Joint Submission of Views under the Mitigation Work Programme: opportunities, best practices, actionable solutions, challenges and barriers relevant to the topics of the dialogues referred to in paragraph 13 of Decision 4/CMA.4

On behalf of the undersigned organizations, we welcome the opportunity to submit our views on opportunities, best practices, actionable solutions, challenges, and barriers relevant to the Sharm el-Sheikh Mitigation Work Programme (MWP) 2024 focus on "Cities: Buildings and Urban Systems."

As the aim of the MWP is to urgently scale up mitigation ambition and implementation through consideration of thematic areas across all sectors, we propose "Urban Food Systems" as an area of discussion under the 2024 global dialogues.

As detailed within this submission, climate action on food is necessary to meet mitigation targets, and urban food systems are both a critical area for this action and offer high potential for impact. A number of cities are already implementing best practices and actionable solutions for upscaling mitigation ambition through urban food systems such as reforming procurement policies to support healthier and lower emissions diets, providing nutritional and environmental education to consumers, and implementing urban agriculture projects. Further sharing and examination of these under the MWP would enable upscaling action and support in this area.

Our proposal builds on findings from the Global Stocktake technical dialogues, and the UAE Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action, in which 159 governments pledged to integrate agriculture and food systems into their climate action.

Food systems and global emissions

Food systems account for a third of anthropogenic greenhouse gas emissions,¹ and, even if fossil fuel emissions stop today, food emissions alone would increase global temperatures above 1.5°C and make the 2°C goal difficult to achieve.² Agriculture emits substantial quantities of non-CO₂ greenhouse gasses including methane and nitrous oxide, and agricultural expansion and land use change through deforestation releases significant quantities of CO₂. These factors also make agriculture one of the greatest threats to mitigation efforts. In addition to increased emissions associated with production, the FAO estimates that food production will increase 70% by 2050, with nearly 200 million additional hectares converted to farmland (not including land impacts from grazing).³ Land conversion undermines mitigation both by releasing additional carbon into the atmosphere and eliminating important carbon sinks.

https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf.

³ FAO, GLOBAL AGRICULTURE TOWARDS 2050 (2009),

¹ Crippa, M et al., *Food Systems Are Responsible For A Third Of Global Anthropogenic GhG Emissions*, NATURE FOOD 2, 198–209 (2021), <u>https://doi.org/10.1038/s43016-021-00225-9</u>.

² IPCC, Climate Change 2022: Mitigation Of Climate Change, at p.1285, (2022),

https://www.fao.org/fileadmin/templates/wsfs/docs/Issues_papers/HLEF2050_Global_Agriculture.pdf

Food system assessments by Poore and Nemecek (2018) and Xu et al. (2021) estimated that animal agriculture is responsible for approximately 58% of global food systems emissions and that the share of plant-based foods is approximately 29%.⁴ This means that the emissions from animal-based foods are twice those of plant-based foods, yet supply only 18% of calories and 37% of protein compared to plant-based foods.⁵

A food system transformation, including shifts to sustainable healthy diets, is needed to mitigate global emissions, adapt to future warming, and bolster food security.

Unique Role of Urban Food Systems in Climate Action

Cities and local governments are vital actors in the fight against climate change. Not only are cities increasingly experiencing the impacts of the climate crisis, but cities are also primary contributors to global emissions. Over the past two decades, cities have emerged as leaders in climate action with the ability to drive public opinion and influence consumption trends. In comparison to countries, cities "often have more political agility"⁶ and are well positioned to directly initiate and implement climate mitigation measures.⁷ Cities and urban areas already account for an estimated 70% of global emissions.⁸

C40, a global network of cities committed to climate action, has found that "food is the biggest source of consumption-based GHG emissions in cities (13-20%) – largely owing to diets rich in animal products."⁹ It is projected that by 2050, 80% of food globally will be consumed in cities.¹⁰ The growth of cities, and urbanization more generally, is intertwined with food systems and opportunities for their transformation. Because it gives rise to income growth, urbanization is associated with dietary shifts towards increased consumption of animal source foods and

https://www.c40knowledgehub.org/s/article/Why-city-action-is-critical-in-the-fight-against-climate-change?l anguage=en_US.

https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter08.pdf.

⁴ Xiaoming Xu et al., *Global Greenhouse Gas Emissions From Animal-Based Foods Are Twice Those Of Plant-Based Foods,* NATURE FOOD 2, 724-732 (2021), <u>https://www.nature.com/articles/s43016-021-00358-x</u>.

See also, J. Poore & T. Nemecek, *Reducing Food's Environmental Impacts Through Producers And Consumers,* SCIENCE 360, 987-992 (2018), <u>https://www.science.org/doi/10.1126/science.aaq0216</u>. ⁵ Id.

⁶ EAT, CITIES (2022), <u>https://eatforum.org/initiatives/cities/</u>.

⁷ C40 Cities Climate Leadership Group et al., *Why City Action Is Critical In The Fight Against Climate Change,* C40 KNOWLEDGE (July. 2023),

⁸ Shuaib Lwasa et al., *Urban Systems And Other Settlements,* (Carolina B.S. Dubeux & Diana Urge-Vorsatz eds., 2022), IPCC WGIII Chapter 8 at p. 877 (2022),

⁹ C40 CITIES, Good Food Cities Accelerator: How cities are achieving the planetary health diet for all (2023),

https://www.c40.org/wp-content/uploads/2024/03/C40_Good_Food_Cities_Accelerator_Progress_Report _2023.pdf.

¹⁰ Ellen MacArthur Foundation, *Cities And Circular Economy For Food,* at p.4 (2019), <u>https://emf.thirdlight.com/file/24/K6LOnIrKMZq-8vK6HoTK6iyBra/Cities%20and%20circular%20economy</u> <u>%20for%20food.pdf</u>.

increased demand for livestock products.¹¹ It also leads to changes in land use that affect agriculture, and cities channel important finance, inputs, information, services, and off-farm employment opportunities to rural areas.¹²

Thus, transforming food consumption patterns within cities is vital to global climate action, providing a lever to reduce emissions and bolster sustainability within our global food system so that we can live within our planetary boundaries.

As cities endeavor to reduce emissions associated with food consumption, integrating animal welfare into urban food policies presents a valuable opportunity. Encouraging urban diets that are not only low in emissions but also considerate of animal welfare can drive demand for more sustainable, ethical food choices.

Existing initiatives on urban food systems and climate action

C40 Good Food Cities Accelerator

Cities in the Good Food Cities Accelerator have committed to work with city residents to achieve a Planetary Health Diet by 2030, through aligning food procurement with the Planetary Health Diet and reducing food loss and waste. Each city develops an action plan to implement these commitments and incorporates these measures into the city's climate action plan. C40 provides a <u>template action plan</u> for cities. Currently, 16 cities have joined the Good Food Cities Accelerator: Barcelona, Copenhagen, Guadalajara, Lima, London, Los Angeles, Milan, Montréal, New York City, Oslo, Paris, Quezon City, Seoul, Stockholm, Tokyo, and Toronto.

Milan Urban Food Policy Pact

The Milan Urban Food Pact, an agreement by Mayors signed in 2015, includes <u>more than 100</u> <u>cities</u> across six continents. Under the Pact, cities commit to developing "sustainable food systems that are inclusive, resilient, safe, and diverse" while mitigating climate impacts.¹³ The Pact also includes 37 recommended actions across categories including governance, food waste, food production, and sustainable diets and nutrition.

Cool Food Pledge

The Cool Food Pledge is a commitment from members to reduce emissions from food 25% by 2030. Cool Food Pledge members include companies (from IKEA to Hilton), universities,

¹² Sophie de Bruin, Dengerink and van Vliet 2021, *Urbanisation As Driver Of Food System Transformation And Opportunities For Rural Livelihoods,* FOOD SECURITY 13 (2021), 781-798, https://link.springer.com/article/10.1007/s12571-021-01182-8#citeas. See also Coulibaly et al., *World*

Development Report 2009: Reshaping Economic Geography, (Bruce ed.), THE WORLD BANK (2009) https://documents1.worldbank.org/curated/en/730971468139804495/pdf/437380REVISED01BLIC109780 8213760720.pdf.

¹³ Milan Urban Food Policy Pact, *Milan Food Policy Pact*, (Oct.15, 2015), <u>https://www.milanurbanfoodpolicypact.org/wp-content/uploads/2020/12/Milan-Urban-Food-Policy-Pact-EN</u>.<u>pdf</u>.

¹¹ Assem Abu Hatab et al., *Urban Sprawl, Food Security And Agricultural Systems In Developing Countries: A Systematic Review Of The Literature,* SCIENCEDIRECT (2019), Vol 94, 129-142 at p.138, https://www.sciencedirect.com/science/article/pii/S0264275118310485.

hospitals, and six cities (Copenhagen, Ghent, Milan, New York City, Toronto, and Washington, DC). In collaboration with the World Resources Institute's Better Buying Lab, Cool Food Pledge members have access to research and guides with test strategies to increase consumer selection of climate-friendly food.

Plant Based Treaty

More than 25 cities worldwide, including Los Angeles, Amsterdam, Edinburgh and Didim, have called for a global Plant Based Treaty as a companion to the Paris Agreement and address food-related emissions.¹⁴ The proposed treaty is modeled on the Fossil Fuel Treaty and calls for a halt to deforestation attributed to animal agriculture and redirection of resources, policy tools and public education to incentivize plant-based diets, along with mass rewilding.

Food Action Cities

Food Action Cities is a joint initiative by Global Alliance for Improved Nutrition (GAIN), Milan Urban Food Policy Pact (MUFPP) and Resource centre on Urban Agriculture and Food Security (RUAF). The Food Action Cities web platform "offers cities a tool to share lessons learned, resources, and successes experienced" and includes a wide variety of case studies.

Transforming Urban-Rural Food Systems (TURFS)

TURFS is a consortium formed by CARE, the Club of Rome, C40, EAT, GAIN, ICCCAD and WWF. TURFS aims to "transform food systems at both local and global levels, focusing on climate, nutrition, livelihoods, biodiversity, and environmental goals."

City Case Studies

Cities of Salvador, Belo Horizonte, and Belém in Brazil

In Brazil, the cities of Salvador, Belo Horizonte, and Belém, among others, have signed on to an initiative that provides nutritious and sustainable meals for vulnerable populations. Through the "*Educando para Sustentabilidade*", "+ *Horta no Prato*" and "*Broca Saudável*" programs, respectively, more than 28 million plant-based meals will be served per year, benefitting more than 644 thousand students in municipal schools and users of popular restaurants.¹⁵ These programs encourage sustainable eating habits by including a greater diversity of plant-based meals on menus, diversifying protein sources by replacing 20% of animal-sourced proteins with plant proteins and providing nutritional and environmental education. Once fully implemented in all three cities, these programs have the potential to save more than 58 tons of CO₂eq per year. To date, they have spared an estimated 35 tons of CO₂eq through the programs' implementation in 2022 in Salvador and the pilot project in Belo Horizonte.¹⁶ The sustainable food initiative, in addition to supporting cities in achieving their climate change mitigation and adaptation goals,

¹⁴ Plant Based Treaty, *Cities: 26 Cities Have Endorsed The Plant Based Treaty,* <u>https://plantbasedtreaty.org/cities/</u>.

¹⁵ Popular restaurants are establishments that serve food at an affordable price to people in vulnerable situations in Brazil.

¹⁶ Obtained from data provided by city halls and the calculator developed by the scientist Cynthia Schuck, used by the organizations Humane Society International and Mercy For Animals.

also supports the achievement of five of the SDGs (2,4,12,13 and 17) and encourages greater diversity and purchase of cereals, pulses, legumes, fruits, and vegetables derived from smallholder family agriculture.

The initiative adopted by the cities follows the guidelines of the National School Feeding Program (PNAE) and has three pillars: food security, sustainability, and nutritional and environmental education. Salvador implemented the program in 100% of municipal schools in 2022 and the introduction of plant-based meals on school menus had a high acceptance rate of 76 to 91% of the students.¹⁷ Belo Horizonte is in the process of expanding the program in all schools, following the success of a pilot project which had an acceptance rate of between 79 and 88% of the new recipes.¹⁸ The city already completed the implementation process in popular restaurants in 2022. Belém, which will be the host city of COP30, is preparing to launch a pilot project this year in schools, to complete the full implementation by 2025 to serve as a case study for how public food procurement initiatives can help cities around the world meet sustainability targets.¹⁹

New York City Health + Hospitals

New York City Health + Hospitals have made plant-based meals the default option for all inpatients in their network of 11 public hospitals. Reflecting on the first two years of the program, NYC Health + Hospitals announced that "in addition to the considerable health benefits for patients, the plant-based meals served in 2023 led to a reduction in carbon emissions of 36% and a cost savings of 59 cents per meal. Patients who ate plant-based meals at NYC Health + Hospitals reported a satisfaction rate of over 90%." ²⁰

Before introducing plant-based defaults, 1% of patients chose a plant-based meal, but now the figure is 50%. All eligible patients are now offered two vegan Chef's Special meals by default and can opt out of both if they prefer a non-vegan entrée. In 2023, they served around one million plant-based meals to patients.²¹ This initiative is part of New York City's broader climate commitment to reduce the city's food-based GHG emissions by 33% by 2030.²²

¹⁸ PBH includes vegetarian options in school lunches and popular restaurants, November, 2019, <u>https://www.google.com/url?q=https://prefeitura.pbh.gov.br/noticias/pbh-inclui-opcoes-vegetarianas-na-me</u> <u>renda-escolar-e-nos-restaurantes-populares&sa=D&source=docs&ust=1711461543586291&usg=AOvVa</u> <u>w08fl9vq4pxrqGeGbE0ImOQ</u>

¹⁹ Belém is a pioneer in the North to implement the Broca Saudável Program, November, 2023, <u>https://semec.belem.pa.gov.br/belem-e-pioneira-no-norte-a-implantar-o-programa-alimentacao-conscient</u> <u>e-brasil/</u>

https://www.nychealthandhospitals.org/pressrelease/nyc-health-hospitals-celebrates-1-2-million-plant-bas ed-meals-served/.

¹⁷ Hunter College, New York City Food Policy Center, Salvador, Brazil to Serve 10 Million Plant-Based School Meals Per Year, April 26, 2022,

https://www.nycfoodpolicy.org/food-policy-snapshot-salvador-brazil-plant-based-school-meals/

²⁰ NYC Health + Hospitals, *Nyc Health + Hospitals Celebrates 1.2 Million Plant-Based Meals Served,* PRESS RELEASES (Mar. 14, 2024),

²¹ Health, A *Multi-Problem Solution: Why Hospitals Are Serving Plant-Based By Default,* VEGCONOMIST (Jan. 22, 2024), <u>https://vegconomist.com/health/why-hospitals-serving-plant-based-by-default/</u>.

²² NYC Office of the Mayor, Mayor Adams Commits To Reducing City's Food-Based Emissions By 33 Percent By 2030 After Releasing New Greenhouse Gas Emissions Inventory Incorporating Emissions

Edinburgh, Scotland

In January 2023, Edinburgh became the first European capital to endorse the call for a global Plant Based Treaty to address food emissions and developed an action plan, which was passed via a democratic vote in January 2024.²³ The action plan has been a catalyst to pull many different food projects in the council together and aims to increase the provision of plant-based food and promote the benefits of plant-based food to the public. Edinburgh's action plan includes carbon labeling and vegan options at schools and universities, public education campaigns and interventions in schools, and engaging with public and private sector food providers and retailers to provide more plant-based options in their catering and instore provision to support healthy, sustainable diets.²⁴

Amsterdam

In February 2024, Amsterdam endorsed the Plant Based Treaty noting both the public health and climate benefits of shifting to more plant-based diets.²⁵ A statement from the City of Amsterdam Council announced the city's "ambition is to shift the protein ratio in the city's diet from 40 to 60 per cent plant-based by 2030."²⁶

A motion tabled by the Party for the Animals, which aims to make Amsterdam a 'Plant Based Capital', was adopted by the city, and as such they will enter a covenant with major employers, public institutions such as hospitals, community centers, and care institutions in Amsterdam titled 'Amsterdam: healthy, fair, and sustainable food city,' that could include:

- All employees, visitors, and patients can obtain full plant-based meal options in all publicly funded institutions from 2024;
- All restoration and catering at public institutions commit to a Vegan Friday from 2024;
- All restoration and catering commit by 2030 to the animal-plant protein ratio set in Amsterdam;
- To organize an annual plant-based conference with care institutions, schools, universities, and other public institutions in Amsterdam;
- All employees, visitors, and patients can obtain full plant-based meal options in all publicly funded institutions from 2024;
- All restoration and catering at public institutions commit to a Vegan Friday from 2024;

From Food, NYC (Apr. 17, 2023),

https://www.nyc.gov/office-of-the-mayor/news/263-23/mayor-adams-commits-reducing-city-s-food-basedemissions-33-percent-2030-after-releasing#/0

²³ The City of Edinburgh Council, *Plant-Based Treaty Action Plan* (January. 9, 2024), <u>https://democracy.edinburgh.gov.uk/documents/s65215/Item%207.2%20-%20Plant%20Based%20Treaty</u> <u>%20Action%20Plan.pdf</u>.

²⁴ Id.

²⁵ Plant Based Treaty, *Amsterdam Becomes The First Eu Capital City To Endorse The Call For A Plant Based Treaty In Response To The Climate Emergency*, PRESS RELEASES (Feb. 1, 2024), <u>https://plantbasedtreaty.org/amsterdam-endorses-pbt/</u>.

²⁶ Id.

Amsterdam will actively promote healthy and sustainable foods through public education campaigns as well as reaching out to universities, supermarkets, and local businesses to promote plant-based foods. They plan to encourage urban agriculture and short supply chains to turn residents into 'prosumers'. The idea is to make residents more aware of the production, distribution, preparation, and consumption of food so that they buy more sustainable food, eat healthier, and reduce waste.

Madrid, Spain

In 2010, numerous community-driven projects focusing on urban agriculture came together to form Madrid's Urban Communitarian Gardens Network (Rehdmad) to increase visibility and foster self-sufficiency. The City Council of Madrid subsequently endorsed these efforts by launching the Urban Communitarian Gardening Program in 2014. This initiative offers technical and material assistance to Rehdmad and similar ventures dedicated to organic urban gardening, as well as facilitating the acquisition of required legal permissions.

Over five years (2012-2017), changes in the dietary habits of participants engaged in urban agriculture within Madrid were evaluated through an online survey.²⁷ Utilizing a life-cycle methodology, the study analyzed the effect of these behavioral shifts on the average carbon footprint stemming from food consumption. The findings indicate a potential reduction of up to 205.1 kg CO_2e /year per individual (12.1%), primarily achievable through decreased consumption of animal-derived products. Study underscores that consumption (or demand) component in GHG accounting needs to be considered, particularly when designing climate change mitigation strategies.

Washington, D.C.

In 2021, Washington, D.C. enacted the Green Food Purchasing Amendment Act of 2020.²⁸ The law requires D.C.'s Department of Energy and Environment (DOEE) to adopt an approach for estimating greenhouse gas emissions that occur over the life cycles of the foods and beverages purchased by the district. The DOEE must also guide district agencies on reducing emissions through purchasing choices. Agencies are required to track and take steps to reduce emissions associated with their food and beverage purchases to reach a 25% reduction by 2030. By requiring agencies to purchase climate-friendly foods, D.C. sets itself up as a leader in the fight against climate change.

²⁷ Puigdueta Bartolomé et al., *Urban Gardening Changes Food Consumption Habits And Decreases Personal Carbon Footprint: A Case Study In Madrid*, RESEARCHGATE (2019), <u>https://www.researchgate.net/publication/336529919_Urban_gardening_changes_food_consumption_hab</u> its and decreases personal carbon footprint A case study in Madrid.

²⁸ Green Food Purchasing Amendment Act of 2021,COUNCIL OF THE DISTRICT OF COLUMBIA, https://code.dccouncil.gov/us/dc/council/laws/24-16.

Los Angeles County, California

In February of 2024, Los Angeles County enacted a new law aimed at mitigating the environmental, public health, and animal welfare impacts associated with its food purchases.²⁹ More specifically, the new law requires the Los Angeles County Department of Public Health to update its nutritional standards to incorporate best practices for purchasing, selling, and serving more plant-based foods. The law also requires the Department of Public Health, in collaboration with the Chief Sustainability Office, the Chief Executive Office, the Internal Services Division, and the Office of Food Equity, to provide recommendations for increasing plant-based food options in the county's food services and for reducing animal-based food purchases and increasing plant-based ones, and the law requires the Department of Health Services will also take the first step toward collecting data for food the department purchases in an effort to estimate its greenhouse gas emissions.

Endorsing Organizations:

Mercy For Animals Global Youth Coalition Center for Biological Diversity Animal Save Movement Real Food Systems Youth Network Humane Society International ProVeg International World Animal Protection Brighter Green

*For additional information, please contact Amelia Linn (amelial@mercyforanimals.org).

²⁹ Lindsey Horvath & Hilda L.Solis, *Reducing Greenhouse Gas Emissions Through Food Procurement,* REVISED MOTION (2024), <u>https://file.lacounty.gov/SDSInter/bos/supdocs/189000.pdf</u>.