Bin2Bean

ACT

Entering the Act phase means ensuring that your validated bio-waste solutions can be scaled up and sustained by a thriving local economy.

Solution Selection & Scoring



IMPLEMENTATION OF THE SCORING SYSTEM: SELECTION OF SOLUTIONS

To complete the PDCA cycle and convert technical, environmental, and financial assessments into strategic municipal decisions, BIN2BEAN has created a scoring system. This comparative ranking framework evaluates and contrasts several bio-waste management scenarios across five core performance dimensions: agronomic performance, safety, environmental performance, circularity, and socio-economic impact. By synthesizing empirical data and weighting locally prioritized indicators, municipal decision-makers can select and scale the bio-waste strategy that best fits their specific regional context.

- **Who leads it:** The city administration (or specifically the municipal Waste Management Department), or an external project coordinator delegated by the city. Essential operational partners include municipal representatives, local waste processing operators, and domain experts in soil science, economics, and Life Cycle Assessment (LCA).
- **What needs to be done:** Compile all measured and calculated indicator values collected during previous testing (e.g., laboratory soil indicator measurements and screening LCA results). Enter the datasets and indicator weights into the scoring tool, run the ranking

procedure, and review the comparative outcomes with local stakeholders in dedicated interpretation workshops. Deliver evidence-based recommendations to city leadership to guide policy adoption and long-term waste management planning.

- **When to use it:** Execute this activity right before taking final decisions regarding the full-scale implementation or policy adoption of bio-waste solutions.
- **Timeline:** Plan for 1 to 3 working days to execute the analysis and review meetings, provided all required indicator values have already been gathered.





According to the results of the scoring system, users can refer back to the Optimising Bio-Waste Collection & Processing guidelines. This activity provides targeted levers to adjust operational processes, refine collection streams, or improve output quality before re-evaluating or scaling up.

Activity Abstract

IMPLEMENTATION OF THE SCORING SYSTEM

WHO	
Who should be the "lead" when using the result?	Strictly speaking, the city. However, this could be an actor responsible for evaluating urban biowaste management solutions, such as someone from the city's waste management department, or external project coordinator working for the city
Who should be involved?	City representatives and other stakeholders with knowledge of the local biowaste management system (e.g. waste operators) should be involved. Use of the scoring system also requires soil experts, economic and LCA experts to be involved, most likely external
WHAT	
Short description of the result	A scoring and ranking framework for assessing and comparing biowaste management solutions, taking into account agronomic performance, safety, environmental performance, circularity, and socio-economic performance
Purpose/Goal	To support decisions by identifying which biowaste management solutions perform best under the priorities and conditions of a specific city or region
Inputs needed to use the result	1) Description of the local biowaste management system 2) Description of the solution(s) to be assessed 3) Selected indicator set and associated weights (obtained from the "Listing of indicators" activity) 4) Measured or computed indicator values or each assessed solution
Main steps of the result	1) Compile measured and calculated indicator values generated in the other assessment activities (i.e., indicator measurements and Screening LCA) 2) Enter indicator values into the scoring system. 3) Run the scoring and ranking procedure. 4) Review and discuss results with relevant stakeholders. 5) Provide recommendations as basis for decision-support in the city

Outputs of using this result	Assessed and ranked list of biowaste management solutions for each of the indicator and aggregated results considering weights of each of the indicators
Links to more information	The scoring system methodology will be publicly available through the BIN2BEAN Scoring System Deliverable after completion of the project (expected early 2027)
WHEN	
When should the result be used?	Before making decisions regarding implementation of solutions
How much time should be planned to use this result?	Typically 1–3 working days once indicator values are available
Timeline	This is an iterative process.
WHERE	
Where should the result be used? (e.g. on site (which site?), in person, online, ...)	The scoring analysis itself can be conducted off-line while interpretation of results is preferably performed in dedicated meetings within the involved city.

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