets set for the Climate Strategy are ambitious, but they take account of Copenhagen's opportunities. With the adopted targets, the municipality can initiate decisive actions that can drive and accelerate the transition. However, progress towards the municipality's targets will also be influenced by developments in the outside world and decisions beyond the municipality. This means that climate initiatives outside Copenhagen can also contribute to meeting the targets, for example, lower emission from production of goods and services consumed in Copenhagen. But it also means that national legislation and developments in the global energy sector can affect our progress.



Nordøstamager School: Thorbjørn Hansen, Kontraframe

## Territorial CO<sub>2</sub>e emissions

With the CPH 2025 Climate Plan, the municipality has come a long way in reducing territorial emissions. The target of becoming climate-positive within the City of Copenhagen's territorial boundary means that more CO<sub>2</sub>e must be removed from the atmosphere than is emitted within the municipality's boundaries.

The CPH 2025 Climate Plan, adopted in 2012, set a target of climate neutrality by 2025 – making Copenhagen the first capital city in the world to do so. This ambitious target, although not met in its entirety, helped cut emissions by around 80% compared to 2010.

As part of the City of Copenhagen's participation in the EU mission "100 Climate-Neutral and Smart Cities by 2030", the city has entered a Climate City Contract with the EU, building on CPH 2025. The contract describes how Copenhagen

plans to reach the EU mission's target of climate neutrality by 2030.

The Climate Strategy 2035 goes even further, aiming for climate positivity by 2035, and it includes more CO<sub>2</sub> emissions within the city's territorial boundary than CPH 2025, for example, all energy production, regardless of who consumes the energy. This expansion of the strategy's scope also means that the Climate Strategy 2035 cannot be directly compared with CPH 2025.

Under the Climate Strategy 2035, territorial emissions must be reduced further through familiar areas of action, primarily related to road traffic and energy production.

Becoming climate positive requires that more CO<sub>2</sub>e is captured than what is emitted within the municipality's boundaries. This can happen using nature-based solutions, for example by planting trees, and technology-based solutions, for example the City's preparations to establish facilities for carbon capture and storage at Amagerværket and/or Amager Bakke. In addition, the City of Copenhagen has an ambition to reduce the use of biomass in the energy system and to support the key principles of the Energy Strategy for Copenhagen.

Emissions within Copenhagen's territory are expected to have been reduced to just over 750,000 tonnes of CO<sub>2</sub>e in the strategy's starting year, 2026.

By 2035, emissions will be reduced further to approximately 500,000 tonnes of CO<sub>2</sub>e even if no new climate measures are introduced beyond those already adopted. This reduction is primarily due to the transition towards electric vehicles and, to some

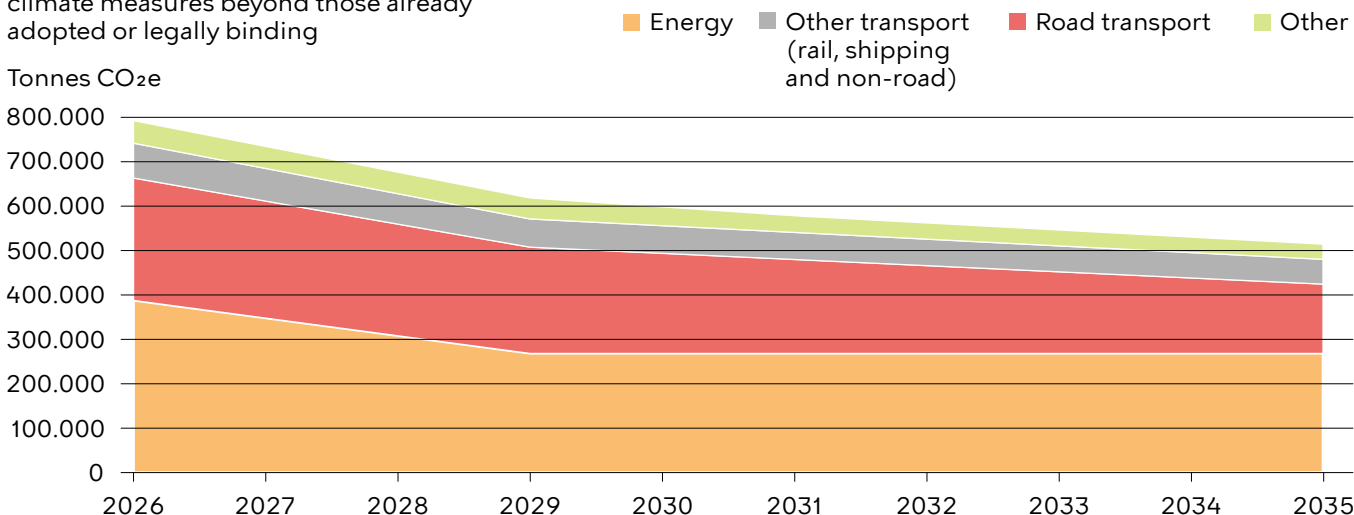
extent, fossil-free peak- and reserve load in heat production. This is shown in the baseline emissions forecast presented in Figure 3.

In 2035, territorial emissions will mainly come from waste incineration and from fossil-fuel-based transport. Achieving the climate strategy's target emissions below zero by 2035 will require the establishment of large-scale carbon capture in Copenhagen.

Achieving the target for territorial emissions is dependent on technological development, cooperation with energy actors in and outside Copenhagen, the right legal and regulatory framework, and major investments.

**Figure 3: CO<sub>2</sub>e emissions in Copenhagen's geographical area**

Baseline projection, assuming no new climate measures beyond those already adopted or legally binding



## Consumption-based CO<sub>2</sub>e emissions

The Climate Strategy 2035 aims to halve consumption-based emissions per Copenhagener over the next 10 years. Reducing consumption-based emissions depends on cooperation with the business community, civil society and residents, on ambitious national and international legislation, and on technological advances in production processes globally.

The climate strategy's target for the city's global climate footprint is to halve consumption-based emissions per Copenhagener by 2035, from around 10 tonnes in the base year 2019 to around 5 tonnes CO<sub>2</sub>e in 2035.

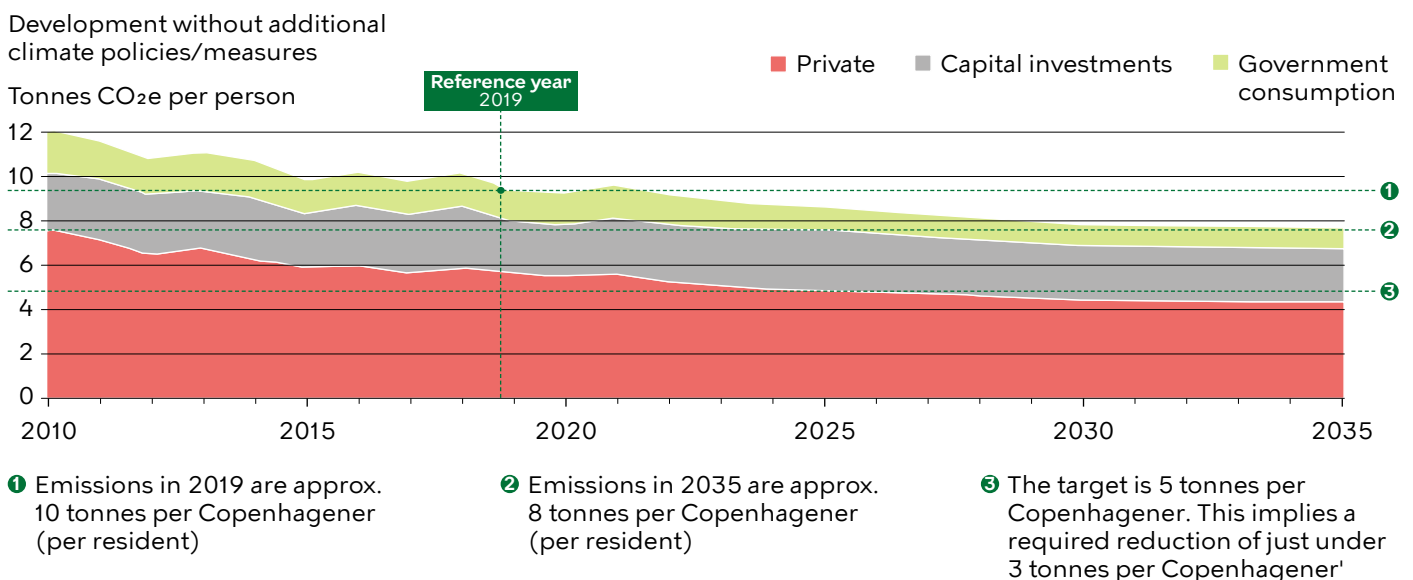
According to current projections, Copenhagen's global climate footprint is expected to fall by around 2 tonnes CO<sub>2</sub>e per resident, from 10 tonnes to just under 8 tonnes in 2035. This will happen as a result of an expected green transition in the energy sector and production processes in Denmark's trade partners by the year 2035. This transition is independent of the effort in Copenhagen, but they will affect the city's consumption-based emissions. This is because as energy production becomes greener globally, it reduces the footprint from producing the products that are consumed in Copenhagen (see Figure 4). To reach the target of

5 tonnes, we as a municipality, residents, businesses, associations and others must therefore reduce emissions by 3 tonnes per resident.

Copenhagen's consumption-based emissions include emissions from the full value chain - extraction, production, transport and distribution - of all products and services purchased and consumed by the public sector serving Copenhagen's residents and by the residents themselves. Companies' consumption is part of this value chain and is attributed either to households or to public sector consumption.

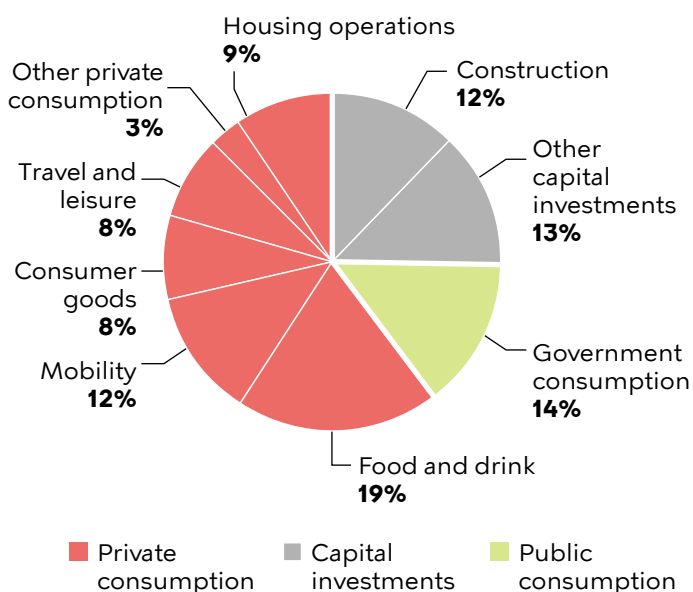
Consumption can be divided into private consumption (household consumption), government consumption (central government, regional and municipal consumption) and capital investments (in buildings, facilities, machinery and knowledge).

**Figure 4: CO<sub>2</sub>e emissions from Copenhagener's consumption**



Emissions from private consumption make up the majority (around 60%) of Copenhagen's total consumption-based emissions. The climate footprint from private consumption can be broken down into different consumption areas in Figure 5 (the red categories).

**Figure 5: Climate footprint divided by consumption areas.**



Food and drink, mobility, and housing operations (rents, energy, water and waste services) have the largest climate footprint for private consumption. Consumption related to travel and leisure, and purchases of everyday consumer goods such as clothing, furniture and electronics, also account for a significant share of consumption-based emissions.

Government consumption includes the municipality's own construction projects and facilities, as well as procurement of everything from food in nursing homes, transport for residents and employees, assistive devices, furniture in public institutions, and services from suppliers.

Government consumption also includes purchases by regional government necessary to provide services to Copenhagen's residents. This primarily entails the provision of hospital services to Copenhageners. A share of national government consumption is also included, for example, consumption that is necessary for the provision of defense and education services that benefit Copenhagen's residents.

Measures will be needed across all consumption areas during the climate strategy's 10-year time-frame if consumption-based emissions are to be reduced by 3 tonnes per person. In some areas, the transition is quite advanced. In others, long-term efforts are needed to achieve the greatest effect. Particular emphasis will be placed during the first period of the strategy, on structural initiatives within energy use and in the construction and transformation of buildings and infrastructure.

## Halving the emissions from the City of Copenhagen's procurement in 2035

The City of Copenhagen provides services to residents, builds municipal institutions such as schools, and is a large employer. In 2019, the City of Copenhagen procured goods and services worth around DKK 13 billion. The Climate Strategy 2035 includes targets to reduce the global climate footprint per resident from the municipality's own procurement, by 25% in 2030 and 50% by 2035, compared to 2019 levels.

Halving the climate footprint of the municipality's own procurement is an ambitious target and places major demands on how climate considerations are integrated into municipal operations.

In 2019, consumption-based emissions from the municipality's own procurement were around 408,000 tonnes CO<sub>2</sub>e, or 650 kg CO<sub>2</sub>e per resident.

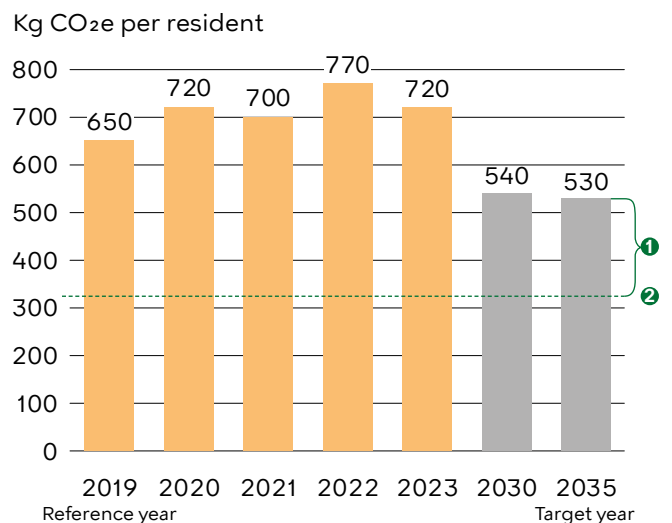
If global emissions develop as expected, the climate footprint of the municipality's procurement will decline towards 2035 even if no additional CO<sub>2</sub>-reducing measures are implemented in the municipality (see Figure 6). It will still be necessary to implement measures that can deliver substantial reductions during the strategy period if the 2035 reduction target is to be met. The development of technologies and greener products and services are expected to play a key role.

Initiatives are being developed across several procurement areas, including the City's own construction projects and the procurement of selected goods and services. The initiatives are developed with a focus on ensuring that reductions are achieved in the most cost-effective way, and without compromising the quality of core municipal services.

In addition to initiatives targeted at specific areas, there will be an increased cross-cutting focus. This will be expressed, for example, through stricter climate requirements for municipal suppliers, an increased focus on limiting the purchase of new

products with a high climate footprint, and the development of internal procurement restrictions.

**Figure 6: Carbon footprint from municipal procurement**



- ① Required reduction: 205 kg per resident.
- ② 50% per resident compared to 2019 (325 kg).

A procurement emissions management model will be implemented to integrate climate considerations into municipal procurement and ensure that they are included in all decision-making processes. Responsibility for delivering reductions will be broadly anchored in municipal operations by setting targets for each of the city's council's seven sectoral committees.



## Focus areas in the strategy

The climate strategy's focus areas have been selected and prioritized based on where the greatest potential for climate impacts is, and where the municipality has the greatest opportunity to act. These areas include: energy systems, energy consumption, construction, mobility, food, consumer products, travel and leisure, the municipality's own procurement, and the municipality's "handprint". The latter refers to reduction contributions that lie outside the scope of the strategy's overall targets. Within each action area, the use of specific transition strategies help steer the city's development towards a more climate-friendly everyday life. These strategies create a holistic approach to the overall transition and act as a catalyst for change in other action areas.

### TRANSITION STRATEGIES

The different transition strategies utilised in the climate strategy are based on approaches developed and recommended by experts, including the UN's Intergovernmental Panel on Climate Change (IPCC), the Danish Council on Climate Change and CONCITO - Denmark's green think tank. These strategies focus on the structural, social and individual dynamics of change, and on pushing for small changes in practices and behaviors. This can lead to major societal shifts (see box on social tipping points), where new norms and trends spread quickly and accelerate the transition further.

The climate strategy is based on transition strategies that focus on improving, shifting and avoiding various consumption types, and on the full spectrum of roles that a municipality can play to influence change. The use of tailored approaches is intended to ensure a lasting transition, that is both structured and guided by the best available evidence, while remaining flexible and adaptable to real-world conditions and the opportunities that arise along the way.

### SOCIAL TIPPING POINTS

Social tipping points refer to situations where a series of unconnected shifts, trigger, accelerate and amplify major transitions at societal level. Working proactively with tipping points involves identifying positive changes that are already taking place in a system and identifying the groups and actors that can influence and spread these changes. The focus on tipping points is intended to ensure a further acceleration of an emerging development trend.

The municipality's work on social tipping points takes existing changes, wishes and needs among the city's actors as its starting point; changes that we can support, for example, through partnerships and collaborations. Social tipping points are further accelerated when they are supported structurally.



Wind Farm Middelgrunden and Kraftværkshalvøen (the Power Plant Peninsula): Hofoer

## ENERGY SYSTEMS

Initiatives relating to the energy system have several objectives: to reduce CO<sub>2e</sub> emissions in Copenhagen, transition the energy system towards lower use of biomass, and ensure security of supply. The connection between these elements is described in the Energy Strategy for Copenhagen (Appendix 4), which forms part of the Climate Strategy 2035.

There are two sources of fossil-based emissions from energy production in Copenhagen: waste incineration and peak- and reserve load production. Waste incineration at Amager Resource Center (ARC) ideally produces energy from both Danish and imported waste that cannot otherwise be recycled. The peak- and reserve load plants, which burn oil and gas, cover additional heat demand for short periods, especially on cold days. They account for only about 5% of district heating supply but can be responsible for half of the heating system's CO<sub>2e</sub> emissions. The peak-load plants must be replaced with green alternatives such as biogas, electric boilers and other fossil-free technologies to reduce emissions.

The City of Copenhagen will implement initiatives at a structural level in the energy system and work together with energy and utility stakeholders in Copenhagen to transition the energy system and ensure climate positivity in Copenhagen. The target is to be achieved through the transition and development of the energy system with a focus on

both economic and climate sustainability and high security of supply, as set out in the key principles of the Energy Strategy for Copenhagen. The municipality will help expand and reinforce the electricity grid and support more decentralised electricity and heat production that makes more flexible use of energy. In addition, the municipality will promote lower temperatures in the district heating network and support preparations for carbon capture in at least one incineration plant in Copenhagen. The transition also involves sector coupling between the electricity and heat sectors, including electrification of the heat sector. The City of Copenhagen will contribute to increased production of renewable electricity from wind and solar and further reduce net emissions within the city's geography, for example by planting trees and transitioning to a climate-neutral town gas network.

The transition requires space in the city, as many decentralised production facilities will replace few central ones. Here, the municipality will use its role as a public authority able to shape urban space, as well as its position as a company owner and investor. The transition also requires the municipality to facilitate dialogue across the utility sector and to collaborate with other actors in the Greater Copenhagen area.



Heating central: Carsten Andersen

## ENERGY CONSUMPTION IN BUILDINGS

Use of housing, including energy consumption, accounted for around 9% of Copenhagen's total consumption-based emissions in 2019. This relatively small climate impact is because a large share of our energy is already based on renewable rather than fossil sources. The climate impact is expected to decline further towards 2035. Nevertheless, reducing energy consumption in buildings is a crucial prerequisite for the transition of the energy system, reduced use of biomass, and more electricity-based heat production.

The city's buildings and their owners, users and tenants play an important role in the green transition of the energy system. Energy consumption in Copenhagen's buildings must be reduced, and property owners and tenants can contribute by saving energy and shifting consumption to periods where energy supply has a high share of renewables. In addition, it must be ensured that the city's buildings can be heated sufficiently with lower temperatures in the district heating network, and that renewable electricity is generated from solar panels on rooftops. The City of Copenhagen will lead by example, through initiatives in our own properties and by working with private property owners and investors, property managers, companies, housing associations and residents, making it easier for all to take part in the transition.

Within this action area, the City of Copenhagen works as an owner, partner and facilitator together with HOFOR, a municipal-owned utility, and with

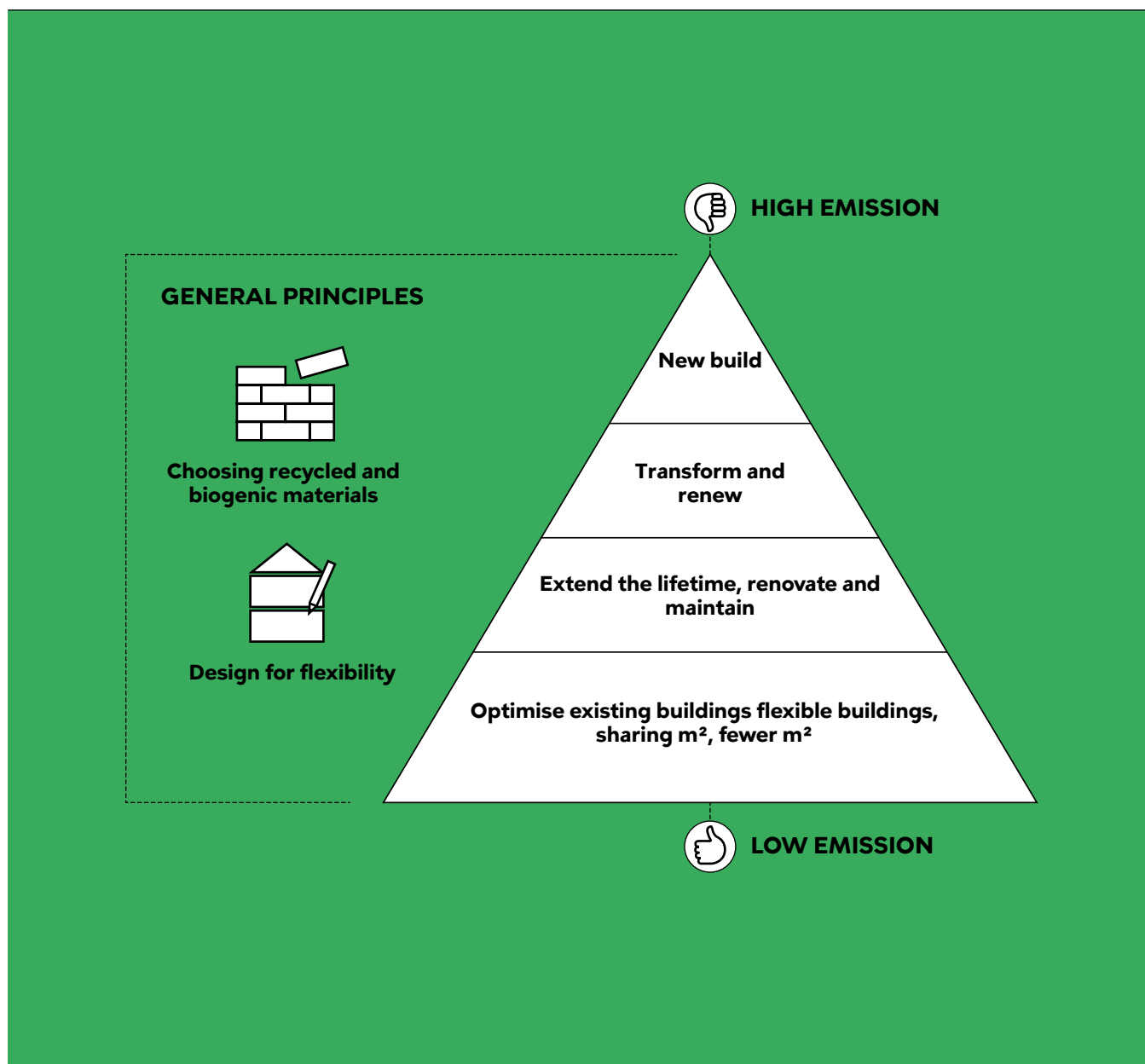
property owners and tenants in Copenhagen. The municipality's role as a public authority will be further developed, and climate considerations will be given higher priority to the extent legally possible, including in relation to the Building Regulations and the Planning Act. In addition, we will, to a greater extent, carry out early dialogue and provide inspiration through knowledge-sharing and information material prior to the approval of building applications. Collaborations and the exercise of public authority will ensure further reductions in energy waste in buildings and the integration of buildings into the energy system of the future.

## BUILDING AND CONSTRUCTION

Emissions from construction account for 12% of total consumption-based emissions. Most of these emissions are due to the use of carbon-intensive materials such as concrete, steel and glass in the buildings and infrastructure being built today, but also because we are not fully utilising the potential to transform, renovate and optimise the use of existing buildings. In Copenhagen we have more square meters per resident than in other large European cities, but less space than the average Dane.

The most effective reductions in climate impact within this action area come from optimising the use of existing buildings, for example, by sharing and using floor space more efficiently, and through maintenance, renovation and transformation, which can extend the lifetime of existing buildings.

**Figure 7: Principles for lower emissions from building and construction.**



New construction, which will still be needed in the future, must have a lower climate impact. Solutions already exist, and there are many existing partnerships that can provide a basis for further scaling and inspiration for new building practices. The municipality wants to support and contribute to this development. However, the transition must be viewed from a long-term perspective in an industry where the process of change generally takes time.

Therefore, at a structural level the municipality will focus on supporting the transition of construction in Copenhagen by further promoting climate considerations in its role as building, planning and

environmental authority. As a building and infrastructure owner and developer, the municipality will also lead by example when building, for instance, schools and kindergartens, bridges, roads, bicycle paths and when creating urban spaces. In its own procurement, the municipality will apply an approach that reduces the climate footprint. This must be done while fulfilling the municipality's duty to provide housing, care homes, schools and kindergartens for its residents. Finally, the municipality will work with utility companies and the city's major developers to reduce emissions from construction in the city.



Flintholm station: Thorbjørn Hansen, Kontraframe

## MOBILITY

Mobility leads both to territorial emissions and consumption-based emissions. Our road transport accounts for about 25% (in 2019) of the emissions within the city boundary, while it accounts for 12% of the emissions from Copenhageners' consumption. Territorial emissions from mobility come from fossil-fueled cars, buses, trains and ships within the municipal boundary. Consumption-based emissions also include CO<sub>2</sub>e emitted when Copenhageners' travel further afield, as well as emissions from the global production chains for the vehicles and fuels that Copenhageners use.

The City of Copenhagen will reduce CO<sub>2</sub>e emissions by improving conditions for cyclists and pedestrians, enhancing public transport, and promoting the transition of road traffic to fossil-free transport. The City of Copenhagen will strengthen green and space-efficient ways of transportation and make room for communities and everyday life, urban activities and nature. Copenhagen must continue to be among the best cycling cities in the world, and cycling, walking and public transport must be the easiest and fastest choice for both residents and visitors. Public transport must be improved, and more Copenhageners must be able to share cars. This will reduce CO<sub>2</sub>e emissions and provide cleaner air, less noise and more space for green areas in the city, while promoting Copenhageners' health.

The transition to electrification is crucial to reducing CO<sub>2</sub>e emissions from road transport. To ensure this transition, the municipality will support the rollout of sufficient charging infrastructure for both private cars and commercial transport. At the same time, the municipality will continue to expand cooperation with neighboring municipalities, regions, public transport operators and the state to support efforts to improve public transport and to develop the regional network of bicycle superhighways.

In its role as a public authority, the municipality will lead the continued structural transition and prioritization of the city's physical space. Urban planning remains crucial to supporting a green transition in traffic through the adaptation and development of infrastructure and land use, to strengthen fossil-free and space-efficient modes of transport.

## FOOD

Consumption of food and drink, including in restaurants and cafes, account for 19% of the overall climate impact from consumption. A large share of emissions come from consumption of beef and dairy products. Survey data shows that many Copenhageners wish to change their dietary habits for climate- and health reasons. Health and climate are closely linked when it comes to food, and we will focus on both.



Supermarket: Thorbjørn Hansen, Kontraframe

A part of the food sector's emissions is indirectly caused by the relatively large quantities of food that are wasted. Reducing food waste can also save money and will form part of the overall focus of the initiatives in this area.

As both a public authority and an organisation, the City of Copenhagen will continue the work already under way to reduce food waste and to offer healthier and more climate-friendly meals to residents in care homes, schools and public institutions, as well as to its own employees. The City of Copenhagen will contribute via its extensive experience in developing food-related initiatives. The municipality's experience is being requested by actors in the city's food sector, who are themselves facing a transition. This entails the conversion of cafeterias in workplaces and educational institutions.

The City of Copenhagen will make its knowledge available and support the sector by offering partnerships and knowledge-sharing based on the needs and wishes of retailers, restaurateurs, cafeterias and others in the industry.

## CONSUMER PRODUCTS

Overall, emissions in this category account for 8% of the total climate footprint from consumption. The emissions come from the production and transport of consumer products such as clothing, home textiles, electronics and furniture.

Trends show that emissions from this area are generally increasing due to increased consumption of clothing and other consumer goods. In recent years, online sales platforms have promoted and changed retail patterns. This is also reflected in the cityscape, where a growing number of shops are standing empty.

Studies in the waste and climate fields show that a good share of Copenhageners already get products repaired each year. In addition, more than 80% say that, to a high or very high degree, they would choose durable products that are easier to repair. More than half are willing to choose second-hand clothing and products instead of newly produced ones.

To realise the latent opportunities, it must be made easier for Copenhageners to extend the lifetime of the products they buy in part via improving access to repair and reuse. This can be achieved, for example, by developing and supporting green business models in cooperation with the business sector and other relevant stakeholders. The City of Copenhagen's roles as procurer, co-owner of companies, and as a workplace, can help push the market in this area.



## TRAVEL AND LEISURE

Emissions from travel and leisure account for 8% of Copenhagen's global climate footprint and primarily stem from air travel.

The travel industry is evolving and increasingly offering alternative modes of travel. We will take part in this development by focusing on improving the conditions for international rail connections, thereby increasing opportunities to travel by rail to and from Copenhagen.

This action area also focuses on the cultural and leisure experiences available in the city. Here, the emphasis will be on supporting cultural and leisure institutions and engaging clubs and associations in the green transition.

The City of Copenhagen is one of Denmark's largest procurers, so in addition to contributing directly to overall reductions, the City of Copenhagen's efforts to reduce the climate footprint of its procurement can help push the market for goods and services in a more climate-friendly direction. Efforts relating to the municipality's own procurement will be focused on delivering reductions in two key areas: the City's own construction projects and property portfolio, and; the City's procurement of other goods and services.

Within the City of Copenhagen's construction projects and property portfolio, we will work to achieve

substantial reductions in the climate footprint of new buildings and infrastructure, including roads and public squares. We will also ensure more optimal use, and improved energy efficiency of the existing building stock.

Each year, the City of Copenhagen will renovate 3% of the floor area in buildings over 250 m<sup>2</sup> to minimum energy rating B. We will work to reduce and shift consumption of goods and services in a more climate-friendly direction, and to extend the service life of goods that have already been purchased. This applies, for example, to the City's consumption of food, vehicles, IT-equipment and services.

Initiatives developed with a focus on achieving the greatest possible reduction at the lowest possible cost will be implemented in each of the two focus areas. To support a cost-effective transition of the City's procurement, an emissions management model, and cross-cutting approach will be implemented to ensure that climate considerations are integrated into the City's management and into all decision-making processes. The model will set reduction targets for each of the seven standing political committees in Copenhagen, thereby embedding responsibility for reductions right across the City administration. The management system will assist each city departments in identifying cost-effective reductions within its own area, with due regard to core operations.

## HANDPRINT

The Climate Strategy 2035 includes initiatives and efforts outside Copenhagen that support the green transition in society more broadly. We refer to this as a “handprint”, as it concerns the (primarily) positive effects that the City of Copenhagen promotes through measures whose impact extends beyond Copenhagen and Copenhageners.

The “handprint” primarily concerns the production of renewable energy via the City’s utility companies, contributing to the national power supply and distribution grid. The transition to renewable electricity is a prerequisite for the success of the green transition in the energy and mobility sectors, and thereby, indirectly, reduces emissions caused by consumption.

The handprint also includes stricter climate requirements for the City of Copenhagen’s investment funds. In addition, the municipality will work to promote nature-based carbon sinks through forestry outside the municipal boundary.

## CROSS-CUTTING AND ENABLING LEVERS

In addition to working specifically within each of the focus areas described above, the Climate Strategy 2035 will provide cross-cutting support to all these areas and connect with the municipality’s other responsibilities. Further development of knowledge and data that will ensure high quality implementation of the strategy will take place throughout the strategy period, both within municipal administrations and in close cooperation with external knowledge partners. In the action plans, the cross-cutting and enabling levers will be presented as a separate area of action, with cross-cutting initiatives intended to strengthen the framework for realizing the full potential of concrete, focused initiatives.

At structural level, the municipality’s position and purchasing power will be used to test and further develop how climate considerations can be integrated into day-to-day operations, and to

involve employees in developing climate actions. In addition, in its role as a public authority, the municipality will plan the city so that it can support a greener transition in the daily life of its residents. The municipality will continue to support education, awareness-raising and engagement in green initiatives in schools, day-care and youth services, and employment. The initiatives will help drive change through communities and through inspiration and guidance for Copenhageners, organisations and businesses. Relevant initiatives include existing and new collaborations with, for example, associations, workplaces, knowledge institutions and neighborhoods, as well as with children and young people. They concern building knowledge and skills, testing and developing initiatives that can nudge social dynamics and tipping points and promote a daily life with lower climate impacts.

## The Climate Strategy's investments

Delivering the ambitions of the Climate Strategy will require investment, both in time and money, from many actors, to develop new products and new practices within the areas of action. Implementing the strategy's specific initiatives will entail municipal implementation costs. This will include new expenditure but also front-loading of already planned expenditure. Additional staff resources will also be required to carry out the municipality's core tasks in ways that are in line with the green transition.

At the same time, some initiatives will result in additional costs for municipal-owned companies, private businesses and citizens. This could, for example, include costs for citizens who invest in an electric car, or for businesses that invest in energy efficiency improvements in buildings. Often, however, these are investments that could be expected to take place anyway, over time and because of broader societal developments, including new national and EU legislation.

One example is the increased renovation of the building stock to reduce energy consumption, which is expected to be driven forward, among other things, by tighter requirements in EU directives. The Climate Strategy 2035 will seek to further accelerate this development, so that more building owners gain access, support and awareness to carry out energy efficiency improvements and renovations.

The specific initiatives that will deliver the targets in Climate Strategy 2035 will be presented in three consecutive action plans. The first action plan (2026–2028) was adopted together with the Climate Strategy 2035. The remaining two plans will be developed and adopted subsequently. Each action plan will include an estimate of the financial and economic implications for citizens, businesses and the City of Copenhagen associated with implementing the initiatives specified in that action plan. These figures reflect direct financial and economic impacts only and not wider socioeconomic impacts.

## Delivering on the targets

22 sub-targets (Table 1) have been defined to indicate the changes required in each action area if Copenhagen is to succeed, by 2035, in delivering on the ambitions of climate positivity, a halving of consumption-based emissions in 2035, and a halving of emissions from the municipality's own procurement.

The sub-targets create the link between the strategy's overarching objectives, the designated action areas, and the specific initiatives described in consecutive action plans. As such, they also constitute an important management tool; they set the direction for how and within which action areas, the municipality should prioritise efforts in cooperation with Copenhageners, businesses, civil society and other relevant actors.

The sub-targets apply throughout the strategy period, providing a good foundation for local actors to engage in climate action.



Copenhagen inner harbour: Daniel Rasmussen, Copenhagen Media Center

**Table 1: Interim targets for areas of action**

Area (target type)	Sub-targets
Energy system (Territorial)	<ol style="list-style-type: none"> <li>1. The City of Copenhagen will contribute to at least one third reduction of biomass consumption in the Capital Region by 2035 and up to half by 2050, by establishing decentralized, electricity-based heat production in the form of geothermal, 300 MW heat pumps and 550 MW electric boilers in Copenhagen by 2035.</li> <li>2. Emissions from peak load in the district heating network are fossil-free, through work on flexibility in district heating demand, thermal storage and fossil-free sources for peak- and reserve load.</li> <li>3. Lower-temperature district heating is rolled out in Copenhagen.</li> <li>4. CO<sub>2</sub> is captured from at least one large-scale carbon capture facility in Copenhagen.</li> <li>5. The electricity grid is expanded and strengthened so it can accommodate fluctuations and an expected doubling of electricity demand.</li> </ol>
Energy consumption (consumption)	<ol style="list-style-type: none"> <li>6. All buildings in Copenhagen can be heated adequately and, at the same time, efficiently integrate lower-temperature district heating as a result of operational optimization and renovation of the buildings.</li> <li>7. Energy consumption for electricity and heat per square metre in buildings in Copenhagen is reduced by 20%</li> </ol>
Construction (consumption)	<ol style="list-style-type: none"> <li>8. A larger share of the need for new floor area is met through lifetime extension, flexible use, densification, transformation and adaptive reuse of existing buildings, and the establishment of shared spaces and facilities.</li> <li>9. New construction in Copenhagen meets, on average, the climate requirements for the low-emission class in the Danish building code (BR25).</li> <li>10. The use of carbon-intensive materials in civil works is significantly reduced, materials are reused and recycled to a much greater extent, and new construction increasingly uses zero-emission machinery.</li> </ol>
Mobility (territorial and consumption)	<ol style="list-style-type: none"> <li>11. The share of Copenhageners' trips made by bicycle, on foot and by public transport increases.</li> <li>12. Copenhageners increasingly use car-sharing rather than owning cars.</li> <li>13. Road traffic in Copenhagen is fossil-free.</li> </ol>
Food and drink (consumption)	<ol style="list-style-type: none"> <li>14. Food waste from households, public institutions and businesses is significantly reduced.</li> <li>15. Consumption of meat and dairy products is reduced significantly.</li> </ol>
Consumer products (consumption)	<ol style="list-style-type: none"> <li>16. Clothing, electronics and furniture are reused, shared and repaired to a much greater extent, instead of being bought new.</li> </ol>
Travel and leisure (consumption)	<ol style="list-style-type: none"> <li>17. Opportunities to travel on holiday by train or bus are significantly improved.</li> </ol>
City of Copenhagen procurement	<ol style="list-style-type: none"> <li>18. 25% reduction in consumption-based emissions from procurement per resident by 2030.</li> <li>19. 50% reduction in consumption-based emissions from procurement per resident by 2035.</li> </ol>
Handprint	<ol style="list-style-type: none"> <li>20. Renewable energy from solar- and windfarms is produced by 2050 in an amount corresponding to Copenhagen's total electricity consumption. The aim is to reach half by 2035. Locations near Copenhagen are prioritised.</li> <li>21. The city will increase the share of green/sustainable investments.</li> <li>22. The City will increase carbon uptake through nature-based solutions.</li> </ol>

