

Supplementary material

Type 1 Social Life Cycle Assessment Results within Circular Economy

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Supplementary material

This file contains a supplementary table of the main text. Table A1 lists the considered stakeholder categories and impact subcategories and the used indicators of the assessment.

Table S1. Stakeholders, subcategories, and indicators

Stakeholder	Subcategory	Indicator
Local community	Local employment	Percentage of workforce hired locally
		Strength of policies on local hiring preferences
		Percentage of spending on locally based suppliers
	Access to material resources	Establishment of effective policies, waste management systems and procedures to ensure proper management of unavoidable pollution and waste.
		Avoidance of the release of hazardous materials.
Value chain actors		Meeting of environmental standards or certification schemes.
		Reasonable efforts to encourage organizations in sphere of influence to follow responsible labor practices.

	Promoting social responsibility	<p>Expectation of suppliers and sub-contractors to comply with a code of labor practice or contractual obligations.</p> <p>Conduction of due diligence by effectively communicating the requirements to be achieved.</p> <p>Participation in, or use tools of, one or more initiatives for social responsibility.</p> <p>Assessment of significant risks of non-conformance by suppliers/subcontractors and monitoring of activities and tracking performance to ensure that these risks are effectively addressed.</p> <p>Efforts to encourage organizations in sphere of influence to follow responsible labor practices.</p>
	End-of-life responsibility	<p>Presence of internal management systems ensure that clear information is provided to consumers on end-of-life options.</p>
	Workers Health and Safety	<p>Reporting of occupational accidents, incidents and diseases.</p> <p>Adequate general occupational safety measures are taken. Provision of a safe and healthy workplace environment.</p> <p>Medical assistance and first-aid should be provided.</p> <p>Access to drinking water should be ensured.</p> <p>Availability of documents related to procedures to detect, prevent, minimize, eliminate potential risks to the health and safety of personnel.</p>
Society	Public commitment to sustainability issues	<p>Reporting performance on social responsibility to stakeholders at appropriate intervals.</p> <p>Encouragement of organizations engage in high quality standards for nonfinancial information, including environmental and social aspects.</p>

Table S2. Amount of worked hours for consumables

Consumable/product	Amount (unit)	Worked hours (h/€)	Reference
Linear system			

Chemical A	0.03E-3 m ³	0.0035	[1]
Electricity	6.67 kWh	0.0025	[2]
Circular system			
Chemical A	0.02E-3 m ³	0.0035	[1]
Chemical B	0.02E-3 m ³	0.0035	[1]
Chemical C	0.008 m ³	0.0035	[1]
Electricity	15.38 kWh	0.0025	[2]
References			

1. Solvay 2020 *Annual Report. Essential and Stronger*; 2020;
2. E.ON *Annual Report 2020*; 2020;