

	System Thinking	Innovation	Stewardship	Collaboration	Value Optimization	Transparency
DM1						
System Thinking	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Innovation	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Stewardship	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Collaboration	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)
Value Optimization	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)
Transparency	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 1.0)
CR	0,070					
DM2						
System Thinking	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Innovation	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Stewardship	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	MI	(1.0, 1.0, 3.0)
Collaboration	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)
Value Optimization	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(0.2, 0.33, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)
Transparency	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(1.0, 1.0, 3.0)	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)
CR	0,083					
DM3						
System Thinking	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Innovation	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Stewardship	(1.0, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Collaboration	(1.0, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)
Value Optimization	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)
Transparency	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)
CR	0,077					
DM4						
System Thinking	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Innovation	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 3.0)	(1.0, 1.0, 5.0)
Stewardship	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 5.0)

Collaboration	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 5.0)
Value Optimization	(0.33, 1.0, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 1.0)	(1.0, 1.0, 3.0)
Transparency	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.2, 0.33, 1.0)	(0.33, 1.0, 1.0)	(1.0, 1.0, 1.0)
CR	0,067					

Table S1. Expert's pairwise comparisons between CE principles converted in TFN and their CR.

CE Indicators	CE Principles					
	System Thinking	Innovation	Stewardship	Collaboration	Value Optimization	Transparency
Reduction of raw materials	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Renewability	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Recyclability	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)
Reduction of toxic substances	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Reuse	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)
Remanufacturing	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)
Refurbishment	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)
Product Longevity	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)
Stakeholder structure and diversity	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)
Financial Results	(1, 1, 5)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)
Taxation or regulatory milestones	(1, 1, 5)	(1, 1, 5)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)	(1, 5, 9)
Circular investment	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Job Creation	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)	(1, 1, 5)
Income generated by jobs	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)

Employee participation in the CBM	(5, 9, 9)	(1, 5, 9)	(1, 5, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)
Market characterization	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 1, 5)	(1, 1, 5)	(1, 5, 9)
Involvement of stakeholders in decision making process	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)
Mindset/Cultural change	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)

Table S2. Intensity level of relationship between CE principles and indicator converted in TFN.

CE Indicator	CE indicator weight	Defuzzified CE indicator weight	Normalized CE indicator weight
Reduction of raw materials	(2.81, 6.29, 8.47)	6.07	0.0549
Renewability	(3.34, 7.34, 9.00)	6.95	0.0629
Recyclability	(4.02, 8.02, 9.00)	7.52	0.0680
Reduction of toxic substances	(2.81, 6.29, 8.47)	6.07	0.0549
Reuse	(3.49, 6.97, 8.47)	6.64	0.0601
Remanufacturing	(3.34, 6.66, 8.32)	6.39	0.0578
Refurbishment	(3.34, 6.66, 8.32)	6.39	0.0578
Product Longevity	(3.34, 6.66, 8.32)	6.39	0.0578
Stakeholder structure and diversity	(4.25, 7.50, 8.25)	7.08	0.0641
Financial Results	(2.29, 3.57, 6.29)	3.81	0.0345
Taxation or regulatory milestones	(1.68, 3.34, 6.66)	3.61	0.0327
Circular investment	(2.28, 6.28, 9.00)	6.06	0.0549
Job Creation	(2.73, 5.45, 7.71)	5.37	0.0486
Income generated by jobs	(2.81, 5.61, 7.79)	5.51	0.0498
Employee participation in the CBM	(3.93, 7.93, 9.00)	7.45	0.0674

Market characterization	(2.07, 4.64, 7.57)	4.70	0.0425
Involvement of stakeholders in decision making process	(4.25, 7.50, 8.25)	7.08	0.0641
Mindset/Cultural change	(4.46, 7.92, 8.46)	7.44	0.0673

Table S3. CE indicators weights, defuzzified weights and normalized weights.

CE Indicators	Circular Business Models					
	Product as Service	Sharing Economy	Product life extension	On-Demand	Recovery by-products	Dematerialization
Reduction of raw materials	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)
Renewability	(1, 1, 5)	(1, 5, 9)	(1, 1, 5)	(1, 1, 5)	(1, 5, 9)	(1, 5, 9)
Recyclability	(1, 1, 5)	(1, 5, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)
Reduction of toxic substances	(1, 1, 5)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Reuse	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Remanufacturing	(1, 1, 5)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Refurbishment	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Product Longevity	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Stakeholder structure and diversity	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 5, 9)
Financial Results	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)
Taxation or regulatory milestones	(5, 9, 9)	(1, 5, 9)	(1, 5, 9)	(1, 1, 5)	(5, 9, 9)	(1, 5, 9)
Circular investment	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(5, 9, 9)
Job Creation	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)
Income generated by jobs	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(1, 5, 9)

Employee participation in the CBM	(5, 9, 9)	(1, 5, 9)	(5, 9, 9)	(1, 1, 5)	(5, 9, 9)	(5, 9, 9)
Market characterization	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)
Involvement of stakeholders in decision making process	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)	(5, 9, 9)
Mindset/Cultural change	(5, 9, 9)	(1, 1, 5)	(1, 1, 5)	(5, 9, 9)	(1, 1, 5)	(1, 1, 5)

Table S4. Intensity level of relationship between the CE indicators and CBMs converted in TFNs.

CE Indicators	Circular Business Models					
	Product as Service	Sharing Economy	Product life extension	On-Demand	Recovery by products	Dematerialization
Reduction of raw materials	(0.55, 1.0, 1.0)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Renewability	(0.11, 0.11, 0.55)	(0.11, 0.55, 1.00)	(0.11, 0.11, 0.55)	(0.11, 0.11, 0.55)	(1, 5, 9)	(0.11, 0.55, 1.00)
Recyclability	(0.11, 0.11, 0.55)	(1, 5, 9)	(0.55, 1.00, 1.00)	(0.11, 0.11, 0.55)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Reduction of toxic substances	(0.11, 0.11, 0.55)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Reuse	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Remanufacturing	(0.11, 0.11, 0.55)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Refurbishment	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Product Longevity	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Stakeholder structure and diversity	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Financial Results	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Taxation or regulatory milestones	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.11, 0.55, 1.00)	(0.11, 0.11, 0.55)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Circular investment	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.11, 0.55)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Job Creation	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)
Income generated by jobs	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)

Employee participation in the CBM	(0.55, 1.00, 1.00)	(0.11, 0.55, 1.00)	(0.55, 1.00, 1.00)	(0.11, 0.11, 0.55)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Market characterization	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Involvement of stakeholders in decision making process	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)	(0.55, 1.00, 1.00)
Mindset/Cultural change	(0.55, 1.00, 1.00)	(0.11, 0.11, 0.55)	(0.11, 0.11, 0.55)	(0.55, 1.00, 1.00)	(0.11, 0.11, 0.55)	(0.11, 0.11, 0.55)

Table S5. Normalized intensity level of relationship between the CE indicators and CBMs.

CE Indicators	Circular Business Models					
	Product as Service	Sharing Economy	Product life extension	On-Demand	Recovery by-products	Dematerialization
Reduction of raw materials	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)
Renewability	(0.0070, 0.0070, 0.0349)	(0.007, 0.0349, 0.0629)	(0.0070, 0.0070, 0.0349)	(0.0070, 0.0070, 0.0349)	(0.0070, 0.0349, 0.0629)	(0.0070, 0.0349, 0.0629)
Recyclability	(0.0076, 0.0076, 0.0378)	(0.0076, 0.0378, 0.068)	(0.0378, 0.0680, 0.0680)	(0.0076, 0.0680, 0.0680)	(0.0378, 0.0680, 0.0680)	(0.0076, 0.0378, 0.0680)
Reduction of toxic substances	(0.0061, 0.0061, 0.0305)	(0.0061, 0.0305, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0061, 0.0305, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0061, 0.0305, 0.0549)
Reuse	(0.0334, 0.0601, 0.0601)	(0.0334, 0.0601, 0.0601)	(0.0334, 0.0601, 0.0601)	(0.0067, 0.0334, 0.0601)	(0.0334, 0.0601, 0.0601)	(0.0067, 0.0334, 0.0601)
Remanufacturing	(0.0064, 0.0064, 0.0321)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)
Refurbishment	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)
Product Longevity	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)	(0.0321, 0.0578, 0.0578)	(0.0064, 0.0321, 0.0578)

Stakeholder structure and diversity	(0.0356, 0.0641, 0.0641)	(0.0071, 0.0356, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0071, 0.0356, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0071, 0.0356, 0.0641)
Financial Results	(0.0192, 0.0345, 0.0345)	(0.0192, 0.0345, 0.0345)	(0.0192, 0.0345, 0.0345)	(0.0192, 0.0345, 0.0345)	(0.0192, 0.0345, 0.0345)	(0.0192, 0.0345, 0.0345)
Taxation or regulatory milestones	(0.0182, 0.0327, 0.0327)	(0.0036, 0.0182, 0.0327)	(0.0036, 0.0182, 0.0327)	(0.0036, 0.0182, 0.0327)	(0.0182, 0.0327, 0.0327)	(0.0036, 0.0182, 0.0327)
Circular investment	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)	(0.0061, 0.0061, 0.0305)	(0.0305, 0.0549, 0.0549)	(0.0305, 0.0549, 0.0549)
Job Creation	(0.0270, 0.0486, 0.0486)	(0.0054, 0.0270, 0.0486)	(0.0270, 0.0486, 0.0486)	(0.0270, 0.0486, 0.0486)	(0.0270, 0.0486, 0.0486)	(0.0054, 0.0270, 0.0486)
Income generated by jobs	(0.0277, 0.0498, 0.0498)	(0.0055, 0.0277, 0.0498)	(0.0277, 0.0498, 0.0498)	(0.0277, 0.0498, 0.0498)	(0.0277, 0.0498, 0.0498)	(0.0055, 0.0277, 0.0498)
Employee participation in the CBM	(0.0374, 0.0674, 0.0674)	(0.0075, 0.0374, 0.0674)	(0.0374, 0.0674, 0.0674)	(0.0075, 0.0075, 0.0374)	(0.0374, 0.0674, 0.0674)	(0.0374, 0.0674, 0.0674)
Market characterization	(0.0236, 0.0425, 0.0425)	(0.0236, 0.0425, 0.0425)	(0.0236, 0.0425, 0.0425)	(0.0236, 0.0425, 0.0425)	(0.0236, 0.0425, 0.0425)	(0.0236, 0.0425, 0.0425)
Involvement of stakeholders in decision making process	(0.0356, 0.0641, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0356, 0.0641, 0.0641)	(0.0356, 0.0641, 0.0641)
Mindset/Cultural change	(0.0374, 0.0673, 0.0673)	(0.0075, 0.0075, 0.0374)	(0.0075, 0.0075, 0.0374)	(0.0374, 0.0673, 0.0673)	(0.0075, 0.0075, 0.0374)	(0.0075, 0.0075, 0.0374)

Table S6. Weighted intensity level of relationship between the CE indicators and CBMs.

CE Indicators	FPIS (F^+)	FNIS (F^-)
Reduction of raw materials	(0.0549, 0.0549, 0.0549)	(0.0305, 0.0305, 0.0305)
Renewability	(0.0629, 0.0629, 0.0629)	(0.0070, 0.0070, 0.0070)
Recyclability	(0.0680, 0.0680, 0.0680)	(0.0076, 0.0076, 0.0076)

Reduction of toxic substances	(0.0549, 0.0549, 0.0549)	(0.0061, 0.0061, 0.0061)
Reuse	(0.0601, 0.0601, 0.0601)	(0.0067, 0.0067, 0.0067)
Remanufacturing	(0.0578, 0.0578, 0.0578)	(0.0064, 0.0064, 0.0064)
Refurbishment	(0.0578, 0.0578, 0.0578)	(0.0064, 0.0064, 0.0064)
Product Longevity	(0.0578, 0.0578, 0.0578)	(0.0064, 0.0064, 0.064)
Stakeholder structure and diversity	(0.0641, 0.0641, 0.0641)	(0.0071, 0.0071, 0.0071)
Financial Results	(0.0345, 0.0345, 0.0345)	(0.0192, 0.0192, 0.0192)
Taxation or regulatory milestones	(0.0327, 0.0327, 0.0327)	(0.0036, 0.0036, 0.0036)
Circular investment	(0.0549, 0.0549, 0.0549)	(0.0061, 0.0061, 0.0061)
Job Creation	(0.0486, 0.0486, 0.0486)	(0.0054, 0.0054, 0.0054)
Income generated by jobs	(0.0498, 0.0498, 0.0498)	(0.0055, 0.0055, 0.0055)
Employee participation in the CBM	(0.0674, 0.0674, 0.0674)	(0.0075, 0.0075, 0.0075)
Market characterization	(0.0425, 0.0425, 0.0425)	(0.0236, 0.0236, 0.0236)
Involvement of stakeholders in decision making process	(0.0641, 0.0641, 0.0641)	(0.0356, 0.0356, 0.0356)
Mindset/Cultural change	(0.0673, 0.0673, 0.0673)	(0.0075, 0.0075, 0.0075)

Table S7. Fuzzy Positive Ideal Solutions and Fuzzy Negative Ideal Solutions.

Taxation or regulatory milestones	0.0084	0.0188	0.0188	0.0252	0.0084	0.0188
Circular investment	0.0141	0.0141	0.0141	0.0422	0.0141	0.0141
Job Creation	0.0125	0.0279	0.0125	0.0125	0.0125	0.0279
Income generated by jobs	0.0128	0.0286	0.0128	0.0128	0.0128	0.0286
Employee participation in the CBM	0.0173	0.0387	0.0173	0.0519	0.0173	0.0173
Market characterization	0.0109	0.0109	0.0109	0.0109	0.0109	0.0109
Involvement of stakeholders in decision making process	0.0164	0.0164	0.0164	0.0164	0.0164	0.0164
Mindset/Cultural change	0.0173	0.0518	0.0518	0.0173	0.0518	0.0518
D_i^+	0.3816	0.4883	0.3338	0.5151	0.3111	0.4860

Table S8. Distance between the intensity values and Fuzzy Positive Ideal Solution.

	$d(A_1, A^-)$	$d(A_2, A^-)$	$d(A_3, A^-)$	$d(A_4, A^-)$	$d(A_5, A^-)$	$d(A_6, A^-)$
Reduction of raw materials	0.0199	0.0199	0.0199	0.0199	0.0199	0.0199
Renewability	0.0161	0.0361	0.0161	0.0161	0.0361	0.0361
Recyclability	0.0175	0.0390	0.0524	0.0175	0.0524	0.0390
Reduction of toxic substances	0.0141	0.0315	0.0423	0.0315	0.0423	0.0315
Reuse	0.0462	0.0462	0.0462	0.0345	0.0462	0.0345
Remanufacturing	0.0148	0.0332	0.0445	0.0332	0.0445	0.0332
Refurbishment	0.0445	0.0332	0.0445	0.0332	0.0445	0.0332

Product	0.0445	0.0332	0.0445	0.0332	0.0445	0.0332
Longevity						
Stakeholder structure and diversity	0.0493	0.0368	0.0493	0.0368	0.0493	0.0368
Financial Results	0.0125	0.0125	0.0125	0.0125	0.0125	0.0125
Taxation or regulatory milestones	0.0252	0.0188	0.0188	0.0084	0.0252	0.0188
Circular investment	0.0422	0.0422	0.0422	0.0141	0.0422	0.0422
Job Creation	0.0374	0.0279	0.0374	0.0374	0.0374	0.0279
Income generated by jobs	0.0384	0.0286	0.0384	0.0384	0.0384	0.0286
Employee participation in the CBM	0.0519	0.0387	0.0519	0.0173	0.0519	0.0519
Market characterization	0.0154	0.0154	0.0154	0.0154	0.0154	0.0154
Involvement of stakeholders in decision making process	0.0233	0.0233	0.0233	0.0233	0.0233	0.0233
Mindset/Cultural change	0.0518	0.0173	0.0173	0.0518	0.0173	0.0173
D_i^-	0.5650	0.5336	0.6168	0.4743	0.6432	0.5650

Table S9. Distance between the intensity values and Fuzzy Negative Ideal Solution.