

Circularity Indicators _ The Advisor

Target the Right C-Indicators Unlock the C-Potential of your Products



Home The C-Indicators Advisor (CIA)

The CIA Web-based Tool

<u>The C-Potential Indicator Tool</u>

Publications

<u>Contribute</u> <u>Contact</u>

The Circularity Potential Indicator (CPI) Tool (beta version)

The CPI aims at evaluating the circularity potential of industrial products during: (re-)design, development or benchmarking phases. The CPI provides practical keys for improving and monitoring the circularity performance of products and associated business practices. The CPI is computed through a guided questionnaire of twenty attributes (ATT#) impacting the circular economy (CE) performance of a product.

The twenty attributes are based on a literature review and grouped in the four building blocks (BB#) of the CE defined by the Ellen MacArthur Foundation.

Circularity Performance Indicator Unlock the Circularity Potential of your Product	Circularity Score of the Product = (out of 100)	0.00
BB#1 - Circular Product Design (sub-score / 2	25)	(
ATT#1 - Materials selection and combination compatibility (sub-score / 5)	(
Number of differents materials	Select Answer	~
Technical recyclability of materials combinaison	Select Answer	✓
Material contamination (coating, paints, and material mixing)	Select Answer	✓
ATT#2 - Modular product design, adaptability and flexibility		
ls the product contained standardised components	Select Answer	~
Has the product being design with a modular mindset	Select Answer	✓
ATT#3 - Design for disassembly and easy end-of-life sorting		
Handling and manoeuvrability of the product (for a single user)	Select Answer	~
Number of different distinct components (regarding the size of the product)	Select Answer	~
Joints and connections numbers (regarding the size and number of components)	Select Answer	~
Joints and connections types	Select Answer	✓
Joints and connections accessibility	Select Answer	✓
Disassembly cost and time (regarding value of the product)	Select Answer	✓
Tools required for disassembly	Select Answer	~
ATT#4 - Design for upgradability		
Possible options of upgradability	Select Answer	~
ATT#5 - Design for maintainability and longevity		
Wear and tear indicator or information	Select Answer	~
Possibility of maintenance and repair	Select Answer	~
Accessibility, visibility, reachability and identifiability of key components	Select Answer	✓
BB#2 - New Business Model		(
ATT#6 - Design for PSS & Product-as-a-Service		(
s the manufacturer currently retain ownership of the product	Select Answer	√
ATT#7 - Leasing or rental schemes		
Leasing or rental offers for the product	Select Answer	<u>~</u>
ATT#8 - Aftersales services - Customized services related to the product		
Number of services (among diagnosis, preventive maintenance, repair service, warranty)	Select Answer	~

ATT#9 - Take-back offers		0.00
Take-back schemes	Select Answer	0.00
ATT#10 - Partnership networks, Sharing platform or Industrial Symbiosis	Select Albwei	0.00
Is there any other forms of collaboration between manufacturers, retailers,		
customers	Select Answer	
BB#3 - Reverse Cycles		0.00
ATT#11 - Traceability of products and components all along lifecycle	0.00	
ls the product included any form of connectivity allowing tracking or traceability	Select Answer	
ls there any information-sharing system or database between stakeholders all along value chain	Select Answer	
ATT#12 - Efficiency and cost of take-back processes		0.00
Organisation of the take-back process	Select Answer	
Profitability (cost to return product to facilities compared to product value)	Select Answer	
ATT#13 - Collection infrastructures and mechanisms		0.00
Collection infrastructures (sorting and other mechanisms)	Select Answer	
ATT#14 - Treatment facilities (remanufacturing and recycling) features		0.00
Treatment facilities taking up end-of-life operations	Select Answer	
Remanufacturing or recycling costs (compared to original components, primary materials value)	Select Answer	
Facilities capacity regarding amount of products	Select Answer	
Technical documentation for end-of-life handling (e.g. dismantling instructions) available	Select Answer 🗸	
ATT#15 - Collaboration between actors involved in EoL value chain		0.00
Is there any consortium, mutual or shared interest among actors to a closed-loop supply chain	Select Answer 🗸	
BB#4 - Favourable System Conditions		0.00
ATT#16 - Product conditions at the end-of-life (resudual value)	0.00	
Value degradation of material for recycling	Select Answer	
Physical deterioration of component for reuse or remanufacturing	Select Answer	
Quality and reliability of recycled materials or remanufactured products	Select Answer	
ATT#17 - Stakeholders' willingness, behaviours and motivations		0.00
Rethinking incentives and pro-active attitude from companies to enhance the circular economy	Select Answer 🗸	
Users' awareness of environmental issues, sustainability and circularity	Select Answer	
Users' emotional links to the product	Select Answer	
Communication to users on possibilities of reuse, recycle or dispose properly their	Select Answer	
products		
ATT#18 - Policy framework		0.00
	Select Answer	0.00
ATT#18 - Policy framework		0.00
ATT#18 - Policy framework Waste legislation concerning the product	Select Answer	0.00
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed	Select Answer Select Answer	0.00
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability)	Select Answer Select Answer Select Answer	0.00
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability) Mandatory ecodesign standard for reuse and repair	Select Answer Select Answer Select Answer	
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability) Mandatory ecodesign standard for reuse and repair ATT#19 - Second-hand market characteristics	Select Answer Select Answer Select Answer Select Answer V	
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability) Mandatory ecodesign standard for reuse and repair ATT#19 - Second-hand market characteristics Presence of second-hand market for the product	Select Answer Select Answer Select Answer Select Answer Select Answer V Select Answer	
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability) Mandatory ecodesign standard for reuse and repair ATT#19 - Second-hand market characteristics Presence of second-hand market for the product Market demand for remanufacturing products	Select Answer	
ATT#18 - Policy framework Waste legislation concerning the product Mandatory percentage of reuse or recycling imposed Is the product concerned by EPR (Extended Producer Responsability) Mandatory ecodesign standard for reuse and repair ATT#19 - Second-hand market characteristics Presence of second-hand market for the product Market demand for remanufacturing products Markets for secondary raw materials of the product	Select Answer Select Answer	







