

# CLOSING LOOPS IN LOCAL FOOD SYSTEMS, by Antonio Zafra\*

## 1. What type of menu would we like for our kids?



The Alicia Rios' Food Diary: Daily recipes, domestic cooking, based on fresh, local, organic products; small purchases, little packaging, no controlled storage, use of perishable products before their expiry date...; personal enjoyment, creativity, ethics and aesthetics, shared pleasure...; a daily record of practice!!!!



"Public funds were charged £30. I'd have bought this for £5.22," said Twitter user Roadside Mum of the parcel she received.

Source: [BBC News](#)

Feeding is a sacred act in the words of Gary Snyder. It is political according to Wendell Berry and an act of love for Alicia Ríos who, through her edible artistic interventions, invites us to deep reflection, to enjoy the wisdom associated with delight, sociability, and commitment to the health of the planet, the resources and the people who feed us.

If technology and digitalisation are called to be an important part of the development of a more resilient and sustainable food production and consumption system, it should be built on values of social justice, environmental ethics, respect for the cultural expressions and identities of local communities, as well as being a guarantee of health and well-being for all people.

In this context, a committed response to how we are going to feed our children and the planet is more urgent than ever.

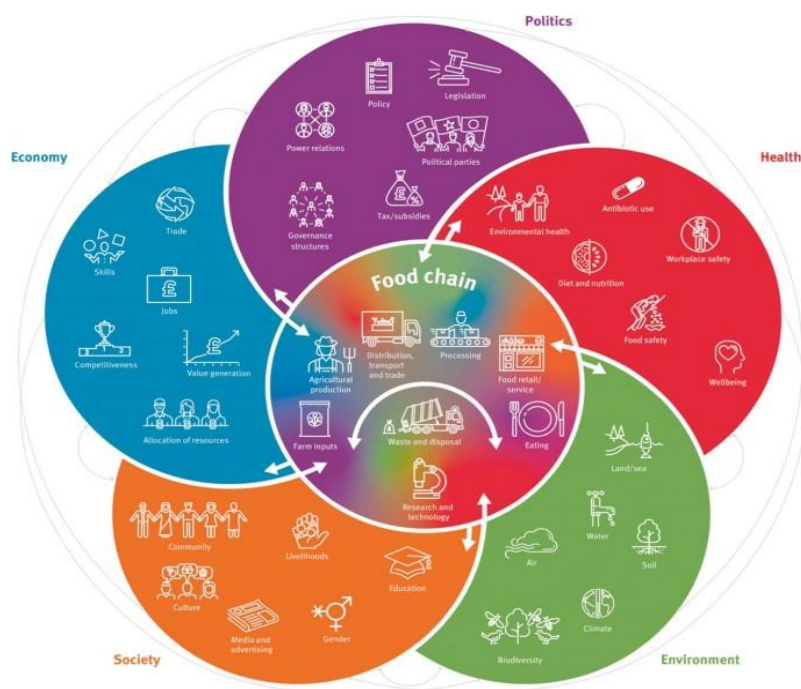
## 2. Sustainable Food System in the Covid-19 time

The Covid-19 pandemic has highlighted the close relationships (economic, social, political, environmental) between different systems and specifically between the agro-industrial system and the associated loss of habitats and diversity, with human and planetary health.

The succession of economic and health crises in recent decades, set in a context of agroindustrial productivism, has highlighted the growing global disconnect between places of production and consumption, as well as between producers and consumers, destroying the chains of security and trust that have sustained this model for centuries.

On the one hand, the extraordinary power of multinational corporations, controlling a large part of the value chain processes, weakens consumer protection and overrides the decision-making capacity of all small producers, making any kind of compensatory public policy, when it exists, inefficient.

On the other hand, the regulatory system shows its ineffectiveness to the extent that it accepts the externalisation of the lateral costs of the agro-industrial system, be they social, environmental, or health-related, with public resources assuming the costs derived from the negative impacts on the health of people and the planet.



Source: University of London. [Centre for Food Policy Research](https://www.cfr.ac.uk/)

The unsustainability of the system is illustrated by the huge amount of resources wasted along the food production chain. Losses and waste associated with the food value chain amount to \$959 billion annually, a figure equivalent to the annual GDP of the Netherlands<sup>1</sup>.

Moreover, policies of feeding the population-based on cheap prices have destroyed many of the small-scale producers in Europe.

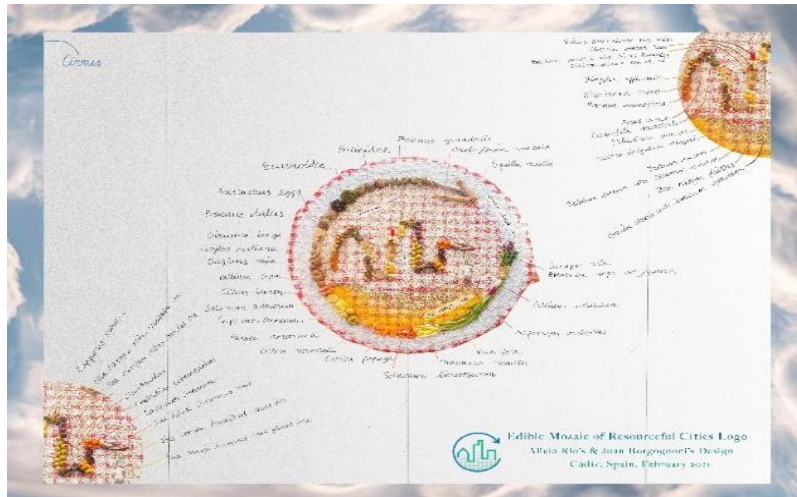
On the other hand, industrial production and consequent advertising, by showing food as pure merchandise, detaches it from its cultural, healing, and sacred essence and turns it into just another meaningless object for consumption. Thus, food that is shown as respectful of nature and nutritionally healthy is often associated with an exclusive public capable of paying a higher price for a product in need of certification that guarantees what food should always be: a nutrition and health source.

As a result, serious and growing difficulties mark the future of the food system: erosion of biodiversity, water and soil pollution, resource depletion, food wastage, diseases associated with poor nutrition. The result is the painful paradox of a large part of the world's population divided between obesity and hunger.

In order to respond to this aggravated problem, alternative proposals have emerged in recent decades from different spheres, be they small producers, consumers, municipalities, academia, educational centres, associations, and institutions around the world. They have increasingly come together to respond to this set of problems in the food system, proposing innovative solutions for the transition to a fairer and healthier system.

Three areas can underpin the response to change towards a more resilient<sup>2</sup> food system, as the complex crisis linked to the Covid-19 pandemic demands now more than ever:

- Promoting healthy and sustainable diets for all people and the planet in a global context of combating climate change.
- Promoting a regenerative and circular production model.

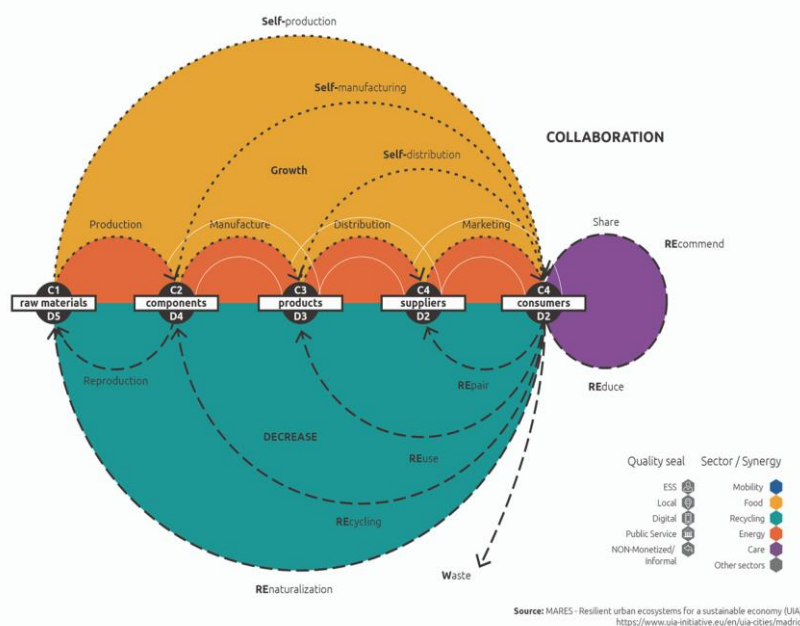


- Moving from culture and innovation towards a practice committed to the protection of biodiversity in the field of agriculture, food and consumption.

### 3. Circularity and food

It is estimated that more than one-third of the food produced becomes waste along the value chain. While there is no shortage of technical and policy proposals to make this model more circular, implementation has been slow in recent years. However, food presents a opportunity to experiment with a new approach to resources and waste generation in a new context defined as the "Circular Economy for Food<sup>3</sup>."

When several systems face complex challenges in an interconnected way, the solution requires synergistic work. In this sense, restarting the food system in terms of sustainability and circularity has to be done on the basis of facilitators where different political levels support coordinated responses. Successive stages should ensure that the political and technical leaders of the process, together with citizens and the private sector, are trained in systemic methodologies, giving way to a new framework of connectors between one and the other systems, identifying solutions in one and the other, as well as managing trade-offs and sharing the benefits derived.



Source: MARES - Resilient urban ecosystems for a sustainable economy (UIA) <https://www.uia-initiative.eu/en/uia-cities/madrid>

One of the classic analytical tools are value chains. The [MARES](#) project (UIA), implemented by the city of Madrid, has adapted this concept, which comes from agroecology, broadening its scope by adding different functions such as the *do it yourself* economy, the return cascade, related to the circular economy, and the collaborative economy, as well as incorporating other variables of analysis, called labels: local, digital, social and solidarity economy, public service and informal or non-monetised. The tool facilitates the experimentation of participatory practices from which to design sustainable and circular policies in each of the stages of the chain.

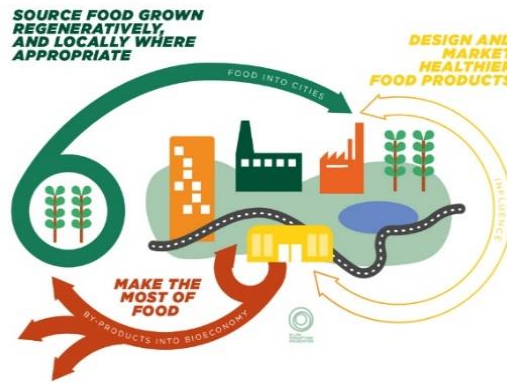
The [Zero Waste Hierarchy](#) is a proposal by an extensive network of European NGOs, determined to promote a change in mindset in favour of resource management, rather than waste management. It puts the political driving force behind ensuring the preservation of resources for future generations. It develops useful tools for action by [citizens](#), businesses, and cities. The aim is always to promote systems that avoid waste generation.



This is also the challenge that the Slovenian city of Maribor, an experienced corridor in the implementation of circular economy policies, is trying to meet. In a practical way, through the [URBAN SOIL 4 FOOD](#) (UIA) project, they propose four virtuous circles from which to generate a sustainable and circular economic strategy in the city:

- Material Circle (analyse material flows of waste usable for production of urban soil; creation of an innovative line for the production of urban soil, etc.)
- Food Circle (Established four types of urban gardens, orchard, vertical gardens, food label, app, etc.)
- Open Innovation Circle (Agri Living Lab, support of innovative start-ups and SMEs who will work in the file or circular economy. etc.)
- Knowledge Circle (policy learning, business learning, and citizens learning, workshops. etc.)

Another important support for developing local food policies under a circular approach is the Ellen Machartur Foundation's Food Initiative since 2019. The [Food initiative](#) is based on the great potential that food has to achieve climate action goals and promote the fight against the depletion of finite resources.



Source: Ellen MacArthur Foundation. [Food Initiative](#)

Particularly recommended for those cities that want to get started in these food policies, under a circular and sustainable approach, is the [self-assessment survey](#) that the initiative offers. We have explored this interest with the member cities of [RESOURCEFUL CITIES](#), a network of URBACT cities committed to the acceleration of the circular economy.. The results support the recognition of the basic character that these policies still have, including the challenges around a lack of knowledge and available data, the importance of prioritisation and consideration of these actions in the political agenda, the need for increased resourcing in cities in order to drive a sustainable food agenda among other initial deficits. While it is true that we are at the beginning of the necessary change, as one of the responses stated, we have found seeds planted in many of the cities of the network, which will undoubtedly flourish in the short term, even more so, as they are nurtured under the URBACT framework that encourages strategic planning of policies. Although very slowly, it is fair to note the change in trend found if we compare the current situation with that described by Professor Kevin Morgan in 2009: "Among the basic essentials for life -air, water, shelter, and food -, planners have traditionally addressed them all with the conspicuous exception of food<sup>6</sup>."

A particularly relevant focus for municipal policies is the management of bio-waste. Bio-waste is a powerful means for cities to contribute to a more circular economy. The generation, prevention, collection, and treatment of bio-waste faces significant challenges in the European Union<sup>4</sup>.

According to data from the European Environment Agency, most municipal waste generated in Europe is landfilled (24%) or incinerated (27%), while 31% is recycled and only 17% is composted. According to EUROSTAT data, 34% of municipal waste is bio-waste, representing 75 million tonnes per year. In order to reach the recycling target of 65% of municipal waste, a major effort has to be made in the area of bio-waste recycling. A recent survey by the European Compost Network indicated that in 2016/2017, 47.5 million tonnes of municipal bio-waste were separately collected and composted or decomposed. This figure excludes waste generated by industry during the manufacturing process (41 million tonnes)<sup>5</sup>.

#### 4. Build back better

What are European cities, producers and consumers, civil society doing in this direction? What knowledge do we have in terms of learning and good practices? In URBACT, as in Urban Innovative Actions, INTERREG or LIFE, there is a track record of networks of cities working on sustainable food and the circularity of food systems.

Large cities such as Brussels, Copenhagen, and Milan, medium-sized cities such as Bristol, and small cities such as Mouans-Sartoux are recognised success stories in implementing such

strategies. From their experience and learning after participating in different URBACT networks, we can find lessons to share with the wide and diverse European cities network interested in deepening these policies. Some analyses looking for a [successful URBACT recipe](#) in this respect have been previously shared.

In order to find this formula, a good diagnosis, a thorough mapping of the initial situation is necessary. The correct articulation between actors. The maintenance of sustained political action over time. The required availability of resources, especially committed and trained personnel. The follow-up and monitoring of the analyses. That will help create realistic, integrated, viable action plans, imbued with the city's political strategies and the territory with which it interacts. Here are three examples to highlight: [Södertälje](#) (Sweden), [Mollet del Valles](#) (Spain), [Pays de Condruses](#) (Belgium)

But how to scale up from the bottom to these effective Integrated Action Plans. From our experience with the AGRI-URBAN and FOOD CORRIDORS networks, we would recommend three stages of evolution around the different and complex issues that feed a food system. They all converge in a multi-actor strategy based on collective action logic, capable of combining bottom-up and top-down initiatives.

- 1) The social dimension can be critical in initiating these model changes. The support of grassroots social movements bringing together citizens, small farmers, consumers, and political actors, among others, can be the genesis around which to build a local mixed partnership to support the launch of this transition model. Initiatives within CSA groups, social gardens, cooperative shops, etc., are often present in this embryonic phase.
- 2) These actors mentioned above have a 'niche' function in that they are often alternative models both technologically and economically. They do not become 'mainstream' until they manage to distort the system to a point where they become part of the 'new normal'. Food Hubs<sup>7</sup> can be, in an EU-adapted version, the agglomerate needed to gain weight, scale and transformative capacity from a grassroots democratic model, capable of connecting production and consumption while conveniently exploiting the progress in terms of the circularity of the food system<sup>8</sup>
- 3) A leap in scale should entail a strengthening of public-private partnerships and a broadening of the model's territorial dimension. Several initiatives are exploratory of this approach in European cooperation, such as the [REFRAME](#) project. Greater political prioritisation in terms of resources and articulation with European policies on territorial development, agriculture, or the environment should reinforce this embryonic proposal. Political commitment on the part of cities finds renewed avenues such as the current case of the [Glasgow Food and Climate Declaration](#), a door to open or confirm cities' commitment.

## 5. Some ideas for moving forward

By way of summary, here are some ideas to pave the way and accelerate the process of change from European cities and territories towards sustainable and circular food systems.

### 1) Culture as a driver of change

This change process can be inspired by culture as a lever that pushes social capital and coexists with more far-reaching political and productive changes. When we listen to [Pete Seeger](#) singing in favour of a "zero waste" strategy, savour delicious edible creations by artists such as [Alicia Ríos](#) or enjoy documentaries as clearly committed to a regenerative environmental policy based on soils as we see in [Kiss the Ground](#), we become aware of the necessary awareness, and we are at the starting point for the required collective action. All this contributes to turning social

awareness into a driving force for action to change the agro-industrial model of food production and consumption, which is as unhealthy as it is wasteful and unjust.

## 2) Put an end to the wasteful feast

To focus on the harms of the extraction strategy and, in particular, to test a policy of degrowth concerning unsustainable resource use, its wastefulness, and the associated and externalised side harms.

In short, to try out an alternative model of food production and consumption with ambitious targets that must be met and monitored, with benefits and incentives depending on the degree of compliance, far from indulgences based on a hypocritical exchange of compensation<sup>9</sup>. The different starting positions of European countries in terms of waste generation in general and food waste generation in particular, and within these according to specific segments of the population, must be taken into account when defining targeted and fair strategies in accordance with these different starting positions.

In any case, European agricultural, environmental, and waste policy, among others, should be the framework in which to anchor territorial plans that commit the public sector, businesses, and citizens as an open path to transition and change.

## 3) Coordinated planning and synergy among actors to sustain change

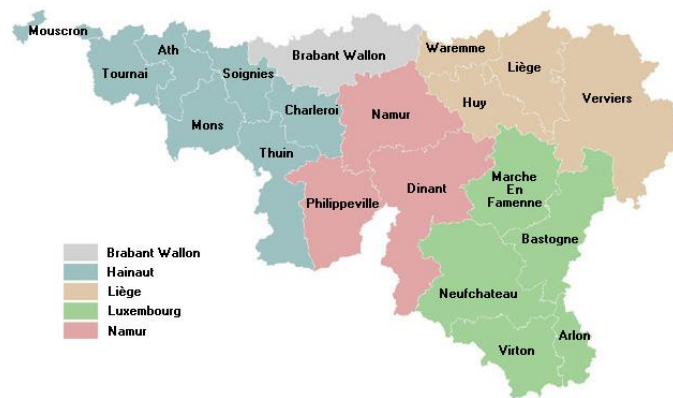
From the practice learned from years of policy implementation in [Bristol](#), [Joy Carey](#) points to some key principles from which to move towards resilient food systems: articulating greater regional sourcing networks, increasing our culinary skills, improving our collective consciousness, developing more closed and circular systems, safeguarding the diversity of the retail food trade. These aspirations are reflected in the following outline of Bristol's food process planning, a Good Food Plan for people, places, and planet. A scheme where the preservation of agricultural land, its protection from other extractive industries is as important as regenerative soil practice.



## 4) Partnership and political action to territorialise the system

The territorial approach, carried out in the Belgian region of Wallonie, is exemplary as a multilevel model based on the promotion of cooperativism, [rural diversification, and innovation](#),

collaborative agglomeration, [food hubs](#), citizen engagement through a [complex network of actors](#), and the strong support of cities and regional administration. This articulated network triggers a virtuous process as a success story to be implemented in the European Union, conveniently adapting alternatives that create employment, promote organic agriculture, local consumption, and scaled growth over the next ten years. The creation of Food Councils at different territorial scales, culminating in a regional Food Council, gives an idea of the magnitude and success of a process that has become a transfer school for many other European regions. Proposals from the [FAO](#) and other institutions stress the need to support these regional models. The case of Wallonie underlines the importance of the social construction of alternative proposals, structured as democratic forms of distribution of wealth and responsibilities.

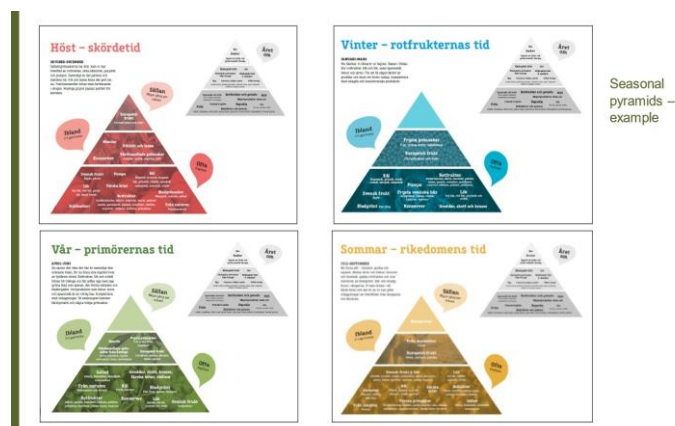


*Project of federating the Walloon region food belts.  
Source: Ceinture Aliment-Terre Liégeoise*

### 5) Human dietary change and the sustainability of the planet

Probably one of the most relevant lessons of the Covid-19 pandemic is how it has underlined the interconnection between the food system and the sustainability of the planet in terms of public health. This entails its necessary promotion by combining food safety principles, the control of zoonoses, and the fight against antibiotic resistance. Institutionalised responses<sup>10</sup> are found alongside critical responses from academics and activists<sup>11</sup>.

Recent schemes<sup>12</sup> developed under this holistic view of sustainable diets scientifically support nutritional alternatives such as the one implemented over the last two decades by the Swedish city of [Södertälje](#) in its school canteens.





These changes, which sometimes lead to a new food culture, for example, when they promote a reduction in meat consumption where it exceeds any nutritional recommendations based on healthy and sustainable criteria, should be made on the basis of rationality, dialogue, and scientific recommendations before the emotional or self-interested responses of the different parties in conflict<sup>13</sup>.

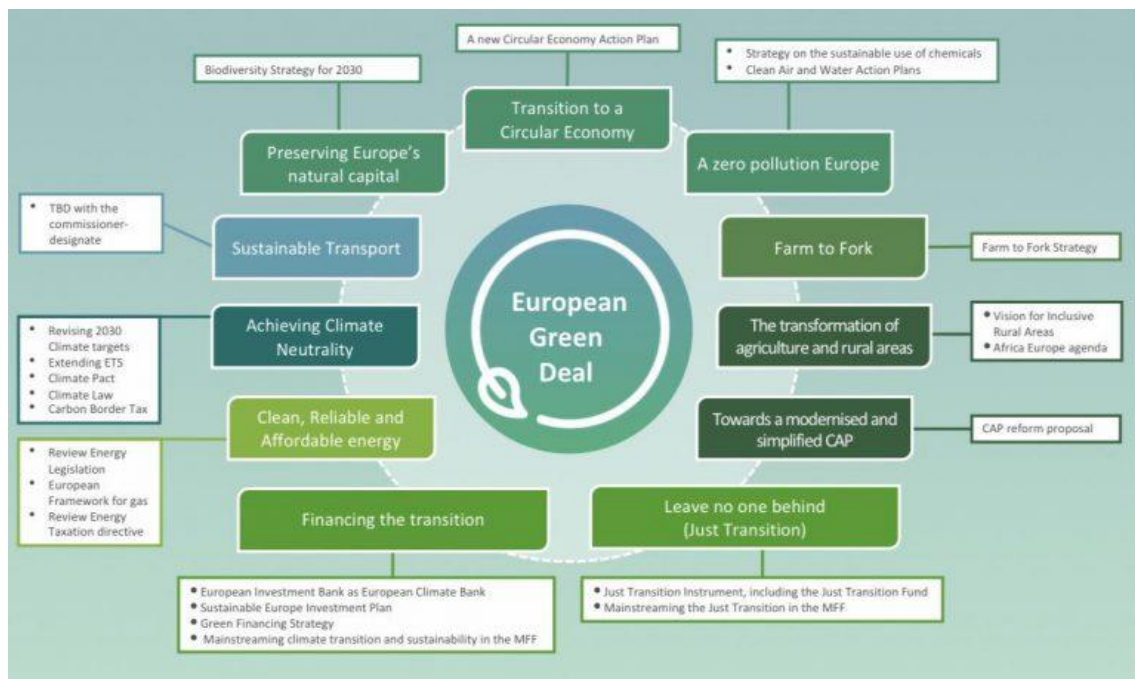
#### 6) Innovative business models

New infrastructures and business models for the circularity of territorial food strategies should be supported. A reformulation and decisive support to essential initiatives and facilities such as food markets, articulating renewed responses based on sustainability, circularity, and reterritorialisation, can play a critical role in accelerating the transition mentioned above<sup>8</sup>.

In this way, small actions such as those promoted by cities in the RESOURCEFUL CITIES network must give way to political initiatives created with the private sector and social initiatives' collaboration and commitment. Simple proposals such as those related to the promotion of short channels in [Cáceres](#) (ES), the composting of organic household waste in [Zagreb](#) (CR), the collaborative platforms in [The Hague](#) (NT), the conversion of used vegetable oils into biodiesel in schools in [Patras](#) (GR) or the more complex consumption strategies promoted by the city of [Oslo](#) point to the relevance of food in promoting a circular and resilient economy in the EU.

#### 7) The EU policy framework as an enabling environment

The framework offered by the [European Green Deal](#) Plan to make the economy more sustainable, as well as the essential economic support provided by the [Next Generation EU](#) Recovery Plan, together with the strong green commitment of the European budget for the next seven years, should be the support that makes the change towards a sustainable and circular food system in Europe possible.



The response must be directed towards a balanced transition that guarantees access to healthy and sufficient food for the mostly urban population, without forgetting the need to keep alive the functions of Europe's rural areas, without forgetting principles of justice, environmental balance, and socio-cultural values linked to food sovereignty that underpin the change of model.

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*Author's contribution to RESOURCEFUL CITIES (SPACES FOR CIRCULAR CO-CREATION AND ACTION), which is a URBACT Action Planning Network led by the city of The Hague and joined by Oslo, Zagreb, Vila Nova de Famalicao, Cáceres, Opole, Patras, Ciudad Real, Bucharest 3<sup>rd</sup> district and Mechelen. The project seeks to develop the next generation of Urban Resource Centres to serve as catalysts of the local circular economy.*