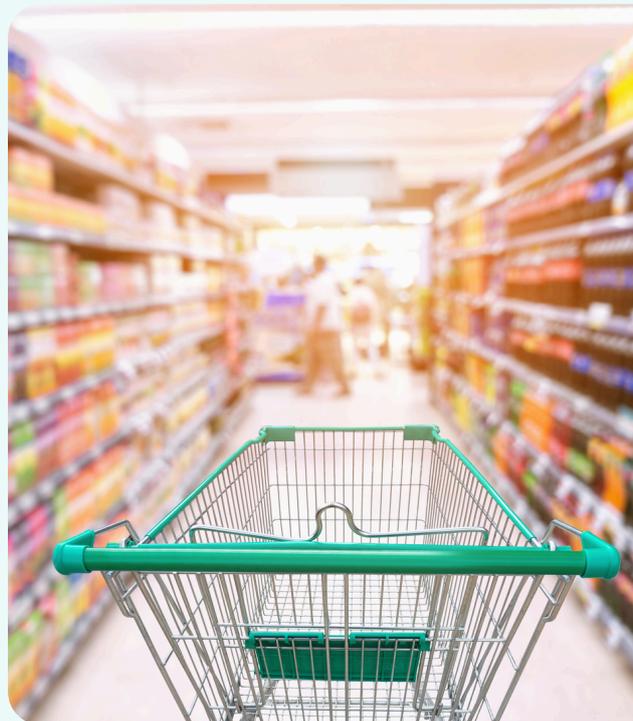


ZeroW tackles Food Loss and Waste (FLW) through a coordinated set of innovations piloted in nine real-world Systemic Innovation Living Labs (SILLs) aiming to achieve significant reductions across all stages of the food supply chain - from pre-harvest to consumption. A dedicated Policy Team complements this work by defining a 'Just Transition Pathway' toward near-zero FLW, offering a practical framework to bridge systemic barriers (e.g., fragmented and lengthy nature of the food supply chains, the digital divide, challenges in scaling innovative waste reduction technologies) and on-the-ground FLW solutions. Drawing on economic modelling and insights from the stakeholders and the SILLs, the team identified key recommendations promoting a flexible, equity-focused transition.

Introduction

In the context of the European Union's recently approved binding national food waste reduction targets and the broader objectives of the Green Deal, actors beyond the formal food supply chain, such as local governments, municipalities, and non-governmental organisations (NGOs), hold an increasingly critical role in advancing a just transition toward sustainable food systems. By 2050, 70% of the global population is expected to live in urban areas,¹ making cities central to both the challenges and solutions of sustainable food systems.

In Europe, where 54% of food waste was generated at the household level in 2022,² urban areas hold particular significance. While they may sit outside the traditional food supply chain, cities wield considerable influence through public procurement, education, infrastructure, and community-level interventions. However, the complex and structural nature of food systems requires coordinated action among a diverse set of stakeholders, both food supply chain (FSC) and non-FSC actors - policymakers, food banks, cooperatives.



To align with the EU's goals of fostering inclusive, resilient, and regionally tailored food policies, it is imperative that policymakers actively engage these local actors through participatory governance and leverage their unique capacities to shape locally grounded, effective interventions that may significantly help reduce food waste. This policy brief recommends actions to strengthen the role of local and regional governments in reducing FLW. It is intended for EU policymakers seeking to support decentralised, effective, and inclusive FLW strategies. It follows the EU's Just Transition Pathway defined in the ZeroW project and will guide the action plans of Member States for the newly adopted binding targets.

Policy Problem

Urban food loss and waste policies are currently undermined by fragmented governance, weak institutional capacity, and persistent power imbalances that exclude smaller actors and vulnerable groups from participation. Municipalities often lack the mandate or tools to connect actors across the food system, yet they are uniquely positioned to bridge these gaps. At the same time, many innovations overlook behavioural and equity dimensions, offering few actionable pathways for urban actors to engage. Bureaucratic and administrative barriers further reinforce their exclusion, making it difficult to scale effective interventions or ensure fair access to support mechanisms.

Crucially, the implementation of several Just Pathway Actions identified within ZeroW, particularly Actions 2, 4, 5, and 7, is highly dependent on urban environments and governance structures. These include improving food waste monitoring (Action 2), subsidising FLW-reducing technologies (Action 4), enabling behavioural change through targeted consumer incentives (Action 5), and most importantly strengthening collaboration with external actors like NGOs (Action 7). Cities are central to these actions due to their capacity to coordinate across sectors, their infrastructure, and proximity to consumers.

However, implementation at the urban level faces challenges such as:

- Limited municipal authority over fiscal levers (e.g., tax incentives or procurement standards);
- Fragmented or siloed governance, with unclear leadership on food-related responsibilities;

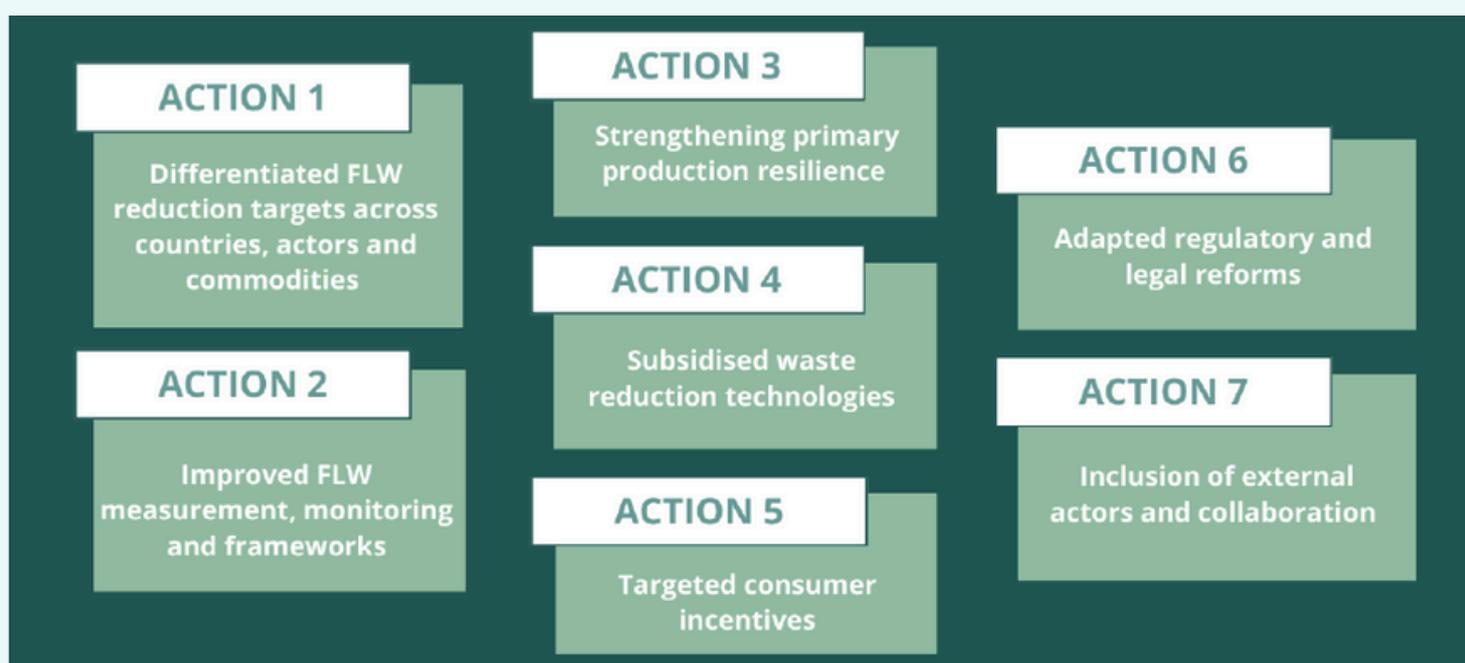
- Poor data availability and inadequate funding to support innovation uptake;
- Underutilised synergies between urban food strategies and national ones.

Addressing these issues requires aligning urban food policy with broader ‘Just Transition Pathway’ strategies and unlocking cities' potential as key implementation arenas.

Evidence from Project

Urban areas are central in the food system and hotspots of FLW. Evidence from the ZeroW project emphasises that reducing FLW in cities requires not just technological innovation, but coordinated, cross-sectoral action and enabling governance environments. Key lessons from the project’s innovations and Just Pathway Actions demonstrate the importance of collaborative mechanisms and data-driven infrastructure in urban contexts.

The project findings explicitly emphasise the importance of integrating external actors into FLW governance, formally recognising cities and NGOs as core contributors to the development and implementation of the just pathway. Effective collaboration is crucial; cities, NGOs, cooperatives, and food banks must actively collaborate and a relevant tool to create systemic solutions include Public-Private Partnerships (PPPs).



Overview of the Just Pathway Actions

To facilitate meaningful participation, institutional support and dedicated funding mechanisms are required, particularly to ensure inclusive partnerships involving smaller actors and vulnerable communities. Policy frameworks should therefore prioritise collaborative governance, embedding cities and local governments within national and EU-level planning processes through participatory mechanisms. Moreover, equity and justice principles, aligned with the 'Just Transition Pathway', must underpin local implementation strategies, safeguarding against regulatory measures disproportionately impacting vulnerable groups such as small-scale farmers and minority communities. Finally, ZeroW's stakeholders consistently highlight the necessity of prioritising preventive approaches, advocating strongly for measures that tackle waste at its source rather than relying predominantly on downstream waste treatment options.

SILL4 (fruit & vegetable redistribution) capacity building activities in Barcelona highlight how enabling governance structures and aligned political responsibilities can significantly improve food redistribution outcomes. There, a single government department oversees both food waste and food aid, allowing streamlined policy and implementation. Fiscal incentives (like VAT exemptions and corporate tax deductions) and legal obligations have made redistribution a viable and attractive pathway for producers and retailers. These measures are supported by an integrated food redistribution network, simplifying logistics and collaboration with Producer Organisations (POs). In contrast, fragmented governance in regions like Belgium creates duplication, inefficiencies, and underutilised infrastructure, despite strong local initiatives. This suggests that urban FLW policy must prioritise institutional coordination, simplification of processes, and long-term investment in food aid infrastructure.

Cross-cutting insights also emerge from pathway actions, such as efforts to build local ecosystems for food waste valorisation. These reveal that while innovation pilots are often technically viable, scaling them requires coordinated action across municipal services, civil society, logistics providers, and local businesses. Quick wins, such as improving redistribution through better storage, transport, and digital platforms, often stall due to unclear roles, missing governance, or lack of structural funding. As such, mapping actors, clarifying responsibilities, and setting up shared governance mechanisms are essential steps for municipalities looking to reduce urban FLW.

Data availability and standardisation are consistent barriers. Across SILLs, data sharing is constrained by unclear ownership, lack of incentives, and limited interoperability. Successful initiatives (e.g., SILL1's semantic data approach) show that progress depends on building communities of practice, not only technical standards. Urban FLW policy should therefore support the development of shared data spaces, aligned with EU data strategies, and invest in capacity-building to help local actors engage with them meaningfully.

Alignment of Just Pathway Actions with existing Urban Policy Instruments:

The Just Pathway Actions identified in ZeroW align with several existing urban policy instruments and initiatives, creating important synergies that can accelerate implementation:

- Just Pathway Action 4: Subsidised waste reduction technologies
 - Matches innovation procurement and green public purchasing frameworks already used by several cities (e.g., in school food services or waste management contracts). Municipalities can apply these to scale digital redistribution platforms or logistics innovations.
- Just Pathway Action 5: Targeted consumer incentives
 - Builds on urban tools for public engagement, nudging, and education (e.g., campaigns, citizen science, or reward schemes for waste separation). Synergies exist with local health and sustainability education programs.



- Just Pathway Action 7: Inclusion of external actors and collaboration
 - Leverages local food policy councils, city networks, and multi-actor governance models. Local governments possess a wide range of action levers to address food waste - spanning urban planning, public procurement, taxation, regulation, municipal food services, public engagement, and waste management.

These synergies suggest that many cities already have the institutional entry points to operationalise the 'Just Transition Pathway', but need additional support, mandate, and coordination to scale impact and ensure equitable participation.

Hence, these findings guide the following policy recommendations.

Key Policy Recommendations

Local and regional governments are crucial enablers of food system transformation. They possess a wide range of action levers³ to address food waste - spanning urban planning, public procurement, taxation, regulation, municipal food services, public engagement, and waste management. Their proximity to local food system actors - producers, distributors and consumers - also positions them uniquely to lead cross-sector collaboration, influence behavioural change, and engage diverse stakeholders. In doing so, local governments can help address power imbalances and foster inclusive governance in line with the Green Deal and the Farm to Fork Strategy.

Given their strategic role, local and regional governments are well-positioned to implement the following target actions to reduce FLW and foster more sustainable and equitable food systems:

- Promote and coordinate agri-food logistics hubs to enhance supply chain and reduce waste. These hubs serve as critical infrastructure within regional food systems and can significantly mitigate FLW through better coordination among stakeholders (the Emilia-Romagna Mercati – Rete di Imprese is a best practice in this sense)⁴.
- Facilitate cross-sector partnerships between logistics hubs, producers' organizations, food banks, and charity associations to redirect surplus food and prevent waste. The Parma CAL within the Logistica Solidale project⁵ is an effective example of collaboration orchestrated by local authorities to achieve measurable reductions in FLW.



- Leverage existing relationships with producers' organizations, particularly through Common Agricultural Policy (CAP) implementation, to support the development of public-private data-sharing communities focused on FLW. Regional administrations can play a central role in creating interoperable data ecosystems using a data space approach, enabling evidence-based decision-making and greater transparency across the value chain.
- Support Short Food Supply Chains (SFSCs), such as farmers' markets and alternative food networks, which contribute to FLW reduction by connecting producers more directly with consumers. Local governments can map existing SFSCs, identify their needs, and provide targeted support through capacity-building initiatives, and by facilitating access to shared physical and digital infrastructure.

To ensure implementation, urban policy actors must institutionalise multi-actor governance structures (e.g., Food Policy Councils⁶ [i], like the Ernährungsrat Freiburg & Region,⁷ and the Cork Food Policy Council⁸) that align and coordinate efforts across planning, procurement, and waste services and help embed FLW goals into local climate and food strategies.

To translate broad EU goals into municipal action, cities should adopt measurable, context-specific targets through local food strategies. Embedding EU-aligned FLW objectives into municipal performance frameworks enables accountability, continuity, and comparability across urban contexts. Participating in transnational networks such as the Milan Urban Food Policy Pact⁹ also facilitates benchmarking, peer learning, and funding access. However, municipalities often lack the authority to fully implement legal, fiscal, or systemic interventions. EU and national policymakers must create an enabling environment to scale urban innovations and align them with systemic change.

1. Strengthen multi-level governance to enable systemic, evidence-informed action on urban food waste

Establish formal cooperation mechanisms across national, regional, and local levels to support the integration of food waste reduction into urban planning and local food strategies. Effective multi-level governance is essential to building sustainable food systems and must be guided by evidence-informed frameworks that reflect the complexity of food systems, the diversity of stakeholders involved, and the trade-offs inherent in policy decisions.¹⁰ Initiatives such as the FutureFoodS Partnership¹¹ and FOODPathS project¹² show how cross-sectoral and cross-level collaboration can accelerate systemic change.

2. Promote multi-actor collaboration for urban food waste reduction

Encourage the development of local Food Waste Alliances that bring together governments, retailers, platforms, and NGOs to co-design context-specific solutions to food waste. Models like the RÉGAL network¹³ in France, and the Food Waste Free United in the Netherlands¹⁴ show how collaborative action can yield tangible results. To scale these approaches, EU support is needed for peer learning platforms, digital infrastructure, and inclusive innovation practices that engage smaller actors, build trust, and ensure equitable participation in waste-reduction initiatives.

3. Incentivise the adoption of national and regional sustainable procurement standards to align cities' public spending with food waste reduction goals

Adopt EU-wide sustainable procurement standards that prioritise food waste prevention in public catering services. By shifting away from purely cost-based criteria, procurement can drive suppliers to adopt waste-reducing practices, such as surplus redistribution and menu optimisation. The Buy Better Food Manifesto for Establishing Minimum Standards for Public Canteens Across the EU¹⁵ and innovative school food procurement models from the SchoolFood4Change project¹⁶ are examples of practical guidance. Malmö's school meal system, for instance, integrates food waste and sustainability criteria into contracts while improving access to healthy meals.

4. Revise tax frameworks at national or regional level to encourage food redistribution and discourage food waste

Use fiscal policy to influence food supply chain behaviour by aligning tax incentives with food waste prevention objectives. Tax breaks can reward surplus food donations, while penalties or redirected levies can discourage landfill use. For example, France¹⁷ offers a 60% tax credit on donated food products, transferable over five years, while Catalonia¹⁸ redistributes landfill/incineration tax revenue to reward municipalities achieving better waste outcomes. These models offer replicable strategies for fostering sustainable behaviour through taxation.

5. Foster the adoption of monitoring tools focusing not only on waste volume but also on participation equity and systemic impact

Develop urban FLW monitoring frameworks that capture both quantitative and qualitative dimensions - tracking not only waste volumes, but also participation equity and governance performance. Indicators should assess how inclusive waste reduction programs are (e.g., participation of SMEs and minority-led initiatives), and whether governance is coherent and accountable. The SILL4 capacity building activity in Barcelona highlights the need for role clarity and coordination. Monitoring tools such as dashboards, transparency indicators, and longitudinal policy tracking can illuminate progress, gaps, and opportunities for institutional reform [ii].



Conclusion

Local and regional governments play a crucial role in reducing food waste and advancing sustainable food systems. The recommendations outlined ranging from promoting cross-sector partnerships to revising fiscal policies, highlight the urgent need for EU policymakers to support local actors in their efforts to reduce food waste, while aligning with broader EU objectives such as the Green Deal and the Farm to Fork strategy. These actions are not only feasible but necessary to ensure that food waste reduction initiatives are effectively tailored to local contexts, empower vulnerable communities, and drive meaningful change across Europe. With coordinated efforts, robust policy frameworks, and the active engagement of local governments, the EU can achieve its food waste reduction targets and foster the development of more resilient, sustainable food systems.

References

1. United Nations (2018), *68% of the world population projected to live in urban areas by 2050, says UN*, UN Department of Economic and Social Affairs (DESA). Online source (accessed in June 2025) : <https://www.un.org/uk/desa/68-world-population-projected-live-urban-areas-2050-says-un>.
2. Eurostat (2024), *Food waste and food waste prevention – estimates*, European Commission. Online source (accessed in June 2025): https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Food_waste_and_food_waste_prevention_-_estimates.
3. ZeroW Deliverable 8.2, 2025
4. Emilia-Romagna Mercati (2025), *Emilia-Romagna Mercati*. Online source (accessed June 2025): <https://emiliaromagnamercati.com/en/>.
5. Parma CAL (2025), *Centro Agroalimentare Logistico di Parma*. Logistica Solidale (accessed June 2025): <https://www.calparma.it/logistica-solidale/iniziativa/>
6. Den Boer, A.C.L., Van der Valk, A.J.J., Regeer, B.J. & Broerse, J.E.W. (2023) Food policy networks and their potential to stimulate systemic intermediation for food system transformation, *Local Environment*, 28(10), 1201–1219.

7. Ernährungsrat Freiburg (2025), Ernährungsrat Freiburg, online, accessed June 2025, <https://ernaehrungsrat-freiburg.de/>.
8. Cork Healthy Cities (2025), *Cork Food Policy Council*, online, accessed June 2025, <https://corkhealthycities.com/cork-food-policy-council/>.
9. Milan Urban Food Policy Pact (2025), *Milan Urban Food Policy Pact*, online, accessed June 2025, <https://www.milanurbanfoodpolicypact.org/>.
10. Circle Economy (2020), *The Urban Policy Instrument Framework – Using Policy to Steer Cities Toward a Circular Economy*, Circle Economy. Online source (accessed in June 2025): [https://cdn.prod.website-files.com/5d26d80e8836af2d12ed1269/5ffff44f1fb4a34061ffe96_20201217%20](https://cdn.prod.website-files.com/5d26d80e8836af2d12ed1269/5ffff44f1fb4a34061ffe96_20201217%20files.com/5d26d80e8836af2d12ed1269/5ffff44f1fb4a34061ffe96_20201217%20)
11. FutureFoodS Partnership (2025), *FutureFoodS Partnership*, online, accessed June 2025, <https://www.futurefoodspartnership.eu/>.
12. FOODPathS (2025), *FOODPathS – Food as Pathways to Sustainability*, online, accessed June 2025, <https://www.foodpaths.eu/>.
13. Ministère de l’Agriculture et de l’Alimentation (2025), *Avec le RéGAL, les collectivités se mobilisent contre le gaspillage alimentaire*, online, accessed June 2025, <https://agriculture.gouv.fr/avec-le-regal-les-collectivites-se-mobilisent-contre-le-gaspillage-alimentaire>.
14. Samen Tegen Voedselverspilling (2025), *Samen Tegen Voedselverspilling*, online, accessed June 2025, <https://samentegenvoedselverspilling.nl/en/>.
15. EU Food Policy Coalition (2022), *Manifesto for establishing Minimum Standards for Public Canteens across the EU*, ICLEI – Local Governments for Sustainability, online, accessed June 2025, https://foodpolicycoalition.eu/wp-content/uploads/2022/10/Manifesto-for-establishing-Minimum-Standards-for-Public-Canteens-across-the-EU_final.pdf.

16. SchoolFood4Change (2025), *SchoolFood4Change*, online, accessed June 2025, <https://schoolfood4change.eu/>

17. European Commission (2019), *Redistribution of surplus food: Examples of practices in the Member States*, EU Platform on Food Losses and Food Waste, Brussels, https://food.ec.europa.eu/system/files/2019-06/fw_eu-actions_food-donation_ms-practices-food-redis.pdf.

18. Interreg Europe (2024), *Performance-based Tax Return Boosts Organic Waste Recycling*, Interreg Europe, online, accessed June 2025, <https://www.interregeurope.eu/good-practices/performance-based-tax-return-boosts-organic-waste-recycling>.

[i] Food Policy Councils (FPCs) are innovative governance tools that support food system transformation. They connect citizens and stakeholders to identify issues, support initiatives, promote sustainable, healthy, and just food systems, and link civil society with government to influence policy. Most FPCs operate locally, though some exist at regional or national levels. For more, see: den Boer et al. (2023).

[ii] For instance, SILL4's analysis of food redistribution in Barcelona revealed that even in cities with progressive policies, fragmented roles and poor coordination can undermine impact. Political responsibility for food waste is often split across departments, with unclear leadership and scattered budgets, a pattern also seen in Belgium. Monitoring governance indicators, such as the presence of formal agreements, transparency of roles, or cross-sector steering bodies, can help illuminate such gaps and support institutional reform.

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