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2025-09-15

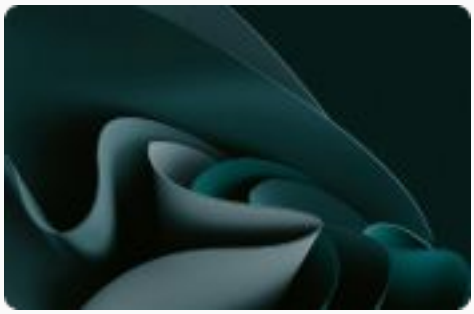
Lyreco LCA

Life Cycle Assessment

The methodology in this report is based on ISO 14040

10.059.864 (sold in SE)

Summary



01

Methodology

Environmental Impact Assessment

Functional unit	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 “3 set(s) of adhesive notes for the purpose of writing”.
Impact Indicator	The impact is measured through the "IPCC 2013 GWP 100a" method.
Electricity impact calculation method	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.
Hypothesis	The Product’s material composition is supplemented by secondary information, if necessary, as shown in the list below. - paper: paper 99% - binding: adhesive 1% Manufacturing Processes and associated loss percentages are assumed based on materials in the product. The electricity is based on the average in the country of manufacturing. Transportation is based on the common routes between the country of manufacturing and the country of sale. No replacements during the lifetime, therefore there are no emissions corresponding to the usage phase. The End of Life is based on the average waste management process of the materials in the product.

Environmental Impact Assessment

System Boundaries	The scope of this research includes the complete lifecycle of a stack of sticky notes from raw material extraction to disposal options for each material, which is the cradle-to-grave perspective.
Exclusions	The impact of secondary packaging and writing utensils are excluded from this assessment.

02

Results

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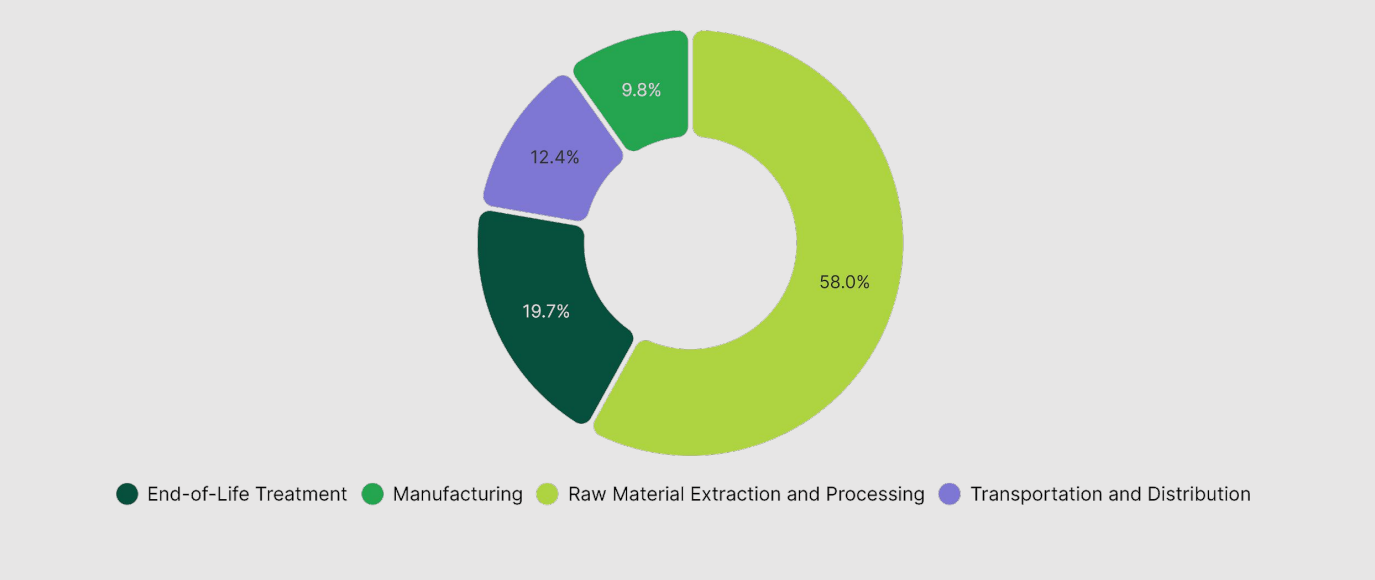
Climate Change



Step	Impact (g CO_2 eq)	Percentage (%)
Raw Material Extraction and Processing	560.02	58.04 %
End-of-Life Treatment	189.87	19.68 %
Transportation and Distribution	120.08	12.44 %
Manufacturing	94.97	9.84 %
TOTAL	964.94	100.00 %

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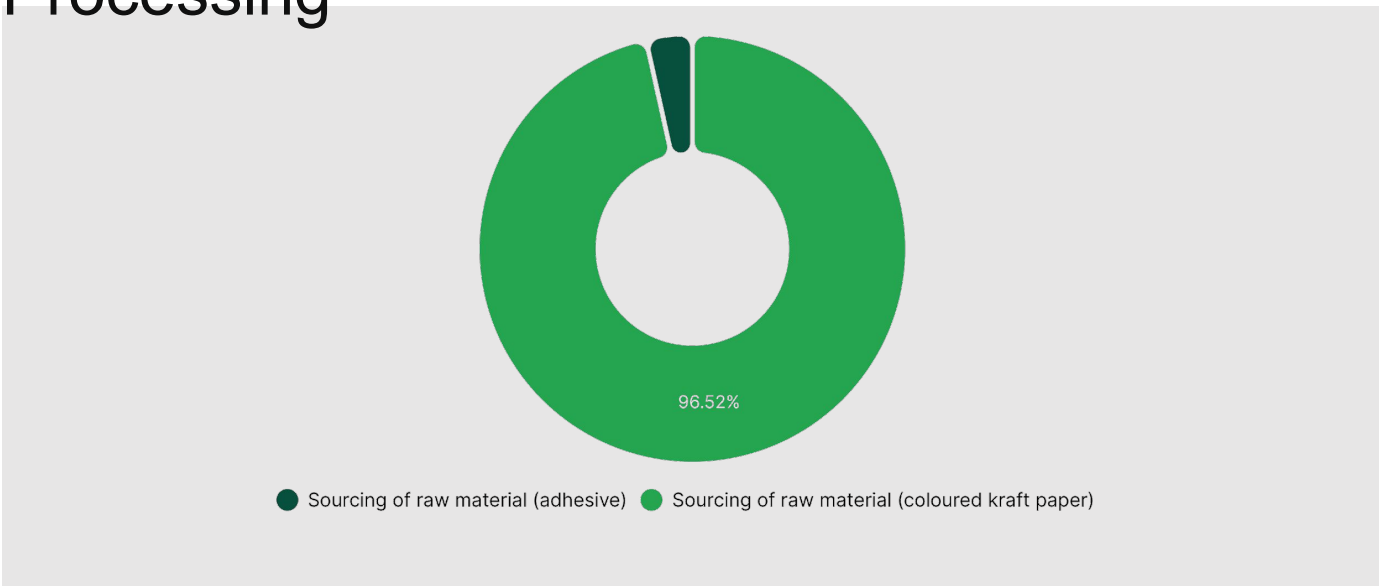
Climate Change - Raw Material Extraction and Processing



Activity	Emission Factor Num	Quantity	Impact (g CO_2 eq)	Percentage (%)
Sourcing of raw material (coloured kraft paper)	1	0.48	540.54	96.52 %
Sourcing of raw material (adhesive)	2	3.57 · 10^-3	19.48	3.48 %
TOTAL			560.02	100.00 %

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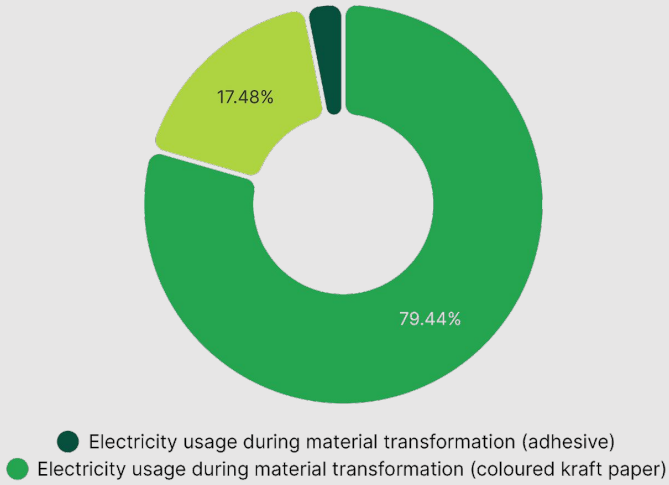
Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Impact (g CO_2 eq)	Percentage (%)
Electricity usage during material transformation (coloured kraft paper)	3	0.17	75.44	79.44 %
Natural gas usage during material transformation (coloured kraft paper)	4	0.09	16.6	17.48 %
Electricity usage during material transformation (adhesive)	3	6.63 · 10^-3	2.93	3.09 %
TOTAL			94.97	100.00 %

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Climate Change - Transportation and Distribution

Activity	Emission Factor Num	Quantity	Impact (g CO_2 eq)	Percentage (%)
Freight	5	0.32	120.08	100.00 %
TOTAL			120.08	100.00 %

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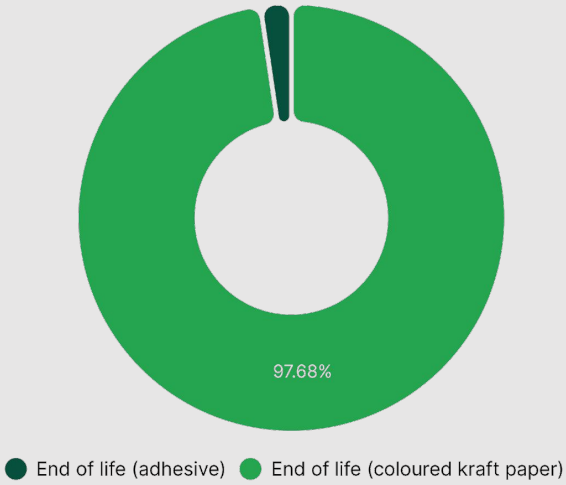
Climate Change - End-of-Life Treatment



Activity	Emission Factor Num	Quantity	Impact (g CO_2 eq)	Percentage (%)
End of life (coloured kraft paper)	7	0.32	185.47	97.68 %
End of life (adhesive)	6	3.24 · 10^-3	4.4	2.32 %
TOTAL			189.87	100.00 %

Contact us

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