

Innovation	<i>Our project introduces a pioneering approach to reduce food waste in the hospitality sector through the use of smart technology. The innovative food waste monitor, developed by Kitro, uses artificial intelligence to track food waste automatically. By integrating a smart camera with a scale, it measures not just the quantity but also identifies the type of food waste, both from kitchen surplus and plate leftovers. This approach is groundbreaking in that it minimizes the manual effort involved in measuring waste, which is traditionally a barrier for many businesses. What makes this project truly innovative is not just the technology itself, but its integration into a broader urban food strategy. The technology also calculates the cost of the food waste, turning data into actionable insights. For restaurants, this creates a direct financial incentive to reduce waste.</i> <i>The project is also testing structural pathways for long-term adoption. Arteveldehogeschool investigates viable business plans for wider rollout in Ghent's restaurants. Meanwhile, together with Vives (university of applied sciences) we are exploring how to link food waste data with smart meal planning systems, potentially transforming supply chains through demand forecasting.</i> <i>This technological integration is unique in our region and potentially lays the groundwork for future large-scale applications in other sectors, such as elderly care centres, contributing to a more sustainable urban food system.</i>
Impact	<i>The project builds on Ghent's longstanding food strategy (adopted in 2014) by shifting the focus from consumer awareness to measurable, upstream reduction of food waste. The project has a clear impact on both the environment and the economy. By reducing food waste, we contribute directly to lowering greenhouse gas emissions and improving resource efficiency in the food system. Through smart monitoring it allows restaurants to track and reduce waste, which reduces CO2 emissions and water and soil consumption. Kitro promises reductions of food waste up to 60%. In this project we want to collect real data to prove how much food reduction the use of food waste scales can generate in the hospitality sector.</i> <i>Economically, the technology offers both cost savings for businesses and long-term investment efficiency for public food service sectors. Kitro estimates up to 8% savings in food procurement costs. By piloting this model now, Ghent explores how food waste monitoring can be integrated in sectors such as elderly care centres, where optimization could lead to major budgetary and environmental benefits.</i> <i>Socially, the extension to care centres opens the door to more inclusive impacts. The money saved by reducing food waste, can be used to improve the quality of the food.</i> <i>Finally, the collaboration with Kitro is mutually beneficial: Ghent generates data and policy insights while Kitro gains critical feedback to adapt its model to public-private use cases.</i>
Inclusion	<i>The food waste scale project fosters inclusion by engaging a broad range of stakeholders across sectors. Municipal authorities, private businesses, researchers, and technology developers collaborate to tackle food waste, creating a multi-stakeholder ecosystem that ensures a holistic approach. By involving FoodWIN for coaching the restaurants, also the NGO sector is onboard and can learn lessons out of this project.</i> <i>The initiative is designed to be adaptable across different food system fields, from hospitality to healthcare.</i> <i>By working on this project as well consumers as staff get sensitized by the problems of food waste and ways to tackle it. Within this project, we noticed for example that staff and customers start adjusting their behaviour from the moment the scale is visually visible in the room.</i>