

How cities are achieving the planetary health diet for all



## **ACKNOWLEDGEMENTS**

This report was created in collaboration with each of the signatory cities of the Good Food Cities Declaration. Each city section including the summary and the city resident impact stories were self-reported. The city summaries showcase past, present, and future actions the city is implementing to achieve the goals of the declaration. For further information on the Good Food Cities Declaration, please check out the declaration webpage.

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Many cities are among those on the frontline of climate change, feeling the impacts of record-breaking temperatures, rising sea levels, and climate related natural disasters.

Since 2017, C40's Declarations and statements of political leadership – based on the toughest science-based targets and allied to concrete delivery milestones – have been signed by bold and forward-thinking Mayors. These reports document the ambitious action that has been implemented within cities. The importance of acting now is greater than ever. Focusing on achieving carbon neutrality by 2050 gives people a false sense of the time we have left to solve the climate crisis, and these Mayors have acknowledged that when it comes to creating safe, inclusive, resilient cities we must act now.

Despite the many challenges faced in recent times, with the global pandemic, economic disruption and upheaval, climate related natural disasters and in many cases strained financial resources, C40 cities have continued to act and have more than doubled the number of high-impact climate actions implemented in the six years since the Paris Agreement was signed. Cities have also already delivered more than 270 actions and are on track to deliver more than 900 additional actions by 2030, creating urban environments that allow citizens to thrive through creating streets that put people first,

cleaning the air that people breathe, creating low-cost and energy efficient homes and offices, ensuring citizens have access to balanced and nutritious food that does not harm the planet and advancing towards zero waste policies.

This must be a decade of action, with cities accelerating their efforts to tackle greenhouse gas emissions. For that reason, I have brought my own commitment to making London net zero forward by 20 years to 2030. I have also recently set out my preferred pathway to 2030 and identified further bold actions that London will need to take to achieve this goal. Delivery will require action by many stakeholders, but by setting out a bold and ambitious approach of our own we can encourage others to follow our example.

Congratulations to the cities featured in these reports for their leadership in creating **The Future We Want**, by demonstrating that their commitments are not empty words, but bold actions, and for driving the change needed for a safe planet for future generations.

**Sadiq Khan** 

**Mayor of London and Chair of C40 Cities** 

# INTRODUCTION

Around the world, C40 mayors and the cities they lead are taking ambitious and urgent climate action, working together to build a more sustainable, resilient and equitable future.

Food is among the largest drivers¹ of global environmental change contributing to climate change, biodiversity loss, freshwater use, interference with the global nitrogen and phosphorus cycles, and land-system change. Research shows that without substantial changes, greenhouse gas emissions from the food sector will increase by 38% by 2050. The world is in a climate crisis, causing droughts, floods, and desertification, reducing our ability to feed everyone on the planet.

In 2017, emissions associated with food consumption in C40 cities accounted for an estimated 13% of cities' total greenhouse gas (GHG) emissions, with consumption of animal-sourced food representing roughly 75% of those food emissions<sup>2</sup>. Most of the world's food is consumed in cities (80% of all food is expected to be consumed there by 2050)<sup>3</sup>.

While shifting patterns of food consumption is a relatively new field for most city governments, cities have the innovation and ambition necessary to increase access to food and improve diet quality for all city residents. One clear and powerful step cities are taking is signing the C40 Good Food Cities Declaration.

#### Achieving a planetary health diet for all

Signatory cities of the C40 Good Food Cities Declaration are working with citizens to achieve a 'Planetary Health Diet' for all by 2030, with a reliance on balanced and nutritious food, reflective of the culture, geography, and demography of their citizens.

The 14 C40 city signatories of the declaration are committing to create healthier and most sustainable food systems by implementing the following measures by 2030:

- Aligning food procurement to the Planetary Health Diet, ideally sourced from organic agriculture.
- Supporting an overall increase of healthy plant-based food consumption cities by shifting away from unsustainable, unhealthy diets.
- Reducing food loss and waste by 50% from a 2015 baseline.
- Within two years of endorsing this declaration, working with citizens, businesses, public institutions and other organizations to develop a joint strategy for implementing these measures and achieving these goals inclusively and equitably, and incorporating this strategy into our Climate Action Plan.

IPCC (2019): Climate Change and Land An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

<sup>2</sup>C40, Arup and University of Leeds, Addressing Food-Related Consumption-Based Emissions in C40 Cities - In Focus (2019).

<sup>3</sup>Ellen MacArthur Foundation, Cities and Circular economy for Food (2019).

## **C40 CITY SIGNATORIES**

Barcelona Copenhagen Guadalajara Lima London Los Angeles Milan Oslo Paris Quezon City Seoul Stockholm

Tokyo Toronto



Since the launch of the C40 Good Food Cities Declaration in October 2019, the COVID-19 pandemic has had dramatic impacts on cities' food systems. Cities experienced unprecedented increases in food insecurity and hunger, and with many schools closed to in-person learning in 2020 and traditional feeding programmes stressed, cities were forced to innovate new and creative ways to provide food that was sustainable and nutritious to the many more residents in need. The accomplishments achieved by cities, in the context of a global pandemic, to increase access to sustainable food, to improve the food environment, to reduce food loss and waste and to transform food governance, are nothing short of amazing.

Despite all of the challenges, the following are some highlights of the activities cities delivered over the past years.

Shifting diets, which represents the most challenging area of work, has been tackled by looking at both a) food service facilities directly managed by the cities and private operators; and b) at the retail sector: increasing their availability, improving the quality of food they offer, etc. Food assistance programs have also been reconsidered in light of the Declaration vision. Likewise, food waste reduction has been an area of great development, where different projects have been piloted, leading to an increased stock of knowledge and expertise which will likely be systematized and capitalized in the next few years.

#### **Shifting diets**

Cities who control large facilities (summing up to millions of meals served per year) updated their procurement guidelines and tender processes for improved sustainability, including emphasizing local and organic supply. They are often monitoring their advancements through tools able to calculate, communicate and report the CO<sub>2</sub>e emission reduction associated with their menu shifts. Training programs for kitchen staff are also taking place to introduce the new procurement criteria and elaborate new menus which, stemming from the Planetary Health Diet recommendations, reflect local preferences and tastes.

Cities with no direct control over food canteens situated in big public facilities such as schools, hospitals, shelters etc have also found their way through. Thanks to the promulgation of local dietary guidelines and the endorsement of food procurement principles, they are currently using regulatory powers or/and lobbying the operators managing those canteens to abide and comply.

Cities are now bringing those new procurement criteria, dietary guidelines and principles beyond the public sphere to involve work/office canteens and many other private food service operators. Additionally cities have also started involving restaurants in the "shifting diets" challenge, supporting them for example in creating nutrition labels for their menus or in re-portioning for more fruit and vegetables.

Many actions are also taken to influence the retail food environment and more specifically to improve the healthy, affordable food offering and to help people make better consumption choices. Actions in these areas span from incentives for good food retailers to settle in underserved areas, technical and financial support to corner stores willing to start selling better food, new licenses for local and organic food sellers or carts, etc.

#### **Food waste**

On food waste, cities are tackling a variety of segments of the population. Different cities are working to minimize the amount of waste generated at the household levels. Experiences in this field range from stimulating the use of kitchen diaries with training, supporting materials and online/offline courses to help people realize the amount of waste they generate (which they usually underestimate) up to the implementation of pay-as-you-throw schemes.

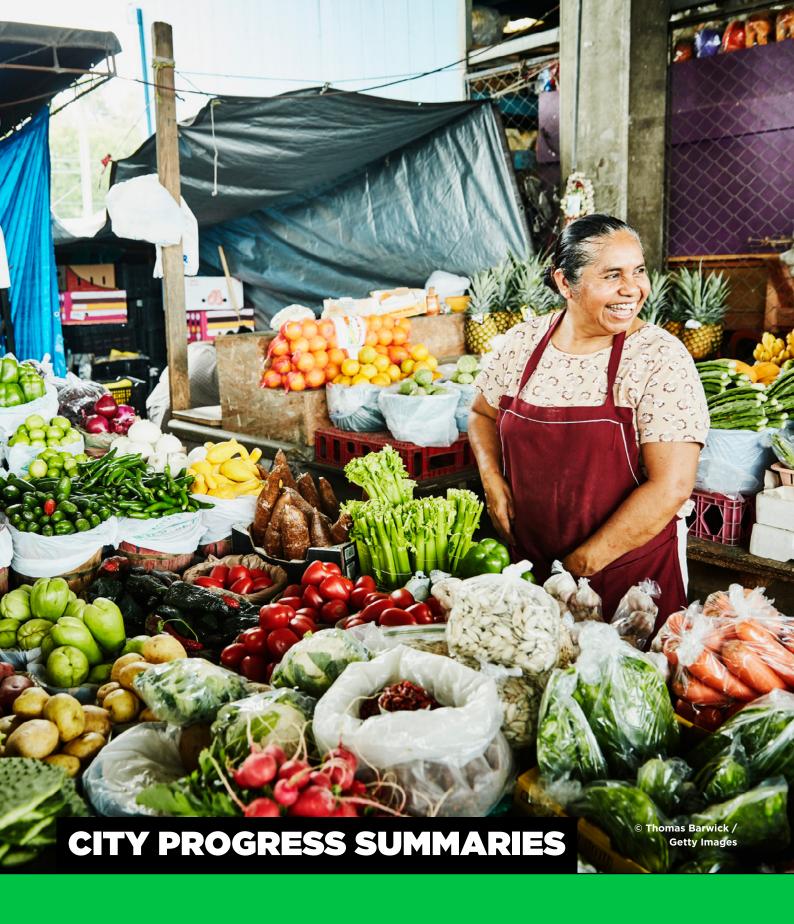
Moreover, some cities are also assessing food waste in their public facilities to identify structural interventions to minimize the waste generated.

Last but not least, many cities are working to create virtuous circles of recovery and donation of food surpluses coming from the retail sector. These systems are usually facilitated by city halls connecting retailers with NGOs and people in need. Cities are often providing financial and logistical support to this recovery network. These actions hit multiple benefits such as reducing the amount of edible/surplus food ending up in waste streams and tackling food insecurity, by closing the so-called "city meal gap".

#### **Data**

Consumption based emissions are a new and emerging area of work for cities. Accordingly, this is an area where there are big changes coming. City scale food consumption data does not yet exist everywhere, and even data on food procurement is inconsistent across cities. However due to the increased understanding and awareness of the food/climate nexus, methodologies are being updated to facilitate better and more actionable data in the future.





The following section of this report contains progress and action summaries that were self-reported by each of the C40 Good Food Cities Declaration signatories. The city summaries showcase past, present, and future actions the city is undertaking to achieve the implementation milestones of the Declaration.



Barcelona is committed to sustainable food. This commitment has been added to a series of policies, including the 'Estrategia de Impulso de la Política Alimentaria [Food Strategy], 2016–2019'; the Climate Plan, 2018–2030; the Climate Emergency Declaration, 2020–2030 and more. In 2021, Barcelona put itself forward as the World Sustainable Food Capital and hosted the 7th Forum of the Milan Urban Food Policy Pact.

The city's guidelines for public food procurement is being updated to increase the criteria for organic produce, local and short food-chains, reduction of animal protein, sugars and ultra-processed foods, and also reduction of food waste. These guidelines informed the tender specifications for soup kitchens, nurseries and the zoo's food services.

The city has also implemented the ALIMENTA programme, particularly as a result of the COVID-19 pandemic. This programme aims to establish a work model for the different soup kitchens and food assistance projects, focusing on people's empowerment. One of its projects brings organic and local food to vulnerable groups.

A lot of work has also been done to facilitate the commercialisation and distribution of organic, local and short-food-chain products in the city. The first organic food centre has been opened at Mercabarna, Barcelona's wholesale market, and the stalls selling local and organic food at the municipal markets will be highlighted to stimulate consumption among the population. Finally, a local logistics exchange centre will be opened at the end of 2021 to facilitate direct sales of small- and medium-scale farmers' products.

The city has begun to implement educational projects in schools to introduce sustainable food, including an update to all Public Health Agency and Markets projects. A second project to reduce protein intake in school cantines has been launched with 42 schools.

In an effort to combat food waste, the city plans to open in 2022 a new food recovery centre at Mercabarna, which will double food recovery capacity, reaching 3000 tons in the years to come. The city has also launched the Ecowaste 4 Food programme, to reduce food spoilage at events, fairs and conferences.

Finally, Barcelona has developed its Urban Agriculture Strategy, and there are now social, community and municipal gardens in the city that nurture the field of urban ecology.

# Basic food baskets - healthy eating habits and emotional support

This project fosters healthy habits to improve physical and emotional health and creates community networks with food as the central focus. Groups meet weekly to work on healthy habits linked to sustainable food, and each week a basket of local, fresh, organic products is distributed to participants. Connectedly, participants are introduced to concepts linking food and healthy eating, and how this relates to emotional health. The 50 families involved in the pilot project are connected via WhatsApp where they share successes and challenges, and use it as a platform for getting further support.



Copenhagen has recently included a so-called "climate weight" in their tender documents for food procurement. When the city's wholesalers bid for public contracts, they are thus motivated to lower the price of climate-friendly food and/or reduce their margins on non-sustainable food.

Moreover, to reduce emissions connected with public meals in the city's daycare centres, schools, nursing homes and social care services, the city has finalised an action plan and recruitment process to train kitchen staff in more than 1000 kitchens with the competencies and knowledge to create more climate-friendly meals.

In 2020, a campaign was launched to reduce household food waste. Actions promoted better habits to reduce avoidable food waste. The initiative mainly used mailed communication to Copenhageners in their homes and digital courses. Another specific example of a food waste initiative, Copenhagen has entered into a partnership with a local NGO to create social food communities in public housing areas that recover and distribute fresh surplus food.

Copenhagen will also work on reducing food waste in municipal kitchens and institutions. An analysis of food waste in the city's public kitchens is being finalised. This will serve as a baseline and inform reduction targets and recommended actions. Finally, a new learning curriculum on waste sorting and circular economy has been introduced in schools and institutions, reaching 70,000 students annually.



Guadalajara is constantly working on transforming the diet of its residents. Some of the ongoing actions include transforming the menus offered in community dining rooms to follow the planetary health diet, including implementation plans for next year. The staff in charge of the community dining rooms, as well as teachers, directors and staff who attend Guadalajara Community Development Centres, were given training about this diet, including around its benefits to health and to the planet. The planetary health diet is also being followed in new menus at the city's 13 Child Development Centres. In the first half of 2021, 43,741 meals were served. Further, the city created nine urban urban community gardens in community centers to provide food for breakfasts.

The city is also carrying out sustainable food campaigns aimed at children and adolescents. The 'Agroeco-educational Project' has been integrated into the PEPDII programme (an educational programme for child development), which worked with children

from the first three grades of preschool (535 children) on issues of food origin, production, care, consumption and nutritional content. The students carried out virtual activities that promoted healthy and sustainable eating.

The programme also involved joint work between students and parents, through training in green classrooms to promote family gardens and healthy eating habits and to reduce the consumption of junk food.

Another initiative aiming to transform the diets of city residents is the promotion of 'meatless Mondays'. Residents are encouraged to celebrate the deliciousness of plant-based options by leaving meat out of their diets on at least one day of the week.

Finally, although organic waste collection has not yet started, the city is already carrying out training on food waste composting.



In October 2020, Lima approved a municipal ordinance that created the Food Systems Council. The aim of the council is to reduce malnutrition and strengthen the sustainability of the food system in the city.

The council has an advisory committee (made up of representatives from the government, private companies and actors linked to the productive sector) that will support decision-making and execute actions. The council is conceived as a stepping stone to increasing the city's work on healthy eating, strengthening the food markets (adding quality standards), and ensuring the efficient use of resources at all stages of the value chain.

In June 2021, Lima approved a new ordinance that established the monitoring of kiosks, cafeterias and school canteens to guarantee that these outlets will only sell healthy foods, in compliance with government resolutions. Trading of unhealthy foods such as sweets, sugary drinks and ultra-processed products will only be allowed beyond a 200 metre radius from school perimeters.

With the same act the city also established a new programme, 'Lima Come Sano' (Lima Eats Healthy) to promote restaurants that comply with National Dietary Guidelines, that clearly and prominently display caloric contents in their menus, that only offer salt and other condiments upon request, and that showcase the sign: 'Less salt, Less sugar, More Life'.

The city has run campaigns to reduce food waste in public markets ('Lima come saludable').

In addition, the city has worked on the bio-gardens programme, with 270 practical workshops held in 369 common plots and 11,570 families (47,698 people) completing training. The programme includes 1,759 home bio-gardens, 92 community bio-gardens, 307 home composters, and 25 communal composters. Overall, these have recovered 4.47 tons of organic waste, with more than 1985.73 m2 converted into organic waste and more than 1985.73 m2 converted into productive soil.

#### **Lima's Bio-gardens**

The city has installed bio-gardens in several buildings including a shelter, La casa de Todos, located in Palomino, in the historical centre of Lima, and an elderly care home, San Vincente de Paul. The vegetables have been harvested and will be consumed locally, bringing both health and ecological benefits. Supervision and monitoring are being carried out to control any pests that might threaten the gardens.

A bio-garden has also been installed in the residential complex of Mertinete and several streets in the city, such as Pasaje Paiva and Pasaje Coronel Ruiz Diaz, where public space has been recovered and green space created using recycled materials such as wood from disused pallets and banners. Workshops on the installation and management of bio-gardens have been provided to the participating residents.



In 2020, the Mayor of London and ReLondon (a partnership of the Mayor of London and the London boroughs to improve waste and resource management) undertook a material flow analysis. The analysis explored the mass of materials flowing through London and their consumptionbased emissions across the whole food and drink supply chain (including food loss and waste at each stage). The analysis shows that 6,347,000 tonnes of food are produced to supply London each year, responsible for 15,483kt CO<sub>2</sub> emissions, of which 78% occur outside the city. In addition, 836,000 tonnes of imported food are lost before reaching London, and 931,000 tonnes are wasted by households. By reducing food loss and waste and shifting towards more healthy sustainable diets, London could reduce its consumption-based emissions by 31% a year. The Mayor of London, Sadiq Khan, will soon convene a food supply chain roundtable with representatives from parts of the food system that were identified as having the largest impact, in order to support the reduction of consumption-based emissions as well as food loss and waste from the supply chain.

The Mayor is using the purchasing power of the Greater London Authority (GLA) Group (7 million meals per year) to buy healthy and sustainable

food for the city's catering operations, whilst reducing food waste. With the 'Healthy Schools London' and the 'Healthy Early Years London' programmes (present in 87% and 82% of all schools) and through the "Boroughs Food Group," the city is helping schools, early years settings and other public facilities to provide healthier food and reduce health inequities.

The Mayor of London's school holidays programme served almost 500,000 meals to children in 2020 across 24 boroughs. Besides, in 2019 and 2020, the Mayor supported ten boroughs to produce food poverty action plans as well as Good Food Retail Plans and Projects, which generated a variety of retail projects to improve the healthy, affordable food offering in convenience stores, increase the take up of healthy start vouchers among local retailers and increase available healthy food options. In 2020, GLA developed research to understand the food needs of older, vulnerable and disabled groups across London. GLA has also piloted 13 'superzones': 400m radius around schools in deprived areas, where the food offering (as well as advertising, gambling, smoking, physical inactivity and air quality) has been tackled and redesigned.



Nearly all of the C40 Good Food Cities Declaration commitments are part of the city of Los Angeles' sustainability plan, known as LA's Green New Deal. The city went even further and applied an environmental justice and equity assessment to the declaration commitments, to further prioritise inclusion and equity within its plan.

Between April 2020 and April 2021, LA's Department of Aging provided six million meals to 18,500 older and low-income Angelenos. This included the Great Plates programme, which worked with 31 local restaurants – many of which are minority-owned – to provide fresh and nutritious meals, many of which included vegan and vegetarian offerings.

In February 2020, Mayor Garcetti signed Executive Directive 25: Leading By Example, reflecting the commitment of the city government to achieve the goals of LA's Green New Deal. As part of that effort, any department or proprietary organisation with restaurants or retailers on their premises must abide by the Good Food Purchasing Program (GFPP). This further expands the GFPP beyond city departments. Its implementation will begin soon.

The city established two new Good Food Zones (GFZ) in south LA and northeast San Fernando Valley (both lacking access to affordable, fresh, and healthy food) and allocated USD 1 million

to the GFZ pilot programme to assist food businesses located in GFZs. The Healthy Food Market Network Program – which empowers corner stores in low-income neighbourhoods to sell good food – has also received continued funding support from the city. Since 2016, the programme has covered over 65 stores and trained 70 store owners. Finally, LA has allocated USD 1 million to support sidewalk vendors with modernised food carts, and is working on streamlining the permitting process and further supporting healthy food carts.

In 2019, LA launched the Curb Your Food Waste programme for 18,000 households, to use green yard waste bins as deposits for food scraps. The pilot will inform LA Sanitation's work. In 2020, the Los Angeles World Airports Commission required all food-serving businesses at LA International Airport to donate a portion of their unsold, high-quality foods to local NGOs. In addition, in just one year, the recycLA initiative (a public-private partnership offering waste and recycling services to industrial and commercial businesses and institutions), donated to those in need 5,091 tons of food (the equivalent of 8.5 million meals). The 2020-2021 LA city budget included USD 1 million for food rescue organisations in low-income communities to expand their work by adding cold-storage infrastructure and storage supplies. It also allocated USD 750,000 to expanding composting sites at farmers' markets.



#### **Healthy Neighborhood Market Network**

Since the start of the Covid-19 pandemic, the Los Angeles Food Policy Council (LAFPC) has successfully been in correspondence with local officials, making sure that food access spaces like farmer's markets and local corner stores can remain in operation as essential businesses. The Healthy Neighborhood Market Network (HNMN) programme aims to ensure that everyone can access fresh produce within a half a mile of their residence, and empowers small business owners in low-income neighborhoods to bring good food to their communities, thus supporting community vitality and economic development. Store owners receive training, guidance and upgrades to their stores, transforming them into beacons of healthy, affordable food. As a result, communities have more options for living a healthy life.

### Los Angeles is delivering on the C40 Equity Pledge commitment by reporting equity and inclusion considerations in its climate actions

The city is delivering equitable actions on three commitments of the C40 Good Food declaration. During the pandemic, the city has further aligned their food procurement toward the Planetary Diet, serving healthy, nutritious, fresh meals to low-income seniors. In an effort to increase equitable access to healthy food in the city and particularly in low-income neighbourhoods, LA has committed through its Green New Deal to establishing for example a healthy food cart programme by the end of 2021 to ensure all low-income Angelenos live within 1/2 mile of fresh food and to creating a Good Food Zone program by 2025 to target investments in areas of low-income households lacking healthy food access, supporting the local economy and vulnerable communities. The various food loss and waste reduction actions, such as the food scrap drop-off and education campaigns, help decrease environmental injustices by reducing negative health impacts of landfills located in low-income areas, saving low-income individuals money by learning how to avoid food waste, and rescuing edible food to ensure it reaches the individuals most in need.



Milan has been constantly working on food issues and on the implementation of its Food Policy since 2015. In 2020, the implementation of actions slowed down due to COVID-19, while the city realised many activities on food aid in order to support access to food for vulnerable people. However, new actions related to the C40 Good Food Cities declaration have been realised in order to progress on the main commitments.

Due to the changes adopted since 2015, the city of Milan reduced the greenhouse gas equivalent emissions for food purchased in school canteens by 20%. This was certified by the World Resources Institute in 2020 with the Cool Food Pledge programme. The city will continue to improve its school meals procurement in the years to come. The city currently serves 85,000 meals a day, or 17 million meals a year, via Milano Ristorazione, the city's largest school canteen supplier, which is fully owned by the city. Meals are prepared in 26 cooking centers and then distributed to the over 760 canteens all around the city.

Each month, 10 tons of food waste for each Hub are recovered, corresponding to 154,000 meals equivalent per year. Crucially, the Hub scheme allowed Milan to respond rapidly to city residents' needs during the early stages of the COVID-19 pandemic, where people could donate food that was then collected and redistributed to those in need. In 2020 and 2021 the municipality opened a second and third food waste hub in order to collect and donate surplus food. New hubs will be opened in the coming months.

Milan recently received international recognition for its work in the field of food waste, as the city was chosen to be one of the first ever winners of the Earthshot Prize, the most prestigious global environment prize in history, designed to incentivise change and help repair our planet.

In 2020 and 2021, the municipality produced educational kits for children and teachers, including the 'Guidelines on school gardens in Milan', dedicated to school gardens for teachers and experts that work with schools, and 'An apple per day' aimed at educating children and families about healthy food and sustainability.



Mayor of Milan and C40 Vice Chair, Giuseppe Sala

"The city's commitment to improve our food system keeps on growing in terms of actions implemented and local partners involved. In 2020, we achieved a great result with the certification of the 20% reduction of GHG equivalent emissions from school canteens purchasing. This builds on the sustainability path launched in 2015 with the creation of Milan's Food Policy. We are committed to steering the food system towards a more sustainable and inclusive city. In doing this, the C40 Good Food Cities Declaration helps us better perform day by day."



Since signing the C40 Good Food Cities Declaration in October 2019, Oslo has worked systematically to organise its efforts on sustainable and healthy food.

The responsibility for implementing sustainable and healthy food has been placed with the Vice Mayor of Finance. The executive body is the Agency for Improvement and Development which, since January 2021, has put together a coordination group for sustainable food in the City of Oslo'. This group gathers together the agencies responsible for improvement and development, urban environment, climate, health, waste management, food and alcohol licensing and inspections, nursing homes, and education, together with St. Hanshaugen District and the Department of Education. The purpose of the coordination group is to enhance crosssectoral collaboration, to suggest measures and to pursue to work jointly and coordinated towards shifting the diets to sustainable, plantbased and healthy food in the municipality. The group meets on a monthly basis to exchange knowledge and experience and discuss how to remove barriers for delivering sustainable and healthy food in public kindergartens, schools, nursing homes and other institutions. In parallel, big food projects are coming up, for example the implementation of free (plant-based) school meals in public high schools and preparing the tender for Oslos next municipal purchase agreement on food and drink.

Oslo is arranging for more kindergartens to have joint menu planning and food purchase schemes, and to test a kitchen assistant scheme in cooperation with the Norwegian Labour and Welfare Administration. 'Klimato', a menu planning tool able to calculate, communicate and report the climate impact of the food served,

is being tested. The city is also working on training and sharing knowledge about sustainable food with personnel that are working with food and meals in municipal institutions. The city has developed guidance on how to procure sustainable food for conferences, seminars and social events.

Together with the organisation Food Studio, the City of Oslo developed a handbook on how to organize 'rescue food tables' in 2019 – and has organized several rescue food tables since. The most prominent was at city hall as part of the Oslo European Green Capital closing ceremony.

#### **MatVinn project**

MatVinn project: Together with Future in Our Hands, a NGO promoting ethical and sustainable consumption, the City of Oslo implemented a round with the MatVinn Families concept, which involves families with children to look at the amount of food that ends up in their bin, why and how they could easily reduce it. Every week, the families weighed the food they needed to throw away - a realisation that is an important part of the process to reduce food waste. Families are given information on how to store food for the best shelf life. what can be frozen and what can still be eaten after its expiration date. Other tips include planning family dinners based on what is already in the fridge and freezer and what has the shortest shelf life. In addition to having great value for the families involved, this can inspire many other families to engage in the same behaviour change through word-of-mouth.

Since 2009, as one of the pioneering cities in this field, Paris has been implementing a policy to offer sustainable food in its public canteens. In 2010, Paris adopted its first Sustainable Food Plan, which was renewed in 2015 with an ambition to achieve 50% sustainable food by 2020. The proportion of sustainable food (organic products, red label and sustainable fish) used to prepare the 30 million meals served in its 1,300 canteens now stands at 53.1%. The proportion of organic-AB certified products alone represents 46.2%.

Moreover, Paris is working towards contributing to a new agricultural economy, where short supply chains, proximity, environmentally friendly farming practices and the circular economy will guarantee better working and living conditions for farmers, protection of air, soil and water resources, and better quality products for consumers.

In 2022, Paris will adopt a new sustainable Food Plan with the ambition to achieve 100% sustainable food and 50% from short circuits in its public canteens. To achieve its goals, the city will create 'AgriParis', which was co-constructed through the Citizens' Conference and the Sustainable Agriculture and Food Summit. AgriParis will support the agro-ecological transition of partner farms and the sustainable processing and logistics sectors, initially with the aim of supporting Parisian public canteens and then gradually being extended to other sectors such as commercial catering and food aid.

The city is also working to promote access to raw, fresh and local ingredients for people in need by creating collective kitchens and social and solidarity grocery stores.

At the same time, an action plan for the withdrawal of plastics from public canteens has been launched in 2021. Different educational actions are also being carried out in school canteens to reduce the generation of food waste.

### **ArgriParis**

In order to establish AgriParis, the city of Paris held a citizen's conference, to involve city residents and ask them about their practices, aspirations and expectations. A diverse panel of 100 people living in inner Paris and the outer suburbs was recruited. During three weekends, these city residents discussed, debated and questioned many experts (institutions, unions, farmers, mass distributers, among others.). They were supported by a committee of four independent researchers to answer the main question: 'What does healthy eating mean in 2021?'

These 100 residents provided the city with a citizens' opinion piece containing 32 key proposals, ranging from awareness-raising campaigns; to supporting producers in short supply chains who wish to develop a more sustainable product range; or developing new canteens open to all, which costs are adjusted depending on the beneficiaries' income.

Paris is delivering on the C40 Equity Pledge commitment by reporting equity and inclusion considerations in its climate action

In the delivery of the C40 Good Food Declaration and in the face of COVID-19 pandemic, the City of Paris has initiated the reinforcement of emergency food aid, home-delivered meals to the elderly, the sale of fruits and vegetables at reduced rates and provision of financial aid to disadvantaged families and students.



'No public funds shall be spent on unhealthy food' said Mayor Josefina Belmonte upon approval of the Quezon City Healthy Public Food Procurement Policy and Nutrition Guidelines. The Executive Order requires all procurement activities carried out by offices, departments, institutions and task forces of the City Government to comply with the new Quezon City Nutrition Standards. Later on, the city is planning to expand the policy beyond the facilities it controls. In fulfilling this action, Quezon City will be able to procure its fresh produce from urban farms established in the city. The policy has already been presented and endorsed by the National Government Agencies (Interior and Health) to facilitate sharing of experiences among other cities.

The city has also installed four biodigesters in its model farms to pilot the processing of biodegradable waste from the surrounding community. Initially, each biodigester processes 25 kilograms of waste every three days for three months, after which the equipment can be fed 25 kgs of organic waste per day, which can significantly reduce the waste ending up in landfill. The methane generated by the process can be used to cook food in the farm, while the solid and liquid by-product can be used as fertiliser.

Turning to the issue of food waste, the city plans to conduct a waste analysis and characterisation study in the last quarter of 2021, covering hotels/motels, hospitals/healthcare institutions, industries, government institutions, catering services and small eateries.



Currently, Quezon City has 303 urban gardens/community farms. There are also seven community model farms showcasing modern urban agriculture technologies. Through the city's Joy of Urban Farming Project, about 52,374 starter kits and seedlings were distributed to households and barangays to encourage backyard vegetable gardening.

In addition, City Ordinance SP-2972, S-2020 has been enacted to enhance the Quezon City government's campaign to strengthen food security and urban agriculture. Said Ordinance exempts idle lands from the imposition of idle land tax if utilised for urban agriculture (personal or public consumption) for a minimum period of three years.

Finally, an executive order has created an internal Food Security Task Force, with a mandate to institutionalise food security measures.



Mayor of Quezon City, Josefina 'Joy' Belmonte

"One of our foremost concerns was ensuring that the families in our communities had sufficient supplies of food. We, along with other Local Government Units with other areas, provided food relief packs, mostly composed of rice, canned goods. With vegetables in short supply, we thought of empowering our residents to plant their own sources of good nutrition. This initiative has its roots in our 'Joy of Urban Farming Programme' which has been running for more than 10 years. The beauty of urban agriculture is that it not only addresses hunger issues, but it has brought communities closer together. In partnership with our Department of Agriculture, The Quezon City Food Security Task Force has initiated its Grow QC campaign. Aside from urban gardens, action plans include the establishment of community soup kitchens, vegetable nurseries, and the introduction of aquaponic technologies as an alternative livelihood for our people."



The key success in this area: In Seoul, Seoul Eco-Friendly Distribution Centre, a municipal organisation, procures food for school feeding programmes to ensure fairness. In fact, the rate of eco-friendly food procured for school meals is on the rise from 53% in 2019 to 55% in 2020. In addition, a Public Feeding Centre is in operation in each of the 25 districts within the city to enable the direct purchase of eco-friendly produce for meals served by small-scale meal service providers, including child-care facilities.

Key success in this area: Seoul provides subsidies for the installation of fruit and vegetable vending machines to make sure children from low-income families are provided with fruit and vegetables twice per week and all city residents are given better access to healthy food. The city also monitors the nutritional content, such as sodium and sugar, of food frequently consumed by city residents, and certifies restaurants and canteens that provide low-sodium food.

Korean food culture, which traditionally involves many side dishes and a soup per meal, makes it difficult to reach our targets of cutting food waste at the household level. For this reason, to improve on the current 'Pay as you Throw' system, the city of Seoul is delivering campaigns to build public consensus on the need to reduce food waste and promote a voluntary food waste reduction culture. The campaign involves public adverts in newspapers and on radio; development and publication of videos and communication materials both online and offline; and food waste reduction tips on social media channels to use leftovers and cut food loss.

Seoul is the first local government in South Korea to revise a relevant ordinance to set up and run the Seoul Citizens Committee for Food, a public-private governance group that consists of experts, activists and citizens as well as public servants. The committee has seven subcommittees focused on public feeding, urban farming, food safety, food ecology, healthy food, food communities, and food education and communication. The committee's key responsibilities include coordination, monitoring of Seoul's food policies and development of food governance models. A website dedicated to the committee provides information to the public.



The Stockholm City Council is working to make all food and meals that are prepared or served in public preschools, schools, elderly care facilities and other official functions of Stockholm (more than 25,880,000 meals/year), sustainable. The city has launched several initiatives to support this shift: it has strengthened its own internal coordination, and created a system for planning and reviewing the meals served by the city. A digital tool has been introduced to measure and review CO2 emissions from all food purchased by city-owned operations (not contracted operations).

The city has also started to engage the kitchens' personnel in the food shift via education and training programmes (one example is a series of seminars for managers and staff responsible for purchasing food and meals in schools) and a digital training kit.

Since January 2021, it has been mandatory for all food preparing businesses in Stockholm (i.e. restaurants, hotels, commercial kitchens) and city-owned kitchens to collect all their food waste. Several initiatives have already been carried out in line with the new policies; for example a number of households have participated in projects to try sustainable ways of consuming food while also reducing their waste.

During 2019 the city organised several seminars with the Climate Pact – a platform run by the city in cooperation with a number of companies. The aim was to engage businesses to step up efforts to reduce food loss and waste and for businesses to pledge to a specific challenge. More than 330 companies are members of the pact. Companies receive regular information about how they can join forces with the city of Stockholm to reduce greenhouse gas emissions and other negative environmental impacts.





The percentage of people who consume a sufficient amount of vegetables or, more broadly, a healthy diet in Tokyo is increasing, but not yet optimal (male: 26.2%, female: 30.6% - data from FY 2018). For this reason, the Tokyo Metropolitan Government (TMG) is promoting efforts in collaboration with municipalities and businesses to improve the eating habits of Tokyo residents. Among these efforts, the TMG has started promoting restaurants that offer menus with 120g or more of vegetables per meal. Currently more than 450 restaurants are part of this campaign.

Concerning food waste, the TMG has set a goal of halving food waste by 2030 (compared to 2000) and net zero food loss by 2050 in its 'Zero Emission Tokyo Strategy'. The strategy summarises the city's vision of net zero  ${\rm CO_2}$  emissions as well as specific policies and roadmaps such as reducing food waste and promoting the conversion of food waste into feed and fertiliser.

To complement the 'Zero Emission Tokyo Strategy', the Tokyo government has also created a 'Tokyo Food Loss Reduction Promotion Plan' To reach these goals the TMG is:

- involving pioneering businesses –
  effective in reducing food waste using
  advanced technologies such as ICT and AI –
  and supporting them in their work;
- promoting campaigns on food waste that involve information dissemination and training of consumers; and
- encouraging the effective use of emergency food stockpiled at municipalities and TMG by matching it with food banks.



Actions to advance sustainable consumption are being presented in the city of Toronto's climate implementation plan – Net Zero Strategy. This includes opportunities to address consumption-based greenhouse gas emissions associated with food through food procurement, local food production, consumption, and reduction of food loss and waste. Food is one of the consumption categories that will be examined through the consumption-based emissions inventory being developed on a city-wide scale.

As part of the Baselining for a Circular Toronto Study, the City completed a material flow analysis of Toronto's food system and identified opportunities, challenges and potential indicators to monitor progress towards enhanced circularity.

Food waste reduction strategies and programmes have been implemented, including the Urban Harvest Program, to redistribute surplus food; training and education for residents in food preservation practices; and participation in the National Zero Waste Council's Love Food, Hate Waste Campaign to raise awareness of avoidable food waste.

The city of Toronto is moving forward with several initiatives that support culturally relevant and healthy food growing and access. Examples include the City's Black Food Sovereignty Plan; Tkaronto Indigenous Prosperity Plan; and the Community Engagement & Entrepreneurial Development urban farms.



