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# Empowering urban youth for food and climate action

A research on  
18 European cities





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# Empowering urban youth for food and climate action

## A research on 18 European cities





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## FOREWORD

This report is an opportunity to increase the knowledge of European cities and stakeholders on the link between food and climate, with a strong focus of the role that young people can play in food system transformation at urban scale.

The City of Milan is proud to lead the Food Wave consortium with prominent civil society organizations and a network of 18 cities across Europe that are questioning how young people can be co-protagonists of food policies.

Across Europe, cities are becoming the preferred places for experimenting with new food policy solutions, where actors can be united towards a common vision, where sustainability and inclusion objectives can be included in public food services and where to analyze the impact of the decisions taken. In other words, cities are becoming living laboratories to innovate the way different souls interact. European cities are pioneers in the development of innovative food policies and with the network of the Milan Urban Food Policy Pact we have created from 2015 a new arena of cooperation among cities and for cities.

The Food Wave project and this report help us enrich the thinking on how cities innovate their food systems by including new energetic, dynamic and creative actors: young people. I am very proud to see more and more young people from institutions in international meetings, but this report goes further and maps the most interesting actions in all 18 cities of the project, transforming them into common knowledge on which the whole MUFPP community will reflect.

I thank the researchers who have produced this study and the civil society organizations who are contributing to animate the project throughout Europe.

Involving youth in the food policy process, making them capable of reading and acting in a complex context where taking action on one issue generates effects, impacts and co-benefits on other aspects. It is a fascinating challenge, which asks us to include all points of view to make our policies increasingly oriented towards food system transformation.

**Anna Scavuzzo**

Vice Mayor of Milan

In charge for Food Policy

[www.milanurbanfoodpolicypact.org](http://www.milanurbanfoodpolicypact.org)

## EXECUTIVE SUMMARY

*"Empowering urban youth for food and climate action: A research on 18 European cities"* offers a very broad and significant panorama of how policies concerning food and climate are developed and the ways in which young people are the object or co-protagonists of these policies. As these issues are mainly developing in the absence of a regulatory or policy framework, in each of the contexts analyzed, climate and food issues are addressed differently, depending on many factors. Hence, this report put the attention on what is happening at the local level with the aim to better understand the impact that territorial actors and the institutions have in shaping policies and initiatives that strengthen the food-climate nexus.

Through a collection of practices regarding crucial topics such as urban food policies, data collection and monitoring at the local level, youth engagement and activism, and food consumption, the report shows that cities constitute a privileged observatory in which not only awareness of the interconnections between complex themes is being built, but also their concrete implementation is being experienced. Some of the main findings of this qualitative study highlight that climate change is a key part of the cities' strategies and visions while food and youth still remain marginal issues when it comes to institutionalization of the themes. However, among the great number and variety of initiatives gathered in the report - over 110 in total - education on sustainability issues in and outside schools and waste management are hot topics for both administrations and civil society.

Experience from the cities show that alliances between institutions and territorial actors are an important push towards tailored and place-based policies, whether they regard food, climate or youth. Including the recipients of the policies into the policy making - through ad hoc administrative structures, european projects, initiatives and more - push a new way of understanding social action into the local administrative mindset. Moreover, data on the local level are another key part of creating evidence-based policies, however they are very complicated to gather and share, especially because there are no common urban monitoring systems on climate and food. Therefore, beside continuing the great work that many cities are doing to collect and monitor their systems, there is a need to cooperate towards common indicators and parameters. Regarding youth, this report demonstrates the presence of a number of different approaches where youth policies are

not just for young people (related, for instance, to education or employment) but are developed directly by young people. However, it also shows that young initiatives are not always in the radar of administrations, which creates a missing opportunity when considering the great impact they have on broadcasting climate change issues and helping during COVID19 pandemic. Finally, food consumption is an interesting angle to look at the complexities of the current food system. The impact of our consumption behaviors and the possibility to implement sustainable alternatives, both at the individual and social level, are important leverages of change. This report shows many projects that create a positive impact either through the school canteens system, with the help of restaurants and markets, or with autoproduction and more. Food consumption links production with waste and surplus, helping societies to see the issues and opportunities of sustainable development. The analysis carried out in the 18 cities provides a very broad look at how local governments and civil society groups address these issues, contributing a knowledge base to stimulate both institutional and social action.

## INTRODUCTION: THE FOOD-CLIMATE NEXUS

### AN URBAN LOOK AT CLIMATE, FOOD AND YOUTH

The 18 European cities analyzed in this report offer a very broad and significant panorama of **how policies concerning food and climate are developed** and the ways in which **young people are the object or co-protagonists** of these policies. The Food Wave project innovatively addresses the connection of these three policy areas that have very different levels of knowledge, public communication, and outreach. Each of these issues has different origins and developments, but their connection can provide a different contribution to a sustainable future. The context in which they originate is very complex as it is mainly developing in the **absence of a regulatory or policy framework** but which finds some important international references in COP26, the Green Deal, the Covenant of Mayor, the MUFPP, and other similar initiatives that encourage the creation of local voluntary initiatives as well as offering the dissemination of a shared vision.

In this context, **cities find their space in the areas of social innovation** creating new forms of aggregation. The city gives the opportunity to have a more territorial and needs-related approach, where the citizen and non-institutional actors have the space for expression, involvement and action. It is precisely in the cities that many initiatives are born, sometimes starting from a simple idea or a specific theme, but with the **great ability to integrate other aspects** which at other government levels would be more complex. Hence, **cities play a pioneering role** as, starting from local initiatives, **they constitute a privileged observatory** in which not only awareness of the interconnections between complex themes is being built, but also their concrete implementation is being experienced.

Hence, **climate** is the area in which the presence of national and European policies is most evident. The link with the local dimension, however, even where it has been consolidated for years, is mainly expressed in the form of regulations and additional criteria given to already existing sector policies. The novelty is, for some, the dissemination of plans and strategies specifically dedicated to the climate issue as well as an increasingly growing constellation of projects and initiatives promoted by actors other than the institutions that see the fight against climate



change as an opportunity to improve their local system. A similar situation concerns **food policies** where local actions, projects, initiatives, movements compose a multitude of experiences. This is why urban agriculture, school meals and food education programs, food waste and food redistribution initiatives, and farmers markets are so prominent all over the world. In many cities, though not all, these are accompanied, guided and helped by institutional strategies where food is considered for its multisectoral, multi context and multi governance characteristics. From this point of view, networks and projects that bring together several actors, help to share intentions and in delineation of ad hoc local strategies. In the broad and varied context of actors shown in this report, food provides a very wide range of ideas both to increase awareness of climate issues and for finding solutions that arise from the change of individual lifestyles, from the opening of new economic activities and from a wide range of activities of a social and cultural nature.

Finally, **youth** policies. These often find space in policies in relation to the education and training of new generations. However, this report demonstrates the presence of a number of different approaches where youth policies are not just **for young people** but are developed directly **by young people**. Involving youth in the policy making process, making them participants and architects of the policies that affect them and the context they live in, is an innovative way in which many cities are moving. This need has been confirmed by the great role and involvement that the younger generations are showing in regards to these themes, especially during the COVID-19 pandemic. The spread of activism movements, the help brought to local actors, the upheaval in lifestyles that young people have experienced, demonstrates **the need to no longer leave young people on the sidelines when it comes to politics**.

This report analyzes a wide variety of actions and policies that have been implemented and are being developed in 18 European cities. In each of these contexts, climate and food issues are addressed differently, depending on many factors. Among these, a crucial role is played by political choices and the relationship of local institutions with higher levels of government. A relevant contribution also comes from a wide variety of social groups which are significantly characterized by the activism of the new generation. Activism looks at issues related to food system sustainability and climate change in a different way than previous generations and constitutes a resource for finding innovative ways of dealing with these challenges.

The following is a summary of the main scientific and institutional documents that constitute the basis of reference at European and

international level for policies and actions on food and climate at the local level.

## CLIMATE

From a scientific point of view, issues related to climate change, mitigation and adaptation policies have been well established for several decades<sup>1</sup>. Recently, however, increased awareness and the cooperation of different worlds of scientific research have contributed substantially to an unprecedented acceleration of the fight against climate change, either in terms of institutional action and development of new economic activities, or in terms of different forms of social activism and change in individual lifestyles. The common awareness and actions related to the fight against climate change is linked to the Conference of Parties (COP) which, since 1995, have annually marked the international institutional agenda on this issue, based on the United Nations Framework Convention on Climate Change (UNFCCC) signed in 1992 by almost all the nations of the world. COP3, also known as the Kyoto Protocol, was the first international agreement that established legal commitments to reduce climate-changing emissions at national level<sup>2</sup>. With the 2015 Paris Agreement (COP21), States agreed to reduce emissions to zero by 2050, committing to create action plans to be updated every five years. In this context, the EU Covenant of Mayors for Climate & Energy was launched in 2008 to unite and support local authorities who voluntarily commit to implementing European and COP climate and energy targets. Currently, the Covenant of Mayors brings together more than 9000 local authorities in Europe and beyond who have signed a declaration to reduce greenhouse gas emissions by 50% through mitigation and adaptation actions by 2030.

## FOOD

Food plays a key role in the transition towards sustainable development, especially when adopting a systemic vision that considers all the direct and indirect implications of the relationship between production and consumption. This approach is confirmed in all the main conceptual models for analyzing sustainability: from the “Food-Water-Energy Nexus” promoted by the UN, to the Circular Economy of the Ellen MacArthur Foundation, to the Planetary Boundaries approach and TEEB (The Economics of Ecosystems and Biodiversity)<sup>3</sup>. Moreover, the natural and

1. European Commission, Directorate-General for Research and Innovation Clean Planet (2020). 100 Climate-Neutral Cities by 2030 - by and for the Citizens. Available at: [https://ec.europa.eu/info/publications/100-climate-neutral-cities-2030-and-citizens\\_en](https://ec.europa.eu/info/publications/100-climate-neutral-cities-2030-and-citizens_en);

GRAIN, The great climate robbery: How the food system drives climate change and what we can do about it, New Internationalist Publications Ltd, Oxford 2015;

Gerten, D., Heck, V., Jägermeyr, J. et al. Feeding ten billion people is possible within four terrestrial planetary boundaries, in Nature Sustainability 3, 200–208 (2020)

2. The protocol set a target of reducing emissions by 5% by 2012 compared to 1990 levels.

3. FAO, *The Water-Energy-Food Nexus: A new approach in support of food security and sustainable agriculture* - FAO, 2014; Ellen MacArthur Foundation, *The big food redesign*, EMF 2021; Gerten, D., Heck, V., Jägermeyr, J. et al. *Feeding ten billion people is possible within four terrestrial planetary boundaries*, in Nature Sustainability 3, 200–208 (2020); TEEB (2018). *TEEB for Agriculture & Food: Scientific and Economic Foundations*, Geneva: UN Environment.



anthropogenic components of food systems intersect with nearly all the Sustainable Development Goals (SDGs). The most reliable scientific and institutional assessments indicate that the food system is responsible for between ¼ and ½ of total CO<sub>2</sub> emissions. UNEP estimates a global contribution of 24%, GRAIN a range of 44% to 57% and the IPCC 21% to 37%<sup>4</sup>. In particular, at European level, the European Environmental Agency indicates an impact of the entire European agri-food system at around 30% of total greenhouse gas emissions (EEA, 2017), 10% of which as a direct contribution from agriculture<sup>5</sup>. In December 2019, the European Union promoted the Green Deal, which is the main European policy document that drives all Member States towards the goal of climate neutrality by 2050. With the approval of the Farm to Fork Strategy in May 2020, the EU Commission made it explicit for the first time that working on the entire food system is one of the keys to implement the Green Deal requirements. This is an important shift that clearly requires considering agricultural production, product processing, logistics and distribution systems, trade, consumption patterns and surplus and waste management as part of a single integrated strategy.

**Figure 1:** Farm to Fork Strategy



source: European Commission, 2020<sup>6</sup>

## CITIES

The systemic approach that has shaped the Farm to Fork and the Green Deal is also reflected in the Milan Urban Food Policy Pact (MUFPP), the pact signed during the 2015 Milan Expo by 140 cities from around the world that commit local initiatives and

policies to make urban food systems more sustainable. The MUFPP constitutes a reference for associations and city networks working specifically on the relationship between food and cities, but also on climate and sustainability commitments in local governments, such as in the Eurocities Working Group on Food, C40, ICLEI, and UCLG. The interaction between MUFPP and these other local government networks and associations has generated increased awareness and engagement by cities to work on urban food systems as part of the fight against climate change. These commitments have been formalized in several documents such as: the Good Food Cities Declaration of C40 (2019), the Glasgow Food and Climate Declaration signed at COP26 (2021) and the Barcelona Challenge for Good Food and Climate (2021).

## YOUNG PEOPLE

Alongside the institutional pathways, the number of social and economic actors who actively contribute to making food systems more sustainable and fighting climate change in urban contexts has increased. Among these actors, the world of young people is a universe extremely rich in subjectivities and initiatives, but still largely unexplored by public policies and traditional media communication. Over the last ten years - and especially in more recent years - there has been an increased number of initiatives targeting young people under 35 - and even under 20 - who have escaped the traditional distinctions between practice, political action and professional work. In fact, while the social action of previous generations was more ideologically characterized and more linked to well-defined political or associative contexts (parties, large associations, etc.), with a more precise distinction between work and social action, the younger generation has changed this perspective. The climate issue constitutes a starting point which is both specific and broad, radical but for everybody. Current youth activism shows that the climate issue requires the intertwining of scientific knowledge and direct action, with the creation of socially shared meanings and also with the invention of ways of working not found in previous generations. These in a nutshell, are the reasons why what we call “youth initiatives” are often the result of a mix of study, self-training, new jobs, sharing of services, social activism, communication and voluntary activities. This set of initiatives has very different origins ranging from actions promoted by neighborhood groups or micro-associations; to the activities of large associations and NGOs that deal specifically with food or the environment and climate, up to groups, associations and individuals who had never dealt with these issues before

4. UNEP, *Food systems and natural resources*, UNEP 2016; GRAIN, *The great climate robbery: How the food system drives climate change and what we can do about it*, New Internationalist Publications Ltd, Oxford 2015; IPCC, *Climate Change and Land*, UN-IPCC 2019.

5. EEA, *Food in a green light. A system approach to sustainable food*, EEA Report n.16/2017.

6. Farm to Fork Strategy: [https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy\\_it](https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy_it)

and who, thanks to all activities that in recent years have spread awareness of the urgency to act, have reoriented their choices and their actions in this direction.

## WHAT POLICIES?

All this raises serious questions about the nature of public policies and institutional action, both in terms of their content and the ways by which they are defined, developed and implemented. The multifaceted action of the youth - including individual action, large associations, local and supra-local networks - can elude the traditional criteria with which public policies are constructed. Indeed, it is not always easy to recognise these social players as actors in public policies, even when they generate public impacts and define new public spaces for communication and action. Institutional action, in fact, is largely based on formal criteria in terms of representation, consensus-building, assignment of responsibilities, and even fiscal reporting. These criteria constitute guarantees both from a legal point of view and in terms of respecting and protecting some of the foundations of representative democracies.

Alongside these aspects, however, the analysis carried out in the 18 Food Wave cities clearly shows how many social and youth initiatives impact on public policies: sometimes in collaboration with institutions, sometimes autonomously or independently of them. In addition, in several of the initiatives analyzed, the size and quality of their impact does not necessarily depend on the size of the actors promoting them. Lastly, in many experiences the boundary between institutional and social action is not easily identifiable.

The fluidity of these relationships and roles that characterize the creative activism of youth on one side and the legitimacy of institutions on the other, are the backbones of the current development of climate change actions and the transition towards a sustainable food system.

## A FOCUS ON YOUTH

The involvement of young people is critical for the imminent ecological, economic and social transition. Informed young citizens, as the ruling class of tomorrow, can play an **active role in defining development priorities**. They need the best learning tools to be ambassadors to adults of the urgent need to make urban food systems greener, fairer, and more inclusive. The more informed they are, the more they can help collective efforts, be testimonials of the new eating patterns and lead the change. However, when it comes to **food policy there is not much talk of** targeted policies for those under 35, even though the need is usually understood. Despite a recent counter trend due to renewed interest in issues and innovations tools and approaches in the agricultural sector, most of the young people are abandoning rural areas<sup>7</sup>. Due to a lack of services and opportunities, farmers across Europe are disappearing because of the missing generational change and youth climate strikes are becoming prominent all over the world. In addition, children and adolescents are increasingly impacted by malnutrition, obesity and food poverty<sup>8</sup>. Many refer to school meals as their main source of food during the day.

Some policies and activities are made to tackle these issues, and many of the cities involved in Food Wave show how much they value youth's engagement. However, this is not the case for many other countries and cities because of the complexity of the topic and, probably, also because of a lack of attention to the strategic nature of the theme. First, **youth policies should have differentiated targets according to a coherent age range**, because from zero to thirty five or even eighteen years old the needs are very different and therefore the solutions. Second, **youth policies are cross-cutting so the topic should be part of all policies of the city**, not just those that seem more obvious, like education or health. Youth policies should touch upon things like urban regeneration, welfare, rural development and more.

**Engagement can happen in a variety of ways** and has been shown to be a fundamental part of policy-making in many cities. The report from Groundwork "Youth in a Changing Climate"<sup>9</sup> summarizes the perspective of 500 young people in UK on climate change, highlighting four interesting findings:

1. Most young people don't have to be convinced that climate is changing and that can be a treat for their future;
2. They show a strong need in more education on the subject because not enough is made in school;
3. They want to be involved in local activities to change their

7. More on youth and rural areas on: [https://www.europarl.europa.eu/RegData/etudes/note/join/2010/438620/IPOL-AGRI\\_NT\(2010\)438620\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/note/join/2010/438620/IPOL-AGRI_NT(2010)438620_EN.pdf) More on youth and rural areas on: [https://www.europarl.europa.eu/RegData/etudes/note/join/2010/438620/IPOL-AGRI\\_NT\(2010\)438620\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/note/join/2010/438620/IPOL-AGRI_NT(2010)438620_EN.pdf)

8. More on youth malnutrition in Europe on: [https://www.euro.who.int/\\_data/assets/pdf\\_file/0003/294474/European-Food-Nutrition-Action-Plan-20152020-en.pdf](https://www.euro.who.int/_data/assets/pdf_file/0003/294474/European-Food-Nutrition-Action-Plan-20152020-en.pdf) and on <https://www.oecd-ilibrary.org/sites/7402dbb2-en/index.html?itemId=/content/component/7402dbb2-en>

9. <https://www.groundwork.org.uk/about-groundwork/reports/youth-in-a-changing-climate/>

environment actively;

4. COVID-19 has been a great opportunity for many to increase their knowledge and connect online with social groups although also restraining due to school and activities closures. These findings easily summarize what we have been seeing all around the world.

**Friday's for Future**<sup>10</sup>, the youth-led movement born in August 2018 after Greta Thunberg's protests, is showing that young people truly understand the urgency of climate change. Their statistics show that from November 30, 2018 to November 5, 2021 global climate strikes have increased, peaking at 155 countries and 3853 cities involved. In the map they show online, **Europe is the area with the most reported strikes**, but actions are happening all over the world. Their demands are straightforward as much as their tools and strategies, and the movement has gathered people of all ages who have been awakened by the call of youth. Following the urge to act, other movements with similar impact and goals have emerged in recent years. One example is the **Extinction Rebellion**<sup>11</sup>, a non-violent movement that aims at minimizing mass extinction and social risks through civil disobedience, which originated in the UK and now is international. It follows three fundamental demands: 1) tell the truth, 2) act now, 3) go beyond politics and promote the implementation of citizens' assembly as a way to represent society in political systems. To date, the movement involves **86 countries and 1199 local groups, most of which are concentrated in European countries**. These movements show **how important activism on climate is** for younger generations. They show that being active and advocating for better environmental policies and a sustainable transition is not a choice, on the contrary, it is fundamental to securing future jobs, future consumption and production, future lifestyles.

**The need to have more education on these complex topics is also another important part of these movements**, so most of them provide free content through their websites, podcasts, news on social media anche much more, besides all the local events they organize. For instance, Slow Food Youth Network<sup>12</sup>, has been working on food related topics with initiatives on Agromafia, environmental impact of agri-food chains, food policies and food waste initiatives. SFYN also organizes Academies and Summer Schools besides proposing a podcast on the complexity of the food system.

**Although all of these movements are international, they act at the local level** with local committees, activities, events, workshops to satisfy the need to be part of a community and improve each own context, keeping in mind global change.

Finally, SWG and Manitesse's research on Food and Climate<sup>13</sup>, shows that there is a strong potential for youth engagement, by giving also important information. Young people mainly trust scientists, international organizations and organizations/other non-profits as sources for sustainability and climate change issues; they favor short documentaries, programmes with experts online or on TV, short videos, and newspaper articles as information materials; and finally they would like to be involved in voluntary actions, signing a petition or voting system.

In addition to plans, strategies and policies that address younger generations, **cities should have a strong focus on youth engagement** because it comes through a more conscious knowledge of the most relevant contemporary issues related to food and through an awareness of their environmental impact. Relevant themes also consider social justice issues that cannot be confined only to the local dimension but take on a much broader meaning in a North-South perspective.

10. Fridays for Future: <https://fridaysforfuture.org/>

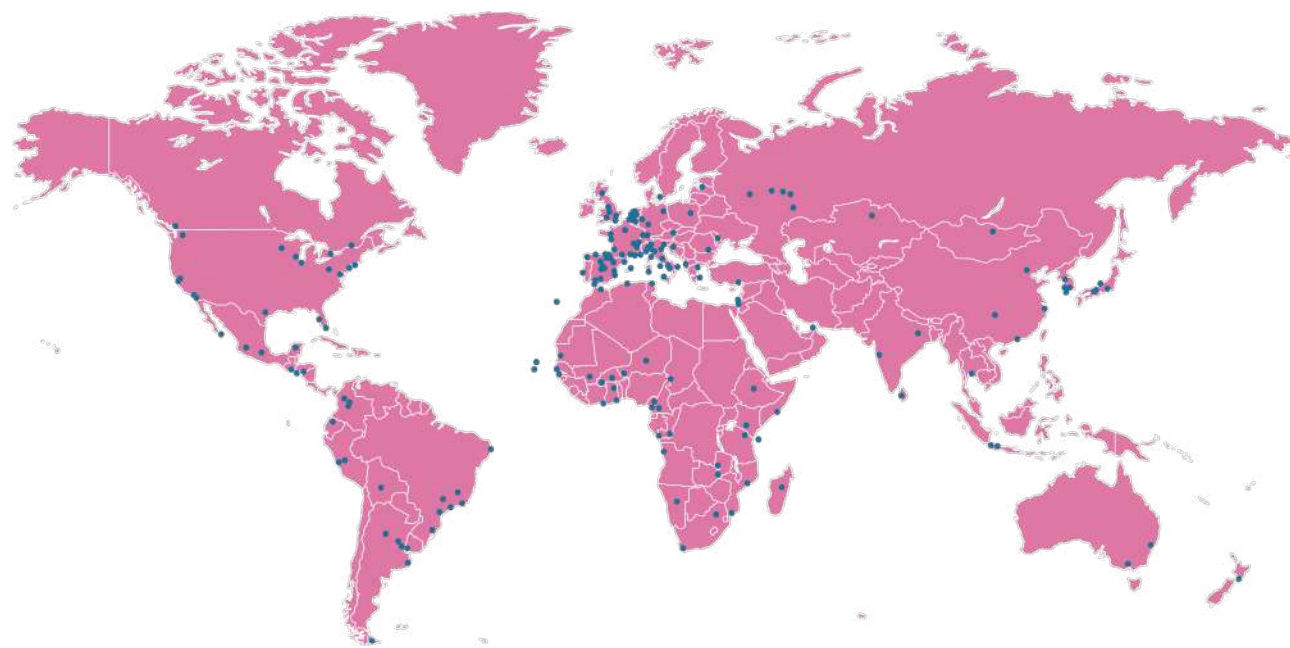
11. Extinction Rebellion: <https://rebellion.global/>

12. Slow Food Youth Network: <https://www.slowfood.com/our-network/slow-food-youth-network/>

13. More at: [https://www.manitesse.it/wp-content/uploads/2021/04/Swg-Mani-Tese\\_Food-Climate-in-Europa\\_sintesi-dei-risultati.pdf](https://www.manitesse.it/wp-content/uploads/2021/04/Swg-Mani-Tese_Food-Climate-in-Europa_sintesi-dei-risultati.pdf)



# Milan Urban Food Policy Pact

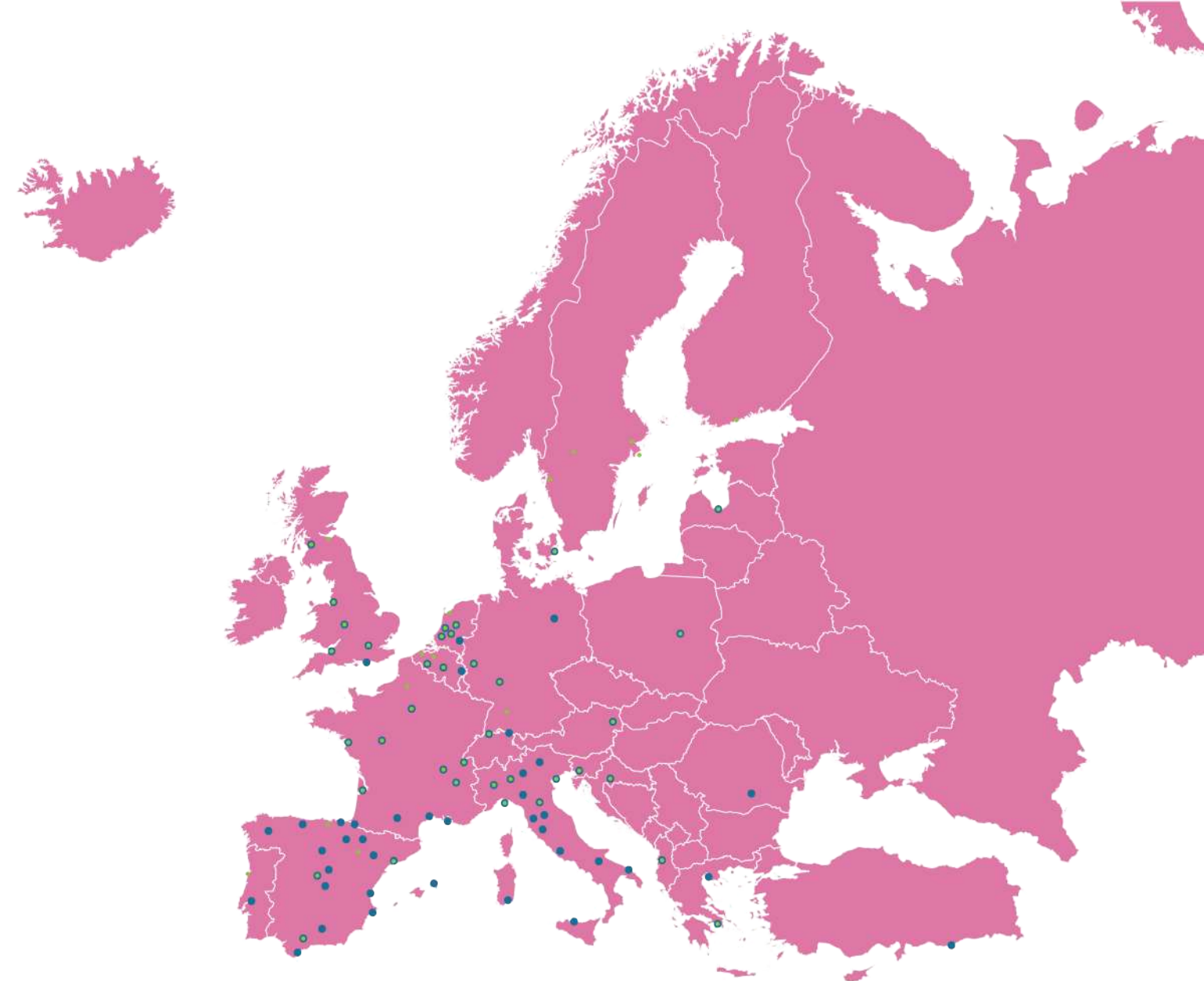


The Milan Urban Food Policy Pact (MUFPP) is a global joint commitment of cities to promote urban food policies among more than 220 cities from all over the world, committed “to develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework, that minimize waste and conserve biodiversity while adapting to and mitigating impacts of climate change”.

Its main aim is to support cities wishing to develop more sustainable urban food systems by fostering city to city cooperation and best practices exchange.

Launched by the Mayor of Milan as legacy of Expo Milan 2015 “Feeding the Planet”, it is a global joint cities’ declaration to spur city’s exchanges on food policies. MUFPP cities consider food as an entry point to tackle some of our most urgent challenges, from climate change to social inclusion, from food waste reduction to biodiversity conservation, from better nutrition for all to the fight against noncommunicable diseases. Milan Pact defines sustainable food systems as inclusive, resilient, safe, diverse, climate friendly and healthy and promote a set of 37 recommended actions (Framework for Action) to define food policies clustered in 6 categories: governance, sustainable diets and nutrition, social and economic equity, food production, food supply and distribution and food waste.

Cities signing the Pact can decide to implement all recommended actions or to pick up some of them, adapting to their local



● Milan Pact cities  
● Eurocities WG Food cities

context and challenges. The MUFPP is a call for action for cities, a framework to inspire local authorities to work towards more sustainable urban food systems as well as to cooperate among them. In fact, MUFPP cities engage in entering a community of like-minded cities, sharing innovative solutions and best practices so spread knowledge and skills.

## MILAN PACT AWARDS

One of the most important goals of the Milan Urban Food Policy Pact (MUFPP), is to stimulate the exchange of practices and learning between signatory cities. To foster this collaboration since 2016 the City of Milan and the Cariplo Foundation launched the Milan Pact Awards (MPA) with the aim of recognizing the most creative efforts and monitoring which cities were implementing the commitments they had made when they joined the pact.

The awards are a means of encouraging action, facilitating the emergence of the best practices of the MUFPP cities, making them evident to the community with a function of inspiring the action of other signatory cities.

## GLOBAL FORUM

The MUFPP Global Forum are international events, organized primarily by cities for cities, offering a unique opportunity to exchange knowledge, build partnerships and celebrate their progress in the implementation of their food policies through the Milan Pact Awards. Dialogue and technical exchange among signatories are enriched by the participation of relevant international organizations and institutions. Over the years, the MUFPP Global Fora have become a regular occurrence for cities and key actors in the global urban food agenda.

For more information:

[www.milanurbanfoodpolicypact.org](http://www.milanurbanfoodpolicypact.org)

and [MUFPP.Secretariat@comune.milano.it](mailto:MUFPP.Secretariat@comune.milano.it)

# CITIES PORTFOLIO



This section gathers 18 posters showcasing the cities analyzed. Each poster shows the strategies, activities and initiatives collected through an online survey and direct communication with city partners, with the aim to give a broad understanding of the themes in which cities have been working around climate change, food and youth. Each poster introduces the context of the city, highlighting strategies and institutional actors that are working on food and climate change along with non-institutional groups present at the local level. Then, some interesting projects on climate, food and youth are described showing the diversity and variety of actors and initiatives across contexts. Each of these topics is understood in its nexus with one another: the idea of this showcase of initiatives is to show tangible examples of the food-climate nexus, analyzing both topics through practices in which young people are protagonists.

## ALMERE

State Netherlands

Population 207.904

GDP per capita 45.585,49 EUR

% of youth under 15 24,43%

CO<sub>2</sub> emissions  
per capita 8,77 mt




The City of Almere has two ambitious objectives: to be energy neutral and without waste. Almere expands its existing programmes - as **"Energy on upcycling"**, **"Almere city without waste"** and **"Groenblauw"** - with the **Sustainability Agenda** by combining policies on food, ecology and mobility.

In Almere the Food strategy is one of the most important policy areas both locally, regionally (through the cooperation within the Amsterdam Metropolitan Area), nationally (through the participation at a national city deal on Food) and internationally (through participation at the MUFPP) levels. Doing so the City focuses on: developing a food strategy that also secures existing initiatives; giving citizens access to fresh regional produce in their neighborhoods; using the existing knowledge cluster; experimenting with innovations such as vertical urban agriculture; combating food waste; strengthening local food production as a growth sector.

Food is seen within the context of an urbanizing society because it encompasses innovation, production, consumption and the logistics of food in an urban context. For this reason food is also one of the main themes of **Floriade 2022**, the international horticultural exhibition whose title is Growing Green Cities. The event acts as an accelerator and a world stage for green and local solutions to global issues about sustainability, food, health and energy.

With the Almere 2.0 programme, the municipality of Almere, the Province of Flevoland and the Government are investing in the qualities of the city, which has the ambition and the tools to become a so-called Living Lab and work with education and research partners, businesses, residents and social entrepreneurs to seek solutions to global urbanization problems in the areas of food, energy, water and health. Another initiative of the municipality of Almere in collaboration with the province of Flevoland and Aeres Groep, is the **Flevo Campus**, a newly established research and education institution which focuses on urban-related food issues. It is a scientific hotspot where innovations in the urban food supply are put into practice by researchers, teachers, students, entrepreneurs and changemakers. a newly established research and education institution which focuses on urban-related food issues.

 **Energy on upcycling** <https://almere20.nl/publicatie/jaarverslag-2019/energy-on-upcycling/>  
**Almere city without waste** <https://english.almere.nl/living-and-working/waste-and-recycling>  
**Groenblauw** [https://www.almere.nl/fileadmin/files/almere/bestuur/beleidsstukken/Beleidsnota\\_s/Meerjarenperspectief\\_Groenblauw\\_Almere\\_stad\\_als\\_landgoed\\_-\\_gemeente\\_Almere.pdf](https://www.almere.nl/fileadmin/files/almere/bestuur/beleidsstukken/Beleidsnota_s/Meerjarenperspectief_Groenblauw_Almere_stad_als_landgoed_-_gemeente_Almere.pdf)  
**Sustainability Agenda** [https://groenengezond.almere.nl/fileadmin/files/almere/GrowingGreenCities/Duurzaamheidsagenda\\_T.pdf](https://groenengezond.almere.nl/fileadmin/files/almere/GrowingGreenCities/Duurzaamheidsagenda_T.pdf)  
**Floriade 2022** <https://floriade.com/en/>  
**Flevo campus** <https://flevocampus.nl/>

## YOUTH



Urban Greeners is a non-profit organization that works with start-ups of young entrepreneurs on horticultural projects related to urbanism, architecture, fashion, art, food and drink. The initiative was launched by the city of Almere and today they are working on the construction of Floriade Expo 2022. Together with this team young entrepreneurs can explore, experiment, meet, share knowledge and work on the development of green urban living.



<https://urbangreeners.com>

## CLIMATE

Stad & Natuur is a foundation that offers an extensive programme of educational, recreational and participatory nature experiences to the residents of Almere with the aim of bringing citizens closer to nature in a direct and accessible way. Over the years they have become a center of expertise in the field of public programming and education about nature, the environment and sustainability. It cooperates with many local, regional and national partners, as well as education centers and social groups dedicated to ecology and culture.



<https://www.stadennatuur.nl/organisatie/over-stad-and-natuur/>



## FOOD



Food Hub is an organization working to accelerate the food transition towards a fair, healthy and sustainable food system. To do so, it offers innovative educational pathways to businesses, governments, students and professionals, with the aim of better understanding the changing world of food and agriculture. Food Hub guides processes of innovation and change by offering governance consultations, transition programmes, summer schools, longreads, book presentations, video lectures and events.



<https://foodhub.nl/over-food-hub/>



# ATHENS

State Greece

Population 3.090.508

GDP per capita 15.331,61 EUR

% of youth under 15 21,32%

CO<sub>2</sub> emissions  
per capita 6,08 mt



The city of Athens presents several strategies aimed at implementing the national legislation regarding waste management and prevention, along with circular economy transition and the Resilience Plan 2030. The new local waste management plan puts effort into:


- Supporting the separate collection of recyclable materials and biowaste
- Increasing the preparation for reuse and recycling of the produced solid waste
- Closing and restoring all existing Uncontrolled Waste Disposal Areas
- Creating a network of energy recovery units from waste treatment residues and / or from alternative fuels.

Besides the general focus, biowaste collection and treatment, and sorting of recyclable packaging materials, are considered a priority of the Municipality, for which they provided to citizens brown and blue bins to ease the collection.

Moreover, particular emphasis is placed on informing, educating, and raising public awareness on the importance of waste management and related topics. In this field, **Actionaid Hellas**, Greenpeace and WWF work in the same direction with important national campaigns and local projects to advocate for a sustainable transition and for informed citizens. For instance, in May 2021 WWF and **Vouliwatch** submitted for public consultation a draft proposal of climate law which stands on two main pillars: 1) “science sets the bar of ambition of climate action”; 2) “strong societies are best placed to deal with crises when empowered with transparent and participatory systems”.

Greenpeace, on the other side, is proposing several campaigns such as “less meat, better for everyone” or “plant the solutions” to educate citizens towards better consumption and production.

Finally, ActionAid Hellas Youth, work directly for and with the younger generation producing content and projects directly related to current youth struggles. Particularly interesting is, for instance, the documentary “**Η ΓΕΝΙΑ ΤΩΝ 17**” (generation of 17) supported by the SDGs ONU platform on the challenges and solution of the younger generation, through the lens of the 17 SDGs.

 **ActionAid Hellas** <https://www.actionaid.gr/>  
**Vouliwatch** <https://vouliwatch.gr/about/en>  
**Γενιά των 17** <https://www.ertflix.gr/series/ser.161963-e-genia-ton-17>

## YOUTH



European Village is a “civil (non-governmental) non-profit company born in 2006 with the aim to create a community around the topics of environmental protection, human solidarity and ethical consumption and production. In the years, they have created a Café where they promote social and solidarity economy, short supply chain, selling ethical products and proposing cultural events. They also own a Farm where they practice self-sufficiency, propose courses and seminars, and go around bringing their beliefs and cuisine with their Nomadic Cuisine.



<https://www.european-village.org/index.asp>

## CLIMATE

The Bee Camp is an urban project of the city of Athens that was born with the idea to improve the biodiversity of urban areas with the help of pollinators. Besides workshops, events, educational activities and more, they are also creating a network of Bee Spots, namely, available habitat for bees. They provide to whoever wants a small house for bees and pollinators to easily install around the city on a balcony, a garden or even a school yard. All these bee spots around the city compose the first green path for pollinators in Athens!



<https://en.thebeecamp.com/>



## FOOD



The Vegan Lifestyle Festival is a non-profit organization that organizes events, workshops and festivals promoting veganism and environmental protection. In all the activities that they promote (from street activism to product exhibitions, from speeches to art events), they aim at reducing food waste and improving recycling. Besides veganism and equality, their values are also solidarity and environmental protection which include prevention of food waste, redistribution of surplus and donations, and waste reduction.



<https://el.veganlife.gr/>

## BRASOV

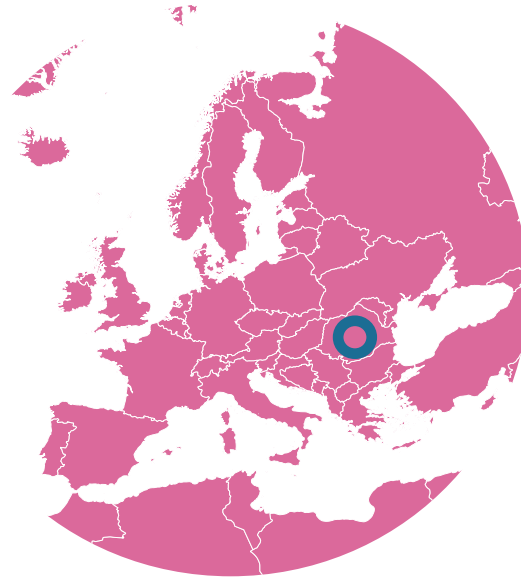
State Romania

Population 290.743

GDP per capita 11.219,60 EUR

% of youth under 15 23,79%

CO<sub>2</sub> emissions  
per capita 3,85 mt



The Brasov Metropolitan Agency for Sustainable Development is an intercommunity association that aims to facilitate cooperation between communities for the implementation of sustainable development policies. Besides this agency, the Brasov Energy Management and Environmental Protection Agency and a series of social networks compose a varied context of actors that promote sustainable development and climate change protection in the city. Hence, the municipality held a Strategy on Sustainability 2030 and has been working on policies to implement sustainable practices such as the transition of the metropolitan public transport operator to a fleet of fully electric vehicles. Regarding food, the city is part of the project FoodShift2030 which encourages and develops food citizenship for a transition of the food systems towards sustainability to accelerate and multiply food innovations practices. In particular, the Brasov Lab focuses on integrating local producers into innovative initiatives with the aim to foster local food economy and revive gastronomic heritage. Regarding social actors, Brasov hosts many NGOs and associations that work on climate change, sustainable agriculture, food consumption and more. For instance, the Asociația Tot mai Verde Brașov with the campaign "I'm breaking up with plastic" and the **Green Energy Workshop** that involve classes of middle schools' students on clean energy, educate citizens on sustainable practices. The Good Soil Cooperative – a private initiative that aggregates small local producers to jointly access the market and connect with consumers – and the **Breasla Carciumarilor** – an association of restaurants that work on developing menus with local ingredients – demonstrate interest of different actors in Brasov that believe in the need for community and locality in their food system. Finally, **Slow Food** is very active in the area of Brasov, with projects on education of taste and local consumption for children and locals along with maintaining traditional recipes and products alive.

 **Green Energy Workshop** <https://totmaiverde.ro/proiecte/ateliere-de-energie-verde/>  
**Breasla Carciumarilor** <https://www.facebook.com/breaslacarciumarilorbrasov/>  
**Slow Food** <https://www.facebook.com/slowfood.brasovro/>

## YOUTH



ASOCIATIA DE TINERI DIN ARDEAL is the Youth Association of Transilvania that has a branch in Brasov. They work to promote the development of local communities from multiple points of view ensuring the active participation of young people in preserving ethnic, national and European values. Their aim is to ensure youth involvement in the conservation of traditional, folk, cultural and ethnic values, to improve youth access to opportunities offered for young people and therefore to create partnerships and collaboration to implement those opportunities.



<https://www.ata-ro.eu/ro#proiecte-section>

## CLIMATE

Green Cities Forum is a local initiative dedicated to environmental sustainability in Romania with the aim to share the concepts of sustainability, climate change, energy efficiency, recycling, protection of forests and waters and more, with the people of Brasov on the changes necessary for the transition to a green city. Their activities goes from owning a radio to holding conferences, from proposing photo exhibitions to planting contests. They also have an Ecotic Caravan, namely a mobile exhibition that presents 10 types of electrical and electronic equipment disassembled and other interesting materials for the purpose of highlighting the importance of recycling and recovery of raw materials also to reduce their climatic impact.



<https://fovbv.ro/>



## FOOD



The Brasov Regional Food Bank is a non-profit actor that fights against food waste, poverty and social exclusion and supports charities that are in direct contact with disadvantaged people. Besides their current work, in the first ten months of 2020, the partners of the Food Bank of Brașov donated over 170 tons of food and non-food aid in a total amount of approximately half a million EUR, which could be saved from waste and donated for consumption to people who could not have otherwise afforded to buy them. These are equivalent to 400,000 portions, which were given to over 15,000 vulnerable people from the 40 NGOs supported by the Food Bank of Brasov.



[https://brasov.bancapentrualimente.ro/?fbclid=IwAR2uqAxUGhrEowB0aFTourLA\\_cF\\_LVnLqwQFnqEtK1xBfVeiqN4d1M8XmLo](https://brasov.bancapentrualimente.ro/?fbclid=IwAR2uqAxUGhrEowB0aFTourLA_cF_LVnLqwQFnqEtK1xBfVeiqN4d1M8XmLo)



## BRUGES

State Belgium

Population 118.284

GDP per capita 39.288,63 EUR

% of youth under 15 26,74%


CO<sub>2</sub> emissions  
per capita 8,18 mt



In the context of the European project Food Smart Cities for Development and the signing of the Milan Urban Food Policy Pact, the city of Bruges developed the Bruggesmaak, the city food strategy. This strategy has been co-written by the city with the Brugs Food Lab, a food council founded in 2015, which today has evolved into an independent platform of stakeholders that help monitor the implementation of the food strategy itself. Indeed, many are the actors that help implement actions of the strategy. First is the Climate and Environmental Department of the City of Bruges, which collaborates with the North-South Department, the Environmental Department and the Work and Economy Department for a huge variety of projects. For example, from 2017 the city of Bruges has been committed to offer sustainable food at their event and to help third parties to adapt to this decision through an online public manual. Also, the city signed the Glasgow Food and Climate Declaration and the **Green Deal Protein Shift** while educating consumers on seasonal and local food with a helpful series of contents of the Bruges Taste (the climate and environmental department) website.

The city has also been working on food loss in care facilities, supermarkets, industrial kitchens and restaurants with innovative solutions. They provided to more than 20 restaurants with doggy bags made of certified FSC cardboard to support the reduction of leftovers. Also, they studied and evaluated the food loss in care facilities creating a manual to help other facilities to reduce waste. The city created the **Good Food School** program and the school food council which help schools in proposing sustainable healthy food to students, educate and inform on sustainability challenges with coaching programs and toolkits.

However, Bruges' sustainable transition does not solely involve food but many other fields such as buildings and constructions for which the municipality is investing to achieve climate neutrality and to ensure that all new buildings follow circularity principles.

 **Green Deal Protein Shift** <https://ilvo.vlaanderen.be/en/news/green-deal-protein-shift-aims-for-sustainable-dietary-patterns#:~:text=The%20goal%20of%20this%20Green,shift%20also%20involves%20economic%20opportunities.>  
**Good Food School** <https://goodfoodcookingschool.com/>

## YOUTH



Het Entrepot is a hub for young creative thinkers that produces art through video and sound. They organize festivals, performances, workshops in their Lab where they also have a radio, podcasts and many other stimulating activities. In particular, Villa Bota is a radio project that hosts many podcasts and radio shows among which the #bloempotcast, a podcast series on "stories from young people from Bruges who are committed to the climate, green living or consciously making sustainable choices".



[https://zorgenvoormorgen.brugge.be/news\\_items/1405](https://zorgenvoormorgen.brugge.be/news_items/1405)

## CLIMATE

Future Proofed Bruges is a platform and an online tool that helps the city to develop, monitor and implement their climate plan. The platform is interactive and everyone can join an action to improve the climate change mitigation in the city of Bruges. Besides the activities that the citizens can do, the platform also serves as a collection of data to show the progress and the impact of the measures implemented.



<https://brugge.futureproofed.com/?hidemap=1>



## FOOD



Within the Bruges Food Strategy, in 2020 the city has developed the Food Winners Project training 50 ambassadors among different families to help reduce food waste and they achieved the result of an average of 65% reduction of waste. In 2021, the project expanded, and the Ambassadors trained were 500, with an achievement of at least 67% of less waste. The city is planning to repeat this experiment every year, training more and more households in order to spread the knowledge and practices on how to reduce food waste.



<https://bruggesmaakt.brugge.be/vermijd-voedselverlies#doe>

## BRUXELLES - MOLENBEEK SAINT JEAN

State Belgium

Population 97.005

GDP per capita 39.288,63 EUR

% of youth under 15 26,74%

CO<sub>2</sub> emissions  
per capita 8,18 mt



The Municipality of Molenbeek Saint Jean is developing a series of local actions under the lead of the Sustainable Development Department and the Agenda 21 local sustainable Strategy. The Metropolitan region, in particular the department of Environment, provides its territory with the Good Food Strategy, the sustainable food strategy launched in 2016 with the aim to “better produce” and “eat well”.

In the municipality of Molenbeek this strategy helped support local organizations to develop projects of social-economic urban farming, empowerment food auto-production, education on sustainable food with NGOs, schools and local stakeholders. For instance, from 2020, the municipality has launched “**Potagers 1080**”, a subsidies’ program for neighborhood vegetable gardens. Molenbeek also flourishes of projects with a strong social focus like **Maison des Cultures et de la Cohésion sociale**, a program that aims at empowering young people from different backgrounds with concrete help, workshops and activities; or **Les Uns et Les Autres**, a social restaurant with workers-learners, mostly young migrants; **La Rue**, a collective urban garden which focuses on sustainable food awareness and protection of the environment; or again, **ParckFarm**, a Green School in a collective garden where surrounding schools and associations come to learn, both in practice and in theory, how to grow, to collect and to prepare vegetables.

Regarding climate change, the Brussels government adopted a Climate Energy Plan which supported the work of Molenbeek towards a urban mobility plan, the promotion of eco-building, green space and energy management, installation for renewable energy production, circular economy management for building, water management in public space, urban farming and ecological area development, and more.

 **Potagers 1080** <http://www.molenbeek.irisnet.be/fr/Actualites/actualites-1/potagers.1080>  
**Maison des Cultures et de la Cohésion sociale** <http://www.lamaison1080hethuis.be/>  
**Les Uns et Les Autres** [https://www.lesunsetlesautres.be/mlm/index2.php?s=1&l=f&tb=tb\\_accueil&tb2=&m1=intro\\_ua&m2=&m-1tc=false&idform=](https://www.lesunsetlesautres.be/mlm/index2.php?s=1&l=f&tb=tb_accueil&tb2=&m1=intro_ua&m2=&m-1tc=false&idform=)  
**La Rue** <https://www.larueasbl.be/>  
**ParckFarm** <https://parckfarm.be/fr/>

### YOUTH



The Youth Council was created in 2014 following the Youth Convention which aimed at bringing to the table all the actors of the associative circles concerned with issues affecting young people in order to establish a complete and accurate state of art. The Youth Council is a group of Molenbeek young people aged between 16 and 25 elected representing the youth of Molenbeek. This Council aims at meeting other young people to know and understand their concerns. It relays information and opinions on issues that concern young people, directly or indirectly, at the College of Mayor and Echevins. Its four main objectives are to be a tool for citizenship education, a tool for participation in the life of the city, a consultation and dialogue with local authorities and a tool for empowerment and emancipation.

### CLIMATE

Kiosque à Graines is a citizens’ initiative which supports the citizens of Brussels towards a “greater food autonomy”. Thanks also to their cargo bikes they meet around the people of Brussels and provide advice and seeds to start gardening in small areas. They also organize events in schools or companies sharing information on seeding, composting and many more activities that can help change food consumption behavior helping mitigate climate change.

 <http://www.kiosqueagraines.be/-accueil->



### FOOD



Atelier Groot Eiland fights poverty by organizing work experience, (free) training, employment care and job coaching in very diverse sectors: from carpentry and catering to urban agriculture. In 2020, they have helped 255 people of which 191 are in an active trajectory and 19% of these work now in urban agriculture activities. In particular, the organization owns 4 vegetable gardens where they offer training, interaction with citizens and events that improve social cohesion. While trying to develop their people’s passions and talents, they opt for activities that add value in the long term on an ecological, economic and social level.

 <https://www.ateliergrooteiland.be/>  
<https://belakker.ateliergrooteiland.be/nl>



## LISBON

State Portugal

Population 506.654

GDP per capita 19.293,38 EUR

% of youth under 15 20,34%

CO<sub>2</sub> emissions  
per capita 4,84 mt



Already in 2008, the Lisbon City Council approved an Energy-environmental Strategy (EEA) and a revision of the Municipal Master Plan in 2012 included a set of strategic mitigation and adaptation principles based on a spatial development model to close the carbon cycle and save water. In 2017, Lisbon signed up to a **Climate Change Adaptation Strategy** (EMAAC) containing a holistic vision of territorial development. Other environmental policies have been strengthened by participation in international networks, including: National Green Roofs Association; Covenant of Mayors for Climate and Energy; OECD - Sustainable urban development policies in aging societies; and 100 Resilient Cities. In 2018, Lisbon won the European Green Capital 2020 award (first time for a southern European capital) in recognition of its commitment to a greener city.

Talking about food, since 2010 the City of Lisbon has embraced a strong commitment to food waste prevention in order to decrease its associated footprint on natural resources. The City has implemented a series of initiatives to collect and reduce food waste, also supporting local initiatives or citizens' movements. This process generated great participation of volunteers and, in January 2015, the Municipality approved the Municipal **Plan Against Food Wastage**, where members of the City Council, national authorities, parishes and NGOs took part in Lisbon's Municipal Commissariat Against Food Wastage. The primary objective was to implement a series of interconnected measures working with stakeholders in the city to optimize the collection of food surpluses and to widen the reach and level of distribution of food to people in need.

Lisbon is a city rich in social groups focused on climate-food issues. These include **Alimentar Cidades Sustentáveis**, a network aiming to bring together all actors and sectors involved in the sustainability of food systems in Portugal. Other social actors in the area are: the **DLBC Lisbon network**; **Rebundance**; **Hub criativo do beato** and many others.

📄 **Climate Change Adaptation Strategy** [https://www.lisboa.pt/fileadmin/cidade\\_temas/ambiente/qualidade\\_ambiental/EM-MAC/EMAAC\\_2017.pdf](https://www.lisboa.pt/fileadmin/cidade_temas/ambiente/qualidade_ambiental/EM-MAC/EMAAC_2017.pdf)

📄 **Plan Against Food Wastage** [https://www.lisboa.pt/fileadmin/cidade\\_temas/direitos\\_sociais/documentos/Plano\\_desperdicio\\_alimentar\\_CML.pdf](https://www.lisboa.pt/fileadmin/cidade_temas/direitos_sociais/documentos/Plano_desperdicio_alimentar_CML.pdf)

📄 **Alimentar Cidades Sustentáveis** <https://alimentarcidadesustentaveis.wordpress.com/>

📄 **DLBC Lisbon network** <https://rededlbclisboa.pt/>

📄 **Rebundance** <https://rebundance.com/>

📄 **Hub criativo do beato** <https://lisboaenova.org/en/hub-criativo-do-beato-hcb-living-lab/>

## YOUTH



Zero Waste Youth Portugal is the Portuguese national section of an international and independent movement organized by young people and focused on integrating and empowering the young generation towards a more sustainable world through Zero Waste ideas and practices.



<https://www.facebook.com/ZeroWasteYouthPortugal/>

## CLIMATE

Zero Waste Lab is a non-profit environment organization dedicated to promoting the Zero Waste concept and contributing constructively to the transition to a waste-free future of human and environmental regeneration. They work on local intervention projects, aimed at fostering civic participation, collaborative solutions, disruptive and creative possibilities.



<http://zerowastelab.pt/en/home.php>



## FOOD



Fruta Feia's main goal is to reduce tons of good quality food that are wasted in land by farmers every year and, also to prevent the unnecessary use of resources on their production, such as water, arable land, energy and working hours. By changing consumption patterns, this project's intent is that in the future all quality fruits and vegetables will be marketed equally, regardless of their size, color and shape. Alongside its local impact, it wants to raise awareness towards the food waste problem, as well as to the fact that "ugly food" can be of good quality. Their project enables people to have access to cheaper, locally produced food through Fruta Feia co-Op delivery points. The first delivery point was launched in November 2013 at Intendente in Lisbon, and from then onwards the project has been replicated in several portuguese cities, namely Porto, Almada, Amadora, Cascais, Vila Nova de Gaia and Matosinhos. In 2021, the project was selected to join the members of the European platform on food wasting and losses.



<https://frutafeia.pt/pt/projecto>

## LONDON

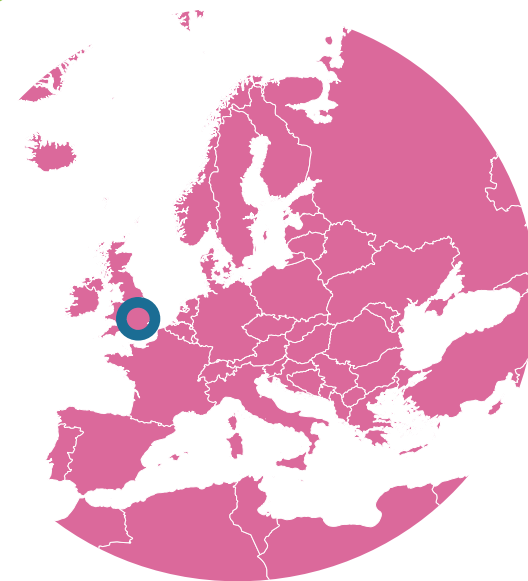
**State** United Kingdom

**Population** 9.950.000

**GDP per capita** 35.778,35 EUR

**% of youth under 15** 27,76%

**CO<sub>2</sub> emissions  
per capita** 5,40 mt



In 2018, the London Food Board, a mayor's advisory group composed of several food experts, renewed the London Food Strategy with the aim to provide "good food" to all. The board also supported the creation of the London Food Programme, a partnership with private, public and third sectors of London's food system, that aims to develop projects to improve the food system. In the same year, the mayor of London signed the **1.5C Compatible Climate Action Plan** and the London Environment Strategy committing to a zero-carbon city. In this direction the **Grow Back Greener Fund** was founded with the aim to support projects that address inequalities in access to green spaces and that help the city to become more climate resilient. Also, **ReLondon**, a partnership of the Mayor of London and London's boroughs is extensively working on decreasing carbon emission through better waste management. Besides the educational and informative content that ReLondon provides on their website, this partnership concretely helps boroughs to create their customized plan to improve waste management. ReLondon does not only work with local authorities, but with all actors that are involved in the food system providing guides and models in order to achieve a reduction of waste and an improvement of recycling. Another fundamental actor is **Sustain**, an alliance of organizations that works on advocating for a better food system. Their work mainly rotates around campaigns and projects, such as the 2020-2021 National Food Strategy, commissioned by the Government to set out a vision for the future of the food system; they have been working on a Good Trade Campaign which aims at pushing the topic of sustainable food into the trade agenda, after the Brexit decision. Also, their Sugar Smart Campaign helped establish the Sugar Drink Duty, namely the implementation of a sugar tax for the soft drink industry; their Children's Food Campaign secured a 37% reduction in advertisements aimed at children for unhealthy products.

 **1.5C Compatible Climate Action Plan** <https://www.london.gov.uk/what-we-do/environment/climate-change/climate-action-plan#:~:text=The%20Mayor%27s%20London%20Environment%20Strategy,reach%20the%20zero%20carbon%20target.>  
**Grow Back Greener Fund** <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/grow-back-greener>  
**ReLondon** <https://relondon.gov.uk/>  
**Sustain** <https://www.sustainweb.org/>

## YOUTH



The Eco-Schools program provides a seven-step framework for schools to create "an environmental management system that empowers young people to introduce and lead environmental actions and education in their school". Every academic year, a school can register to the portal and follow the steps during the year to receive the Eco-School Green Flag accreditation. The seven steps are methodological rather than straightforward solutions as each environmental action will be decided by the students and the teachers together. In England the program has been working since 1994 and over 20,000 schools, colleges and nurseries have now registered.



<https://www.eco-schools.org.uk/about/>

## CLIMATE

VegPower is a project that aims at improving children's nutrition by including more vegetables into their diet. They work through campaigns and in direct contact with schools pushing the topic of healthy eating towards social and climate change related aspects. With the campaign #loveyourleftovers or 2020 Seasonal Vegetables, they work on both healthier consumption and greener and more environmentally friendly eating habits. Their advertisement series Eat Them To Defeat Them has had an incredible success and has been supported by celebrities, social media and schools.



<https://vegpower.org.uk/about/>



## FOOD



London with the partners Wrap, Resource London, Groundwork and London Waste and Recycling Board, are part of the EU project TriFOCAL – Transforming City Food Habits for Life. This project has the aim to prevent food waste, promote healthy and sustainable eating and improve the recycling of unavoidable food waste. In London, the partners involved a series of boroughs to improve knowledge on the topic of food waste, receive trainings and tools, contribute to the policy development on the topic and create synergies to produce projects.



<https://trifocal.eu.com/about-trifocal/>



## MADRID

State Spain

Population 3.300.428

GDP per capita 23.544,98 EUR

% of youth under 15 21,94%

CO<sub>2</sub> emissions  
per capita 5,52 mt



Madrid has a Health and Sustainable Food Strategy (2018) which was developed by the Milan Pact Follow-up Table:

a dialogue space created in 2016 after the signing of the MUFPP. Today the Milan Pact Follow-up Table is still a very important body as it brings together all the administrations involved in food and environment issues, as well as different organizations, associations, NGOs. Many are the actions developed since the strategy, especially from the Environmental Education Department, such as the environmental activities program "Habitat Madrid", the school program "Educate today for a more Sustainable Madrid" or the public campaign on how to save water with daily actions.

Also the Cooperation and Global Citizenship, Madrid Health, and the Department of Climate Change work on the topics of climate change, sustainable development, and food system, as Madrid signed the **Green City Accord**. Madrid has indeed a local plan called "Plan A: the air quality and climate change plan for the city of Madrid" which integrates 30 different measures which are necessary to achieve a sustainable city. The city also has been developing an awareness campaign to increase participation in the municipal urban gardening program and support a change in food habits in general. Other campaigns are "**Acierta con la organica**" which invites individuals, households, schools and shops to a better compost management. The Municipality also has a citizen participation portal called **Decide Madrid** in which citizens can create proposals that can be voted on such as the placement of recycling machines near supermarkets or planting of trees in gray areas of the city.

Other actors work on these topics as well. It is the case of Redhmad the Madrid Urban Garden Network which helps create a community among all the urban gardens. Or the Technology innovation center for human development of the Madrid Polytechnic University which works on green cities and urban agriculture and has been part of many partnerships with the city.

 **Green City Accord** [https://ec.europa.eu/environment/green-city-accord\\_es](https://ec.europa.eu/environment/green-city-accord_es)  
**Acierta con la organica** <https://aciertaconlaorganica.es/>  
**Decide Madrid** <https://decide.madrid.es/>

## YOUTH



The City of Madrid held a Youth Council which works with all the Government Areas of the City Council of Madrid and Youth Associations, and it is coordinated by the Equity, Social Rights and Employment Government Area. Its main task is to create synergies between the City Council and the young people. They coordinate 4 Youth Centers for leisure and free time, where food and cooking workshops are held. They offer free training and job opportunities, along with cultural activities and contests like for example the "Young creator contest" which aims to implement innovative proposals by young people in different artistic fields.

 [urly.it/3hq0f](http://urly.it/3hq0f)

## CLIMATE

To mitigate climate change with circular economy solutions, Madrid Agrocomposta was born, initiated by Plataforma Madrid Agroecológico, with the idea to turn waste from food markets into compost to fertilize agricultural land around the city. With this project they aim at decentralizing the organic waste management which normally goes to incinerators instead of being used as a resource for soil. They therefore collect organic waste in schools, public markets, urban gardens or from private citizens, and bring to farms near Madrid (less than 30km in order to reduce greenhouse gas emissions). The farms then turn this organic waste into compost and produce products to be consumed in the city of Madrid.


 <https://cooperativecity.org/2017/10/09/madrid-agrocomposta/>



## FOOD



Tarjeta Familias is a governmental project that grants financial support to families in need. They consist of prepaid cards to cover food and hygiene basic needs, from 125 euro to 630 euro per card, depending on several criteria. During COVID-19 this project has been largely used and an online version of it has been implemented to help families buy their basic necessities online. The idea behind this project is to erase the stigma behind financial support and helping as many people as possible.

 <https://www.madrid.es/portales/munimadrid/es/Inicio/Servicios-sociales-y-salud/Servicios-sociales/Tarjeta-Familias/?vgnextfmt=default&vgnextoid=6bd43fdee4f24710VgnVCM1000001d4a900aRCRD&vgnnextchannel=70e4c8eb248fe410VgnVCM1000000b205a0aRCRD>



## MALMÖ

State Sweden

Population 350.647

GDP per capita 45.478,74 EUR

% of youth under 15 28,40%

CO<sub>2</sub> emissions  
per capita 3,54 mt



Since 1995, Malmö has pioneered inclusive and innovative urban strategies for sustainability.

The city signed the European **Green City Accord** in 2020 in order to address five areas of environmental management: air, water, nature and biodiversity, circular economy and waste, and noise. Malmö City Environmental Programme 2021-2030 sets the direction for the city's long-term work with regard to environmental issues. It consists of twelve objectives with associated indicators, divided into three main goal areas: reducing climate impact; improving the urban environment; and improving biodiversity and ecosystem health.

Talking about food Malmö's Sustainable Development and Food Policy was approved in 2010. It provides the "S.M.A.R.T. model" to combine health and environment without increasing the costs of the city's collective catering. It does so by following five guidelines: healthy and good quality food; knowledge and skills; sustainable purchasing; sustainable economy; sustainable business. In addition to kindergartens, schools and health care, the policy also includes all public hotels, school canteens, social and leisure clubs and all events organized by the city of Malmö.

With the Climate Smart Food in Malmö project (2016-2020) the city has worked in line with the city's food and sustainable development policy to reduce the percentage of greenhouse gasses related to the city's food purchases. It has done this by focusing on reducing food waste and increasing plant-based menus.

Some of the city's young social groups, including the student organization **Miljöförening Fenix** and the cultural center **Arena 305**, are also sensitive to the issues of sustainability, food-climate nexus, recycling and fair trade consumption. In addition, there are many organizations in Malmö dedicated to managing food surpluses: **Food 2 Change** resells surpluses to specific targets at reduced prices, **Restaurang SPILL** and **Rude Food** offer catering services using waste products, the former in a restaurant and the latter through a non-profit catering service.



**Green City Accord** [https://ec.europa.eu/environment/green-city-accord\\_es](https://ec.europa.eu/environment/green-city-accord_es)

**Miljöförening Fenix** <https://www.facebook.com/FenixMalmoStudentkarsMiljofoorening>

**Arena 305** <https://malmo.se/Uppleva-och-gora/For-familjer-barn-och-unga/Motesplatser-for-unga/Arena-305.html>

**Food 2 Change** <https://www.food2change.se/>

**Restaurang SPILL** <https://restaurangspill.se/>

**Rude Food** <https://rudefood.se/>

## YOUTH



Tillsammans i Förening is an organization and meeting place that works to strengthen children and youth's involvement in society by organizing activities and initiatives. It started in 2010 as a project to increase girls' involvement in community life in Rosengård, Malmö. For the TIF organisation letting young people lead has become a fundamental cornerstone. Young people are recruited, trained and empowered as leaders to be able to organize and lead activities and projects on their own. Basic activities are dedicated to women, children and sport, always accompanied by values of interculturality and inclusion.



<https://tifmalmo.se/>

## CLIMATE

The Malmö Nature Conservation Association - Naturskyddsföreningen - is a non-profit association that is part of the largest non-profit environmental organization in Sweden. They host the nation's largest climate festival. They offer experiences in nature such as guided tours of organic farms, the Limhamn lime quarry and the recycling center. They also organize workshops and exchanges. They are also an advisory body on various local environmental issues for which they carry out advocacy work. They cooperate with municipalities, shops and associations to achieve greater knowledge and awareness of current environmental issues.



<https://malmo.naturskyddsforeningen.se/>



## FOOD



Food Malmö is a collaborative project led by the Environment Department in Malmö. It is co-financed by the European Fund for Agriculture via The Swedish Board for Agriculture (Jordbruksverket) and contributes to achieving the goals within the national food strategy. The project aims to increase knowledge and access to good, healthy, locally produced sustainable food and drink for all citizens in Malmö. Food Malmö, with Case Sofielund Entreprenörskap, offers the possibility to join a free incubator programme for food entrepreneurs who want to realize their ideas through business consulting, training and coaching. Food Malmö also laid the foundation for the first Swedish Food Council through a food strategy project focusing on co-creation, educational initiatives, food literacy, entrepreneurship, strategic food initiatives and community involvement around our local food system. The Food Council is divided into six thematic areas (production, education, communication, market, gastronomy, food waste) and open to the participation of all citizens.



<https://foodmalmo.wordpress.com/>

# MANCHESTER

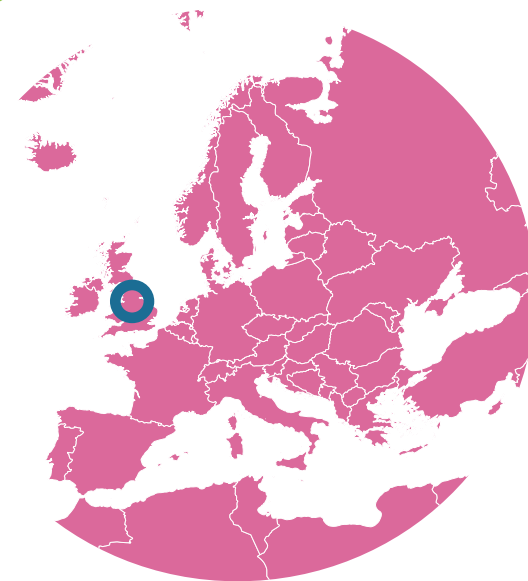
State United Kingdom

Population 552.858

GDP per capita 35.778,35 EUR

% of youth under 15 27,76%

CO<sub>2</sub> emissions  
per capita 5,40 mt



Manchester has been working on sustainability for quite some time: the first climate change strategy was implemented in 2009! In their 2016-2025 City Strategy, the city created three main bodies:

- **Manchester Climate Change Partnership:** it involves several bodies and organizations around the city with the aim to create a community with common goals around the topic of climate change.
- **Manchester Climate Change Agency:** it has the role to oversee and champion climate change actions in the city along with the MCC partnership.
- **Manchester Climate Change Youth Board:** a group of 13-28 years old who sit on the MCC Partnership.

The aim of the partnership is to work with local communities to implement the Manchester Climate Strategy with all relevant city's stakeholders. In 2021, the Manchester Sustainable Mission "Incorporating Food into Manchester's Climate Change Response" was signed, underlining the link between climate change and food. One pivotal actor in this strategy is the Manchester Food Board which is an independent multidisciplinary body that advocates the need to put food in the policy agenda.

Manchester hosts many associations, NGOs and projects such as Sow the City which is a social enterprise that aims at empowering communities with community gardens, workshops, green roofs while also providing consultancy and research skills. Or Groundwork Greater Manchester, a federation of charities that works on guaranteeing wellbeing in the city's communities. Their **Green Influencers Scheme** supports the employment of Green Mentors with the aim to enable the education of 10 to 14 years old interested in becoming environment influencers in their community.

Other interesting projects are Open Kitchen, a sustainable catering company committed to producing food without waste, loss or unethical suppliers; The Bread-and-Butter Thing, an association that redistributes food surplus to people in need; Healthy me, Healthy Communities, a social enterprise with the aim to guarantee access and education around good food.

✂ **Manchester Climate Change Partnership** <https://www.manchesterclimate.com/MCCP#:~:text=The%20Manchester%20Climate%20Change%20Partnership,in%20place%20from%202010%20%2D%202017.>

✂ **Manchester Climate Change Agency** <https://www.manchesterclimate.com/>

✂ **Manchester Climate Change Youth Board** <https://www.manchesterclimate.com/youth-board>

✂ **Green Influencers Scheme** <https://www.groundwork.org.uk/projects/green-influencers/>

## YOUTH



Climate Change Youth Leadership from Groundwork Greater Manchester is a program that provides training to young workers of Manchester. As part of Young Manchester, this program has developed a number of resources designed to support youth workers and community group leaders to deliver environmental social action with the young people they work with. They provide free training, free resources available on their website and a funding program for innovative youth actions.



<https://www.groundwork.org.uk/projects/climate-change-youth-sector-leadership/>

## CLIMATE

The Manchester Climate Change Partnership gathers many local projects on climate change with a 360° perspective. The Stitched Up project fights against the culture of fast fashion, helping people to understand its impact on climate change and providing skills to develop their own wardrobe. The Furniture Poverty Hub is a space to reduce, reuse and recycle old furniture in a combination of "art, activism, strategic practical advice and collaborations to raise awareness of the issues surrounding furniture poverty". They also work with the University of Manchester to eliminate plastic from campus and with the Manchester Diocese to launch the Eco Church program. But there is much more that this partnership encourages.

✂ <https://www.manchesterclimate.com/MCCP#:~:text=The%20Manchester%20Climate%20Change%20Partnership,in%20place%20from%202010%20%2D%202017>



## FOOD



Real Food Whythenshawe is an organization that teaches people how to better interact with food, tackle issues of sustainability, food waste and food poverty. They provide education and skills to increase awareness on these topics. Two interesting projects are, for instance, The Geodome - which houses aquaponics, vermiculture, hydroponic and mushrooms, acting as an amazing space of information for outdoor education workshops - and the Cooking and Eating sustainably project - which helps people to develop better skills in cooking healthier, cheaper and more sustainably.



<https://www.realfoodwhythenshawe.com/>



# MARIBOR

State Slovenia

Population 94.244

GDP per capita 22.200,08 EUR

% of youth under 15 23,60%

CO<sub>2</sub> emissions  
per capita 6,77 mt



The **Smart City Maribor** initiative (2011) was established to enable sustainable environmental development and promote innovation by testing pilot projects for improving urban services and the quality of life of citizens. It is the result of intensive cooperation between the municipality, research organizations and industry to promote technological, social and organizational innovation with the active involvement of citizens. The Maribor Smart City strategic plan identifies six key areas in which to define development directions and objectives: governance, economy, mobility, environment, life and people. Whereas the **Sustainable Urban Strategy** of the Municipality of Maribor (2015) with an integrated approach not only outlines the situation and challenges of the time, but also contains sustainable development guidelines to place the city at the forefront of European social, cultural and economic development.

One of the most active actors in the area is the **Regional Development Agency Podravje-Maribor** (RRA Podravje), which, through the adoption of the Regional Development Programme, works on regional development at the economic, social, environmental and territorial levels. Moreover, specifically on the topics of food and climate the Agency cooperates with the Youth Office of the Municipality of Maribor, harmonizing the project content with their youth programs.

The WCYCLE Institute Maribor is another of the actors involved. It is a research and development center for resource flow management in the local and regional area, now incorporated in the RRA Podravje. And it is a useful platform for local service companies to rethink their business models, to discuss and initiate new circular economy projects for different stakeholders in the city and region.

The municipality of Maribor is very active in the field of cycling, and as part of the **TRAMOB** project, it has initiated the process of planning sustainable mobility in the city by systematically organizing the cycle paths in the center. In addition, thanks to the opening of the Center for Sustainable Mobility (first in Slovenia), there is an appropriate place to support sustainable mobility in the city. In this context, the bike network **Kolesarska mreža Maribor** has been involving the city's inhabitants for almost twenty years.

 **Smart City Maribor** [https://www.smartcitymaribor.si/si/O\\_pametnem\\_mestu/](https://www.smartcitymaribor.si/si/O_pametnem_mestu/)  
**Sustainable Urban Strategy** <https://www.maribor.si/dokument.aspx?id=28079>  
**Regional Development Agency Podravje-Maribor** <https://www.rra-podravje.si/>  
**TRAMOB** <http://www.tramob.si/>  
**Kolesarska mreža Maribor** <https://ibikemaribor.com/>

## YOUTH



City of Maribor is European Youth Capital 2013 Winner. In 2012, while preparing for the European Youth Capital 2013, Maribor decided to fight the challenge of high youth unemployment by becoming a partner in the URBACT project My Generation at Work (URBACT, 2014-2020). The Municipality of Maribor set up a network of stakeholders (Local Support Group – LSG) who are already active in the field of youth employment – the Employment Service of Slovenia, the City Youth Council Maribor, the Maribor Development Agency and the University of Maribor, the Career Center of the University of Maribor and the Business Incubator of the University of Maribor - to create a platform for cooperation building, presentation of individual projects and interconnection of these between LSG members.



<https://www.blog.urbact.eu/2014/07/go-for-it-city-of-maribor-engaging-youth/>

## CLIMATE

The City water circle is an European Interreg project (2019-2022) that works with partner municipalities to reform outdated urban water infrastructure systems using a circular economy approach that offers many economic and environmental benefits. The project promotes a water-saving culture, including the use of unconventional water resources (e.g. the use of rainwater). Objectives include harnessing urban rainwater to restore water at city level and creating a knowledge base that can be shared digitally for anyone who wants to manage water more sustainably. In Maribor, the company Mariborski vodovod is implementing a pilot project, with the aim to create a link to the Cinderella project already acquired by the Slovenian utility Nigrad as an added value to the project.



<https://rra-podravje.si/projekti/city-water-circle>



## FOOD



The URBAN SOIL 4 FOOD project is piloting an urban circular economy model to increase local food self-sufficiency and minimize the city's environmental footprint. The aim is to use inner-city waste - particularly excavated material from the construction sector - as input material to produce recycled, standardized and certified soil. When reintroduced into the soil, it improves soil quality and increases agricultural production. This is an experiment that will allow the development of community urban gardens and, in parallel, a food distribution system of local labels. It is also planned to create an Agri Living Lab where various experiments in social innovation and urban ecology will take place.



<https://www.uia-initiative.eu/en/uia-cities/maribor>

## MILAN

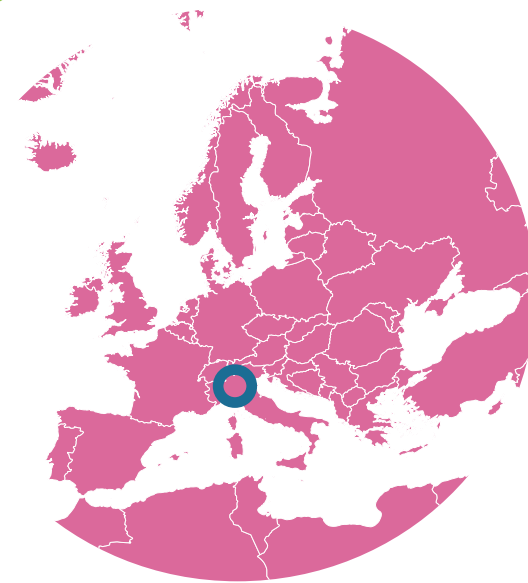
State Italy

Population 1.381.080

GDP per capita 27.591,37 EUR

% of youth under 15 20,38%

CO<sub>2</sub> emissions  
per capita 5,38 mt



Through the Air and Climate

Plan, the City of Milan is committed to achieving the objectives of decarbonisation by 2050 (with the elimination of fossil fuels), adaptation to climate change and reduction of air pollution to avoid the increasing of the planet's temperature more than 1.5°C in line with the objectives of the 2015 Paris Agreement. To monitor these targets, the City of Milan has implemented a GHG emissions calculator for public procurement: **Cool Food Pledge**.

Milan participates in several international networks committed to achieving sustainable development goals: C40 Cities for Climate Network; Covenant of Mayors; the Urban Agenda on Air Quality; Resilient Cities Network; and the European EIT Climate-KIC initiative. Also at the international level, since the Milan Pact (MUFPP), the city is playing a distinctive role in the dissemination of urban food policies at international level.

At the local level, the role of political commitment has been crucial in strengthening governance in food policy processes: in fact, the city has a Food Policy Office under the authority of the Deputy Mayor, which facilitates political action as a cross-departmental office. In this way, the city of Milan has initiated a process of optimizing its food system to make it more sustainable. The most active departments of the Milanese administration that design policies on climate-food issues are the Food Policy Office, the Department of Agriculture, the Department of Welfare and the Department of Environment. One of the major results of the Milan Food Policy are the so-called **local Food Waste Hubs**, which are physical places designed to recover surplus food (which comes mainly from supermarkets and company canteens) and donate it to organizations that distribute the food to people and families who need it most. This practice won the Earthshot Prize in 2021.

In Milan the agencies and public companies that work on food and climate are the Municipal Agency for School Canteens (Milano Ristorazione - MiRi) and the Municipal Agency for Wholesale Market (SogeMi). Whereas some of the most influencing social groups that design and promote practices related to the Food Policy are: Banco Alimentare, Caritas, IBVA (for food recovery and redistribution), the Agricultural Districts (coalition of urban and peri urban farmers) and the School Canteens Parents Commissions.

 **Cool Food Pledge** <https://drive.google.com/file/d/1-E-ZDnc4KRYIY12mLs3fdfeHVkVgRtrB/view>  
**Local Food Waste Hubs** <https://foodpolicymilano.org/hub-quartiere-spreco-alimentare/>

## YOUTH



The Municipality of Milan has published a call for participation in the "Mi Generation-Net" network, which aims to bring together young people to address innovative projects and initiatives, in order to better meet the needs of the city's youth population. The network was created to encourage the active and concrete participation of girls and boys in the definition of policies that affect them and to discuss specific issues, including for the purpose of drafting the 'Youth Operational Plan', dedicated to the age group between 12 and 35 years.



<http://www.migeneration.it/novita/nasce-migeneration-net-la-rete-di-associazioni-per-le-politiche-giovanili-di-milano/>

## CLIMATE

Although Milan is known for its urban amenities, the city has been working to renew and regenerate its rural dimension. One example is Bosco in città born in 1974 on land granted by the Municipality, a public park with 200 gardens assigned to citizens. Besides urban forests, it is easy to find in Milan modernized "cascine", namely farmsteads, in the middle of the city. An example is Cascina Cuccagna, a sustainable community with a restaurant-bar, a hostel, a short supply chain market, a didactic garden for schools and many other inclusive and social activities. Similarly Mare Culturale Urbano is a center of artistic production built in an ancient farmhouse. It is a multifunctional space where there is a restaurant, a craft brewery, a coworking and rehearsal rooms, that comes alive with concerts, cinema, festivals and activities for children. All these projects are part of a greater cultural shift towards a more young, green and inclusive Milan.



  
<https://www.cuccagna.org/chi-siamo/>  
<https://maremilano.org/mare-culturale-urbano/>  
<https://www.boscoincitta.it/storia-e-ambienti/>

## FOOD



RECUP is a Social Promotion Association that wants to face the serious problem of food waste in local markets. There are many people who, at the end of the market, rummage through the garbage to recover what is thrown away, that is however still edible. This practice often causes fights and discomfort, rummaging through the garbage causes humiliation and suffering. RECUP therefore wants to combat both food waste and social exclusion: it recovers food before it is thrown away, divides it between good and bad and makes it available by redistributing it to anyone who wants to take it. The beneficiaries are the same executors of the work: in this way it creates a concept of collaboration and community between different people, an intercultural and intergenerational contact that was missing before. What has lost economic value, can find social value again. Other objectives of the Association are to create a path of food education, for citizens and schools, with training directly on the markets, workshops, meetings, artistic and gastronomic events, aperitifs and games.



<https://www.facebook.com/recup.org/>



## MURCIA

State Spain

Population 456.330

GDP per capita 23.544,98 EUR

% of youth under 15 21,94%

CO<sub>2</sub> emissions  
per capita 5,52 mt



Murcia Municipality has had a Local Energy and Climate Change Agency (ALEM) since 2008 and has a long history of actions to achieve sustainability targets. Murcia achieved its initial target of a 20% reduction in CO<sub>2</sub> emissions five years early. By signing the 2030 Climate Change Mitigation Strategy, Murcia has signed up to the target of a 40% reduction in emissions by 2030. And it has already signed up to the goal of becoming climate neutral by 2050. Reasons why the city has just won the Covenant of Mayors Sustainability Award 2021.

In 2021 Murcia signed the **The Green City Accord**, a movement of European mayors committed to making cities cleaner and healthier. In the same year Murcia's **Circular Economy Strategy** was presented, complementing its **Circular Economy assessment report**. Its strategy priority lines are: consumption; waste management; water management; sustainability of urban spaces; mobility; and cross-cutting policies. The city of Murcia is a signatory to the Milan Food Policy Pact (MUFPP) and its participation in European programs is very significant: in addition to many projects in the past, it is currently involved in several Horizon2020 projects on circular economy. Among them **CityLoops** aims to contribute to Europe's circular transition by closing the loop on two of Europe's most important waste streams: construction and demolition waste, and organic waste. But also **HOOP** project, focused on recovering valuable resources from urban biowaste and wastewater to make bio-based products. Two other remarkable circular economy LIFE projects in which the city is involved are ENRICH and AMDRYC4, both to be completed in 2021. The former concerns the recovery of nutrients from wastewater and their use as fertilizer for crops through innovative treatment, while the latter demonstrates natural solutions for climate change adaptation of arid farming systems in the Mediterranean area.

 **The Green City Accord** [https://ec.europa.eu/environment/green-city-accord\\_es](https://ec.europa.eu/environment/green-city-accord_es)  
**Circular Economy Strategy** <https://www.estrategiamurcia.es/upload/2021/11/Murcia-s-Circular-Economy-Strategy.pdf>  
**Circular Economy assessment report** <https://www.estrategiamurcia.es/upload/2020/09/Diagnostico-del-estado.pdf>  
**CityLoops** <https://cityloops.eu/cities/cityloops-replicators>  
**HOOP** <https://hoopproject.eu/>

## YOUTH



Young activist groups in the city include FFF Murcia and Extinction Rebellion Murcia, which, in addition to issues of environmental defense at a global systemic level, support the cause of SOS Mar Menor together with activists from Ecologistas en Acción Región Murciana and many others for the defense of the Mar Menor marine ecosystem.

## CLIMATE

Murcia is a world leader in wastewater treatment and reusing, but it faces challenges when it comes to the handling of bio waste. The VALUE WASTE Horizon2020 project (2018-2022) takes action in this regard: its general objective is to develop a system for urban biowaste valorisation through the development of three value chains. Specific objectives are: promote urban biowaste collection; contribute to EU self-sufficiency on strategic resources; improve the perception of citizens on urban biowaste as a local source of valuable materials; and provide scientific and experienced-based data.

 <https://valuewaste.eu>



## FOOD



Tejiendo Redes (Weaving Networks) was born with the mission of promoting agroecology and bringing local producers and potential local consumers together. It is a project promoted by the City of Murcia, whose purpose is to create alternatives to keep the Huerta de Murcia - historical agricultural production area - fertile, productive and sustainable socio-economic, socio-cultural and environmental view, in order to recover control of food security and sovereignty in the surroundings of the municipality.

 <http://tejiendoredes.eu/>

## PEST COUNTY

State Hungary

Population 1.751.251

GDP per capita 13.903,24 EUR

% of youth under 15 22,02%

CO<sub>2</sub> emissions  
per capita 4,75 mt



### Pest County Climate Strategy

(2018) has been written after a two year awareness campaign that reached 187 municipalities and with the help of the Climate Change Platform, a community of stakeholders from business to communities, organizations, and innovators with the aim to share information on local initiatives. The Association of Climate-Friendly Municipalities gave the common principles and methodology to draft the strategy as their work is to help municipalities improve their climate actions and policies. Regarding food, **Felelős Gasztrohős** works on raising public awareness about the environmental effects of food consumption. They have developed a certification system that recognises green restaurants and created Gasztro Randi, a cooperation between local producers and restaurants to help purchase locally and seasonally. Similarly Agri Kulti works on the reconnection between cities and rural areas through food production and urban gastronomy. Their Nagymaros Farmers' Market created the first example of sustainable and local markets in Hungary. Working on the other side of the food supply chain is **Diverzitas Alapítvány**, which supports disadvantaged people creating job opportunities and training. Their Revitalist project is a mentor program aimed at training social farms in 47 countries, including Hungary. Many are the entrepreneurial initiatives pushing Pest County towards a more sustainable way of working in the agricultural sector. TrAEce, is a project to equip farmers with managerial, industrial and ecological skills, through agroecology. Also, the university program Agrovirtus and the NAK techlab, promote and finance agro-innovative start-ups and youth entrepreneurial activities. Budapest also hosts two UIA: E-Co-Housing, which aims at creating a regenerative social housing community following circular economy principles; CUP 4 Creativity, an online cultural community with the goal of drawing individuals suffering from digital isolation into real-life activities, related to mind and body health.



**Climate Strategy** <https://budapest.hu/Lapok/2021/a-fovarosi-onkormanyzat-40-kal-tervezi-csokkenteni-budapest-karo-sanyag-kibocsatasat-a-kovetkezo-evtizedben.aspx>

**Felelős Gasztrohős** <https://www.gasztrohos.hu/>

**Diverzitas Alapítvány** <https://diverzitasalapitvany.hu/>

## YOUTH



Munch is a start up made by young entrepreneurs with the aim to reduce food waste or surplus from restaurants and provide cheaper meals to customers. They partner with local restaurants and supermarkets providing them a platform to sell their leftovers with a discount. This helps prevent food waste and reduce emissions. They also have a social perspective as they cooperate with the Hungarian Food Bank giving the possibility to the customers of their platform to donate a meal to someone in need.



<https://munch.hu/>

## CLIMATE

Védegylet is an organization that works on preserving natural and cultural resources by strengthening the awareness and sense of responsibility around food and climate change. Since 2017 they have been working on the project BOND with the aim to raise the level of cooperation between organizations and networks in the agricultural sector to create a healthier, more productive and more harmonious smallholder sector in Europe in the long run. This is a project of food self-determination and food sovereignty and in particular to eradicate farmers' vulnerability due to climate change.



<http://xn--vdegylet-b1a.hu/elelmiszer-onrendelkezes/>



## FOOD



Szatyorbolt is a shopping community and social enterprise with a business component that offers an alternative to eco-conscious shopping. They work with the idea that consumers should not only care about taste but also about impact on their health, on the environment and care to create a link with food producers. They also organize awareness campaigns, workshops and producer meetings "in order to make sustainability not only a concept in our lives, but also the basis of our everyday actions".



<https://szatyorbolt.hu/rolunk>

## SOFIA

State Bulgaria

Population 1.242.568

GDP per capita 8.768,91 EUR

% of youth under 15 22,99%

CO<sub>2</sub> emissions  
per capita 5,85 mt



The city of Sofia in 2019 adopted a national action plan and a national climate change adaptation strategy. Following the signing of the Global Covenant of Mayors for Climate and Energy, Sofia Municipality developed in 2021 the Sustainable Energy and Climate Action Plan (2021-2030), which integrates climate change mitigation and adaptation policy. With respect to mitigation practices, thanks to the European UIA **INNOAIR** project (2021-2023) Sofia is taking ambitious steps to electrify and expand public transport options in order to reduce its high rate of air pollution. The project involves modernizing the transport network with new e-buses. This will enable route maps based on citizen demand to be offered via a mobile application, creating the most efficient route for each run and collecting as many passengers as possible. The action will be implemented together with a wide range of initiatives, including: low-emission zones, green corridors, congestion charging, and promoting active mobility.

As part of the adaptation measures, however, the city plans to investigate food security and the promotion of urban agriculture through a specialized study.

Urban agriculture is not a new topic for Sofia, in fact already in 2017 the NGO **Gorichka** launched an initiative to unite the enthusiasm of dozens of people and organizations advocating for the common interest of having a real network of shared vegetable gardens in the city.

The most active departments in the Sofia administration that design and promote practices and policies on food and climate issues are the Climate and Energy Department and the Youth Department.

## YOUTH



In 2021, on the initiative of the Sofia City Council's Directorate of Sports and Youth Activities, the Visionaries Academy was held to stimulate young people (15-29) in the city to identify socially significant problems at the local level and propose solutions. Thanks to an information campaign, training sessions, funding of a proposal and guaranteed support, an incubator of innovative ideas for the community was created. The Academy for Visionaries workshops were divided into 5 areas: Ecology and Urban Environment; Sports and Health; Arts, Culture, Education and Science; Civic and Health Education and Media Literacy; Support for Disadvantaged People, Groups at Risk, Animals at Risk.



<https://youthub.bg/2020/11/akademiya-za-vizioneri-april-maj-2021g-sofiya/>

## CLIMATE

Za Zemiata is an independent environmental non-governmental organization working to exclude the exploitation of people and natural resources. It works in cooperation with environmental organizations at national and international level. It aims to collect and disseminate information on environmental issues; to promote the formation of a culture of conservation and raise public awareness of the endangered state of the planet; and to organize direct actions and campaigns to protect and restore the environment.



<https://www.zazemiata.org/about/>



## FOOD



As part of the TRiFOCAL London (Transforming City Food for Life) project partnership, coordinated by Resource London, Sofia City Council launched an information campaign to promote the reduction of food waste by bringing together a wide range of groups to suggest actions to prevent and recycle food waste and to promote healthy and sustainable eating. In 2018, part of the campaign included a drawing competition for children and a media event consisting of a dinner with saved food, hosted by the Mayor of Sofia.



<https://www.sofia.bg/en/web/guest/trifocal>



**INNOAIR** <https://uia-initiative.eu/en/uia-cities/sofia>  
**Gorichka** <https://gorichka.bg/initsiativi/gradsko-zemedelie/>



## TURIN

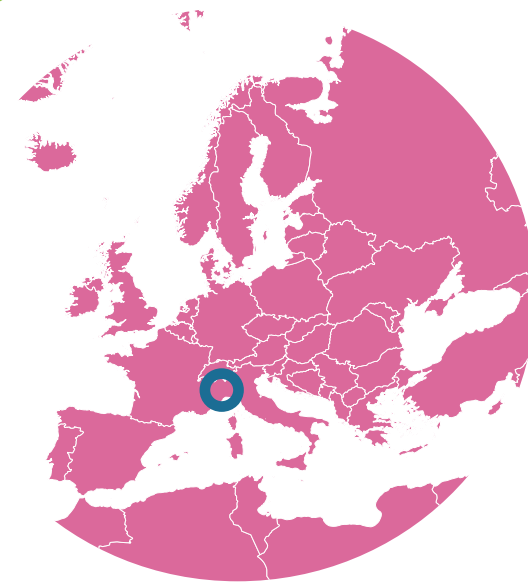
State Italy

Population 871.658

GDP per capita 27.591,37 EUR

% of youth under 15 20,38%

CO<sub>2</sub> emissions  
per capita 5,38 mt




To face the challenges of climate change and promote sustainable development, in 2020 Turin has adopted a **Climate Resilience Plan** which analyses Turin's climate vulnerabilities and proposes climate change adaptation and mitigation actions. The plan reaffirms the commitments made under the Covenant of Mayors in 2019 to reduce CO<sub>2</sub> emissions by 40% by 2030 and provides for regular monitoring of its results. Also in 2019, the city published the **Torino 2030 Action Plan**, structured around four key principles: participation, dynamism, liveability and solidarity. One of the projects mentioned in the plan is Torino City of Food, which aims to enhance the richness of gastronomic culture and agri-food heritage, but also to underline the connection between food and climate in the territory.

Every year, Turin hosts the international Terra Madre Salone del Gusto event. The fact that it is also a city highly committed to social action on food issues is demonstrated by the extensive network of activists who defend access to food for all, fight food waste (**RePopp** winner of the MUFPP award in 2018, is one of the most famous examples) and promote urban horticulture initiatives (such as **Orti Generali**).

Turin is one of the few European cities to have introduced the right to adequate food in its Charter.

The city signed the MUFPP in 2015, and has been working for many years on the development of a local food policy with the research support of the **Food Atlas** (a stable observatory - made up of local universities - that monitors the flows and dynamics of the food system). The city is currently involved in the European **FUSILLI** project, which - together with other EU cities - aims to overcome the obstacles to the development and implementation of integrated and systemic food policies to enable the transition to sustainable food systems in urban, peri-urban and rural areas.

Finally, the Department of Environmental Sustainability and Resilience Policies, with the coordination of the Environment Area and the scientific support of the University of Turin, has promoted the drafting of the **Food Metrics Report 2020** in order to know the state of the art of the food system and monitor the progress of ongoing projects and initiatives.

-  **Climate Resilience Plan** [http://www.comune.torino.it/torinosostenibile/documenti/200727\\_Piano\\_Resilienza\\_Climatica\\_allegati.pdf](http://www.comune.torino.it/torinosostenibile/documenti/200727_Piano_Resilienza_Climatica_allegati.pdf)
- Torino 2030 Action Plan** [https://www.torinovivibile.it/wp-content/uploads/2021/03/TO2030\\_COMPLETO\\_web.pdf](https://www.torinovivibile.it/wp-content/uploads/2021/03/TO2030_COMPLETO_web.pdf)
- RePopp** <https://www.torinovivibile.it/progetto-repopp-allinterno-del-mercato-centrale-torino-apre-una-bottega-solidale/>
- Orti Generali** <https://www.ortigenerali.it/>
- Food Atlas** <https://atlantedelcibo.it/>
- FUSILLI** <https://fusilli-project.eu/>
- Food Metrics Report 2020** <https://www.torinovivibile.it/wp-content/uploads/2021/07/Food-Metrics-Report.pdf>

## YOUTH



Eufemia is an association of young people who for over ten years have been working for social inclusion through active citizenship actions under the banner of intercultural dialogue. For the development of a community attentive to environmental and food sustainability, Eufemia conceives, designs and coordinates local and international projects. In particular, the Youth work project provides expert support and accompaniment in international mobility projects. The Eufemia team in fact has a strong experience in the "Youth in Action" and Erasmus+ programs, in the role of Coordinating, Host and Supporting Organisation. They supported the creation of the international network Europiamo to monitor European mobility opportunities and to foster the creation of a community of young people able to act on the issues of their future.



<https://www.eufemia.eu/youth-work/>

## CLIMATE

CONEXUS (EU Horizon2020 program, 2020-2024) is a research and innovation project whose aim is to mitigate climate change by experimenting with natural solutions and developing green infrastructure. Here a support and involvement community, called Valdocco Life Lab, has been set up to accompany the implementation of the Valdocco Vivibile pilot project. The main objective of the Turin Life Lab is to co-construct an awareness-raising, dissemination and communication program on climate change adaptation issues together with the district's secondary and high schools.



<https://www.torinovivibile.it/aree-tematiche/progetto-conexus/>



## FOOD



Food Pride is a project by Eufemia that started in 2012 and has grown to become a national example for the dissemination of good practices in food sustainability. In addition to collecting surplus food in local shops and markets and redistributing it by bicycle to people living in marginal conditions, Food Pride volunteers organize information and awareness-raising activities; anti-waste cooking workshops and convivial moments to share stories, integrate experiences and create community.



<https://www.eufemia.eu/food-pride/>

## WARSAW

State Poland

Population 1.792.692

GDP per capita 13.677,27 EUR

% of youth under 15 23,04%

CO<sub>2</sub> emissions  
per capita 8,24 mt



Warsaw is the first Polish city that has a Climate Action Plan and joined the **Green Cities Network**. This cooperation helped finance a new underground system essential for meeting the needs of the growing population with green solutions, and many more projects. The city hosts the Warsaw Panel on Climate, the first civic panel on climate change in Poland, that sources ideas from the citizens and develops climate policy recommendations. The idea of the Panel emerged from meetings between the Mayor of Warsaw and the Youth Climate Strike, a group of activists that became more and more relevant during the past years. Besides Food Wave, The Economic Development Department of Warsaw is currently involved in Food Trails as well, demonstrating a great interest in the topic of food and climate. Together with this department, the Air and Climate Policy Department and the Center for Public Communication are involved in food-related activities. For instance, the latter started the educational school campaign “I know what I eat” and a waste prevention pilot on city marketplaces, besides producing a booklet on food waste prevention and reduction practices available online. The municipality often works in collaboration with social groups of the city on these themes. For example, the social garden program **Bujna Warszawa** was created by the Warsaw’s Greenery Authority as a way to enable the expansion of community gardens in the city. The program helped develop the Council of Community Gardens which today serves as an informal representative body of the gardeners. Other social networks are the Agro-Perma-Lab Foundation, a grassroots organization which develops training on agroecology, permaculture and food sovereignty for activists, educators and the general public. Their great research brought them the opportunity to work with FAO and Via Campesina on the project TAPE “Tool for Agroecology Performance Evaluation”, which aims at providing data and evidence on how agroecology contributes to sustainable development.



**Green Cities Network** <https://www.ebrdgreencities.com/news-events-and-publications/meet-the-green-vision-of-warsaw-through-the-citys-new-information-platform/>  
**Bujna Warszawa** <https://www.facebook.com/bujnawarszawa/>

## YOUTH



As in many other European cities, the Fridays for Future movement has been striking for a better planet in the past years. Also in Poland, specifically in Warsaw this youth movement has been engaging with the global activities bringing to the table important challenges, questions, and solutions for the government. However, in Warsaw the movement has been heard by the city’s government and has had the possibility of encountering the mayor. This meeting inspired the creation of the Warsaw Climate Panel in which also this youth movement is now engaged.



<https://www.themayor.eu/en/a/view/warsaw-convenes-a-popular-assembly-on-its-energy-future-5888>

## CLIMATE

Koalicja Żywa Ziemia aka the Living Earth Coalition aims to advocate for better agricultural and food policy at local, national and EU level. This coalition gathers many local and national partners with the aim to produce campaigns and knowledge for policymaking and citizens. They have a strong focus on improving the food system, from production to consumption, in order to prevent climate change and to mitigate its externalities.



<https://koalicjazywaziemia.pl/misja/>



## FOOD



Foodsharing Warsaw is a social network that established food sharing spaces, overseen by volunteers, spread all over the city. The spaces have refrigerators and cabinets to store the food, and everyone can either share or take some food for free. On their FB pages it is possible to find all the locations, strategically located near universities, dormitories, shops and more. This project aims at creating a community that avoids food waste creating a sense of responsibility and empathy as many customers - but not everyone - are indigent people.



<https://www.facebook.com/FoodsharingWarszawa>



## ZAGREB

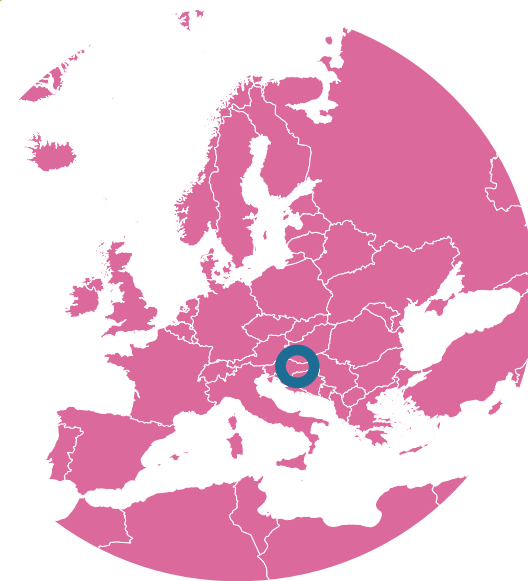
State Croatia

Population 807.254

GDP per capita 12.296,72 EUR

% of youth under 15 22,65%

CO<sub>2</sub> emissions  
per capita 4,06 mt



By accepting the Covenant of Mayors in 2008, the City of Zagreb confirmed its commitment to energy-efficient urban development. The **Sustainable Energy and Climate Action Plan** (SECAP), adopted in 2019, identifies and provides clear guidelines for the implementation of energy efficiency and climate change adaptation and mitigation projects, building on environmental protection, the use of renewable energy sources and sustainable construction.

In the same year Zagreb also adopted the Smart City Framework Strategy that determines the strategic areas and sets the objectives and future development focusing on: 1. Digital infrastructure; 2. Efficient, transparent and smart city administration; 3. Smart management of energy and utilities; 4. Education; 5. Economy; 6. Sustainable urban mobility.

The city hosts an annual Energy Week to disseminate models and methods for achieving significant energy and financial savings, while reducing greenhouse gas emissions and harmful impacts on the environment.

The city of Zagreb is also very committed to safeguarding its young citizens. In fact, the municipality established the Youth Council as an advisory body back in 2014. In addition, Zagreb has a youth program that includes several areas: active and political participation, lifelong education, skills development, employment and entrepreneurship, youth housing, protection of rights, security, health and others. Funding for the implementation of this program is provided by the budget of the City of Zagreb, in particular by the Office of Sport and Youth.

The most active departments in City Hall, which promote practices and policies on food and climate issues, are: City Office for Economy, Energy and Environmental Protection and City Office for Agriculture and Forestry. Together with the latter, Zagreb has encouraged traditional Croatian producers and farms through the **Plavi ceker** project. This, thanks to a certification mark, guarantees both the origin and high quality standards of the local product chain in order to protect and encourage creativity, innovation and added value in the heritage of rural areas.

## YOUTH



The Green Network of Activist Groups (ZMAG) is an association that works on sustainable development education, agroecology and permaculture, bringing together organic gardeners, professionals in applied technology and environmental construction, permaculture designers, researchers of equitable social models of organization and equal interpersonal relations and environmental activists. For 20 years ZMAG has been involved in activities in the fields of organic food production and seed conservation, sustainable waste management, learning to use renewable energy sources, building ecological and natural houses, supporting and creating models of good economics and solidarity economy.



<https://www.zmag.hr/hr/cime-se-bavimo/agroekologija.html>

## CLIMATE

The “Save Energy!” initiative explains to citizens in a simple and interesting way how they can save energy at home with minimal changes in their habits. It originates from the European project LABEL2020 with the support of the Fund for Environmental Protection and Energy Efficiency and the Ministry of Economy and Sustainable Development of the Republic of Croatia. Meanwhile, the Office for Economy, Energy and Environmental Protection of the City of Zagreb and other interested stakeholders have joined as partners, recognising the need to convey information to citizens to help them choose and use household appliances with the least amount of energy and money.



<https://ustedienergiju.hr/>



## FOOD



The city of Zagreb prepared city-owned land on 10 locations for urban gardening, called “city gardens” for citizens who do not own land in Zagreb. The project “City Gardens” aka Gradski vrtovi, is a positive example of sustainable use of urban land and improving the quality of life of citizens in social, economic and environmental terms. City gardens provide access to healthy food and improve the household budget of citizens, contribute to preserving a healthier environment, preserving biodiversity, environmental awareness of citizens, connecting with nature, healthy leisure and promoting a healthy lifestyle and developing partnerships between the City of Zagreb and citizens.



<https://una.city/nbs/zagreb/urban-gardens-zagreb>



# COLLECTION OF PRACTICES



This section collects practices around five main topics: urban food policies, monitoring the food system, youth climate-food activities during COVID-19, youth engagement and food consumption behaviors and lifestyles. These topics have been selected as they are pivotal when talking about climate change and sustainable transition in the food system. The initiatives analyzed in this section have been gathered among the 18 cities participating in the project via survey and desk-based in-depth analysis as virtuous examples from local contexts, with the aim to show different ways in which the same theme is debated.





## URBAN FOOD POLICIES

Urban food policies vary according to the country and context they are implemented in. The term refers to all the policies that concern who eats what, when, how and with what consequences. They are often called **local food policies** rather than urban, as the **food system doesn't know rural-urban borders**. They can be also called place-based food policies as they aim to talk to a specific territory and act for the territory, its people and environment.

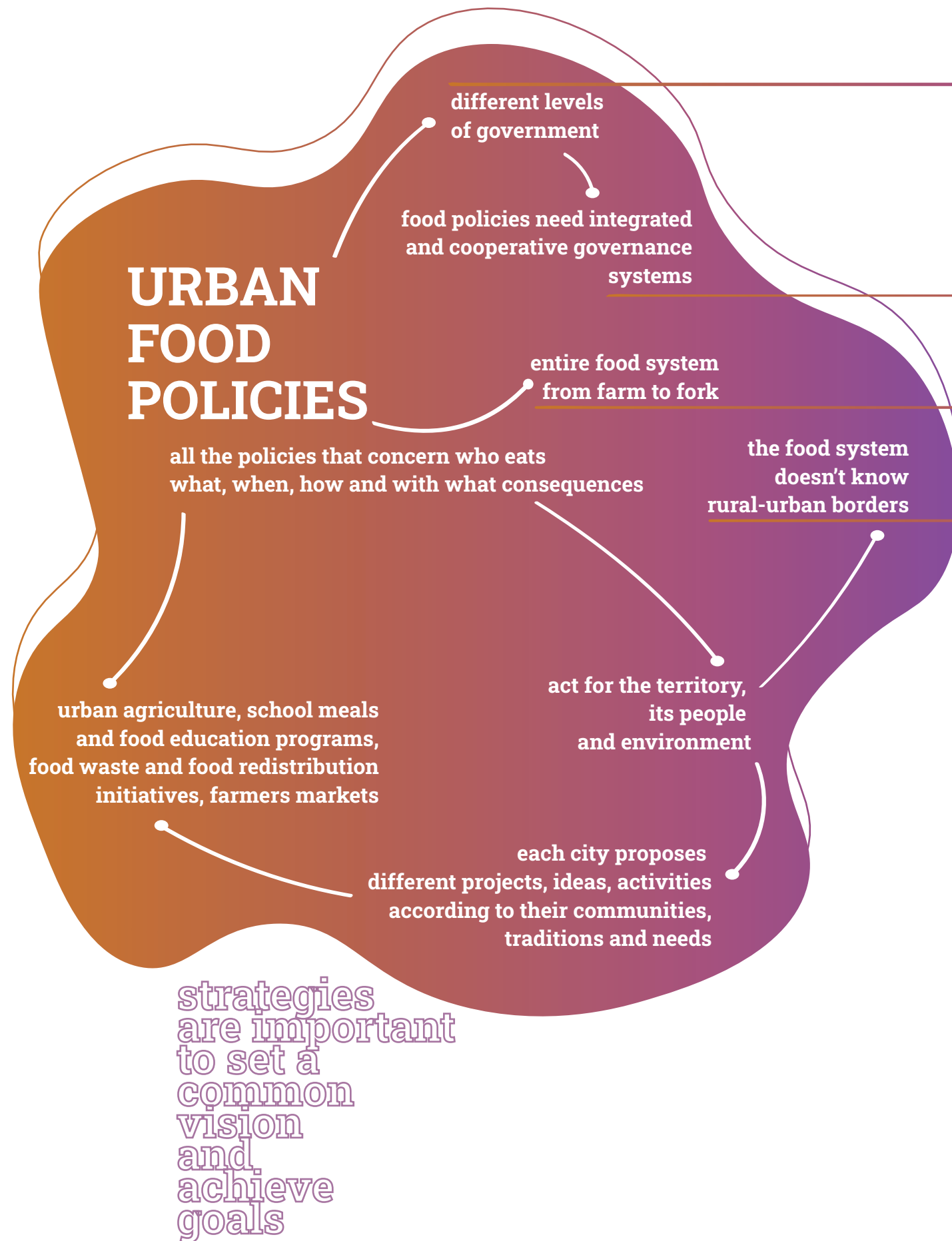
These types of policies have been developing all around the world at the city level as it has been largely recognized that cities are the government level that is most in contact with citizens and their way of consumption. They have the aim to work on the **entire food system from farm to fork** trying to tackle the challenges of sustainability and climate change related issues, starting from cities, places where society, economy and the environment are embedded.

Some of the main activities related to a food policy that can be found in a city are: **urban agriculture, school meals and food education programs, food waste and food redistribution initiatives, farmers markets**. But each city proposes different projects, ideas, activities according to their communities, traditions and needs. Every city has an entry point for which to approach the topic of food into their urban agenda.

**Not all cities need a strategy to work on food policy activities, but strategies are important to set a common vision, gather actors under an umbrella policy and work together towards the same goals.** Strategies are statements from the institution on their will to work in a specific direction which is very important especially considering the thousands of local projects that most of the time need validation and reinforcement. Then, a strategy provides the legitimacy to integrate sector actions with each other, towards a more integrated and systemic action. For this reason, strategies are considered one of the main ingredients to establish an effective and comprehensive food policy.

Although many food policy strategies around Europe share similar goals, they differ according to the city's needs and context. Madrid, for example, has a Health and Sustainable Food Strategy, since 2018, developed after the signing of the Milan Urban Food Policy Pact; Bruges created their Bruggesmaakt in the context of an European project; Almere works on food policy goals through their sustainability agenda and thanks to the cooperation with Amsterdam Metropolitan agenda, and with the national and international policies.

Food policies can indeed have **different levels of government**, they don't have to be solely at city level. Indeed, multilevel governance is another important milestone for cities' food policy. Hence, **integrated policies, such as food policies, need integrated and cooperative governance systems** that collaborate and set coherent goals with the actors of the territory and the different levels of government. In order to achieve this collaboration, cities can create an ad hoc governmental or non-governmental organization that works on food policy - which is the case of Milan, London and Bruges, for example - or they can be included in pre-existing departments of the city, such as the sustainability department or the health department, as the case of Murcia, Sofia and many others.



### MILAN - CITY-WORLD INTEGRATION

The city of Milan founded the Milan Urban Food Policy Pact which has been proven to be a great opportunity to create a formal community around the topic of food and food policies between the local level and the European and international levels

#### Food Hub

<https://foodpolitymilano.org/hub-quartiere-spreco-alimentare/>

#### MUFPP

<https://www.milanurbanfoodpolicyact.org/regional-fora-page/>

### BRUGES - WHERE PARTICIPATION WORKS

Bruges created the Bruges Food Lab, a network that connects and strengthens various actors working on sustainable food

#### Bruges Food Lab

<https://bruggesmaakt.brugge.be/food-lab>

### LONDON - TOWARDS POLICY COHERENCE

The London Food Strategy is not the only way in which food is included in the London urban agenda. The topic of food has been integrated across the full range of Mayoral strategies.

#### London Food Strategy

[https://www.london.gov.uk/sites/default/files/final\\_london\\_food\\_strategy.pdf](https://www.london.gov.uk/sites/default/files/final_london_food_strategy.pdf)

#### London Health Inequalities Strategy

<https://www.london.gov.uk/what-we-do/health/health-inequalities/london-health-inequalities-strategy>

#### London Environment Strategy

<https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>

### BRUXELLES-MOLENBEEK - CITY-REGION PERSPECTIVE

The Good Food Strategy of Bruxelles, a food policy that aims to "produce better and eat well", is particularly interesting because it works on the city-region level and not solely for the city of Bruxelles.

#### Good Food Strategy

[https://document.environnement.brussels/opac\\_css/elecfile/BRO\\_GoodFood\\_Strategy\\_ENGL.pdf](https://document.environnement.brussels/opac_css/elecfile/BRO_GoodFood_Strategy_ENGL.pdf)

#### Good Food Council

<https://innovationinpolitics.eu/showroom/project/good-food-strategy-towards-a-sustainable-food-system/>



## BRUGES

### where participation works

In 2015, the city of Bruges created, with the push of the MUFPP and the EU project “Food Smart Cities for development”, the **Bruges Food Lab**, “a network that connects and strengthens various actors working on sustainable food”. Among these actors, in the steering committee, representatives from the Region, the local climate and environment department, civil society and an organic local farmer sit. Their first task, in 2015, was to write a sustainable food strategy for the city. This participative form of governance has now more than 40 members who work on creating initiative on the Food Strategy itself. Besides driving initiatives, they have the task to monitor the implementation of the strategy. They have a coordinator and a steering committee in which members from the government are also included. What is particularly interesting in this project is that it is all about participation and continued evolution: from writing the strategy to monitoring its implementation. Although the strategy is held by the city department of climate and environment, the Bruges Food Lab is a fundamental part of the project. The strategy, *Bruggesmaakt*, not only supports projects of the Municipality but also civil society initiatives and activities from the territory. Today some of the projects and policies they have been implementing are known to be best practices all around the world, like for instance, the food waste reduction in health-care facilities which won the special mention prize for food waste at the Milan Pact Award in 2017.

## LONDON

### towards policy coherence

The **London Food Strategy** has been developed by the Greater London Authority (GLA) on behalf of the Mayor of London and in partnership with the London Food Board, an advisory group of 17 members. Before publishing the strategy, the document had gone through a full consultation where almost 150 organizations and thousands of members of the public responded. The London Food Strategy divides the actions and goals in two main categories: what the Mayor will do to deliver change; what Londoners can do to improve the food system. However, the London Food Strategy is not the only way in which food is included in the London urban agenda. The topic of food has been integrated across the full range of Mayoral strategies: the London Plan, the **London Health Inequalities Strategy**, the Mayor’s Economic Development Strategy, the **London Environment Strategy**, the Mayor’s Transport Strategy, Culture for All Londoners Strategy, the Mayor’s Skills for Londoners Strategy, the Mayor’s Vision for a Diverse and Inclusive City, a Tourism Vision for London, and a Vision for London as a 24-Hour City. This measure helps improve full coherence among policies which is something that should be a priority for all integrated policies such as food ones.

## BRUXELLES-MOLENBEEK

### city-region perspective

The **Good Food Strategy** of Bruxelles, a food policy that aims to “produce better and eat well”, is particularly interesting because it works on the city-region level and not solely for the city of Bruxelles. Indeed, Brussels environment, which holds the strategy within its objectives and goals, is the metropolitan area department that helps the implementation of the strategy. Besides the department, the region hosts a **Good Food Council** which has 28 members, representing all the different actors within the food sector (agro-ecology organizations, farmers, restaurants, the federation of supermarkets, environmental education organizations, universities, etc.). This city-region dimension of the strategy gives the possibility to satellite cities such as Molenbeek to have a strong strategy to work with and to adapt to local needs. In the municipality of Molenbeek the strategy helped support local organizations to develop projects of social-economic urban farming, empowerment for food auto-production, educational action for sustainable food with NGOs, schools, and local stakeholders. For instance, Molenbeek is part of the Good Food networks of restaurants, shops and canteens, which give visibility to the entire region to their good practices as well.

## MILAN

### city-world integration

Milan started its food policy also thanks to the push of EXPO 2015, writing a comprehensive food strategy and creating an ad hoc office in the Municipality of Milan which has been showing its great work by implementing actions and practices all around the city and on different issues. One of their most important projects concerns the **Food Hubs** around the city of Milan that redistribute food surplus with five logistics centers in strategic areas of the city. This project won the award Earthshot Prize 2021 promoted by the Royal Foundation of Prince William. Besides this great work, the city of Milan, within the International Relations Department, has been coordinating the **Milan Urban Food Policy Pact** which has been proven to be an important network for many cities all over the world also with ongoing regionalization processes in Europe with thematic fora and alliances with existing EU platforms, networks and associations (e.g. Eurocities) and also in Africa, Eurasia & South West Asia and Latin America. The signature of this pact has been the starting point for many cities to initiate their local food policy. It has also been a great opportunity for cities to share their best practices, be awarded or known at an international level, to create communities on common practices or working groups on specific issues. One example is the School Meals Coalition which is a coalition of governments, UN agencies, intergovernmental organizations, civil society, the private sector and research institutions with the aim “to drive actions that can urgently re-establish, improve and scale-up school meals programs in low, lower middle, upper middle and high income countries around the world”. Along with this coalition, the MUFPP is a great opportunity to create a formal community around the topic of food and food policies between the local level and the European and international levels.

## MONITORING THE URBAN SYSTEM: COLLECTION AND DISSEMINATION OF DATA

Urban systems are complex and often local information is not easy to find. Collecting data and carrying out monitoring is important **in order to understand**, study and consequently implement urban policies tailored to the local area. However, it is equally important to communicate the data and information collected, as it helps to **produce shared democratic knowledge** and to stimulate discussion, questioning, dialogue and cultural debate. Especially regarding innovative policies, such as integrated food policies, it seems paramount to have all available data on how the system works on a local scale.

**Collecting data means conducting fact-finding activities** in a context to gather information. While **monitoring means to systematically observe data and parameters** to assess the evolution of a complex system such as the urban one. Both aim to gather information and provide a real picture of the observed context. Data collection and monitoring **make it possible to assess the various elements characterizing territorial contexts** with a view to targeted interventions or policies responding to concrete needs. There is no unified system for cities, with national, European or international guidelines for defining and reporting system performance or sustainability data. In fact, there is no entity at European level that compares systems or systematic collection of the same kind of data for topics such as food, climate change and environmental information.

At the same time, **cities use different methods and tools - sometimes experimental - which is why it is hard to compare the cities' data on such issues**. One interesting project that attempts to create a uniformed way of monitoring one part of the food system is the **Cool Food Pledge (CFP)** initiative. The idea is to help food providers to reduce the climate impact of the food served by following the common target of reducing 25% of their greenhouse gas emissions before 2030. Their impact is monitored by the World Resources Institute using the following metrics through a calculator that can also be downloaded from their website:

- Food purchases by food type (boneless equivalent, kilograms or pounds)
- Food-related GHG emissions from agricultural supply chains (tonnes of carbon dioxide equivalent [CO<sub>2</sub>e])
- Food-related land use (hectares)
- Food-related carbon opportunity costs (tonnes of CO<sub>2</sub>e)
- Normalized metrics (several possible units of measure)

Among the members of this initiative, there are private businesses, health facilities, universities and starting from the example of Milan, also municipalities. Thanks to the monitoring of the food providers, the CFP helps better understand the state of art of the emissions and better customize solutions to achieve the environmental targets.

Hence, **methods and tools may differ depending on an infinite number of variables**.

All are useful for building knowledge that can be passed on to citizens.

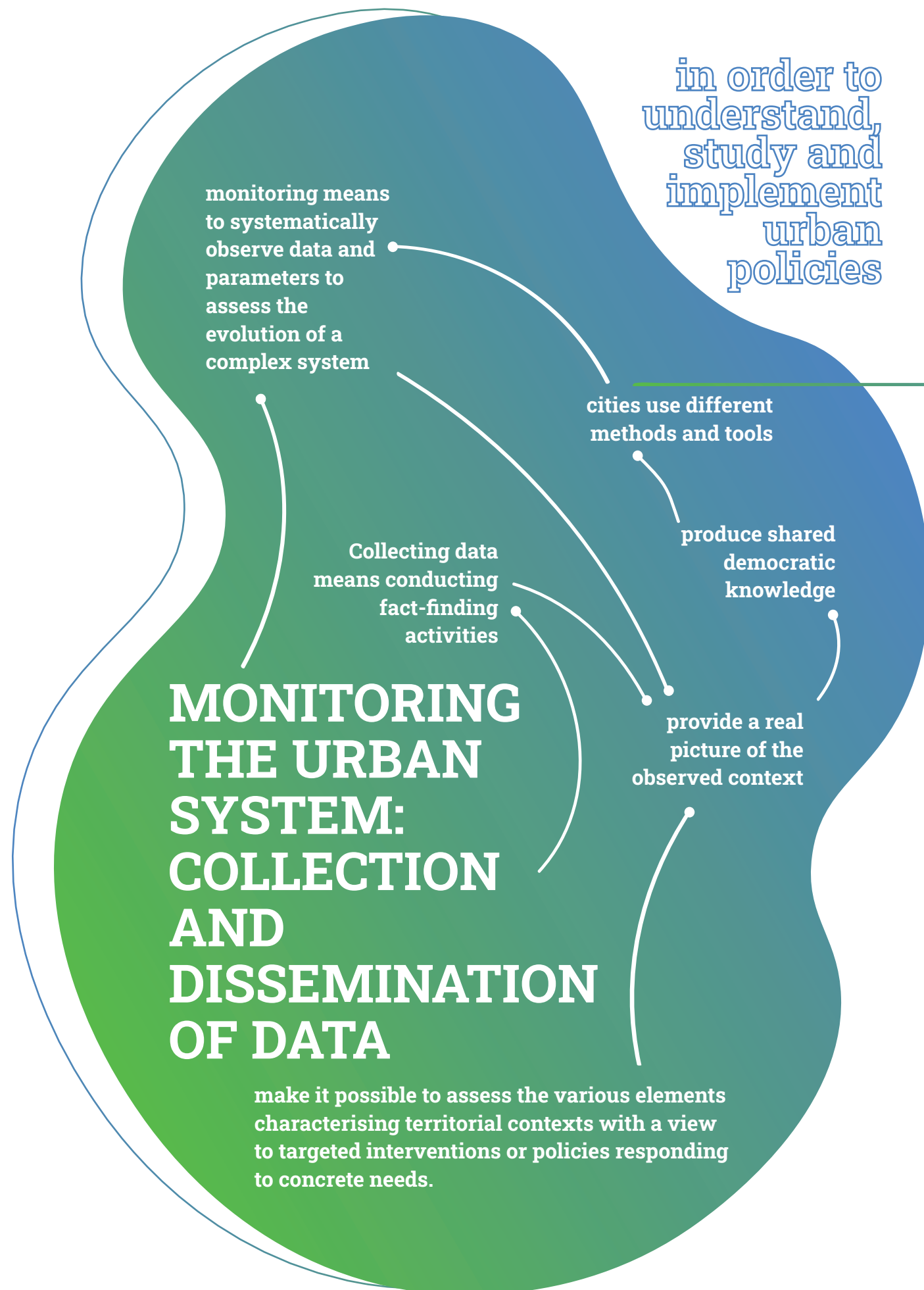
Cities address the issue of how to collect, represent and communicate data and information in a variety of ways in addition to reporting. Below are some examples of methods found in the observed cities:

- They publish data through **websites with interactive tools**, as Almere, Malmö, Murcia, London;
- They draw maps to represent reality in a **geoportal website**, such as Lisbon, Milan and Zagreb;
- Another thing that some cities choose to do is to rely on **external platforms** to observe data, as for example the city of Brasov uses URADmonitor to monitor environmental data or Lisbon with LisboaZero to track food waste;
- There are cities that combine data collection and monitoring with **strategy** signatures. This is the case of Molenbeek, whose strategy provides a clear vision for the future of the city, using a wealth of data to ensure accurate and concrete references for citizens.
- Bruges behaves in a similar way to the ones mentioned above, with the difference that it concentrates exclusively on the environment sector, combining the representation of data with the telling of local practices;
- Cities could adopt **international indicators** or develop their new ones;
- Some cities begin their journey towards integrated policies by **signing reports/ strategies** or European **institutional networks** in support of the 2030 Agenda's development goals, declaring policy intentions and/or pragmatic courses of action;
- Other cities publish strategic climate change adaptation and **mitigation or development plans**, as well as reports on specific issues, such as school canteen sustainability;
- Others take an **operational approach** and act mainly through European projects, often in partnership with other cities. As Sofia did about air quality (INNOAIR) and food waste (TRIFOCAL). Or as Maribor did working on circular economy (Urban SOIL 4 FOOD, The Water Cycle) and mobility (TRAMOB) too.

All these contexts are great opportunities for cities to begin their work of collecting data and monitoring their urban systems.







## INTERACTIVE ONLINE TOOLS

**Almere**  
<https://almere.incijfers.nl/dashboard/>

**Malmö**  
<https://malmo.miljobarometern.se/>

**Murcia**  
<https://murciaencifras.es/utilidades>

**London**  
<https://data.london.gov.uk/>

## GEOPORTAL WEBSITE

**Lisbon**  
<https://geodados-cml.hub.arcgis.com/>

**Milan**  
<https://geoportale.comune.milano.it/sit/>

**Zagreb**  
<https://geoportal.zagreb.hr/>

## EXTERNAL PLATFORMS

**Brasov**  
<https://uradmonitor.com/tools/users/brasov/>

**Lisbon**  
<https://www.lisboazero.app/>

## STRATEGIES

**Molenbeek**  
<http://www.molenbeek.irisnet.be/fr/je-vis/developpement-urbain/molenbeek-une-vision-pour-une-ville-plurielle>

## INTERNATIONAL INDICATORS; NATIONAL/LOCAL INDICATORS; INSTITUTIONAL NETWORKS; EUROPEAN PROJECTS





## YOUTH CLIMATE-FOOD ACTIVISM AND PRAXIS DURING THE COVID-19

The COVID-19 pandemic not only caused a deep economic and social crisis, in the most fragile contexts it provoked a real **food emergency**. Social restrictions, the closure of economic activities and the adoption of practices to cope with the emergency situation severely impacted on the lives of those who were already experiencing economic difficulties or social isolation. Especially in the first months, it was therefore **necessary to find quick and effective solutions to meet the need to ensure access to healthy food for all**. Solutions came from civil society and territorial social actors, the city institutions, and especially from the collaboration between both worlds. In this context, many young people had to put up with great sacrifices: a marked reduction in socializing, distance learning, not attending sports and leisure activities, but also the interruption of apprenticeships and the collapse of job opportunities. Nevertheless, **through practice rather than rhetoric, many young people have become witnesses of sustainability, social inclusion and health**.

Dozens of groups of young people have taken action on their own to dedicate themselves in a spontaneous and very practical way to defending the right to food. They did this by distributing shopping parcels or ready-to-eat meals; by collecting donations and food surpluses (from supermarkets, markets, small traders, farmers or households) to collect food stocks for redistribution to those who needed it most. In doing so, they have defended the value of ecology and significantly increased the quality of the territory. Youth - through climate-food activism and praxis - has become a symbol of care, protection, presence and community. Moreover the pandemic has highlighted how **food can become a social vector of solidarity between health and respect for the environment**.

**The pandemic had also changed the way young people engage with activism**, which, thanks to a skilful use of technology and media, is becoming increasingly virtual, but no less real and effective.

# YOUTH CLIMATE-FOOD ACTIVISM AND PRAXIS DURING THE COVID-19

Young people have taken action on their own to dedicate themselves in defending the right to food.

the COVID-19 pandemic in the most fragile contexts provoked a real food emergency

changed engage with activism

necessary to find quick and effective solutions to meet the need to ensure access to healthy food for all

solutions came from

civil society and territorial social actors

city institutions

collaboration between both worlds

food can become a social vector of solidarity

## ARTERIA ONLUS - TURIN

Arteria Onlus operates with the project Activists for the right to food in the multicultural neighbourhoods of Porta Palazzo and Aurora in Turin, highlighting the protagonism of young people during COVID-19.



**Activists for the right to food**

<https://2020.terramadresalonedelgusto.com/evento/food-wave-giovan-attivisti-del-diritto-al-cibo/?fbclid=IwAR0gqKm3Oxuj7cA6FkKX2C-ZKLTsqNfbLI-hNLKhuD3kl3UNKTzYyl3TYtE>

## NON CI RESTA CHE MANGIARE

Non ci resta che mangiare is a podcast project by ActionAid activists of Milan, with the aim to offer company during lockdown with talks on the environmental, social and economic impacts of the agri-food system.



**Non ci resta che mangiare**

[https://www.spreaker.com/show/non-ci-resta-che-mangiare\\_1](https://www.spreaker.com/show/non-ci-resta-che-mangiare_1)

## TORINO SOLIDALE

TORINO SOLIDALE is an initiative set up by the municipality as part of the social inclusion plan with the aim to create a territorial network of non-profit organizations and citizens, to support people in personal, social and economic fragility.



**Torino solidale**

<https://servizi.comune.torino.it/inclusione/torino-solidale/>

## MILANO AIUTA

The voluntary emergency brigades are part of the wider Milanese municipal service Milano Aiuta, an initiative awarded by the local recognition "Ambrogino d'oro".



**Milano aiuta**

<https://www.comune.milano.it/web/milanoaiuta>



## TERRITORIAL NETWORKS AS SOCIAL WELFARE: Turin and Milan

**Arteria Onlus** operates with the project Activists for the right to food in the multicultural neighborhoods of Porta Palazzo and Aurora in Turin. The aim of the project is to highlight the protagonism of young people during the COVID-19 pandemic by telling the stories, and above all the actions, of the volunteers who worked (and in part are still working) in the neighborhoods of reference: girls and boys with different backgrounds and of all nationalities. This story is promoted through the production of videos that give voice to the young protagonists who - thanks to their voluntary intervention in actions to reduce waste and distribute food parcels to the needy in their communities - preserve and guarantee the right of access to food for all. This story is intended to validate their skills (young people who know many languages and the peculiarities of the context and social dynamics of the community of intervention) and the values of solidarity, sharing and protection of social communities.

**TORINO SOLIDALE** is an initiative set up by the municipality as part of the social inclusion plan. It was created as a territorial network involving non-profit organizations and citizens, to support people in personal, social and economic fragility. Starting from the first lockdown phase, it organized a supply system of foodstuffs and basic necessities, ensuring their distribution to people's homes and through outlets throughout the municipality. Central elements of this practice are both proximity to need and territorial distribution to ensure the widest possible support. In fact the action is based on thirteen intermediate hubs, called "Snodi", and distributed throughout the municipality, which ensure the procurement, storage and free distribution of goods both to non-profit organizations and directly to individuals and families in difficult situations. In the months that followed, the network was further developed, acquiring new partners, resources, project proposals and territorial infrastructures, in an attempt to respond not only to the need for food, but also to the need for reception, assistance and support. All this is done with the help of civic volunteers, mostly young people.

**MILANO AIUTA:** The voluntary emergency brigades - Brigade volontarie per l'emergenza - are part of the wider Milanese municipal service Milano Aiuta, an initiative awarded by the local recognition "Ambrogino d'oro". Inside this project, the municipality has called together volunteers, companies and the private sector to activate a network to support citizens during the emergency created by the Coronavirus. The service started on March 13, 2020, during the first national lockdown, and replicated at the end of October 2020. The first phase, which ended in June, involved 320 volunteers from EMERGENCY and the Voluntary Emergency Brigades who moved 60 tons of food and basic necessities and made 6,370 home shopping deliveries helping over 3,000 families, with an average of over 100 deliveries per day.

## VIRTUAL ENGAGEMENT DURING LOCKDOWN: Milan

**Non ci resta che mangiare** is a podcast project by ActionAid activists of Milan, promoted by Radio Kivuli on the Spreker platform. During the lockdown they created it with the aim of keeping listeners company by offering a serious reflection, albeit in an entertaining way, on the environmental, social and economic impacts of the agri-food system. The project stems from the observation that during the first lockout, while a large part of the Italian population began to devote themselves to cooking as a creative outlet, another part of the population had nothing left to eat.





## YOUTH ENGAGEMENT

Talking about youth engagement doesn't mean solely to show what young groups of people are doing in a city. It's rather about showing how young people are involved in responsible, challenging actions to create positive social change and the results that originate from that. This means involving youth in planning and in making decisions that affect themselves and others which normally happens through youth-adult partnerships that are structured so that both groups contribute, teach, and learn from each other. Youth engagement offers policy makers and community leaders the expertise and partnership of young people and to youth groups to represent their interests. It is a matter of **creating societies that fit youth needs but also set the base for active citizenship**. In particular, in the past years, **youth activism** has played an important role in putting climate change and sustainability issues to the political table.

Hence, there are many ways and tools to develop youth engagement: from youth councils to youth advisory boards, from **school teaching and learning activities** to youth activism. Many of the partner cities host youth councils, have youth plans, provide youth competition or entrepreneurial leadership programs.

## DEMOCRATIC LAB

Malmö hosts Tillsammans i Forening (TiF), an organization and meeting place that works to strengthen children and youth's involvement in society by organizing activities and initiatives. The project started in 2010 as a way to increase the participation of young women in Rosengård in Malmö. The city also hosts the Malmö Youth Council which works by the ideas that "children and young people have the right to be heard on issues that concern them. It is stated in the UN Convention on the Rights of the Child, which is now Swedish law."

In early 2019, people from various non-profit associations around Malmö gathered to discuss approaches to including young people in our democratic society and decision-making processes. They created a Democratic Lab where the Malmö Youth Council and TiF worked together to develop new initiatives on youth engagement. Thirty five people participated, besides young people there were adults from different administrations in the city of Malmö, Region Skåne, associations and business, in a three-month period, bringing together needs, challenges and solutions. Today, the Lab is working to implement some of the most brilliant ideas. This model of co-creation will be developed also in other Swedish cities such as Höör and Östra Göinge.

## MULTIFACETED STRATEGY

In Manchester, 40% of the population is under 35 and the city found different ways to hear young people's voices. In the Manchester Climate Change Partnership sits also the

Manchester Climate Change Youth Board composed by nine members from 13 to 28 years old. In the past year, the Youth Board representatives have chaired the Youth Climate Action Summit, spoken to politicians in the Town Hall about the declaration of a Climate Emergency, and have campaigned and successfully secured funding for Manchester's first full-time Youth Climate Action Champion. Besides this board where participation is specific on Climate Change, Manchester also has a Youth Council, composed of members from 11 to 18 years old, which works in direct contact with the Manchester City Council to ensure the views of young people are listened to and acted upon. They often work with Young Manchester which is a charity working as a funder and fundraiser for youth programs around the city. The first fund they were able to manage was the Youth and Play 18-20 fund which is today the largest fund on youth projects with 4.5 million pounds. From 2018, this fund helped 26.000 children engaging with social activities. Other interesting activities are also done by Groundwork Great Manchester with their Green Influencers Programme where qualified and experienced youth workers act as Green Mentors to support the development of 60 Green Influencers, namely young people aged 10-14 with a passion for environmental projects. With all these activities, Manchester demonstrates that youth engagement is a complex topic that needs to be addressed with different tools and strategies.

## ACTIONS IN SCHOOLS

Actions in Schools: "The Mayor's Young Londoners Fund is helping children and young people to fulfill their potential, particularly those at risk of getting caught up in crime. It supports a wide range of local community projects providing activities for young Londoners". The fund is investing 30 million pounds in local communities projects and 15 million pounds in supporting already existing activities of the City of London for young people. The city also has a Young Ambassador program that work in partnership with schools to improve them on important topics such as food poverty, bullying, LGBTQ+. Thanks to this program, for instance, the Conway Primary School did a food drive, which involved 500 students, to raise awareness and to help donate food to where it was needed. They also hosted a competition to collect food for the local food bank (more than 1000 items were collected), and a march around the local area to fight against poverty and food insecurity. Moreover, Students from Edward Wilson Primary School in Westminster ran an awareness campaign about the environment which produced the idea of hosting in the school garden a "bug hotel", namely an area that will host bird houses and bat boxes, a wild flower section, herbs/vegetables and sections for students to plant their own bulbs.



# YOUTH ENGAGEMENT

how young people are involved in responsible, challenging actions to create positive social change and the results that originate from that.

involving youth in planning and in making decisions

creating societies that fit youth needs but also set the base for active citizenship

there are many ways and tools to develop youth engagement

youth activism

youth councils and youth advisory boards

school teaching and learning activities

youth activism puts climate change and sustainability issues on the political table

## MANCHESTER - MULTIFACETED STRATEGY

Manchester demonstrates that youth engagement is a complex topic that needs to be addressed with different tools and strategies.



**Manchester Climate Change Youth Board**  
<https://www.manchesterclimate.com/youth-board>

## MALMÖ - DEMOCRATIC LAB

The Democratic Lab gather the Malmö Youth Council and the youth organization TiF to bring together needs, challenges and solutions into the youth policy making.



**Tillsammans i Forening**  
<https://www.nok.se/priser-stipendier-stod/stod/tif/>

## LONDON - ACTIONS IN SCHOOLS

The Mayor's Young Londoners Fund is helping young people to fulfill their potential, by supporting a wide range of local community projects providing activities for young Londoners.



**Mayor's Young Londoners Fund**  
<https://www.london.gov.uk/what-we-do/education-and-youth/young-londoners/mayors-young-londoners-fund>



# FOOD CONSUMPTION BEHAVIORS AND LIFESTYLES

Food consumption and sustainable diets are becoming a topic of great interest since **dietary patterns have been dramatically changing in the past fifty years**. One in nine people suffers from hunger or undernourishment while, at the same time, one in three is obese or overweight, resulting in the well-known “triple burden of malnutrition”. However, it is widespread that changing diet can help the reduction of wildlife loss, premature deaths, food related GHGs emissions, poverty along with improving social inclusion, biodiversity, fair trade, individual health, and many other challenging issues. Although the connection between eating patterns and environmental challenges is common knowledge, **calculating the relationship between healthier diets and healthier environment is not an easy task**. Understanding how cities can help is even more complex.

One of the areas in which cities can have an impact in changing citizen’s diets are **school catering**. All over the world, indeed, cities and States are working to improve lifestyles of the youngest through the school system, and among Food Wave partners, there are many of them. Milan, Manchester, and Malmö, for instance, have school catering programs that can be a good starting point to reflect on food consumption. They indeed have received different types of recognition to be best practices around Europe.

**Malmö**, for instance, has won the Ekomatsliga’s prize for the “**least possible climate impact in combination with a high proportion of organic food**”. Ekomatsligan is a Swedish ranking for the city that does the most organic purchases. Each year the Ecofood Center collects statistics from the public sector, documented and published in an annual report. Indeed, the city hosted the S.M.A.R.T. food which is a recently finished project where the goal was to reduce the greenhouse gas emissions from the food served in Malmö from the public kitchens.

**Milan**, on the other hand, **has reduced by 20% the CO<sub>2</sub> emission of their school meals** working side by side with Milano Ristorazione for five years. They indeed are part of the Cool Food Pledge, a program created by the World Resource Institute which analyses the greenhouse gas emissions of the catering services in thirty eight city partners all around the world. Milan is at the moment the city that has had the greatest reduction in CO<sub>2</sub> emissions in school canteens.

**Manchester** school catering service, strongly focuses on nutrition and food security, winning many national awards such as the LACA Change4life 2016, Educatering Secondary School Caterer of the Year 2016 and for two consecutive years, the APSE Best Performer for Education Catering. By implementing the Universal Infant Free School Meal national program **they have also exceeded the Government take-up target by achieving an uptake of 90%**.

By looking at the three cities’ school meals, we first see that **food consumption varies according to the places** you take in consideration because it is influenced by tradition, culture, demographics, food availability and much more. For this reason, when talking about diet transition it is important to consider the context: **there is no common solution, only customized one**. For example, Manchester school meals are high in milk (34%), fruit (27%) and vegetables (22%) while Malmö’s are mainly composed of vegetables

	Manchester	Malmö	Milan
Cheese	100	50	100
Red meat	100	100	0
White meat	200	100	100
Fish	0	100	100
Cereals and potato	150	800	850
Legumes	80	0	160
Vegetables	800	1.200	800
Fruit	1.000	1000	1000
Eggs	0	0	120
Milk	1.250	0	0

(36%), fruit (30%) and cereals and potatoes (24%). Milan, on the other side, besides vegetables, fruit and cereals/potatoes include eggs in the weekly diet, which are not present in the other two cities’ diet.

This shows that from a nutritional point of view **it is important to maintain variety in food consumption**, favoring foods that are seasonal and good for the growth of young generations, but also culturally adequate. For instance, Thursdays are very different from city to city! Manchester proposes hamburgers with baked beans, Malmö vegetable soup with bread while Milan pasta with cauliflower. Every meal in Manchester finishes with milk and fruit, which is not part of the culture for the other two cities.

This variety and differences influence also from an environmental point of view, as the weekly school catering meals produce (the methodology used is better explained at the end of the report):

Manchester: 5,91 kg of CO<sub>2</sub> and 6.299 L of water per person

Malmö: 4,08 kg of CO<sub>2</sub> and 4.109 L of water per person

Milan: 4,47 kg of CO<sub>2</sub> and 5.722 L of water per person.

As declared by the Cool Food Meal project from the Cool Food, the threshold for one meal should be 5,38 CO<sub>2</sub> e/portion. Hence, only Manchester exceeds that threshold and only by 9%.

The differences among cities surely lay on higher or lower consumption of meat (red and white) and cheese and dairies: food groups that are well-known to be some of the bigger components of GHG emissions and water use. In fact, if Malmö had to substitute the consumption of red meat with legumes, there would be a saving of 1,28 kg of CO<sub>2</sub> and 0,583 L of water.

However, **animal products are not to be demonized as they are not the only food groups that can have a great impact on the environment**. For example, if the Manchester menu would propose vegetable milk instead of cow milk, they would be able to lower the CO<sub>2</sub> emissions, but the water use would increase by 27%. Also, regarding Milan school meals the higher CO<sub>2</sub> emissions and water consumption are recorded for main courses based on cereals rather than for meat or cheese. This depends on the fact that the cultivation of cereals requires a lot of water and their production is often far from the place of consumption. Hence, a more varied menu that would consider more fish, white meat, legumes, and vegetables instead of cereals, would help lower by 0,35kg of CO<sub>2</sub> and 0,557 L of water the weekly school diet.

Hence, although some food groups have a higher impact than others, frequency and variety are the solution since they respond to cultural, nutritional, and environmental issues.

# FOOD CONSUMPTION BEHAVIORS AND LIFESTYLES

All over the world cities and States are working to improve lifestyles of the youngest.

One of the areas in which cities can have an impact in changing citizen's diets are school catering

food consumption and sustainable diets are becoming a topic of great interest since dietary patterns have been dramatically changing in the past fifty years

calculating the relationship between healthier diets and healthier environment is not an easy task

food consumption varies according to the places there is no common solution, only customized one

it is important to maintain variety in food consumption

frequency and variety are the solution

## MALMÖ

Malmö ranks first among Swedish cities as the school catering with least possible climate impact in combination with a high proportion of organic food.



### Ekomatsliga's prize

<https://malmo.se/Aktuellt/Artiklar-Malmo-stad/2021-05-25-Malmo-vinner-Kimatekoligan-2021.html>

## MILAN

Milan has reduced by 20% the CO<sub>2</sub> emission of its school meals working side by side with Milano Ristorazione for five years.



### Cool Food Pledge

<https://www.comune.milano.it/-/food-policy.-ridotte-del-20-le-missioni-di-co2-dei-menu-delle-mense-scolastiche-di-milano-ristorazione>

## MANCHESTER

By implementing the Universal Infant Free School Meal, Manchester exceeded the national take-up target by achieving an uptake of 90%.



### winning many national awards

<https://www2.myschool lunch.co.uk/manchester/>





# GLOBAL FOOD SUPPLY CHAINS CONNECTING NORTH AND SOUTH



As food consumption is pivotal in sustainable development, this section aims at giving points of discussion around the unsustainability of some food consumption behaviors. In particular, the idea is to show how a popular and trendy food, often consumed by younger generations, can have a strong impact because of the global food supply chain of the ingredients that make it up. Although each ingredient can have impacts related to society, economy and the environment, in this section only the environmental impact will be analyzed.

## A BOWL OF POKE

The food supply chains of our globalized world, in addition to increasingly linking trade between the North and South of the World, imply enormous impacts from the point of view of the environment (reduction in biodiversity, alteration of natural ecosystems), society (labor exploitation, lack of food sovereignty) and economy (growing inequality). Before food reaches our plates, it travels quite a few kilometers and exchanges a few hands to get to us. Finding ways to manage and reduce our footprint in all of these steps of the food production process is vital to ensure a more sustainable future.

The critical elements that characterize a large part of globalized supply chains and determine the diets of Europeans, could potentially coexist in one dish: for example a **bowl of Poke**.

The Poke, in its western interpretation of the Hawaiian recipe, is one of the most trending dishes of the period in major European cities and can be a very useful example of a dish to highlight and represent the extent of some of the mentioned impacts of North-South food supply chains. The dish is composed of several parts: base, protein, marinade, topping, crunchy and sauce. In general its main ingredient is sliced raw fish (Poke is a Hawaiian verb meaning to cut, to slice), served in a rice bowl and seasoned with many other elements: dried fruit (macadamia nuts, cashews), vegetables (spring onions, cherry tomatoes, cabbage, seaweed), fruit (avocado, pineapple, mango, lime), sauces and more (ginger, herbs, soy sprouts).



## WHY IS IT SO TRENDY?

It has that sense of discovery for tropical style. It is highly customisable because it allows you to choose the composition according to your taste. It looks healthy, is colorful and beautiful to look at. What's more, it follows the dietary trend of the moment: few carbohydrates and lots of protein.

## BUT IS POKE SUSTAINABLE?

Probably the best answer to this question is: it could be, but in most cases it is not. It could be because it all depends on the characteristics of the supply chain of each product that makes up the rich dish. Since there are no internationally recognized sustainability standards for all products, ingredients such as those mentioned above often have a very long and fragmented supply chain. This means that the processing of products can be numerous and carried out in different countries or continents, resulting in long and repeated transport distances. In addition, the geo-economic difference of the countries involved in trade relations, especially North-South relations, often leaves room for the violation of certain rights, such as labor rights or access to water.

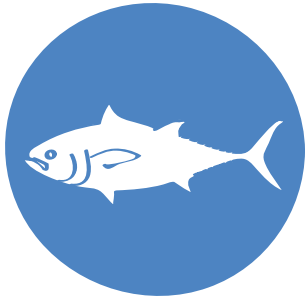


# HOW FOOD GETS INTO YOUR PLATE

## TUNA


Environmental impact

 **CF** 3,68  
(CO<sub>2</sub>eq/kg)



## RICE

Environmental impact

 **CF** 2,19  
(CO<sub>2</sub>eq/kg)

 **WF** 1597  
(Water/L)



The infographic aims to explain the global production and trade chains of fresh tuna, avocado, rice and cashew nuts. It does so by geolocating their main export and import locations, showing how complex food supply chains are.

Could you imagine that all of this complexity lies in your poke bowl?

 exporter  
 importer

All references about environmental impacts are from Petersson, T., Secondi, L., Magnani, A., Antonelli, M., Dembska, K., Valentini, R., ... & Castaldi, S. (2021). A multilevel carbon and water footprint dataset of food commodities. *Scientific Data*, 8(1), 1-12.

All references about import and export countries are from **TRIGDE database**, available at: <https://www.tridge.com/> and **OEC world database**: <https://oec.world/en>

## AVOCADO

Environmental impact


 **CF** 1,09  
(CO<sub>2</sub>eq/kg)

 **WF** 1805  
(Water/L)




## CASHEW NUT


Environmental impact

 **CF** 1,38  
(CO<sub>2</sub>eq/kg)

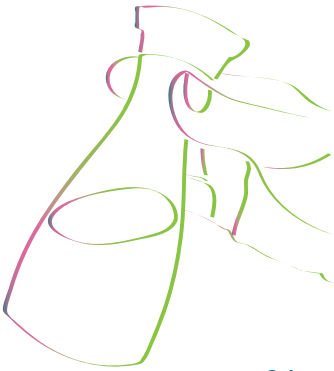
 **WF** 14218  
(Water/L)



 The **carbon footprint (CF)** is a measure that expresses the total greenhouse gas emissions associated directly or indirectly with a product, organization or service in CO<sub>2</sub> equivalent. More on: Wright, L. A., Kemp, S., & Williams, I. (2011). 'Carbon footprinting': towards a universally accepted definition. *Carbon management*, 2(1), 61-72.

 The **water footprint (WF)** measures the amount of water used to produce a good or a service that we use. More on: Aldaya, M. M., Chapagain, A. K., Hoekstra, A. Y., & Mekonnen, M. M. (2012). *The water footprint assessment manual: Setting the global standard*. Routledge.

And don't forget.... **SOY SAUCE**  
613 **WF** (Water/L)





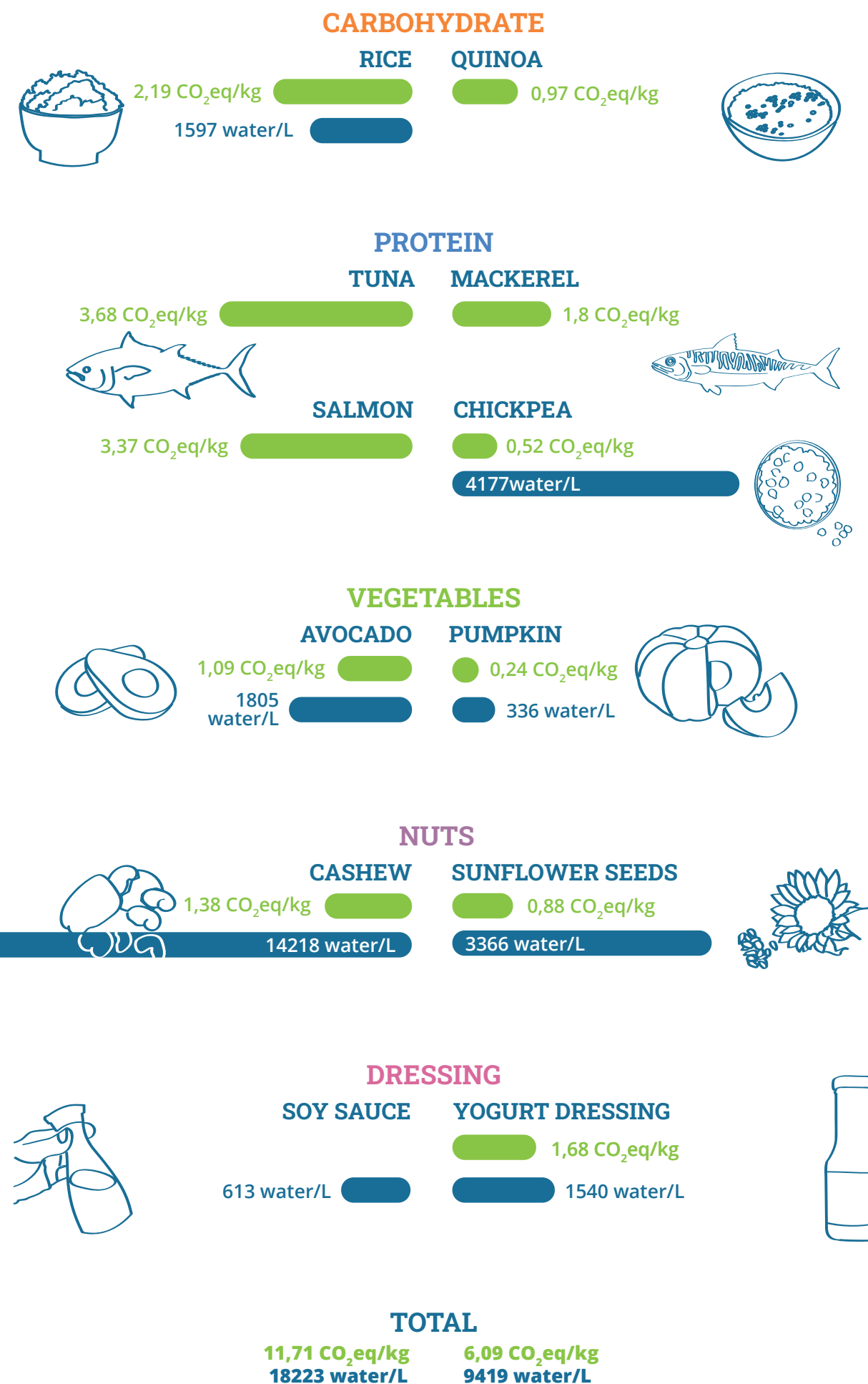


## ALTERNATIVE POKE

Faced with the awareness of the complexity and often unsustainability of the supply chains, consumers can contribute through their own choices and play their part. How? First seeking information on the certification of the supply chain to ensure that the food they buy is socially and environmentally sustainable. European citizens, especially the younger generation, are demanding sustainable food supply chains that guarantee food safety and health, and support growth, employment and labor rights in the food chain. It is by understanding the complexity of the food system that it becomes possible to search for strategies to correct its criticalities. Another solution is selecting more sustainable food, trying to compose an **alternative Poke**. If instead of the classic ingredients, your pokè could include a vegetable protein such as legumes, more sustainable fish and less impacting vegetables, nuts and cereals, it would already be a step towards sustainability.

**When looking at Carbon and Water Footprint, the alternative pokè impacts 52% less than the normal pokè!**

Remember that these numbers are average values which vary depending on where the poke consumption takes place. Also, these data are per kilo so they may vary depending on the portions of the individual ingredients.





# LESSON LEARNED



Through the analysis of eighteen European cities, this report dives into some of the main themes regarding the food-climate nexus, with the lens of the local level and their actors. In this final section, some lessons learned from the experiences of the cities are portrayed.



This report aimed to contribute to the knowledge and dissemination of cross-cutting and complex issues, to the definition of new values and meanings, and the promotion of innovative actions, starting from places and their cultural and contextual differences. Through the study of eighteen European cities, this report highlighted the **relationship between knowledge and action** as a key component within the food-climate nexus. It showed, on one hand, that many of the cities where climate and food issues have become a more significant part of urban policies are also those that have been able to move into European projects, networks with other cities, and collaborations with civil society. **This shows that innovation develops in those cities where actions are taken in that sort of “middle ground” that unites social worlds and institutions.** On the other hand, the capacity of a context to spread a common culture and vision as well as the level of technical-scientific expertises present in each city also plays an important role. This is particularly important when talking about the collection, monitoring and use of information in relation to policy making. Initiatives and policies are at the core of this report. **More than 110 initiatives** have been gathered among the 18 cities analyzed, thanks to a **direct communication and a survey with the cities’ partners** and through desk-based research. Hence, although these initiatives don’t represent all the realities present in these cities, they show **what are the main themes on which the cities are working**. These initiatives are both from civil society and the institutions and show that European cities mainly work on **education and training on sustainability issues**. Indeed, 30% of the initiatives can be included in this category and consist of educational activities inside and outside schools, training for young people to fight against poverty or unemployment, festivals and events, educational campaigns and more. This teaches us the **importance of learning and knowledge sharing** on topics such as climate change, environment, sustainable transition and the role of food in this context. The second main theme on which cities are working is **waste and food waste**, with **26%** of initiative mapped related to recycling, compost, food waste and surplus reduction and redistribution, waste on land and much more. Finally, 8-14% of initiatives relate to environmental actions - which regards biodiversity, air and water quality, greenhouse gas emissions etc - , and food consumption and food production, namely activities on diet, health, restaurant and distribution systems, agricultural production and urban/peri urban gardening. The report also shows that cities often have a vision on these topics. Our study shows that **all 18 cities have a strategy on climate change or sustainable transition**. However, **only half of the cities have strategies specific to food**, although they all work on the topic at local level even without a strategy. The reflection of these strategies can be related to the **CO<sub>2</sub> emission per capita** that in **more than 50% of the countries analyzed is lower than the european average** (6,4 metric tons per capita).

Also regarding youth engagement, **only 50% of the cities have a strategy or an institutional project that includes a youth food council or the engagement of young people** in the policy making of climate and sustainability activities. However, only 5% of the initiatives gathered involve youth activism or

activities. It is important to understand that this data doesn’t mean that cities don’t have active youth groups but that **youth activities are often hard to map**. In fact, youth activities are often **informal and disconnected from the institutions** as they use innovative spaces of interaction and aggregation - such as social media - that are mostly not used by institutional actors. It is the case of Friday’s For Future and Extinction Rebellion youth activists which have been advocating all over the world but haven’t been cited by most of the cities and all the other smaller groups that compose the variety of youth groups in Europe.

The detachment of youth topics from the institutions is important in the light of the statistical data provided in the Cities portfolios. Hence, when comparing the **percentages of youth under 15 among cities, only four countries** (Netherlands, Belgium, United Kingdom and Sweden) **exceed the European average of 24%**.

All the other countries follow the global trend of a growing aging population and a constant decrease in births.

Finally, the report showed that the impact of these initiatives does not necessarily depend on the size of the actors promoting them but often on the **ability to network or use communication effectively**. This ultimately allows it to have significant impacts in terms of consensus building but also of involvement and expansion of the number of active subjects.

## **SIMPLIFY WITHOUT DIMINISHING**

All the topics analyzed are complex and complicated issues that need to be simplified in order to be better understood to have the consensus and to legitimate adequate policies. However, it is important that simplification does not diminish the scope of these issues and the problems that arise from them.

## **FIND THE "HOT" ISSUE**

Not all cities have the same needs, much less the same interests, yet the fight against climate change and the sustainable transition must involve as many cities as possible. A smart administration must understand which is the most interesting theme for its city that can easily link to these themes. For some partner cities it might be youth engagement and youth employment, for others culture and art. Finding the "hot" topic that gives food the opportunity to enter the political agenda is essential to ensure that the topic is heard as a priority within the institution.

## **NEVER STOP COLLECTING DATA**

The urban system is still very unknown, and the information related to it struggles to reach the administrative centers of a city, especially regarding food. We recommend facilitating the collection of data on the local system in order to know, study and consequently implement policies customized with the territory.

## **CREATE COMMON WAYS TO MONITOR THE URBAN SYSTEM**

Data on climate change, food systems and environmental issues are rare and vary a lot according to the methodology used to collect and gather information. Without common methodologies it is impossible to really assess a global state of art regarding these complex issues.

## **CITIES CAN BE DRIVERS OF CHANGE**

Local change can be a leverage to create strategies for the rest of the country. However, cities don't have to wait for national strategies to start acting on food systems and climate change and this report shows why.

## **CREATE A REAL AND OR VIRTUAL SPACE TO MAP**

Many partner cities already implement this type of space showing the importance of sharing and understanding their territory to better know their food system.

## **COLLABORATE WITH RESEARCH BUT NOT ONLY**

Research centers are an excellent source of information and scientific data from which administrations must draw to learn more about their food system but there is a wide range of "gray" literature and information available on the territory that even research struggles to reach. For this reason, working with the territory and with those who act directly in the field is essential to gather all the information necessary to know one's local food system.

## **APPLY TO EUROPEAN CALLS**

Many cities have started working on food and climate issues starting from European projects which shows how important this project can be. Also, they are a relatively simple way to obtain funds on these issues which are often entrusted to local volunteering.

## **NEVER STOP KNOWING WHAT OTHER CITIES ARE DOING**

European projects are a great opportunity to know what other cities are doing with respect to certain issues. It is necessary that the exchange of practices and policies continue in order to create European working communities and stimulate joint work.

## **PARTICIPATION OF THE TERRITORY**

Working with the territory is not only important but even necessary to better understand the problems and to reach a level of policy collaboration such as to achieve a sustainable transition. All the partner cities demonstrate that they have local activism groups and associations (including youth) that already work in this direction. It is therefore a task of the administrations to don't neglect their work but rather start from this to build their own policies.

LINK PROJECTS TO STRATEGIES

Projects have a predetermined time duration which often does not coincide with the social timing of local communities or with those of a substantial change in practices. Associating a political strategy with a project means establishing a practice, recognizing its validity, and facilitating its continuation after the end of the project.

ALLIANCES BETWEEN CIVIL SOCIETY ARE A STRONG DRIVING FORCE

It is important that alliances, collaborations, and cooperation are made in order to facilitate the administration work and better advocate for common needs.

PUSH GENERATIONAL CHANGE

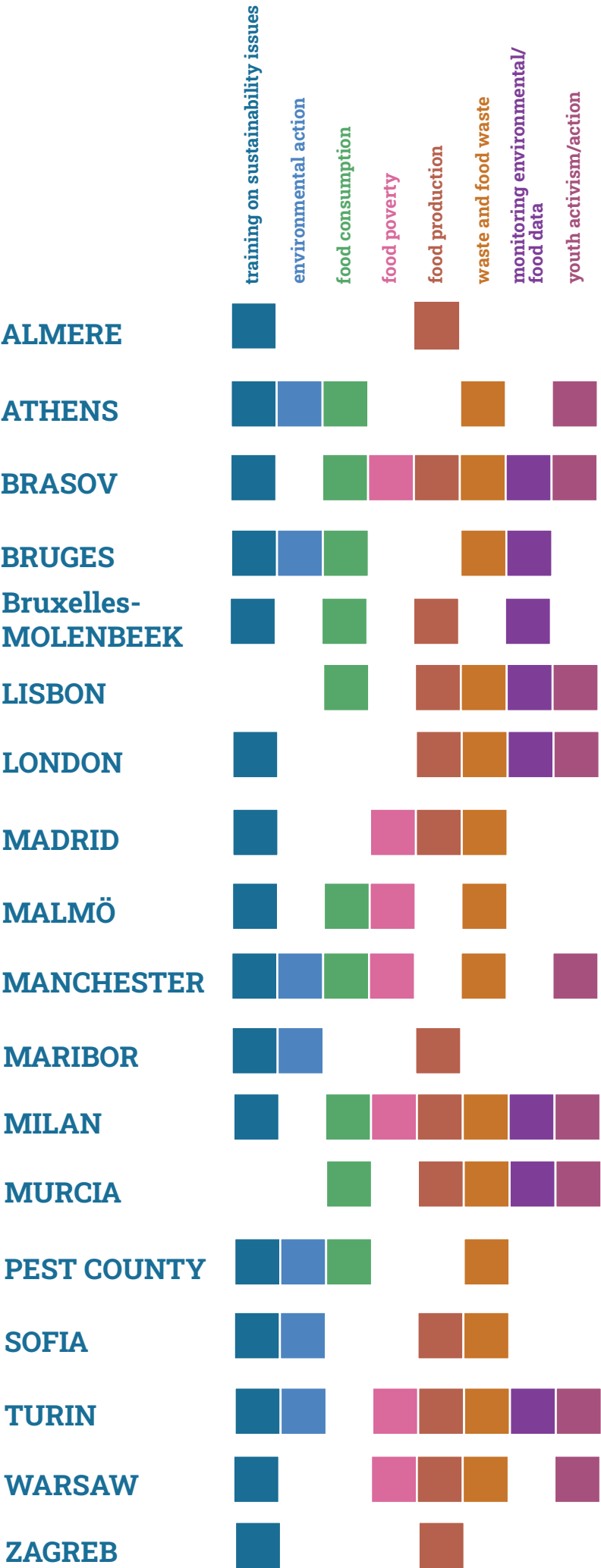
Enhancing what young people do cannot remain a project objective but should be part of a larger scheme relating to generational turnover within public institutions and large associations. Only in this way the innovative ideas of young people permeate current food systems.

CREATE AD HOC ADMINISTRATIVE STRUCTURES

To facilitate participation with the territory, it is essential to have flexible and collaborative administrative structures that know the topics and have the structural possibilities to react to objectives in the most correct way. All the cities need collaboration between the various administrators to work on such an integrated and complex issue as food. Many partner cities show that they have discussion tables, joint offices and that they have applied different management strategies to fulfill this need.

POLICIES FOR YOUTH ARE DIFFERENT FROM POLICIES MADE WITH YOUTH

It is important to create services and opportunities for young people but also that municipalities develop youth engagement strategies to involve young people into the policy making and ultimately create more customized policies.







## THE AUTHORS

ESTà is a non-profit cultural association that acts as a training, research and consultancy center. It cooperates with government agencies, research centers, local authorities and social actors at local, national and international level. Specifically, Està develops analyses, design and monitoring tools to support social innovation and new contents for public policies.

For Està, the principle of sustainability must subtend all dimensions of development, affecting the quality of life of individuals and communities and territorial development, with a local approach to dealing with major environmental and social equity issues.

For Està, acting on the levers of sustainability means promoting new forms of employment that create jobs and increase the quality of life, through an ecological reconversion of the economy that directs it towards social equity, a process that involves both lifestyles and political and systemic visions. For these reasons, the main themes on which Està has carried out project and research applications concern: territorial development, food systems, agro-ecological practices, social innovation, sustainable mobility, new geographies, the relationship between urban and rural, impact finance, productive districts.

## METHODOLOGY

The report used different types of sources starting, first of all, from the cities' partner to the project. Indeed, after a **deep literature review** that included scientific articles, reports and policy documents, ESTà presented to **Food Wave partners an online survey**. This tool helped the team to gather information on local activities and policies along with all the "gray literature" that without the help of the partners wouldn't have been possible to discover (e.g. municipal reports, local documents, online databases, websites, etc.). The great variety of stakeholders - from municipalities to civil society - that compose the FW partnership enriched the analysis bringing different perspectives.

The survey has been fundamental for many sections of this report, starting from the cities' description to the collections of practices. Indeed, it has been a great opportunity to understand what kind of data and documents cities have regarding food and climate change related topics and to create a showcase of the state of art of a selection of European cities. The partners have been queried about their actions, projects and policies on Food Wave core topics (food, climate, youth, COVID-19), with the annotation to provide names and context of youth groups, social activists, local actors besides institutional ones.

The purpose of these requests was both to acquire information to be summarized in this report, and to suggest to the local focal points of Food Wave that the entire set of information requested (data, policies, actors, organizational forms) is important for building policies that integrate food and climate with the active participation of young people. Alongside this, both for the team of researchers who wrote this report and for the focal points of the project, it was important to focus on the **diversity and specificity of these components for each city**. Indeed, methodologically, ESTà adopts an approach that integrates technical-scientific knowledge with socio-historical knowledge, both in the aspects of analysis and in those of interpretation and design, because it is convinced of the **interdependence of environmental, economic, social and cultural dimension for the definition of policies and their implementation**. ESTà stands out for its **systemic and interdisciplinary** research-action approach, focusing on the involvement of different stakeholders with respect to the issues of sustainability and participation.

METHODOLOGY FOR FOOD  
CONSUMPTION CALCULATIONS

Three school catering meals have been taken in consideration, one for each city cited (Malmö, Milan, Manchester). The same week of catering has been selected (week 8/11-13/11 2021) served in kindergartens, primary and lower secondary schools. The menus have been harmonized using portions recommendation from the Barilla Double Pyramid - which are based on a combination of WHO Regional Office for Europe (2000), Bach-Faig, A. et al. (2011) and Harvard School of Public Health (2008). These helped obtaining homogeneous information on portions here summarized:

<b>Food Groups Portions</b>	<i>Main course Cheese</i>	<i>100g</i>
	<i>Main course Fish</i>	<i>100g</i>
	<i>Main course White meat</i>	<i>100g</i>
	<i>Main course Red meat</i>	<i>100g</i>
	<i>Main course Legumes</i>	<i>80g (dry)</i>
	<i>Main course Egg</i>	<i>120g</i>
	<i>Main course Cereals</i>	<i>100g</i>
	<i>Main course Vegetables</i>	<i>200g</i>
	<i>Side Vegetables</i>	<i>200g</i>
	<i>Side Potatoes</i>	<i>350g</i>
	<i>Side Cheese</i>	<i>50g</i>
	<i>Side Cereals</i>	<i>50g</i>
	<i>Fruit</i>	<i>200g</i>
	<i>Milk</i>	<i>250g</i>

Hence, the menus have been adapted to this harmonization and the CO2 emissions and Water consumption have been calculated using CO2 and W coefficients created from the Peterson 2021 SuEATable Life database. It is important to note that this database reports data of carbon footprint (CF) and water footprint (WF) of food commodities with different levels of data aggregation. The database is “based on a standardized methodology to extract information and assign optimal footprint values and uncertainties to food items, starting from peer-reviewed articles and gray literature” (Petersson et al. 2021). For this reason, the data extracted are to be intended as detached from the context in which they are analyzed, namely the local context, but are useful as they provide a general understanding of the environmental impact.

In particular, the two coefficients (CF and WF) have been calculated starting from the average of the typology of products rather than the specific product data. The calculations derive from the crossing of portions, CO<sub>2</sub> and W coefficient. Therefore, it is important to note that these are proxy and do not represent the reality of school catering in Manchester, Milan and Malmö but can be helpful only in understanding the food consumption phenomenon.

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