

The current food wasted in the European Union is estimated at **58 million tonnes per year**. The associated loss in value is estimated at around **132 billion euro** and the corresponding redundant greenhouse gas emissions are up to **254 million tonnes per year**. The EU has set **legally binding targets** for 2030 to reduce food waste by **10% in processing and manufacturing** and by **30% (per capita) in retail, restaurants food services and households.<sup>1</sup>** 

## SMARTER SUPPLY CHAINS THROUGH REAL-TIME QUALITY MONITORING

The Smart Food Chain is a technology development project aiming to reduce food waste, improve food quality and safety and provide end-to-end traceability in supply chains 'from farm to fork'. This is achieved by significantly improving supply chain efficiencies by gathering real-time food condition data and breaking down existing data silos to leverage the use of data throughout the food supply chain.

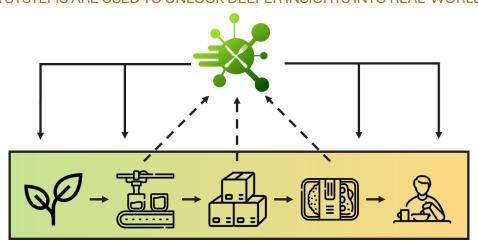
Our goals directly coincide with the aim of the 'Electronic Components and Systems Strategic Research and Innovation Agenda', which is the main subject for the European Chips-JU subsidy call.



The Smart Food Chain project proposal will be submitted to the Chips Joint Undertaking subsidy fund:

- >40 partners from >10 EU countries
- ~40M euro in development costs
- 50% average subsidy rate
- 3 years duration

# NOVEL SENSOR SYSTEMS ARE USED TO UNLOCK DEEPER INSIGHTS INTO REAL-WORLD FOOD CHAINS



The project will develop sensor systems to obtain data from:

- 1. Large volumes of food during processing
- 2. Batches of food during transport and storage
- 3. Single food packages.

<sup>&</sup>lt;sup>1</sup> Reduction compared to reference values about food waste generated in 2021-2023. <u>European Council press release</u>



## THE SMART FOOD CHAIN PROJECT AIMS TO DEVELOP, INTEGRATE, INDUSTRIALIZE AND DEMONSTRATE

- 1. Packaging-integrated sensors & food condition indicators
- 2. Next generation food sensing systems
- 3. Connectivity components & IoT systems
- 4. Interoperable data system, enabling data exchange from farm to fork
- 5. Al based data-analytics and digital twins for supply chain management

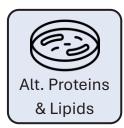
### JOIN US IN TRANSFORMING THE FOOD SUPPLY CHAIN

As part of this pioneering project, consortium partners will collaborate directly with food industry leaders to demonstrate and validate cutting-edge technologies in **real-life supply chain environments**:









Together, we'll prove how these innovations can significantly reduce food waste, boost efficiency, and unlock measurable value across the chain — from producer to retailer.

### SMART FOOD CHAIN CONSORTIUM

To achieve our goals, a consortium of over 40 European partners is combining forces. The consortium covers experts from every stakeholder in the chain:

