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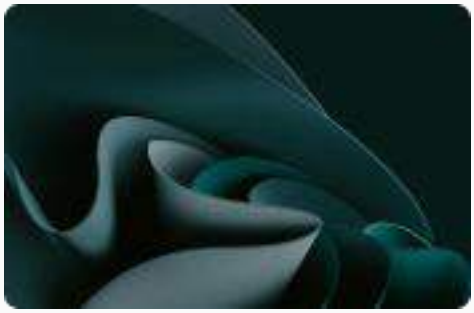
Nordisk Microfiber

Life Cycle Assessment
Cradle to Gate

High Performance Mop, 40 cm

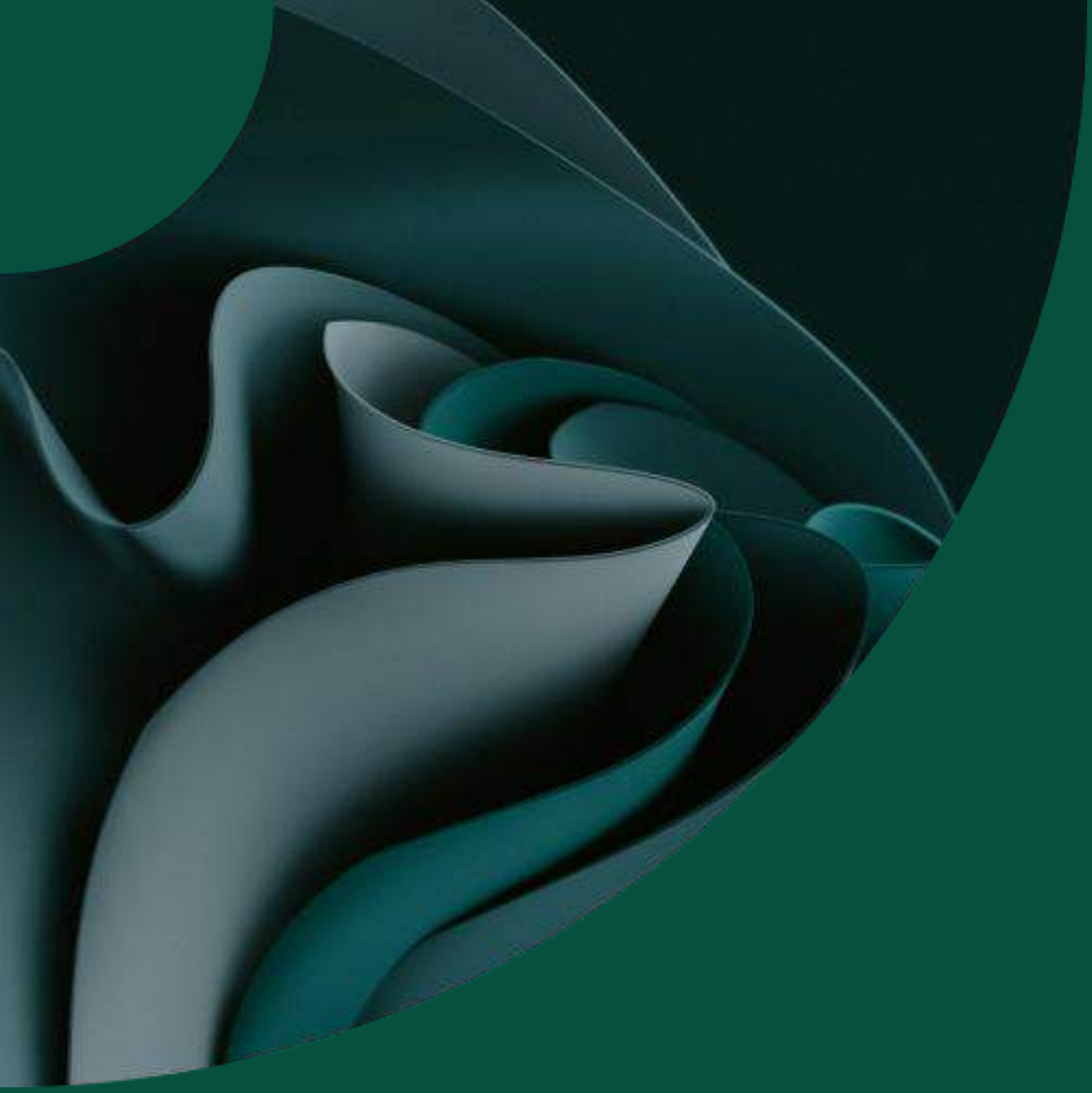
2025-12-19

Summary



01 | Methodology

02 | Results



01 Methodology

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Environmental Impact Assessment

Functional unit	The functional unit of this analysis is “Product 'High Performance Mop, 40 cm' (product code: FX-40-110) is made of 80% recycled polyester + 20% polyamide, weighs 0.122 kgs, and is not otherwise certified”
Impact Indicator	The impact is measured through the "EF v3.1 method" method
Hypothesis	The data source for the emission factors is EcoInvent 3.12. The System Model used is allocation, cut-off by classification. Where data was not available from NMF, conservative estimates have been applied. Assumptions include; origin of raw materials (GLO, IN averages) and manufacturing processes (GLO averages).

Environmental Impact Assessment

System Boundaries

The scope of this study is Cradle-to-Gate and assesses according to EF v3.1 as LCIA (Life Cycle Impact Assessment) method is developed by the European Commission.

This method is compatible with ISO 14040/44 and PEF. This LCA has not been independently reviewed.

Exclusions

The following stages have been excluded: Downstream Transportation, Use and End-of-Life.

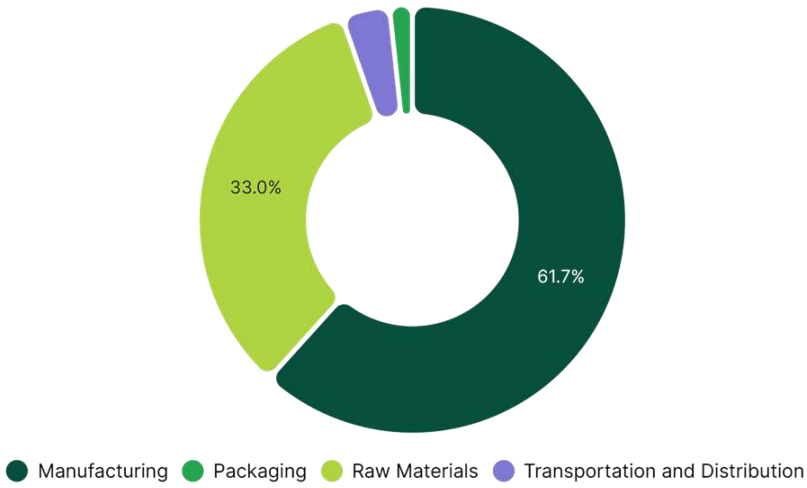
Emission Factor Inventory

Num	Emission Factor	Source	Value	Unit
1	Nylon 6-6 | Market for nylon 6-6 | Market activity	ECOINVENT 3.12	8.32	kg
2	Polyethylene terephthalate, pellets, recycled fibre based | Market for polyethylene terephthalate, pellets, recycled fibre based | Market activity	ECOINVENT 3.12	1.23	kg
3	Polyethylene terephthalate, granulate, amorphous | Market for polyethylene terephthalate, granulate, amorphous | Market activity	ECOINVENT 3.12	3.70	kg
4	Weaving, synthetic fibre | Market for weaving, synthetic fibre | Market activity	ECOINVENT 3.12	0.56	kg
5	Fibre, polyester | Polyester fibre production, finished | Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
6	Printed paper | Market for printed paper | Market activity	ECOINVENT 3.12	2.54	kg
7	Corrugated board box | Market for corrugated board box | Market activity	ECOINVENT 3.12	1.27	kg
8	Transport, freight, lorry, diesel, unspecified | Market for transport, freight, lorry, unspecified | Market activity	ECOINVENT 3.12	0.16	metric_t_km
9	Transport, freight, sea, container ship, heavy fuel oil | Market for transport, freight, sea, container ship, heavy fuel oil | Market activity	ECOINVENT 3.12	0.01	metric_t_km

02 Results

High Performance Mop, 40 cm

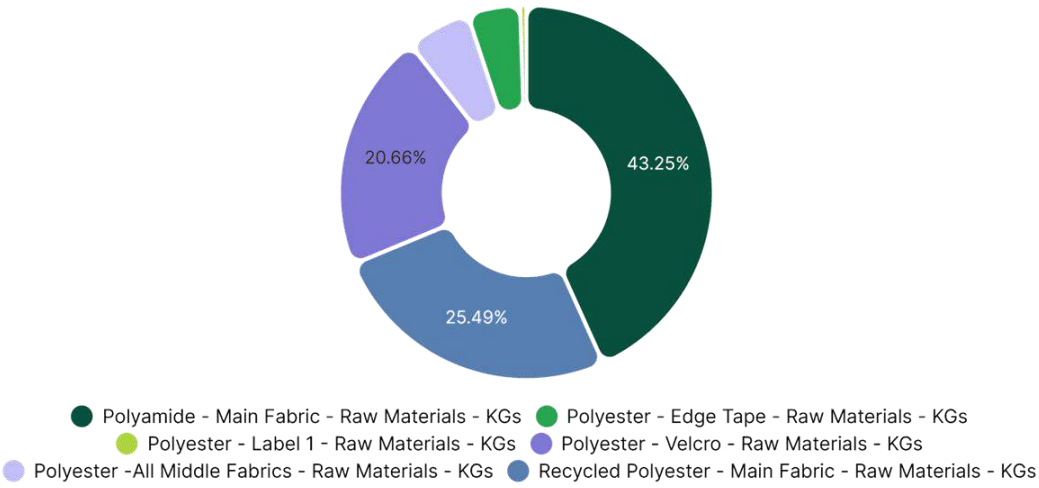
Climate Change



Step	Impact ($kg\ CO_2\ eq$)	Percentage (%)
Manufacturing	0.65	61.70 %
Raw Materials	0.35	32.97 %
Transportation and Distribution	0.04	3.62 %
Packaging	0.02	1.71 %
TOTAL	**1.06**	**100.00 %**

High Performance Mop, 40 cm

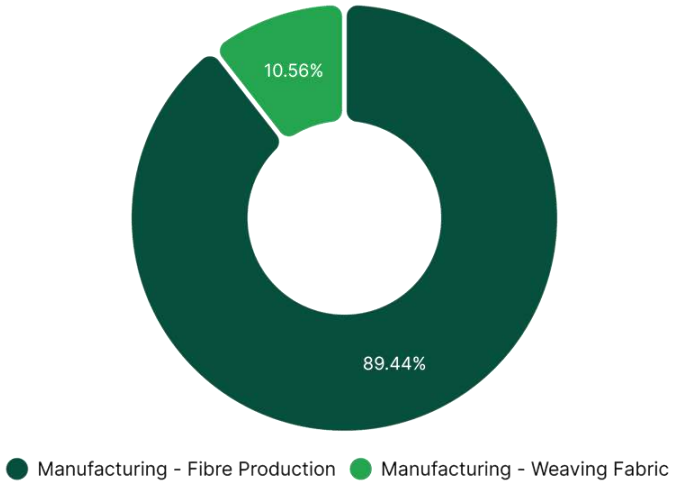
Climate Change - Raw Materials



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO_2 eq)	Percentage (%)
Polyamide - Main Fabric - Raw Materials - KGs	1	0.02	kg	0.15	43.25 %
Recycled Polyester - Main Fabric - Raw Materials - KGs	2	0.07	kg	0.09	25.49 %
Polyester - Velcro - Raw Materials - KGs	3	0.02	kg	0.07	20.66 %
Polyester -All Middle Fabrics - Raw Materials - KGs	3	5.2 · 10^-3	kg	0.02	5.51 %
Polyester - Edge Tape - Raw Materials - KGs	3	4.3 · 10^-3	kg	0.02	4.56 %
Polyester - Label 1 - Raw Materials - KGs	3	5 · 10^-4	kg	1.85 · 10^-3	0.53 %
TOTAL				0.35	100.00 %

High Performance Mop, 40 cm

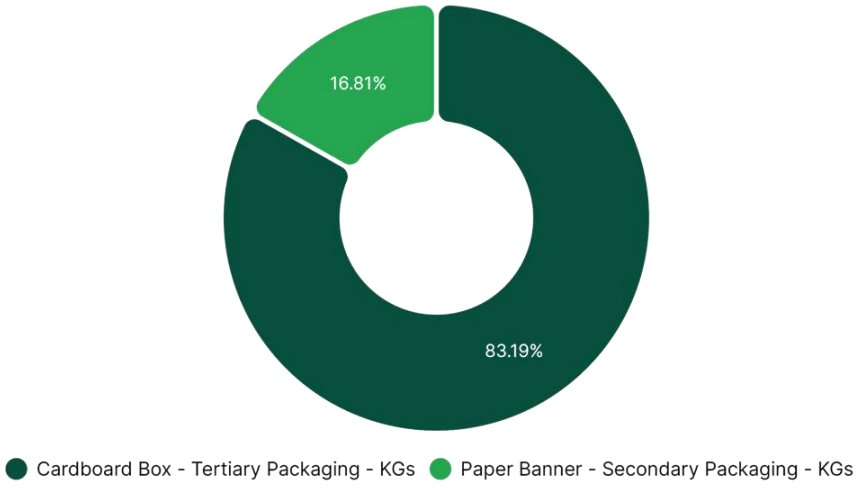
Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO_2 eq)	Percentage (%)
Manufacturing - Fibre Production	5	0.12	kg	0.58	89.44 %
Manufacturing - Weaving Fabric	4	0.12	kg	0.07	10.56 %
TOTAL				0.65	100.00 %

High Performance Mop, 40 cm

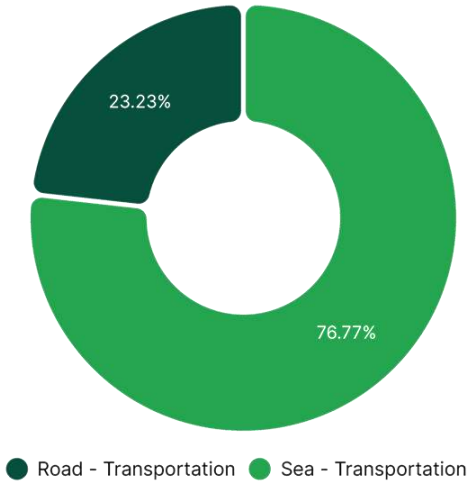
Climate Change - Packaging



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO_2 eq)	Percentage (%)
Cardboard Box - Tertiary Packaging - KGs	7	0.01	kg	0.02	83.19 %
Paper Banner - Secondary Packaging - KGs	6	1.2 · 10^-3	kg	3.04 · 10^-3	16.81 %
TOTAL				0.02	100.00 %

High Performance Mop, 40 cm

Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO_2 eq)	Percentage (%)
Sea - Transportation	9	3.05	metric_t_km	0.03	76.77 %
Road - Transportation	8	0.06	metric_t_km	8.9 · 10^-3	23.23 %
TOTAL				0.04	100.00 %

This LCA was carried out by Sustaina Company using the Greenly software. This LCA has not been third party verified.

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