



2025-09-15

Lyreco LCA

Life Cycle Assessment

The methodology in this report is based on ISO 14040

6.059.401 (sold in PL)

Summary



01 | Methodology



02 | Results

01

Methodology

Environmental Impact Assessment

Functional unit	<p>The functional unit is a quantified performance of a product system for use as a reference unit. One of the primary purposes of a functional unit is to provide a reference to which the input and output data are normalized (in a mathematical sense).</p> <p>The functional unit of this analysis is "1 jacket(s) used and washed 5 times [Ecobalyse]".</p>
Impact Indicator	<p>The impact is measured through the "IPCC 2013 GWP 100a" method.</p>
Electricity impact calculation method	<p>Following guidelines from the GHG Protocol, the impact of electricity is calculated using the location-based approach. This means that the emission factors used represent the average annual carbon intensity of the power grid in the country the processes take place in.</p>
Hypothesis	<p>The Product's material composition is supplemented, if necessary, by secondary information as shown in the list below.</p> <ul style="list-style-type: none"> - Cotton 100% <p>Manufacturing Processes and associated loss percentages are assumed based on materials in the product.</p> <p>The electricity is based on the average in the country of manufacturing.</p> <p>Transportation is based on the common routes between the country of manufacturing and the country of sale.</p> <p>No replacements during the lifetime, therefore there are no emissions corresponding to the usage phase of the clipboard.</p> <p>The End of Life is based on the average waste management process of the materials in the product.</p>

Environmental Impact Assessment

System Boundaries

The scope of this research includes the complete lifecycle of a t-shirt from raw material extraction to disposal options for each material, which is the cradle-to-grave perspective.

Exclusions

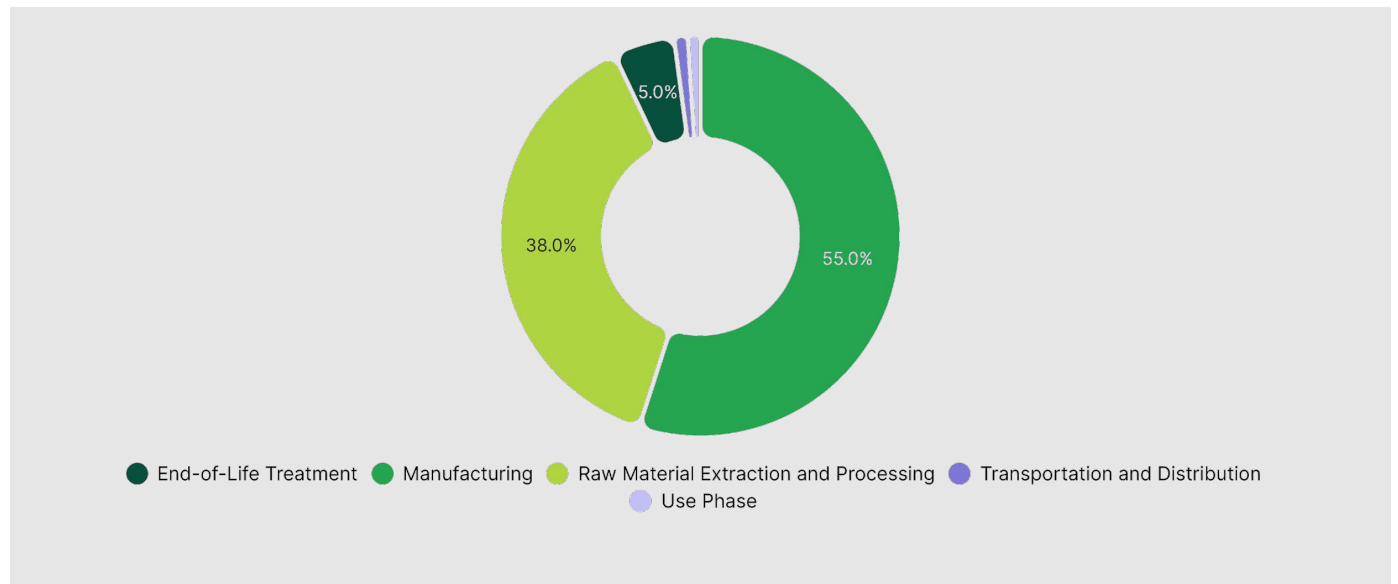
The impact of secondary packaging is excluded from this assessment.

02

Results

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Climate Change



Step	Impact (kg CO ₂ eq)	Percentage (%)
Manufacturing	7.46	54.96 %
Raw Material Extraction and Processing	5.16	37.99 %
End-of-Life Treatment	0.67	4.95 %
Transportation and Distribution	0.15	1.10 %
Use Phase	0.14	1.00 %
TOTAL	13.58	100.00 %

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Climate Change - Raw Material Extraction and Processing

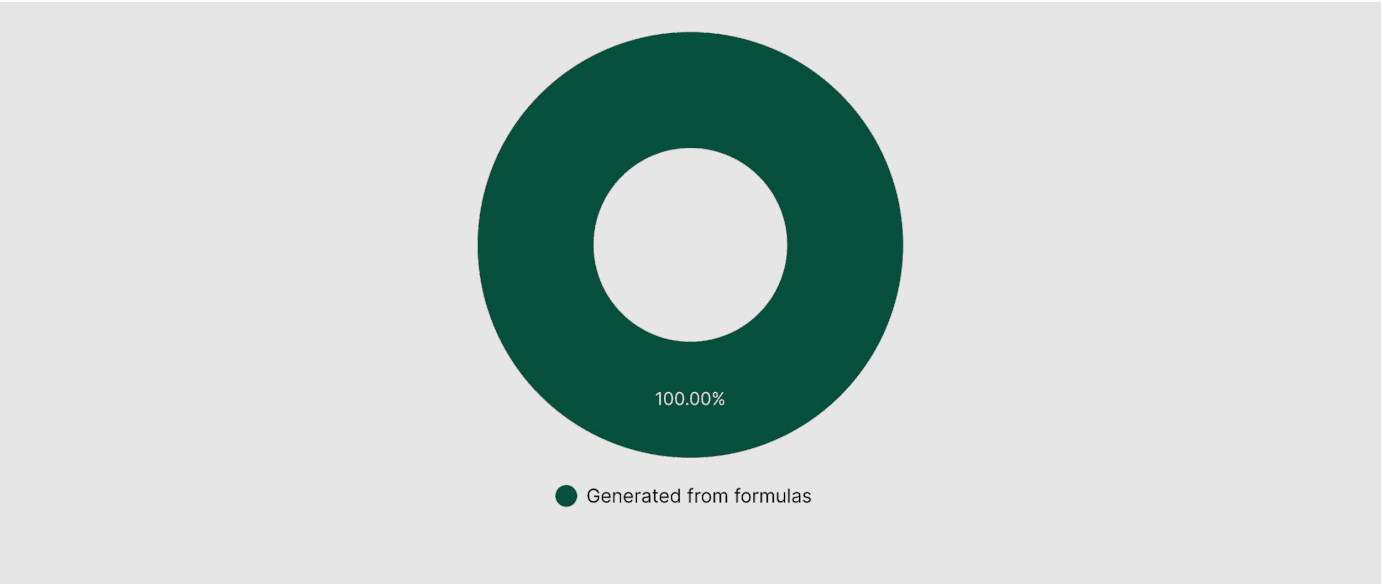


● Generated from formulas

Activity	Emission Factor Num	Quantity	Impact (kg CO ₂ eq)	Percentage (%)
Generated from formulas	1	0.89	5.16	100.00 %
TOTAL			5.16	100.00 %

6.059.401 (sold in PL)

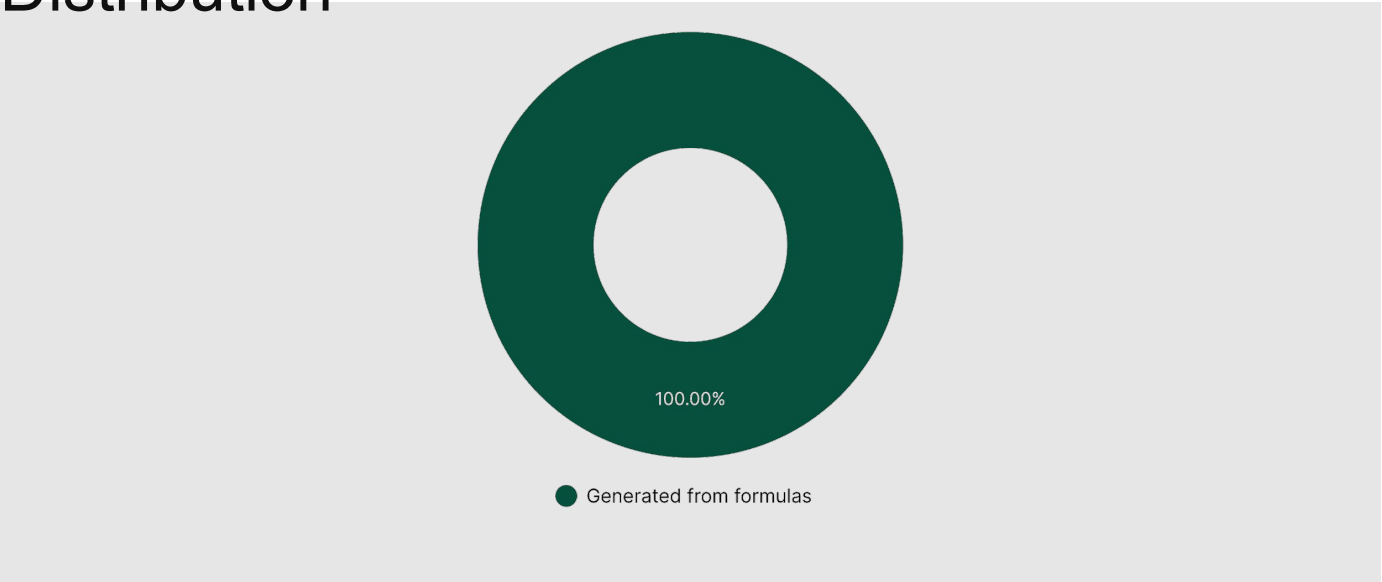
Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Impact (kg CO ₂ eq)	Percentage (%)
Generated from formulas	3	15.68	7.46	100.00 %
TOTAL			7.46	100.00 %

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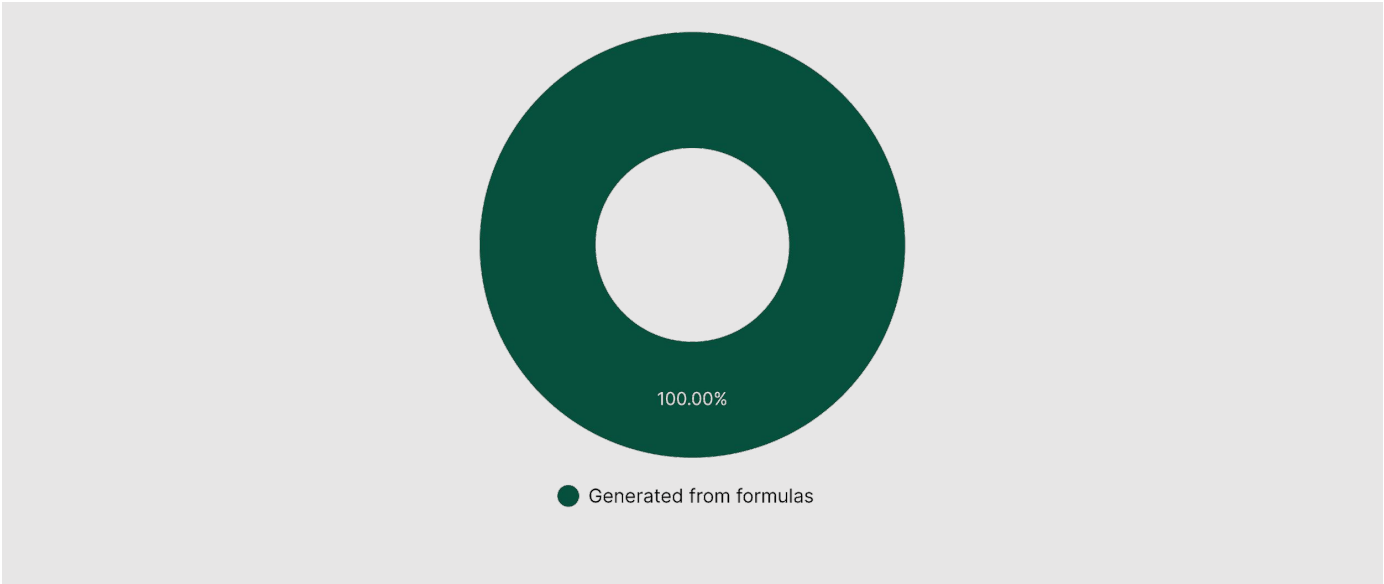
Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Generated from formulas	6	0.68	149.62	100.00 %
TOTAL			149.62	100.00 %

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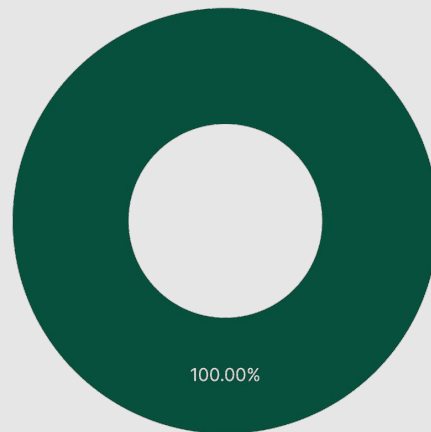
Climate Change - Use Phase



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Generated from formulas	7	0.18	136.19	100.00 %
TOTAL			136.19	100.00 %

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Climate Change - End-of-Life Treatment



● Generated from formulas

Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Generated from formulas	8	0.68	672.79	100.00 %
TOTAL			672.79	100.00 %

Contact us

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