



SISTERS

Sistemic **I**nnovations for a **S**usTainable
reduction on the **E**uRopean Food wa**S**tage



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SISTERS' Approach



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5 Innovations for 5 Stages of the Food Chain

- › **Primary production** → Short Chain Platform
- › **Processing** → Bio-Based Packaging
- › **Retail** → Good Practice Guidelines + Dynamic Labelling
- › **Transport/Storage** → Smart Containers & Labels



Innovation 1: Regioneo

Regioneo

Short Chain Platform for farmers

- › Custom websites for selling surplus produce
- › Set-up in less than a day
- › 57.9% recurring customer rate

regioneo 



Innovation 2: Bio-Based Packaging

Bio-Based Packaging

Home-compostable packaging

- › **PLA materials + Evanesto[®] enzymes**
- › **Breaks-down in home compost (200 days)**
- › **Extends shelf-life with antioxidants**
- › **4 packaging types developed**



Innovation 3: Good Practice Guidelines

Good Practice Guidelines

Retail certification system

- › 10 best practices for retailers
- › Seal of Excellence certification
- › Based on 58 retailer surveys
- › Market-driven incentives



Innovation 4: Dynamic Labelling

Dynamic Labelling

Smart discount algorithm

- › **Gradual price reductions before expiration**
- › **Template for any retailer**
- › **Low implementation costs** (mostly in e-ink price displays)
- › **Maximises revenue recovery**



Innovation 5: Smart Containers & Smart Labels

Smart Containers & Labels

Real-time monitoring system

- › Containers track temperature, humidity, O₂, CO₂
- › Containers operate on a subscription-based service model
- › Colour-changing labels for consumers
- › Prevents unnecessary disposal



Next Steps

Next Steps: Policy Integration

- › Financial incentives for adoption
- › Regulatory framework updates
- › Knowledge-sharing networks
- › Harmonised EU standards