



# Overcoming practical limitations for the retailer adoption of eco-friendly clamshell packaging

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## The problem

The use of eco-friendly clamshell packaging is essential to reduce plastic waste and its environmental impacts. However, current solutions face practical challenges, such as limited size, making them inadequate for bulk sales, and opacity, which prevents consumers from inspecting produce quality and leads to inefficient inventory management. These issues hinder the widespread adoption of eco-friendly clamshell packaging by retailers.

## The solution

Redesign eco-friendly clamshell packaging to better meet retailer needs. Particularly, SISTERS, in collaboration with retailers, has evaluated the performance and acceptance of these solutions, identifying the requirement for larger-capacity packaging and adding transparency to the design.

## Larger eco-friendly clamshell packaging allows for:

- ✓ Packaging and displaying more produce.
- ✓ Meeting consumer demand for bulk purchases.

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## While transparent design enables:

- ✓ Improved visibility and appeal of produce on retail shelves.
- ✓ Consumers to easily assess produce quality, encouraging purchases.
- ✓ Enhanced operational efficiency by streamlining inventory management and reducing food waste.
- ✓ Quick identification of spoiled items, ensuring fresher products reach consumers.

## Practical recommendations

- Increase clamshell packaging capacity to accommodate a broader range of produce sizes and quantities.
- Incorporate transparency to allow consumers to easily assess produce quality, improve shelf presentation and increase ease of handling for retail staff.
- Future designs should prioritise consumer trust and operational efficiency to ensure the adoption of eco-friendly packaging solutions on a larger scale.



### About SISTERS and this Practice Abstract

This practice abstract was elaborated in the framework of the SISTERS project, based on the EIP AGRI practice abstract format. © 2024

**Project dates:** from November 2021 to April 2026.

**Goal:** to systemically reduce food loss and waste in the main stages of the food value chain in Europe through innovations targeted to each stage of the chain.