

greenly

2025-09-18

Lyreco LCA

Life Cycle Assessment

The methodology in this report is based on ISO 14040

17231104 (sold in CH)

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). The functional unit of this analysis is "20 page(s) of A4 paper for writing".</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	

Environmental Impact Assessment

System Boundaries

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

Exclusions

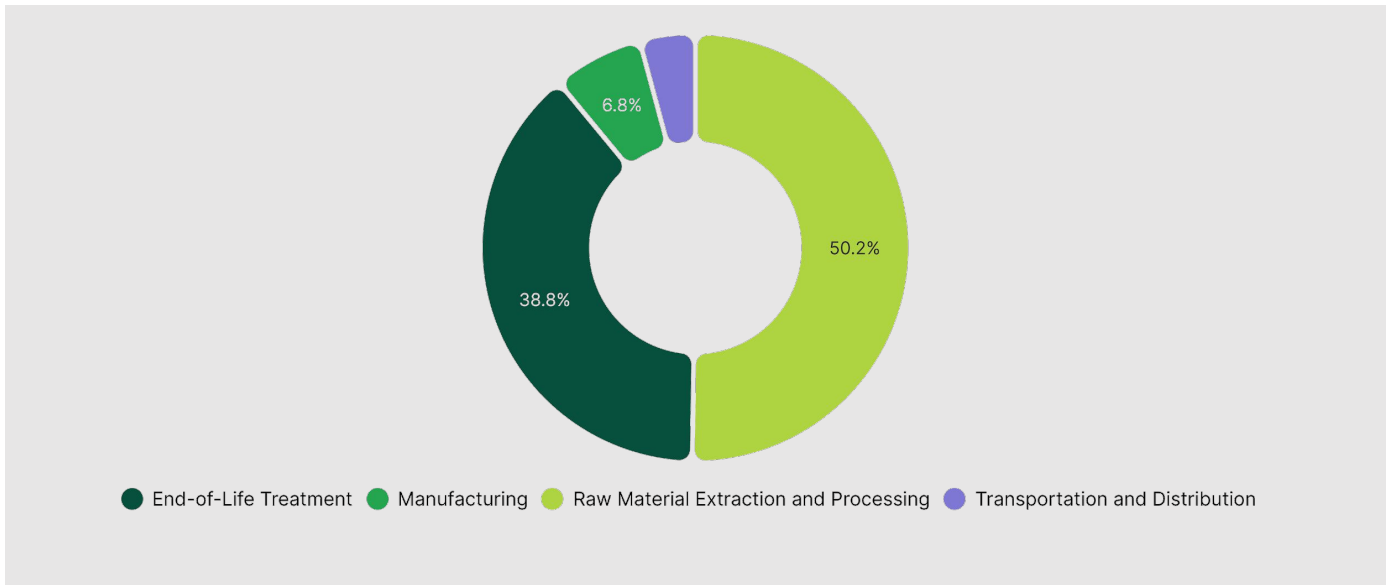
The impact of secondary packaging impact and writing utensils are excluded from this assessment.

02

Results

17231104 (sold in CH)

Climate Change



Step	Impact (g CO ₂ eq)	Percentage (%)
Raw Material Extraction and Processing	438.05	50.23 %
End-of-Life Treatment	338.18	38.78 %
Manufacturing	59.31	6.80 %
Transportation and Distribution	36.53	4.19 %
TOTAL	872.06	100.00 %

17231104 (sold in CH)

Climate Change - Raw Material Extraction and Processing



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Sourcing of raw material (bleached kraft paper)	1	0.88	438.05	100.00 %
TOTAL			438.05	100.00 %

17231104 (sold in CH)

Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Natural gas usage during material transformation (bleached kraft paper)	3	0.17	30.26	51.03 %
Electricity usage during material transformation (bleached kraft paper)	2	0.31	29.04	48.97 %
TOTAL			59.31	100.00 %

17231104 (sold in CH)

Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
Freight	4	0.59	36.53	100.00 %
TOTAL			36.53	100.00 %

17231104 (sold in CH)

Climate Change - End-of-Life Treatment



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
End of life (bleached kraft paper)	5	0.59	338.18	100.00 %
TOTAL			338.18	100.00 %

Contact us

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