



WP2 update - May 2026

Social and Behavioural Innovation for Reusable Plastic Packaging

Deliverables

- D2.1. A report describing how consumers interact with reusable plastic packaging ✓
- D2.2. Guidelines for the design of reusable plastic packaging to minimise concerns about contamination ✓
- D2.3. Guide for businesses on promoting reusable plastic packaging systems ✓
- D2.4. Set of online resources for businesses implementing a reuse system ✓

Objectives

- To understand how consumers interact with reuse systems, in particular, to what extent concerns about contamination might shape consumer behaviour?
- To understand the effectiveness of develop and test strategies for promoting consumer engagement with reuse systems.

Key Activities

- Collect data on how consumers interact with the range of reusable plastic packaging systems including studied by the Buddie Pack project.
- Collect data on how stakeholders might respond to a system for reusing meat packaging. This will include pubs and restaurant staff, but also food hygiene officers, meat suppliers, packaging manufacturers, and industrial washing businesses.
- Investigate whether providing information about the environmental benefits of reuse systems or cleaning promotes engagement with reuse systems.
- Review data on the effects of surcharges and incentives (e.g., rewards for reuse, penalties for single use) in promoting engagement with reusable packaging systems and understand how those operating reuse systems make decisions about what incentives to use.



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? Key Research Questions

- What factors affect how consumers interact with reuse systems?
- Do we need to rethink what is meant by 'convenience', by investigating how reuse is situated within household practices more broadly?
- What are the barriers and enablers to implementing reusable packaging systems for raw meat in the food service industry?
- How can we promote engagement with reuse systems? Would it be helpful to provide information about the environmental benefits of reuse systems or information about how reusable packaging is cleaned? What about providing rewards and / or implementing penalties?

Results

- We have identified 17 factors that affect consumer interaction with reuse systems, including access and availability, awareness, communication, competencies, convenience, cost, demographics, environmental attitudes and beliefs, habit, hygiene, packaging design, the type of product, the nature of the reuse system, social norms, staff engagement, systemic factors, and technology. These are summarised in Deliverable 2.1 (<https://www.buddie-pack.com/deliverables>).
- We have published a paper in Consumption and Society which argues for a context-specific definition of convenience when discussing reuse, due to the different types of reuse and different provisioning styles reuse is involved in (<https://doi.org/10.1332/27528499Y2025D000000067>).
- Our research investigating stakeholder perspectives prior to planned implementation of a reuse scheme for meat delivered to food service venues identified: (1) a lack of operational readiness in kitchens; (2) the need for a appropriate design of reusable packaging for effective practice (e.g., compatibility with workflows and food safety), (3) power dynamics and fragmentation across the supply chain, and (4) the need to make a business case for reuse, with cost neutrality as a minimum condition. This work was published in Sustainability <https://doi.org/10.3390/su18083849>



[Image used for study of the effects providing information on washing information effect on willingness to reuse](#)

- We have found that informing consumers about (i) the environmental benefits of reusable packaging systems, and / or (ii) washing processes (see Graphic 1) does not make consumers more likely to engage with reuse systems. To find out more, see our papers published in Sustainability <https://www.mdpi.com/2071-1050/16/15/6599> and <https://www.mdpi.com/2071-1050/16/3/1322>
- A scoping review of 52 reuse systems found that the majority (77%) employ positive material consequences (i.e. rewards) to promote engagement or return of packaging, primarily through refundable deposits (42%), while 52% employ negative material consequences (i.e. penalties) mainly through late fees (25%) and surcharges (19%) – see Graphic 2. Quasi-experimental analysis of field data from 31 German outlets operating the Vytal scheme suggested that €0.30-0.90 surcharges on single-use containers increased reusable uptake by 74-98%, with effects persisting over 12 months

43 reuse systems identified



[Graphic 1: Locations of Reuse Schemes across the world.](#)

Use of rewards and penalties across product types



[Graphic 2: Pie chart detailing use of rewards and penalties across product types](#)

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