

SUPPLEMENTARY MATERIAL

**Strategic sustainability:
Unveiling the crucial role of solid waste management
in environmental balance**

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Table S1. Analysis of the views of the study sample for the dimensions of sustainable management

No.	Paragraph	Iteration					Arithmetic average	Standard deviation	Relative importance (%)
		absolutely agree	agree	neutral	don't agree	absolutely don't agree			
1	Practice awareness projects focused on waste management	12	21	20	7	2	3.548	1.035	70.96
2	There are deliberate methodological projects focusing on waste management	5	17	27	8	5	3.145	1.022	62.90
3	Management has waste management curricula and methods	3	14	29	11	5	2.984	0.967	59.68
4	There are panel discussions on waste management	2	19	23	9	9	2.936	1.084	58.72
Education (X₁)							3.153	1.027	63.06
5	The department has advertising campaigns promoting the waste reduction and recycling initiative	7	27	13	11	4	3.335	1.103	66.70
6	Participation of professional staff in programs focusing on sustainable waste management	4	27	20	8	3	3.339	0.957	66.78
7	Possesses activities promoted by waste management-related cadres	3	23	22	9	5	3.161	1.011	63.22
8	There is technical training, courses, seminars, and cultural interventions that focus on sustainable solid waste management	2	22	25	4	9	3.065	1.069	61.30
Participation (X₂)							3.230	1.035	64.50
9	Support participatory waste reduction and recycling programmed	7	17	25	7	6	3.194	1.099	63.88
10	Work in an appropriate manner for the disposal of biological and medical waste and the discharge of water	9	12	25	10	6	3.129	1.152	62.58
11	We have programs to reduce energy and water consumption, prevent food waste and treat sewage	4	12	29	10	7	2.936	1.038	58.72
12	Supporting the management of the company in reducing environmental degradation	4	9	33	10	6	2.919	0.980	58.38

No.	Paragraph	Iteration					Arithmetic average	Standard deviation	Relative importance (%)
		absolutely agree	agree	neutral	don't agree	absolutely don't agree			
Implementation (X₃)							3.044	1.067	60.64
13	The company's management seeks to improve decision-making in environmental policy formulation	7	12	22	15	6	2.984	1.138	59.68
14	Transparent storage and final disposal of hazardous wastes	5	12	31	9	5	3.048	0.999	60.96
15	The company has solid waste management policies and programs	5	16	24	12	5	3.065	1.054	61.30
16	We use sustainable planning and publication of solid waste operational reports and data	4	10	29	10	9	2.839	1.074	56.78
Policy (X₄)							2.984	1.066	59.68
The sustainable management X							3.102	1.048	62.03

Explanations: **X₁ (education)**: this dimension focuses on educational initiatives related to waste management, including training, courses, seminars, and cultural interventions aimed at sustainable solid waste management; **X₂ (participation)**: participation involves professional staff engaging in programs focused on sustainable waste management, demonstrating a significant interest and involvement in waste reduction and recycling initiatives; **X₃ (implementation)**: implementation encompasses the company's efforts to execute decisions and policies related to waste management, such as transparent storage and final disposal of hazardous wastes, indicating action-oriented measures; **X₄ (policy)**: policy dimension refers to the company's solid waste management policies and programs, including sustainable planning and publication of solid waste operational reports and data, showcasing the organisation's approach to waste management at a policy level.

Source: own study.