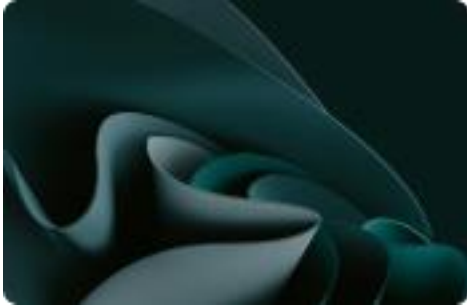


Life Cycle Analyses

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Summary



01 | Methodology

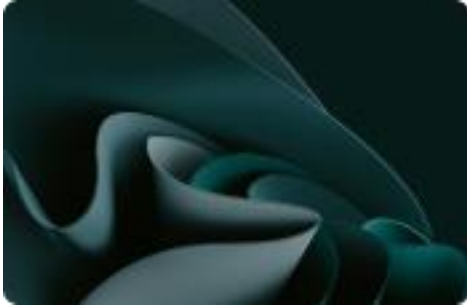


02 | Results

01

Methodology

Summary



01 | Methodology



02 | Results

Emission Factor Inventory

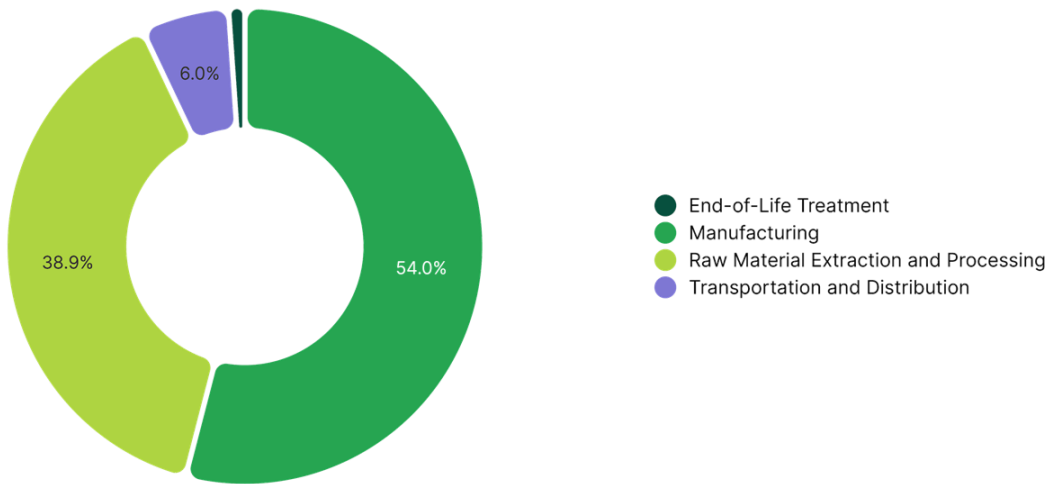
Num	Emission Factor	Source	Value	Unit
1	Steel, low-alloyed Ordinary transforming activity	ECOINVENT 3.10	2.203301567	kg
2	Acrylonitrile-butadiene-styrene copolymer Ordinary transforming activity	ECOINVENT 3.10	4.533718346	kg
3	Natural stone plate, cut Ordinary transforming activity	ECOINVENT 3.10	0.1200093679	kg
4	market for copper, anode	ECOINVENT 3.10	6.209959797	kg
5	Electricity Total (Scope 2 & 3) People's Republic of China	IEA 2023	0.7231	kWh
6	Freight Boat From CN to FR	WELOW EXPERTS 1.0	0.25227278	kg
7	market for inert waste	ECOINVENT 3.10	0.015324362	kg
8	Waste reinforcement steel Ordinary transforming activity	ECOINVENT 3.10	0.06273427595	kg
9	market for scrap copper	ECOINVENT 3.10	0.03507768	kg
10	Residues, MSWI, waste plastic, consumer electronics Ordinary transforming activity	ECOINVENT 3.10	0.3620299477	kg

02

Results

Desk lamp

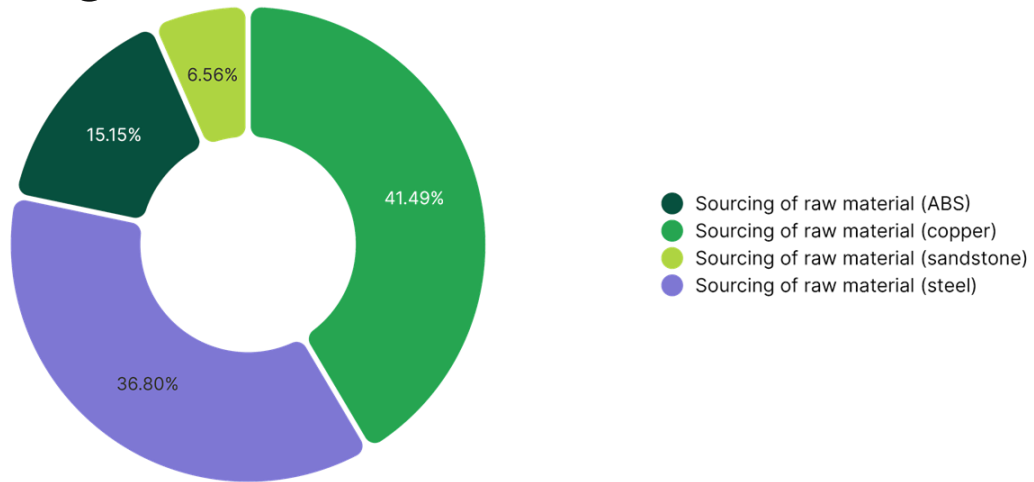
Climate Change



Step	Impact (kg CO ₂ eq)	Percentage (%)
Manufacturing	9.14	54.03 %
Raw Material Extraction and Processing	6.59	38.91 %
Transportation and Distribution	1.01	5.96 %
End-of-Life Treatment	0.19	1.10 %
TOTAL	18,22	100.00 %

Desk lamp

Climate Change - Raw Material Extraction and Processing



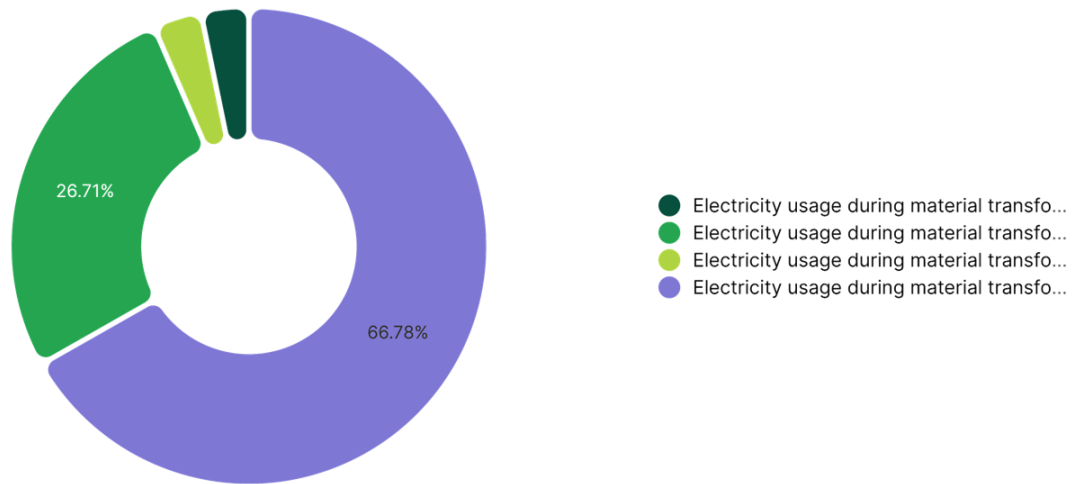
Activity	Emission Factor Num	Quantity	Impact (kg CO ₂ eq)	Percentage (%)
Sourcing of raw material (copper)	4	0.44	2.73	41.49 %
Sourcing of raw material (steel)	1	1.1	2.42	36.80 %
Sourcing of raw material (ABS)	2	0.22	1	15.15 %
Sourcing of raw material (sandstone)	3	3.6	0.43	6.56 %

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TOTAL			6.59	100.00 %
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Desk lamp

Climate Change - Manufacturing



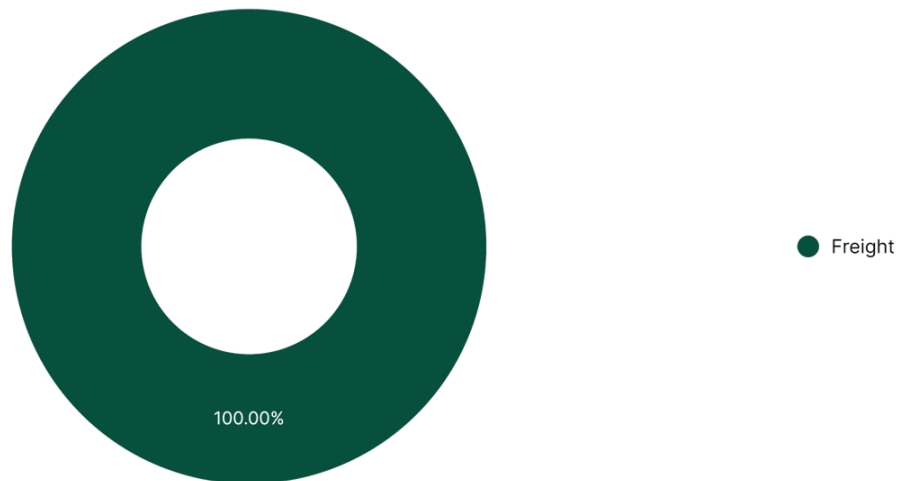
Activity	Emission Factor Num	Quantity	Impact (kg CO ₂ eq)	Percentage (%)
Electricity usage during material transformation (steel)	5	8.44	6.11	66.78 %
Electricity usage during material transformation (copper)	5	3.38	2.44	26.71 %
Electricity usage during material transformation (sandstone)	5	0.41	0.3	3.27 %
Electricity usage during material transformation (ABS)	5	0.41	0.3	3.23 %

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TOTAL			9.14	100.00 %
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Desk lamp

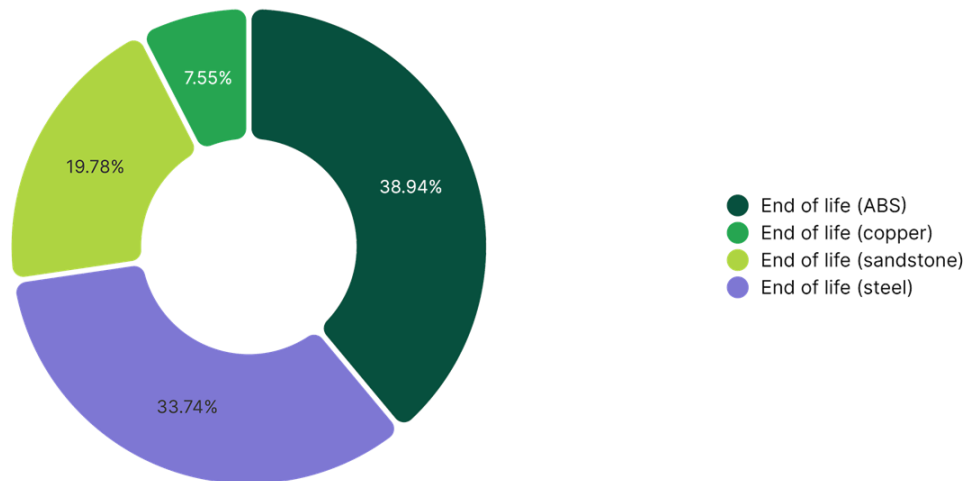
Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Impact (kg CO ₂ eq)	Percentage (%)
Freight	6	4	1.01	100.00 %
TOTAL			1.01	100.00 %

Desk lamp

Climate Change - End-of-Life Treatment



Activity	Emission Factor Num	Quantity	Impact (g CO ₂ eq)	Percentage (%)
End of life (ABS)	10	0.2	72.41	38.94 %
End of life (steel)	8	1	62.73	33.74 %
End of life (sandstone)	7	2.4	36.78	19.78 %
End of life (copper)	9	0.4	14.03	7.55 %

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TOTAL			185.95	100.00 %
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