Bin2Bean

Practice abstract 18

SCAN ME!

Planning and piloting the bio-waste system

*Sound planning is essential for successful bio-waste management. The **Bin2Bean Living Labs** show that every stage of the value chain must align with local and regional conditions. Pilot projects are crucial for testing technical, economic, and social assumptions and should come before full-scale implementation, regardless of the business model.*

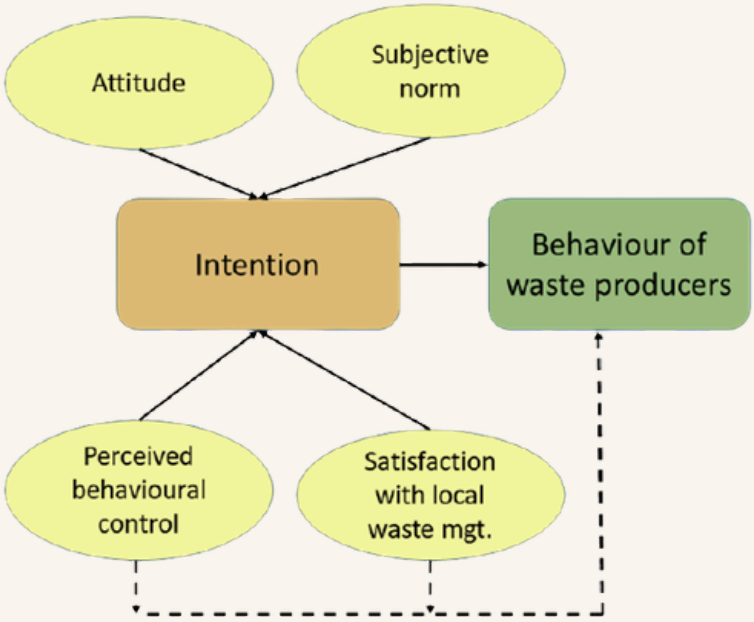
Effective **municipal systems** start with clear targets based on the availability and quality of **organic waste**, market demand for compost and digestate, and the capacity of existing treatment facilities. In Bin2Bean, municipalities assess these factors in real conditions, mapping bio-waste flows and aligning collection with processing needs and market demand. Financial planning is equally important, covering costs such as personnel, logistics, and operations, while revenues depend on waste fees and product markets.

Pilot projects play a central role in the Bin2Bean approach. **Living Labs are used to test and refine collection systems before scaling up**, including bin types, placement, collection schedules, and the inclusion of commercial bio-waste producers. This iterative testing reduces implementation risks and supports evidence-based decision-making.

Citizen engagement is another critical success factor. Bin2Bean Living Labs combine awareness-raising on the link between organic waste, soil health, and climate benefits with practical measures that make separate collection easy and intuitive. Intrinsic motivation is reinforced through education and community involvement, while extrinsic incentives such as differentiated fees, feedback mechanisms, and regulatory enforcement support consistent participation.

Quality and safety monitoring across the entire chain ensures compliance, contaminant control, and proper nutrient content.

Strong collaboration between municipalities, operators, and farmers supports continuous improvement, builds trust, and strengthens long-term market viability.



Extended model of the
Theory of planned behaviour for waste sorting

Project partners

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