



FOOD & CATERING

Global public procurement factsheet



This factsheet explores the challenges and opportunities facing public food services in the context of global climate emergency. It summarises the innovative actions GLCN cities have taken to address those issues locally through public procurement.

Background

Continuous access to sufficient, nutritious and fresh food is essential to guarantee a balanced diet to the global population. Over the past decades, the world has experienced a steady growth in food supply per capita. Data from the United Nations Food and Agricultural Organization (FAO) for example [shows](#) that the daily supply of calories per person worldwide increased by over 31% between 1963 and 2013 (from 2,096 kcal to 2,884). This increase in production has to a certain extent helped drive down global hunger, as the FAO estimates that the percentage of the global population experiencing undernourishment reduced from 13.1% to 10.9% between 2007 and 2017 ([FAO 2018](#)).

With the global population set to reach over 9 billion by 2050 that will further increase demand for food by 59–98% from 2005 levels ([UN 2019](#)), food-related challenges are however far from being addressed. Even though production has been increasing regularly over the past years, food security and nutritional health remain significant concerns in a context where population growth, changing diets and climate emergency impact the reliability, quality and distribution of supply. In parallel, the intensification of agricultural methods and the globalisation of supply chains is driving strong environmental and ethical concerns in the food and catering sector, warranting strong action to increase its sustainability.

The following challenges are facing global food production and consumption in a context of climate crisis:

★ **Greenhouse Gas Emissions:** Emissions arise at all stages of the supply chain. However, food production, transformation and distribution processes contribute

to circa 26% of global greenhouse gas (GHG) emissions arising from human activities ([Valin, et al. 2013](#)). Supply chain activities, including food processing, retail, packaging and transport, account for circa 18% of the global greenhouse gas emissions arising from food consumption. As 82% of emissions coming from food systems arise from primary production (as opposed to transport or processing) ([Ritchie 2019](#)), promoting growing, farming and fishing practices with a low carbon footprint is key. Nonetheless, scope to reduce the climate impact of various food types also arises later down the supply chain, for example during the transportation and processing activities, considering also the impact of waste produced between the harvesting and retail level. In particular, transportation, processing and processing activities contribute to ca 18% of the emissions linked with the global food supply chain. Additionally, around 14% of all food produced worldwide is wasted between the harvesting and retail level, (through on-farm activities, storage and transportation), so that the emissions associated with the production of this food are in vain ([Global Agriculture 2019](#)).

→ #GHGEmissions

★ **Natural hazards:** Global food systems are highly vulnerable to the impacts of the climate emergency and environmental degradation. The number of extreme climate-related disasters recorded annually worldwide has doubled between 1990 and 2016 ([FAO, IFAD, UNICEF, WFP and WHO. 2018](#)). Hazards such as extreme heat, droughts or floods may lead to localised shortages and volatility in food prices, impacting access to food in

vulnerable populations. To strengthen their resilience, food systems should consider the following challenges:

- The progressive consequences of the climate emergency, **including changes in temperatures and rain levels**, are set to have a significant impact on agricultural yields over the coming years. Finding ways to mitigate against this loss in productivity is therefore key to ensure the long-term continuity of global food supplies.
- The climate emergency is set to increase the regularity and intensity of **extreme climate events** (such as floods, droughts and fires), **pest invasions and animal diseases**, which in turn can lead to pandemics.

These shocks hold the potential to destroy crops and the lives of farm animals, therefore creating adverse shocks across the food value chain. Over the past decades, global agricultural systems have undergone a radical change, driven by mechanisation, the extensive use of artificial pesticides and fertilisers and the rationalisation of land use patterns through monocultures. Certainly this “green revolution” helped significantly increase global productivity. However, this has come at a strong environmental cost, as unsustainable intensive farming practices are notably associated with biodiversity losses, degradation in the quality of soils, pollution and antibiotics resistance. To mitigate these impacts, it is therefore key to develop agricultural techniques which promote the restoration and resilience of ecosystems.

→ #NaturalHazards → #ExtremeWeatherEvents

→ #BiodiversityLoss → #Pollution

→ #AntibioticsResistance → #Pandemics

- ★ **Changing diets:** Over the past decades, meat consumption nearly doubled since 1961 to reach an annual average of 43 kilogram per capita in 2014 ([Ritchie 2019](#)). The growth in demand for this industry is increasing its environmental impact. The production of meat and dairy products is alone responsible for nearly two-thirds of the total GHG emissions from the food sector ([FAO 2019](#)).

→ #UnsustainableDiets

- ★ **Malnutrition:** Around 2.3 billion adults worldwide are currently estimated to suffer from malnutrition (underweight, overweight or lacking key nutrients) ([WHO 2019](#)). Actions taken to support climate-friendly diets should guarantee balanced, nutritious and healthy diets, without compromising on food affordability, taste and quality.

→ #Malnutrition → #HealthyDiets

- ★ **Large water consumption:** Agricultural activities currently account for ca 70% of global water use ([World Development Indicators](#)). With climate emergency set to drive scarcity in water supply in some areas, difficulties in accessing sufficient water to grow crops may start to threaten parts of the global production.

→ #WaterConsumption

- ★ **Depletion of soils:** Intensive agricultural practices developed over the past decades are putting soils under strain, with over 20% of the world’s arable land surface suffering from a strong decrease in quality owing to practices such as the use of heavy machinery, single crop cultures and the over-use of water ([UNCCD 2017](#)).

→ #SoilDepletion

- ★ **Animal welfare:** A [2018 audit](#) notably highlighted that, despite some of the strongest animal welfare laws in the world, the European Union still records numerous accounts of animal abuses during farming and production processes (including on the farms, during transport and in slaughterhouses). This points to a large gap between regulatory requirements for animal welfare and their application, leaving room for public authorities to help bridge this gap through an ethical approach to procurement.

→ #AnimalWelfare

- ★ **Food loss and waste:** Estimates show that roughly a third of the global food production is lost or wasted annually - across all stages of the supply-chain. This amounted to ca 1.3 billion tons per year in 2011 ([FAO 2011](#)), contributing to up to 8% of the world’s GHG emissions, with a global cost over \$410 billion per annum ([FAO 2015](#)). [Studies](#) indicate that food waste makes up for an important share of the sector’s adverse climate impact: hospitality/catering activities are responsible for up to up to 12% of global food waste. Excessive or unsustainable packaging is associated with significant pollution and over-use of resources.

→ #FoodWaste

- ★ **COVID-19:** The global pandemic that spread since late 2019 and the lockdown policies adopted worldwide to contain it jeopardized access to food and threatened food systems all around the world, resulting in a global food emergency with serious implications, such as disrupted supply chains and social protection, decrease of incomes, deepening of inequalities, altered food systems, eventually determining an increased poverty and food insecurity ([HLPE 2020](#)).

→ #COVIDresilience → #Pandemics

Addressing these challenges is key to promoting more sustainable and resilient food systems capable of both supporting the nutritional needs of the global population as it continues to grow and helping food producers maintain their livelihoods at times when environmental challenges affect production.

The power of public procurement

As major procurers of food and catering services, public authorities can play a strong role in supporting sustainable production and distribution practices in the sector. In the European Union alone, the social food services market is worth an estimated €82 billion per annum (GIRA Foodservice 2014, as quoted [here](#)), a large share of which originates from public spending. By carefully integrating the impact of the food they purchase into procurement decisions, public authorities can significantly contribute to supporting environmental improvements in the sector whilst providing a nutritious diet to beneficiaries and supporting targeted producers.

Focusing on climate-related considerations, there are three key areas in which public procurers can support more sustainable food systems and catering practices:

1. Climate friendly and nutritious food supply;
2. food supply that is resilient to climate emergency;
3. sustainable catering practices.



GLCN cities commitments on food and catering

GLCN cities are fully determined to use their purchasing power to support sustainable food and catering services, starting with setting ambitious targets:

Denver:

By 2030, 25% of the food purchased by public institutions in the city will come from Colorado.

Ghent:

- All tenders involving procurement of food and drinks consider the use of criteria supporting agro-ecology, fairly traded goods, animal welfare, short supply chains, protein-transition where possible, sustainable logistics, seasonal produce, reduce/reuse waste, avoiding disposables, involvement of social economy/job opportunity;
- from January 2021 onwards the meat consumption in the city's school canteens is reduced by 50%. Protein-source consist of 50% animal based and 50% plant based proteins;
- opportunities to increase the share of organic and fair trade food being served at receptions should be considered in all catering contracts.

Helsinki:

The city will engage in work to find new procurement methods that can improve the living conditions of animals.

Oslo:

- By 2030 the food waste in the municipality will be reduced by 50%;
- increase the share of organic food that is procured by 50%;
- halve the meat consumption in the municipality's canteens and institutions, by the end of 2023;
- set requirements for sustainable production and good animal welfare in public procurement of meat and animal products.



Sustainable public procurement of food and catering services in practice

GLCN cities are finding innovative ways to meet their targets, using procurement activities to deliver climate-friendly, resilient and ethical food and catering services.

1. Procuring a climate-friendly and nutritious food supply

The challenge

- #GHGemissions
- #Pollution
- #WaterConsumption
- #SoilDepletion
- #FoodWaste
- #UnsustainableDiets
- #Malnutrition
- #HealthyDiets

What can public procurement do?

Suggested to-do list:

- Increase the offer of plant-based options on menus; favour animal proteins [which have the lowest carbon footprint \(e.g. poultry meat\)](#);
- procurement of free-range and organic animal products, or to require contractors to enforce strengthened animal protection standards in the production of meat and dairy products;
- opt for seasonal foods;
- source food products that are handled with low-impact packaging throughout the supply chain;

The ethics box

Animal welfare and Veggie Thursdays in Ghent

Since 2009, the City of Ghent has secured the services of catering providers which implement 'Veggie Thursday' in all of the city's schools. On that day, school canteens do not serve meat or fish products, and occasionally deliver educational workshops to schoolchildren on the topics of vegetarianism, environmental sustainability and animal welfare. [Learn more.](#)

Similar approaches have been widely trialled and tested by local public procurers across countries like England, Sweden and Italy, as documented notably in [this article](#), as well as in several public institutions in GLCN member Helsinki.

- ensure bulk purchases and that food stocks are carefully managed to avoid waste;
- decrease carbon impact, by taking into account emissions that arise throughout the entire life-cycle, considering for example transportation and packaging;
- ensure that any move to low-carbon menus is made without compromising on taste or nutritional quality.

Cities in action

Helsinki and its carbon-neutral food procurement

In 2018, the Finnish Environment Institute launched a 6 year project to encourage municipalities and regions in the country to take measures towards climate neutrality.

As a response, Helsinki decided to give priority to the development of tools and processes to measure and mitigate the carbon footprint of its activities, food services included.

Some targets include:

- Developing recipes that reduce emissions and protect the Baltic Sea;
- increasing the percentage of vegetarian food served in public buildings;
- developing and tightening criteria that limit the impact of the public food services, by including principles of the circular economy;
- halving the use of meat and dairy in the food procured by 2025.

Following the adoption of these goals, in 2020 the City launched a tender for low-carbon catering services for the staff restaurant of the City's Urban Environment Division. Minimum selection criteria for the procurement exercise included that the vegetarian and vegan options should be on offer daily on the menu, the origin country any meat served should be clearly indicated on the menu, and that fish and fish products should be sourced in line with the WWF fish guidelines.

The city of Helsinki was successful in identifying suppliers capable of delivering those ambitions. Contract performance and the impact of this project will be measured over the lifetime of the contract through the monitoring of the carbon footprint of the restaurant services.

[Explore more](#)

2. Procuring a resilient food supply

The challenge

- #NaturalHazards → #ExtremeWeatherEvents
→ #BiodiversityLoss → #AnimalWelfare → #Pandemics

What can public procurement do?

Suggested to-do list:

- Committing to procure a given percentage of organic food, or meeting a certain number of environmental protection standards;
- avoiding to purchase food products related to unsustainable production practices (e.g. [fish species prone to over-fishing](#), meat and crops from areas prone to deforestation such as [Brazilian beef](#)).
- choosing products certified for environmental sustainability (e.g. [EU Ecolabel](#)).

The ethics box

Supporting local farmers in Tshwane (South Africa)

In 2016, the city of Tshwane decided to use its procurement powers to tackle first-hand the issues faced by its vulnerable populations through a resilient farming project.

It went out for tender to procure services for the construction and operation of a new agropolitan village, supporting the empowerment of 25 small scale farmers from black communities. The facilities, known as the Tshwane Food and Energy Centre, afford each of the beneficiaries some land and facilities to grow crops and raise poultry in a sustainable and viable way. There, they benefit from learning opportunities on sustainable agricultural practices, support for marketing products through a central farming system (coordinating purchases and sales to deliver better economies of scales), and access to green and resilient technology (the Centre is run on 100% renewable energy, including a biogas facility and is equipped with a fully sustainable water and sanitation system).

The project has been a significant success, demonstrating best practice in public authorities's ability to support the development of fair and sustainable local agricultural economies. In particular, the project supports the financial independence and skills development of 25 farmers from disadvantaged communities, contributes to food security through the local and resilient production of fresh poultry and vegetables, and helps raising awareness and know-how of green farming technologies within local communities. [Learn more](#).

Tshwane is now considering building on this success and strong positive feedback from farmers for the initiative through the replication of this project in 6 other locations across the city's metropolitan area.

Procuring Fair Trade food products in Oslo

As a GLCN member, Oslo provides a leading example of what can be achieved in this field. Between 2017 and 2018, the City organised a tender procedure to set up three framework agreements for food and beverages for various facilities that they operate.

Through a competitive procedure with negotiation, the city was able to use tender specifications and award criteria to encourage suppliers to provide Fair Trade specified products. This included a fixed tender requirement that all coffee and bananas provided are 100% Fair Trade. This initiative was backed by a strong local policy framework supporting social clauses in public contracts and a robust system for monitoring contract performance. As a result, the contract was highly effective: for example, the share of fair trade certified bananas purchased by the city's suppliers increased from 3% to 50% in the first 4 months of 2019, demonstrating significant short-term wins are achievable.

(See [EU Commissions, Making socially responsible public procurement work](#))

Cities in action

Shaping policy for sustainable food procurement policy in Denver, Colorado

In order to meet its food sustainability target the city of Denver founded an advisory council especially dedicated to the topic in 2011. Run by a group of experts and citizens appointed by the City Mayor, the [Denver Sustainable Food Policy Council](#) (SFPC) aims to produce research outputs, guidance and support for all of the city's public institutions, helping them to develop policies and procurement practices which will support the city-wide target for local food procurement. The focus of the SFPC is double: promoting a food chain that supports a thriving local economy ('economic vitality' goal) and ensuring the food sector is green and resilient to environmental stresses ('environmental impact' goal).

One particular initiative which the SFPC has been promoting is the [Real Food Challenge](#), an initiative joined in 2014 by the University of Denver, which encouraged educational institutions to shift 20% of their food budgets away from industrially farmed, 'unhealthy' food toward ecologically sound, locally produced and fair food sources by 2020. In order to qualify as 'real food' under the rules of the challenge, the food procured by the University had to either be labeled as sustainable under a third-party certification scheme (e.g. organic food) or to have been produced within 250 miles of campus. The challenge was significant as the University as only 3% of the food that they sourced met those criteria when they engaged on this journey but it achieved its 20% target in September 2020, demonstrating to other public institutions in Denver that the city-wide 25% sustainable food sourcing target by 2030 should be well within reach. Following the success of the initiative, the institution decided to further increase its commitment to responsible food procurement. It has notably set for itself a new ambitious "real food" procurement target of 30% by 2025, and it is also procuring a new cook-chill food-processing system which will allow the catering company to better store and process the fresh and organic foods purchased by the University.

[Explore more](#)

3. Procuring responsible catering services

The challenge

→ #GHGmissions → #FoodWaste → #Pollution

What can public procurement do?

Suggested to-do list:

- Require contractors to avoid single-use, disposable items;
- encourage contractors who operate their own kitchens to use or purchase energy and water-efficient equipment;
- require contractors to take steps to minimise food waste and/or manage any surpluses sustainably and circularly (redistribution or recycling);
- encourage the use of electric vehicles to transport food from the production sites to the distribution sites;
- encourage contractors to deliver environmental education activities to the recipient of catering services (e.g. raising awareness about food waste and low-carbon diets among school-children).

The ethics box

Procuring for fair catering wages in Bremen, Germany

Whilst not a GLCN member, the city of Bremen, Germany, provides a case study of good practice in the sector. By requiring the payment of a pre-agreed minimum wage for all staff employed by catering contractors procured by public administrations in the city, Bremen succeeded in improving employment conditions for catering staff. Compliance is monitored through occasional inspections: between 2013 and 2015 116 inspections were carried out and sanctions imposed in 19 cases, including financial penalties and temporary interdictions to bid for public tenders ([Jaehrling et al. 2018](#)).

Cities in action

Transforming food logistics in Helsinki

In 2018, the Helsinki Service Centre, which provides food to over 100,000 people everyday in the City's schools and care homes, decided to address issues which affected the transport of food from the city's processing plants to their end destination. It went out to tender to find contractors able to address challenges in the logistics system including poor customer service, lack of reliability, grey market activities, high running costs and low environmental sustainability. The total contract value was over 8€ million. Through 2 year of preliminary market research, the city gathered extensive data on the inefficiencies within its existing deliveries system, and it was able to ensure the market had a clear idea of their objectives before proposing solutions to meet them. The tender specification notably required suppliers to adopt a pricing system different from the one in place so far (i.e. payment would vary according to the delivery location rather than travel time), and to minimise environmental impact.

The exercise was a significant success. Following the award of the contracts to a new supplier, emissions from the 51 service vehicles driven daily for the delivery activities dropped significantly. When compared with previous contracts, the improvements included a 22% reduction in carbon monoxide emissions, 67% in nitrogen oxide emissions and 92% in particulate emissions.

At the same time, cost savings of up to 25% were achieved compared to the previous contract, and the successful delivery rate has been 99.5%. This demonstrates that public procurement can be effectively used to improve the environmental footprint of catering logistics without compromising on cost or performance. See EU Commission GPP in practice issue 47/2014 [here](#).

Cities in action

Reducing packaging and supporting low-emission deliveries in Copenhagen

Whilst not a GLCN member, the efforts of the city of Copenhagen (Denmark) in making the operations of their catering contractors more sustainable are worth highlighting.

In 2013, the city published a call for tender to source fruit and vegetables for 80 of its kitchens, serving around 20,000 meals per day to nursing homes, elderly homes, schools and day-care centres across the city. The average budget of those kitchens was €70,000 per annum.

Requirements for food quality and environmental impact were stringent, as 100% of the products supplied had to be organic and seasonal. However, the city went further by requiring potential bidders to develop a low impact operational model. For example, suppliers were required to put forward proposals that reduced the amount of packaging used to a minimum. Any packaging used furthermore had to be free from PVC and recyclable. In addition, all vehicles used for delivery were required to meet strict environmental performance standards, ensuring that transport activities had a low climate impact.

This approach was a significant success. The call for tender received 7 bids, and a supplier which met all of the city's ambitions was awarded a renewable 2-year contract in 2014. Whilst results have not been quantified yet, it is anticipated that the reduction in packaging and in transport-related emissions of greenhouse gases will strongly improve the carbon footprint of the city's catering activities. See EU Commission GPP in practice issue 47/2014 [here](#).

Resources

EU Green Public Procurement Criteria for Food, Catering and Vending Machines:

<https://ec.europa.eu/jrc/en/publication/eu-gpp-criteria-food-procurement-catering-services-and-vending-machines>

EU Sustainable Procurement of Food: Case study collection (2018):

<https://cor.europa.eu/en/engage/studies/Documents/sustainable-public-procurement-food.pdf>

EU From Farm to Fork Strategy (2020):

https://ec.europa.eu/food/sites/food/files/safety/docs/f2f_action-plan_2020_strategy-info_en.pdf

IPCC Report on global food security and climate change (2019):

www.ipcc.ch/site/assets/uploads/2019/08/2f.-Chapter-5_FINAL.pdf

FAO report on global food losses and food waste (2011):

www.fao.org/3/a-i2697e.pdf

EU Joint Research Council: technical report on public procurement of food for health (2017):

<https://ec.europa.eu/jrc/sites/jrcsh/files/public-procurement-food-health-technical-report.pdf>



About the GLCN on Sustainable Procurement

The Global Lead City Network on Sustainable Procurement is a group of cities committed to drive a transition to sustainable consumption and production by implementing sustainable and innovation procurement. All participating cities are acting as ambassadors of sustainable procurement to lead to a resource efficient, low carbon and socially responsible society.

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