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CNAS VV009-EI

Zhongtian Radio Frequency Cable Co., Ltd.

Organizational GHG Verification Report

Client: Zhongtian Radio Frequency Cable Co., Ltd.

Name of Verification Body: TÜV SÜD Certification and Testing (China) Co., Ltd.

Address of Verification Body: 5F, Communication Building, 163 Pingyun Rd, Huangpu Ave. West, Guangzhou 510656 P.R. China

Report No.: 704102501319 Rev.01

Date of issue: 2025-08-21

Table of Contents

Verification summary

Client ..... :	Zhongtian Radio Frequency Cable Co., Ltd.
Responsible Party..... :	Zhongtian Radio Frequency Cable Co., Ltd.
Address of responsible party..... :	No 105 Qixin Road, Economic & Technological Development Zone, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA 226010
Reporting period ..... :	2024-01-01~2024-12-31
Project started date..... :	2025-02-17
Declaration of Responsible party ..... :	Claim Content: The total GHG emissions of Zhongtian Radio Frequency Cable Co., Ltd. at the organizational level in 2024-01-01~2024-12-31 in organizational boundary and reporting boundary are 499211.0385 tCO_2e. Claim Date: 2025-01-14
Verification standard	☒ ISO 14064-1:2018 *Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals* *cification with* *gas*
Implementation	
Organizational boundaries	nic & Province, PEOPLE'S REPUBLIC OF CHINA, No.5 Tianchi Road, Hekou Town, Rudong, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA, Second Floor of Office Building 3, Zhongtian Industrial Park, Hekou S REPUBLIC OF
Level of assurance..... :	☒ Reasonable ☐ Limited
Material discrepancy..... :	Within 5% of total emissions across organizational boundaries
Related Industrial Category ..... :	A02 General Manufacturing (A2.6 Computer, communications and other electronic equipment manufacturing)
Reporting boundary ..... :	☒ Category 1: direct GHG emissions and removals ☒ Category 2: indirect GHG emissions from imported energy ☒ Category 3: indirect GHG emissions from transportation

	☒ Category 4: indirect GHG emissions from products used by organization ☒ Category 5: indirect GHG emissions associated with the use of products from the organization ☒ Category 6: indirect GHG emissions from other sources
GHG groups.....:	Including CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3 seven types of greenhouse gases
GHG sources and sinks.:	The facilities of the organization contributing to GHG emissions within the reporting boundaries
Base year.....:	2024-01-01, 2024-12-31
Verification conclusion ...:	In accordance with ISO 14064-3:2019, the claim submitted by the responsible party was verified. It was verified that the organization's calculations of carbon emissions within the boundaries meet the [redacted] and that the [redacted]med data and [redacted]jor discrepancy.
Verification c... types.....	
Verification tean... member.....	
Leader of verification team.....:	Johny Wang
Other personnel (observers.....:	Observers /

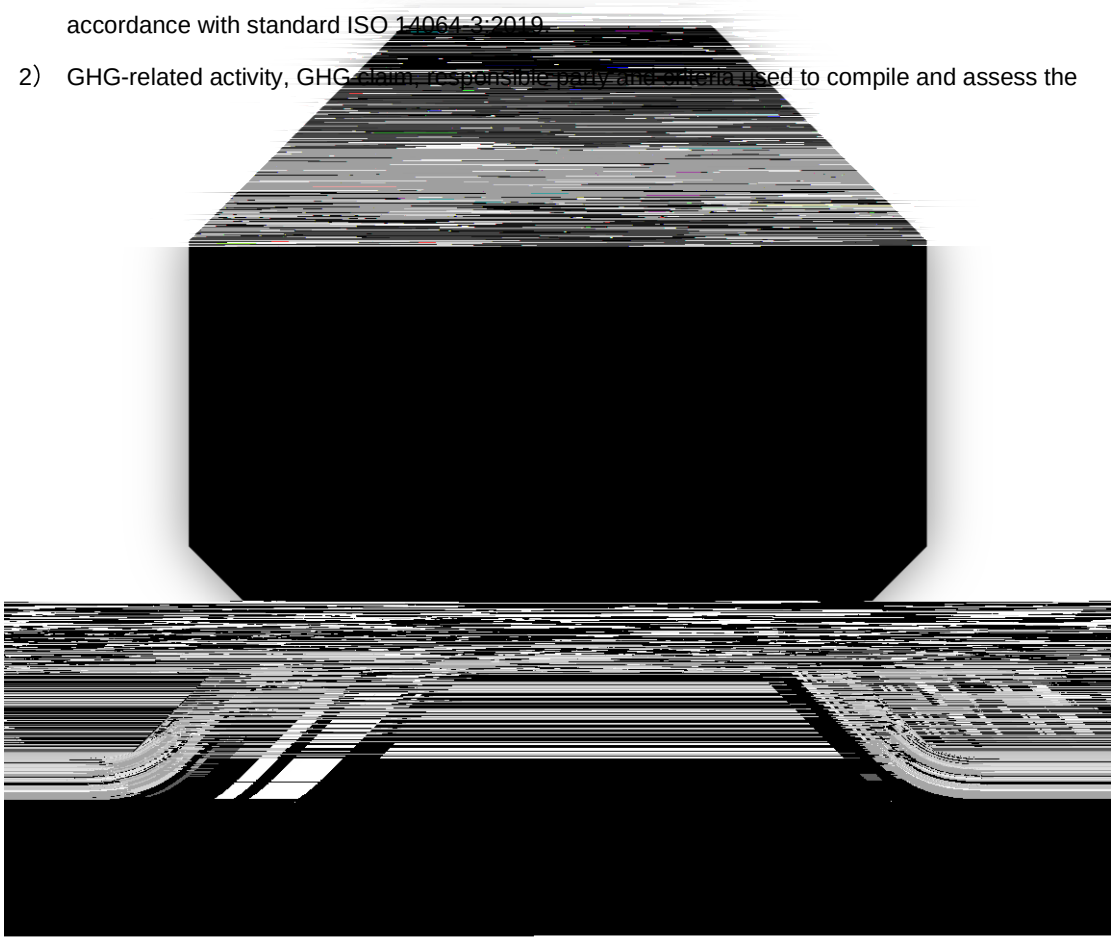
1. Summary

Background
TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch (hereinafter referred to as TÜV SÜD) was commissioned by Zhongtian Radio Frequency Cable Co., Ltd. to verify GHG emission. Between 2025-02-17~2025-05-12, TÜV SÜD auditor Johny Wang and Tony Sun conducted the carbon verification activities of the responsible party to evaluate the conformity of GHG related verification specification for the organization, including the principles and requirements of the standards or GHG scheme that applied to the verification Category.
Verification conclusion

After verification, TÜV SÜD Certification and Testing (China) Co., Ltd. reached conclusions as below:

1） The Organization's GHG emissions verification verifies claims made by responsible party in accordance with standard ISO 14064-3:2019.

2） GHG-related activity, GHG claim, responsible party and criteria used to compile and assess the



our commitment to the society and employees' health, safety and environment, and adhere to the resource-saving and environment-friendly road.
Responsible Party Greenhouse Gas Claim (Self-declaration)
The total GHG emissions of Zhongtian Radio Frequency Cable Co., Ltd. at the organizational level in 2024-01-01~2024-12-31 in organizational boundary and reporting boundary are 499211.0385 tCO_2e.
Level of assurance
☒ Reasonable assurance ☐ Limited assurance
Verification purpose
☒ Verify the accuracy and conformity claimed by the responsible party according to the verification criteria. ☒ Provide independent evaluation of relevant information through objective evidence, including whether the information in GHG reporting meets the principles of relevance, completeness, consistency, accuracy, and transparency; Whether there are material errors and omissions in the reported data results; Whether the level of assurance provided is met. ☐ Others:
Verification Standard
☒ ISO 14064-1:2018 *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.* ☒ ISO 14064-3:2019 *Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.*
Verification Category

Organizational boundary	quity share ons within the
Operation Site	Zhongtian Radio Frequency Cable Co., Ltd. No 105 Qixin Road, Economic & Technological Development Zone, Nantong Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA
Covered	No. gsu Province,
	Rudong, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA
Reporting Boundary	☒ Category 1: direct GHG emissions and removals ☒ Category 2: indirect GHG emissions from imported energy ☒ Category 3: indirect GHG emissions from transportation ☒ Category 4: indirect GHG emissions from products used by organization ☒ Category 5: indirect GHG emissions associated with the use of products from the organization ☒ Category 6: indirect GHG emissions from other sources

Quantified emission source attributes	☒ Non-biogenic GHG emissions and removals ☒ Anthropogenic biogenic CO_2 emissions and removals ☒ Anthropogenic biogenic emissions and removals of other GHGs ☐ Non-anthropogenic biogenic GHG emissions and removals
Facilities, physical infrastructure, activities, technologies, and processes	Manufacture and sale of RF coaxial cables, leaky coaxial cables, symmetrical communication cables, signal cables, control cables, high-temperature coaxial cables, high-temperature wires & cables, hybrid fiber-optical cables (composite cables), flexible waveguide feeders (flexible waveguide lines), flexible waveguide leaky cables (flexible waveguide leaky lines), communication network cable, connectors, jumper assemblies, harness assemblies, lightning arresters, feeder clamps and matching accessories.
GHG SSRs	All the facilities and activities responsible for contributing to GHG emissions within the reporting boundary
Types of GHGs	☒ CO_2 ☒ CH_4 ☒ N_2O ☒ HFCs ☒ PFCs ☒ SF_6 ☒ NF_3
Time Boundary	[redacted]
Materiality thresholds	
The numerical error of the GHG claim is within 5%, and the deviation of the GHG claim does not affect its reliability and the decision of the intended user based on the claim.	

2.2. Verificati[redacted]

Verification team	
Name	Role
Johny Wang	Team leader
Tony Sun	Team member
Observers: /	Technical experts: /
	Interns/trainees: /

Verification schedule	
Date	**Work content**
2025-03-10~2025-03-11	Documents review
2025-04-07~2025-04-08	Site visit
2025-08-20	Verification report writing
2025-08-21	Issue of verification report

are collected for verification, and 92.86% of cross-check data sources are sampled. In summary, the verification results can meet the requirements of assurance level and materiality threshold.
Evidence-gathering

2025-04-07~2025-04-08	· Inspect whether the main energy consumption equipment and facilities and energy measurement system of the enterprise meet the requirement of GHG quantification
2025-04-07~2025-04-08	· Collation of data sources, metrological verification, and cross check evidence · Internal evaluation and review of GHG quantification methods · Record and save of GHG documents
2025-04-07~2025-04-08	· Verification standard · GHG emission boundary · GHG control procedures of the verified party · Consistency of GHG inventory report · Determine the conformity of calculation method and emission factor · Material discrepancy of GHG claim of enterprise

3. Verificati

3.1. Assessm

Assessment of GHG information system and its control
The energy cor ta statistics and settlement meet quirements. The verification team cros e energy activity level data provided by the enterprise was accurate and reliable. The responsible party's electricity consumption data is obtained from the electricity invoice provided by the power company, which calibrates the meter. The rest, such as diesel purchase record, refrigerant filling amou upplier, and the Responsible party Greenhouse gas management is the responsibility of the quality department. The responsibilities and terms of reference of the GHG Panel are described below: - Top management: responsible for the establishment of the company's greenhouse gas team, the appointment of greenhouse gas representatives, the provision of resources for greenhouse gas inventory verification, the reporting of greenhouse gas management performance to the Group company, and the person responsible for the greenhouse gas report issued by the company. - Greenhouse Gas Representative: The head of Operations is responsible for organizing the greenhouse gas team to conduct inventory work, responsible for reporting the status and results of

greenhouse gas inventory and verification to top management and is the designated window for internal and external communication.

- Greenhouse gas authority: responsible for summarizing the level of activity data related to greenhouse gas inventory and verification, and responsible for the establishment of the Company's inventory and the preparation of reports; Responsible for the company's inventory information management, greenhouse gas inventory and verification of documents and records management and archiving.

The responsibilities of the Equipment Department are as follows:

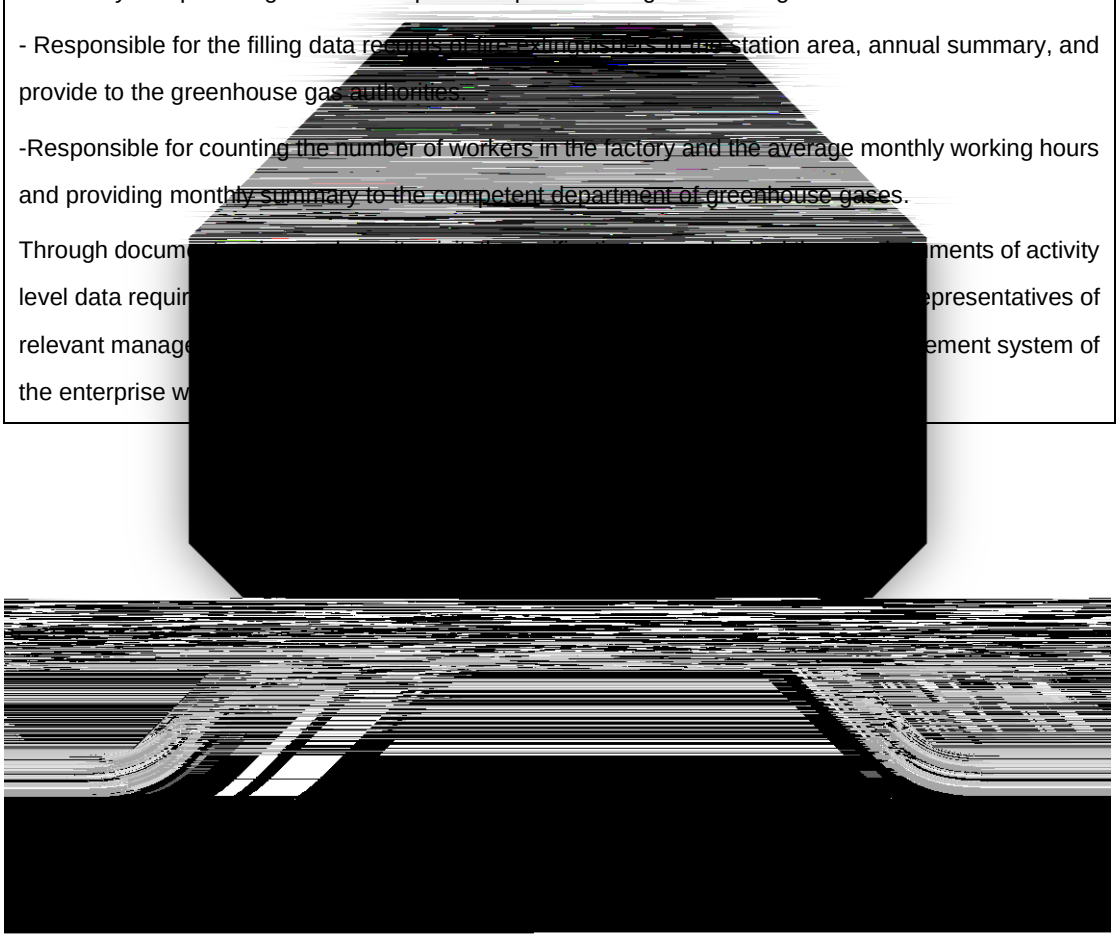
-Responsible for recording power meter reading data of station area, daily meter reading, monthly summary, and providing to the competent department of greenhouse gas.

-Responsible for recording the refrigerant filling data of air conditioning in the station area, summarizing it annually and providing it to the competent department of greenhouse gas.

- Responsible for the filling data records of fire extinguishers in the station area, annual summary, and provide to the greenhouse gas authorities.

-Responsible for counting the number of workers in the factory and the average monthly working hours and providing monthly summary to the competent department of greenhouse gases.

Through docum ments of activity level data requir epresentatives of relevant manag ement system of the enterprise w



3.2. Assessment of GHG data and information

Activity data and emission factor compliance

The verification team verified each activity data in the enterprise greenhouse gas emission report submitted by the enterprise. The verification included the values, units and sources of activity data, the values and sources of emission factors, and the GHG calculation report.

The verification information are as follows:

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
Category 1: direct GHG emissions and removals	Diesel	Diesel forklift	Direct e ☒ Emis method ☐ Mas method ☐ Mea method	[redacted]	[redacted]	[redacted]	[redacted] kgCO2/TJ kgCH4/TJ kgN2O/TJ e: 42652 Gg	*2006 IPCC Guidelines for National Greenhouse Gas Inventories* Table 3.3.1, Chapter III, Volume II *China Energy Statistical Yearbook 2022* Appendix IV	B /

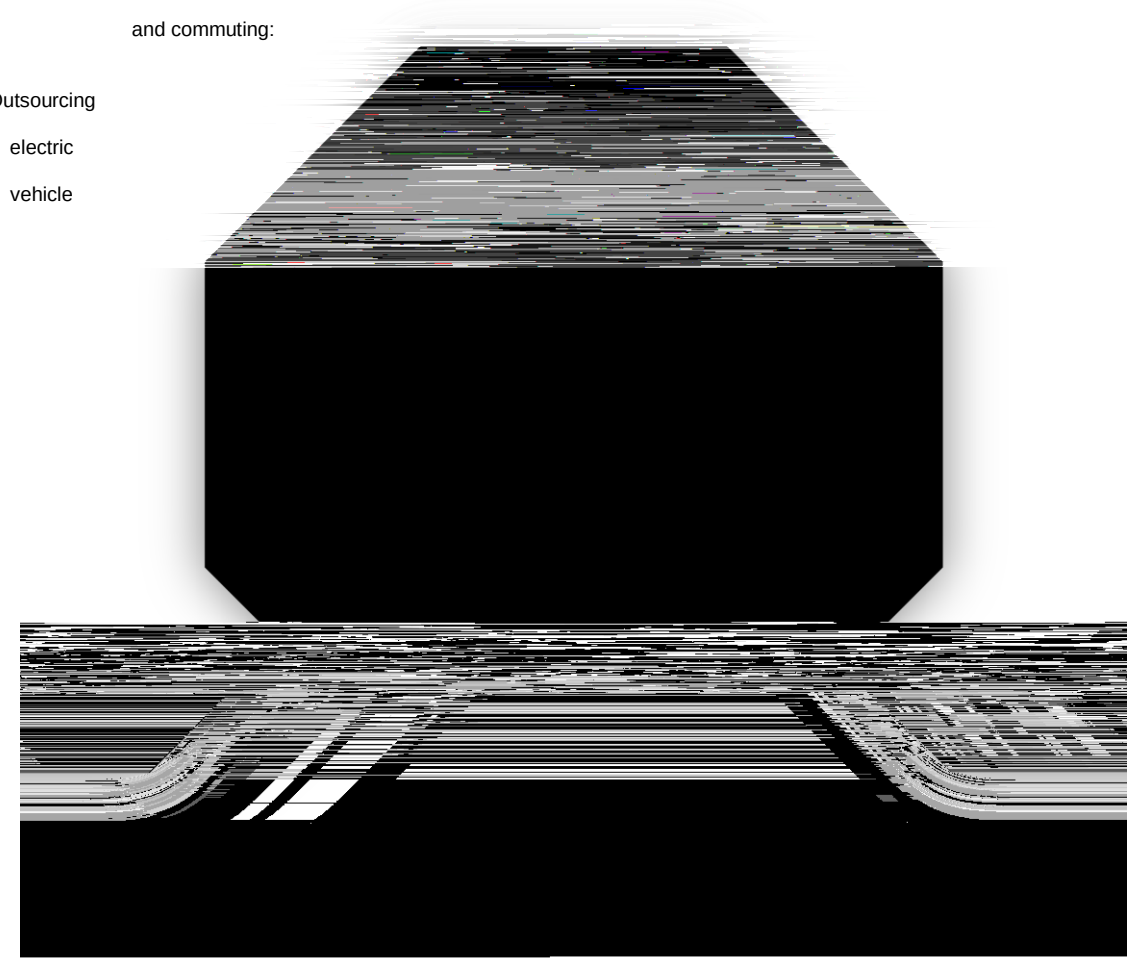
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Propane	Propane combustion	Direct emission ☐ Emission factor method ☒ Mass balance method ☐ Measurement method	546.00	kg	Raw material acquisition record	3.0000 $kgCO_2/kg$		1.6380
	Methane	Methane combustion	Direct emission ☐ Emission factor method ☒ Mass balance method ☐ Measurement method				gCO_2/kg		0.0102
	R32	Air conditioning	Direct emission ☒ Emission factor method ☐ Mass balance			Quantity and the	ve factor, 5.5%	2006 *IPCC Guidelines for National Greenhouse Gas Inventories* le 7.9, Chapter VII, volume III	1.7513

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	R410A	Air conditioning	Direct emission ☒ Emission factor method ☐ Mass balance method ☐ Measurement method	279.30	kg	Quantity from the nameplate of air conditioners	Fugitive factor: 5.5%	*2006 IPCC Guidelines for National Greenhouse Gas Inventories* Table 7.9, Chapter VII, volume III	34.6479
	HFC-227ea	Fire extinguisher	Direct em ☒ Emis method ☐ Mas method ☐ Mea method				actor: 2%	*2006 IPCC Guidelines for National Greenhouse Gas Inventories* 7.6.2.2, Chapter VII, volume III	0.2880
	Carbon dioxide	Fire extinguisher	Direct emission ☒ Emission factor method ☐ Mass [illegible]			Fire extinguisher type	ve factor: 5.0%	GB 4351.1-2005 *Portable fire extinguishers- Part 1: Performance and construction*	0.0005

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Carbon dioxide	Gas usage	Direct emission ☐ Emission factor method ☒ Mass balance method ☐ Measurement method	44462.60	kg	Raw material acquisition record	1.0000 $kgCO_2/kg$		44.4626
	Septic-tank	Septic-tank	Direct er ☒ Emis method ☐ Mas method ☐ Mea method			dividual ion: 40 on/day m CH_4 capacity CH_4/kgBOD (MCF): 0.5		*2006 IPCC Guidelines for National Greenhouse Gas Inventories* Table 6.2, Table 6.3 and Table 6.4, Chapter VI, volume V	64.8893
Category 2: indirect GHG emissions from imported energy	Imported electricity	Grid electricity	Electricity and heat ☒ Location-based method ☐ Mark ed	139415264.75	kWh	Enterprise's power statistics	0.5365 $kgCO_2/kWh$	2022 National Grid Average CO2 Emission Factor	7483.0827

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Imported electricity	Zhongtian Photovoltaic Technology Co., Ltd. sourced electricity	Electricity and heat: ☒ Location-based method ☐ Market-based method	[redacted]	kWh	[redacted] statistics	0.0000 $kgCO_2/kWh$		0.0000
	Imported electricity	Rooftop photovoltaic electricity	Electricity and heat: ☒ Loca method ☐ Mark method	[redacted]	[redacted]	[redacted]	CO_2/kWh		0.0000
Category 3: indirect GHG emissions from transportation	Employee commuting vehicle	Outsourcing vehicle	Transpo and com ☐ Fuel-ba ☒ Distance-based method ☐ Spend-based method	[redacted]	km	[redacted] statistics	[redacted] $kgCO_2e/km$	Ecoinvent 3.10 database	162.0829

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Employee commuting electric vehicle	Outsourcing electric vehicle	Transportation, travel and commuting:						

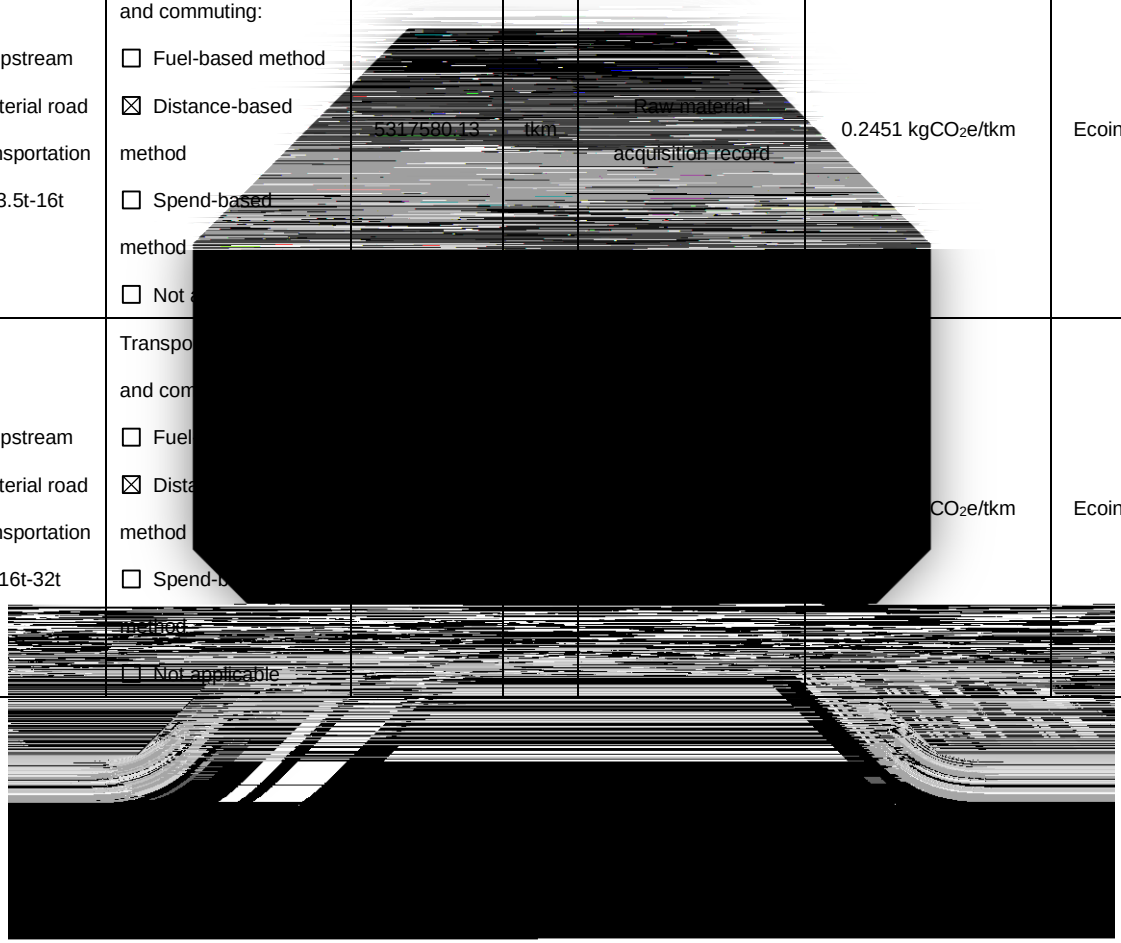


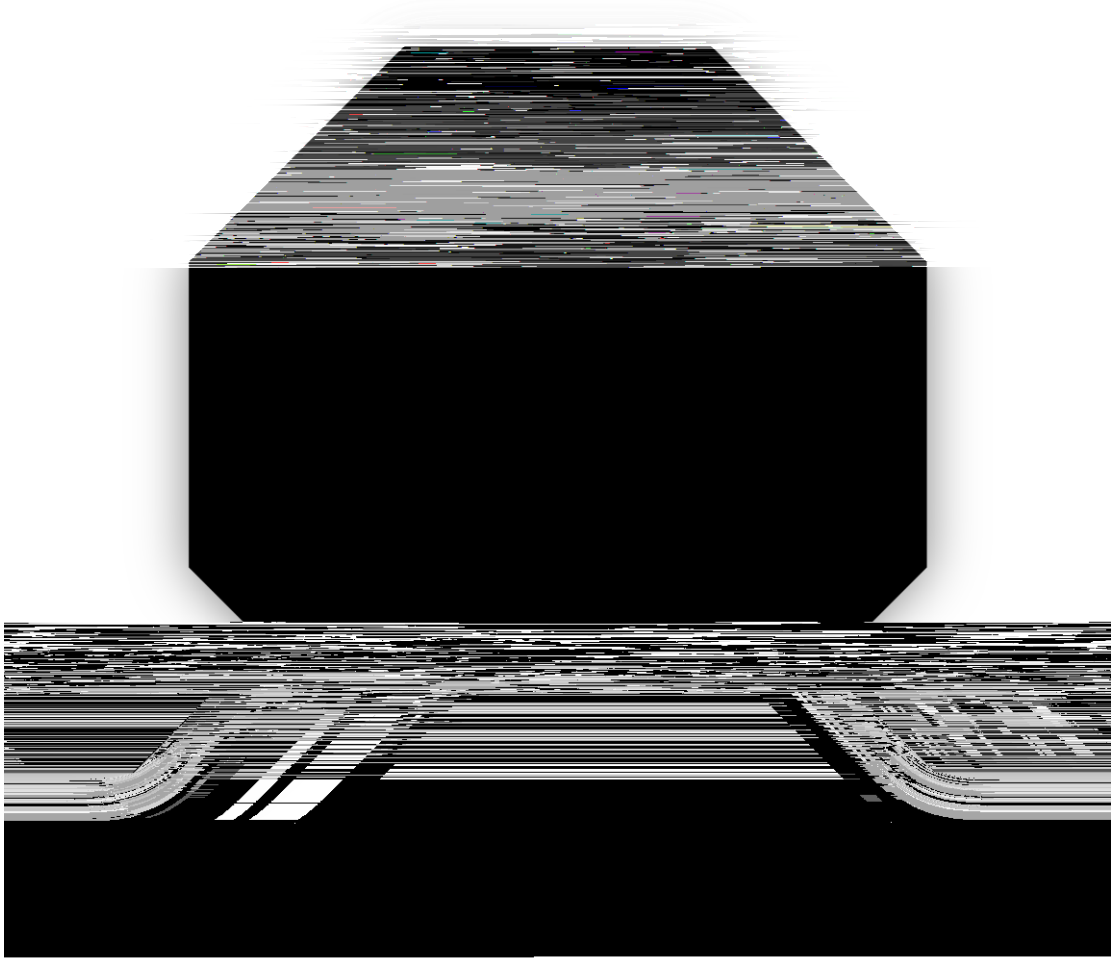
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Employee taxi traveling	Taxi traveling	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not a	1110.00	pkm	Employee traveling compensate record	0.3632 $kgCO_2e$/km	Ecoinvent 3.10 database	0.4031
	Employee plane traveling	Plane traveling	Transpo and com ☐ Fuel ☒ Dista method ☐ Spend-b method ☐ Not applicable				CO_2e/pkm	Ecoinvent 3.10 database	17.5831

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Employee rail traveling	Rail traveling	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not applicable	130565.00	pkm	Employee traveling compensate record	0.0749 $kgCO_2e$/pkm	Ecoinvent 3.10 database	9.7753
	Employee subway traveling	Subway traveling	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not applicable				gCO_2e/pkm	Notice of the Beijing Municipal Ecology and Environment Bureau on Effectively Managing Carbon Emission Entities and Piloting Carbon Emission Trading in the Municipality for 2024	0.000012

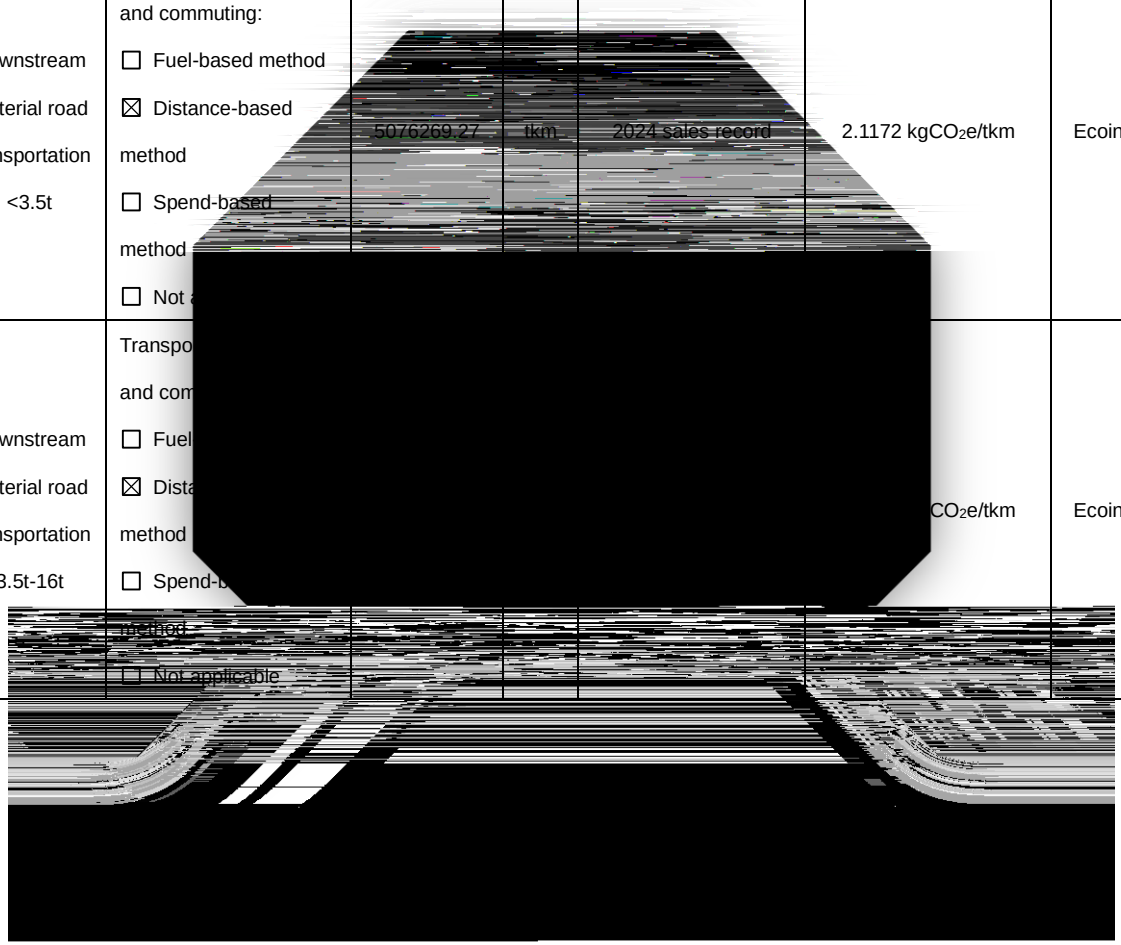
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Upstream material transportation	Upstream material road transportation 3.5t-16t	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not	5317580.13	tkm	Raw material acquisition record	0.2451 $kgCO_2e$/tkm	Ecoinvent 3.10 database	1303.2020
	Upstream material transportation	Upstream material road transportation 16t-32t	Transpo and com ☐ Fuel ☒ Dista method ☐ Spend- method ☐ Not applicable				CO_2e/tkm	Ecoinvent 3.10 database	2287.1907



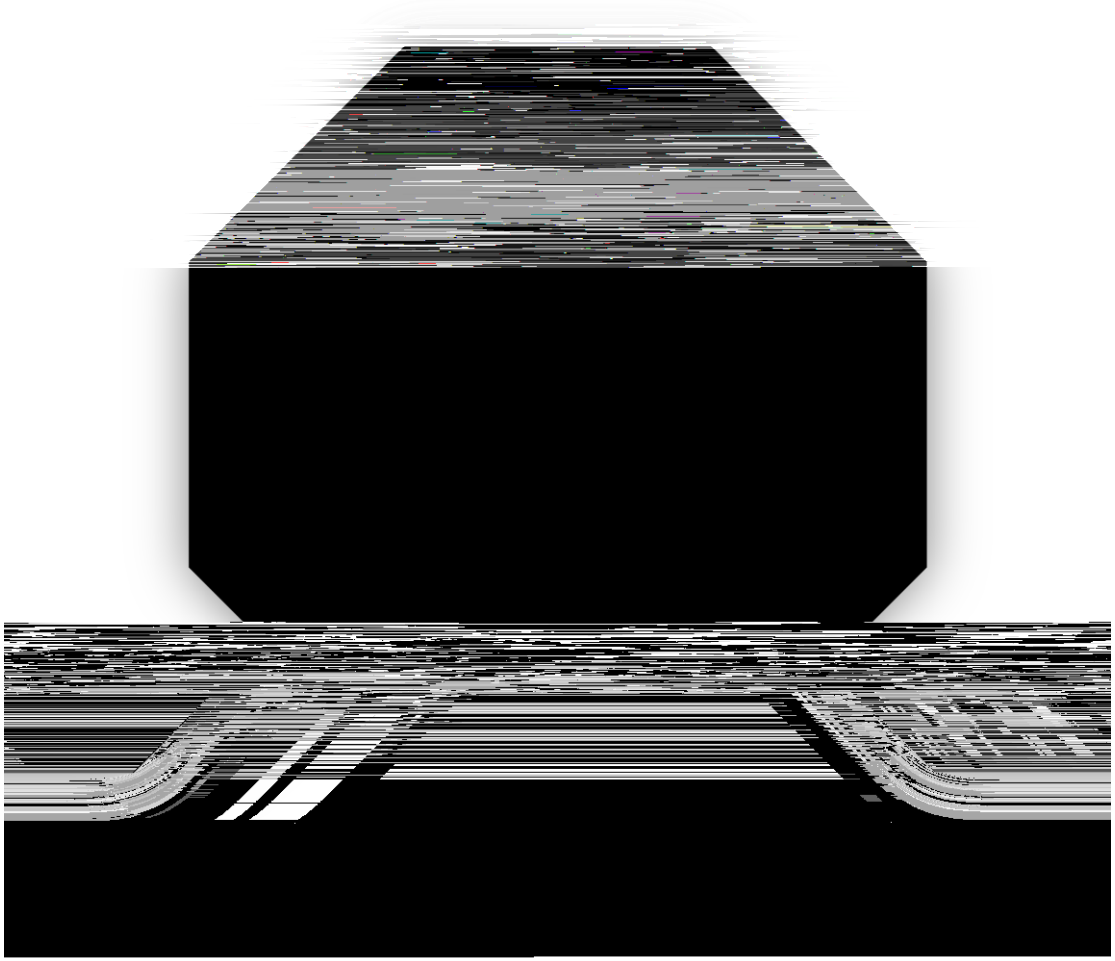


Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Downstream material transportation	Downstream material road transportation <3.5t	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not a	5076269.27	tkm	2024 sales record	2.1172 kgCO_2e/tkm	Ecoinvent 3.10 database	10747.6085
	Downstream material transportation	Downstream material road transportation 3.5t-16t	Transpo and com ☐ Fuel ☒ Dista method ☐ Spend-b method ☐ Not applicable				CO_2e/tkm	Ecoinvent 3.10 database	3124.3441



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Downstream material transportation	Downstream material road transportation 16t-32t	Transportation, travel and commuting: ☐ Fuel-based method ☒ Distance-based method ☐ Spend-based method ☐ Not a	14234501.04	tkm	2024 sales record	0.1940 kgCO_2e/tkm	Ecoinvent 3.10 database	2761.6855
	Downstream material transportation	Downstream material road transportation >32t	Transpo and com ☐ Fuel ☒ Dista method ☐ Spend-b method ☐ Not applicable				CO_2e/tkm	Ecoinvent 3.10 database	1544.3551

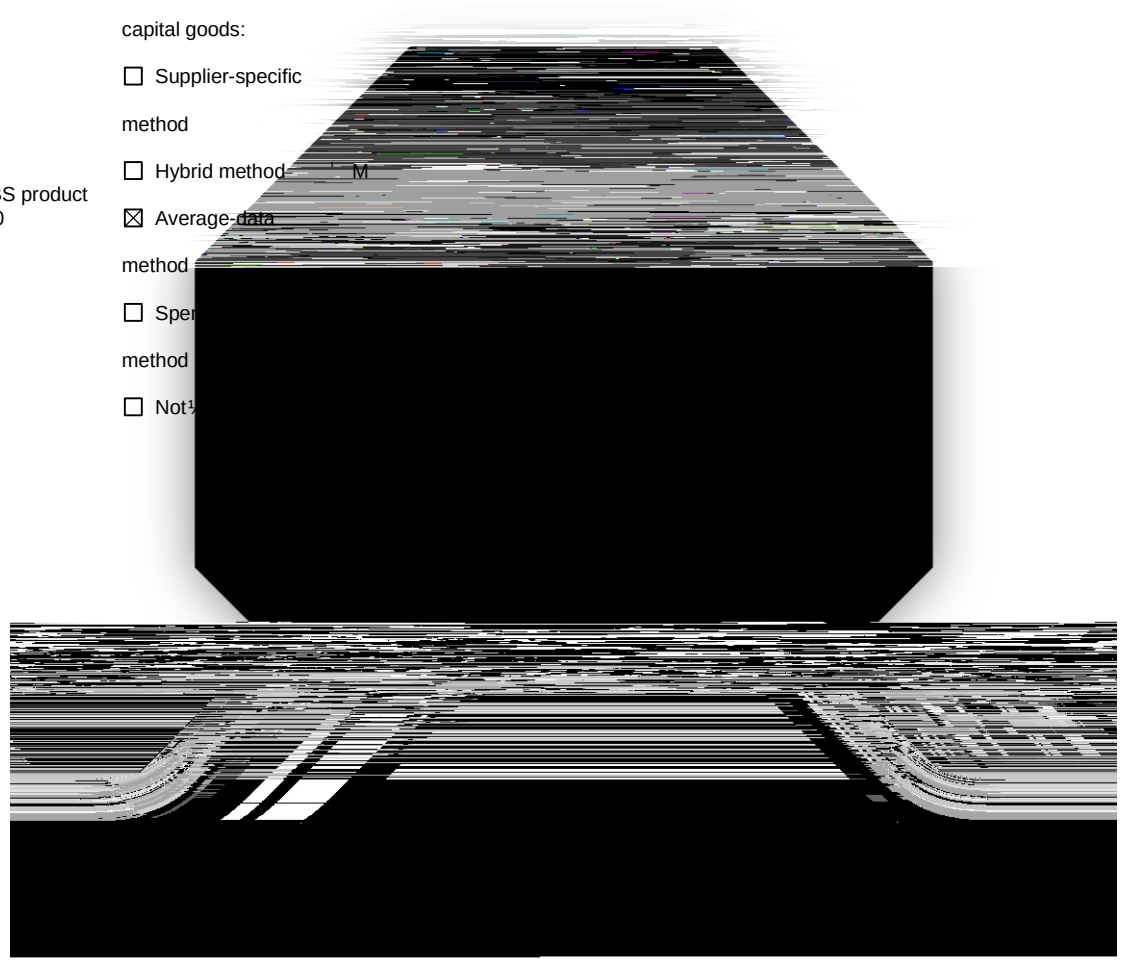
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
Category 4: indirect GHG emissions from products used by organization	Production equipment	Production equipment cost	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☐ Average-data method ☒ Spec method ☐ Not a	1275.43	Ten thou sand RMB	Stationary equipment record	1.9524 tCO_2e/ten thousand RMB	*Chinese Environmentally Extended Input-Output database* adjusted by 2024 PPI	2490.1583
	Office equipment	Computer	Goods, s capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Specified	64.67	p	2024 office equipment record	505.3343 $kgCO_2e$/p	Ecoinvent 3.10 database	32.6133



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased service	Dining cost	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☐ Average-data method ☒ Spe… method ☐ Not …	132.22	Ten thou sand RMB	2024 dining cost settlement	0.7397 tCO_2e/ten thousand RMB	*Chinese Environmentally Extended Input-Output database* adjusted by 2024 PPI	97.8039
	Purchased service	Processing service	Goods, … capital g… ☐ Supp… method ☐ Hybrid method ☐ Average-data method ☒ Spec… ed	493.27	thou sand RMB	raw material acquisition record	1.2496 tCO_2e/ten thousand RMB	*Chinese Environmentally Extended Input-Output database* adjusted by 2024 PPI	343.9419

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased living products	Drinking water	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	161.25	m^3	Drinking water purchase record	0.3913 $kgCO_2e/kg$	*China Products Carbon Footprint Factors Database,* Drinking water	63.0959
	Tap water	Tap water	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	96795.18	m^3	Actual tap water invoice	0.0013 $kgCO_2e/kg$	Ecoinvent 3.10 database	122.4535

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material P H P0	ABS product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not	M					



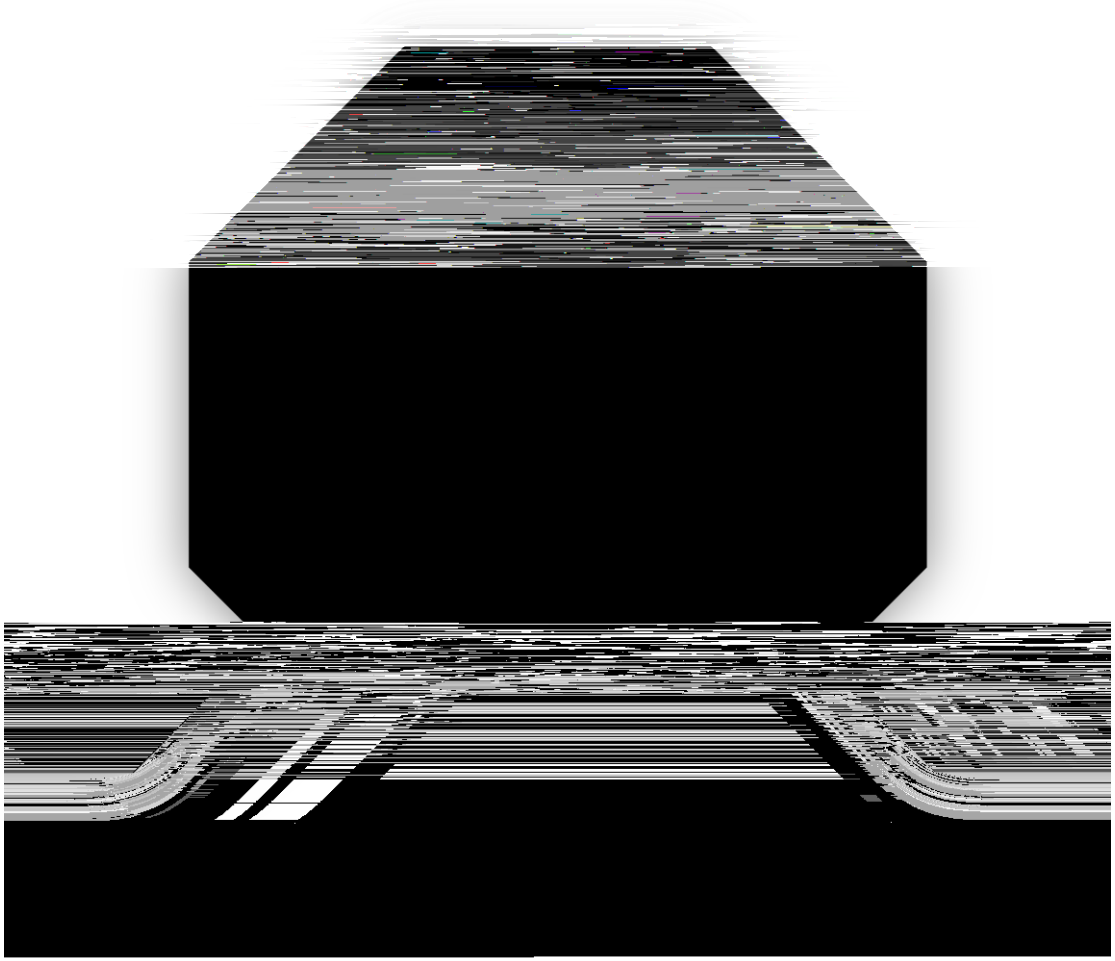
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	EAA material	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	9650.00	kg	Raw material acquisition record	3.7261 $kgCO_2e/kg$	Ecoinvent 3.10 database	35.9571
	Purchased raw material	FEP material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	6882.1	kg	raw material acquisition record	2.9198 $kgCO_2e/kg$	Ecoinvent 3.10 database	201.5201

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	HDPE material	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	3667814.00	kg	Raw material acquisition record	3.1562 $kgCO_2e/kg$	Ecoinvent 3.10 database	11576.4465
	Purchased raw material	[redacted] material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	[redacted]	kg	[redacted] acquisition record	[redacted]	[redacted] nvent 3.10 database	2977.1738

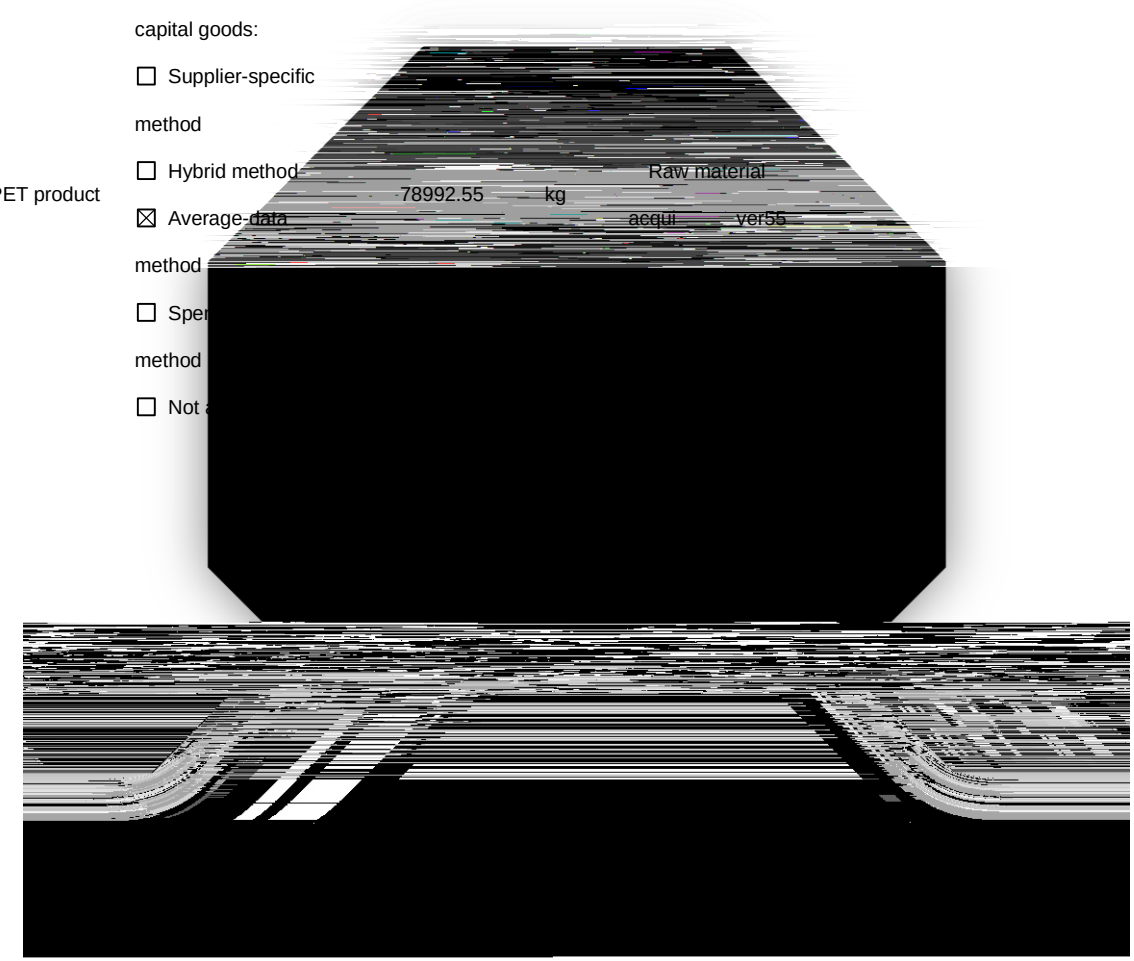
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	PE tape	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not	757.89					

Emission categories	Emission source	Facilities or process

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	LSZH material	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not Goods, capital g ☐ Supp	9669816.00	kg	Raw material acquisition record	2.1529 $kgCO_2e/kg$	Ecoinvent 3.10 database	20817.8179
	Purchased raw material	PA6 product							



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	PET product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not a	78992.55	kg	Raw material acqui	ver55		

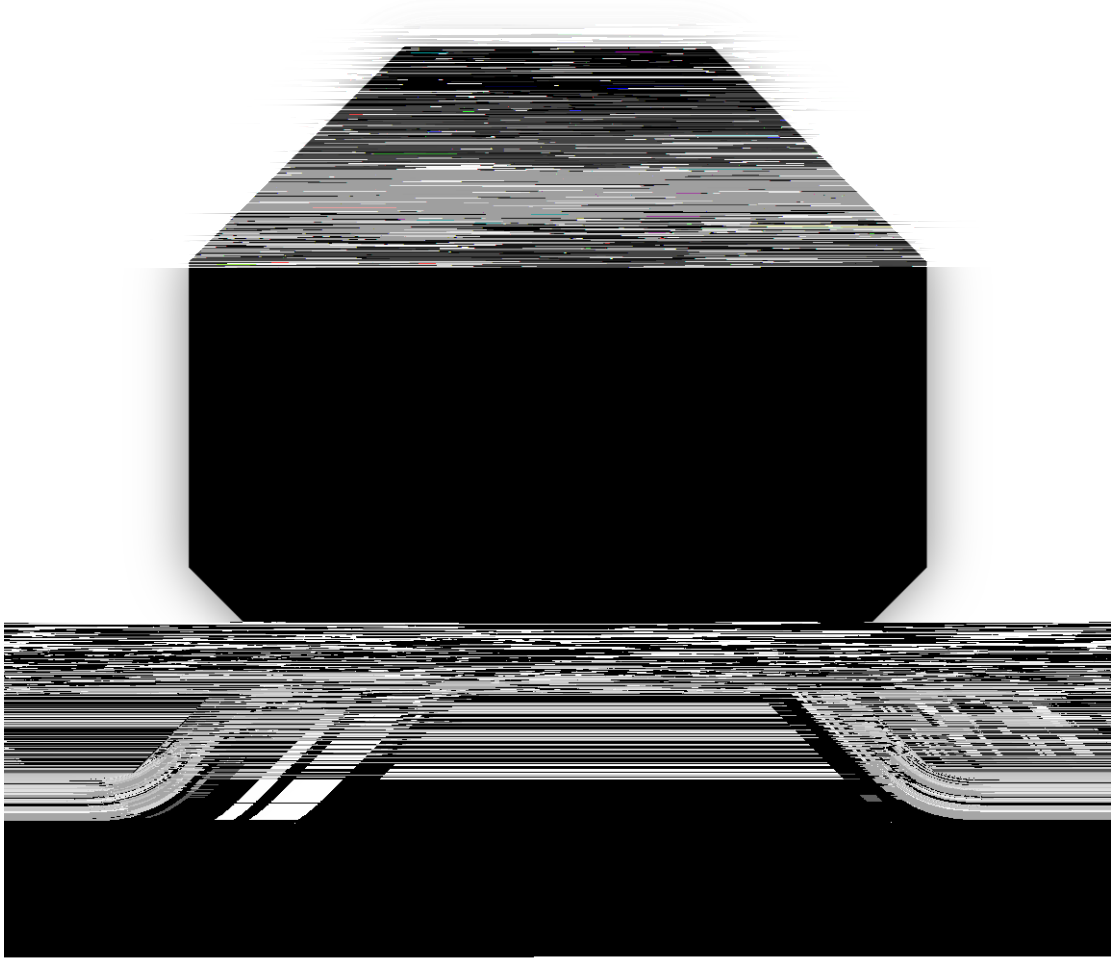


Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	PP material	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	96628.5	kg	Raw material acquisition record	3.6789 $kgCO_2e/kg$	Ecoinvent 3.10 database	355.4863
	Purchased raw material	PP plastic strip	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	656.62	kg	raw material acquisition record	4.3351 $kgCO_2e/kg$	Ecoinvent 3.10 database	2.8465

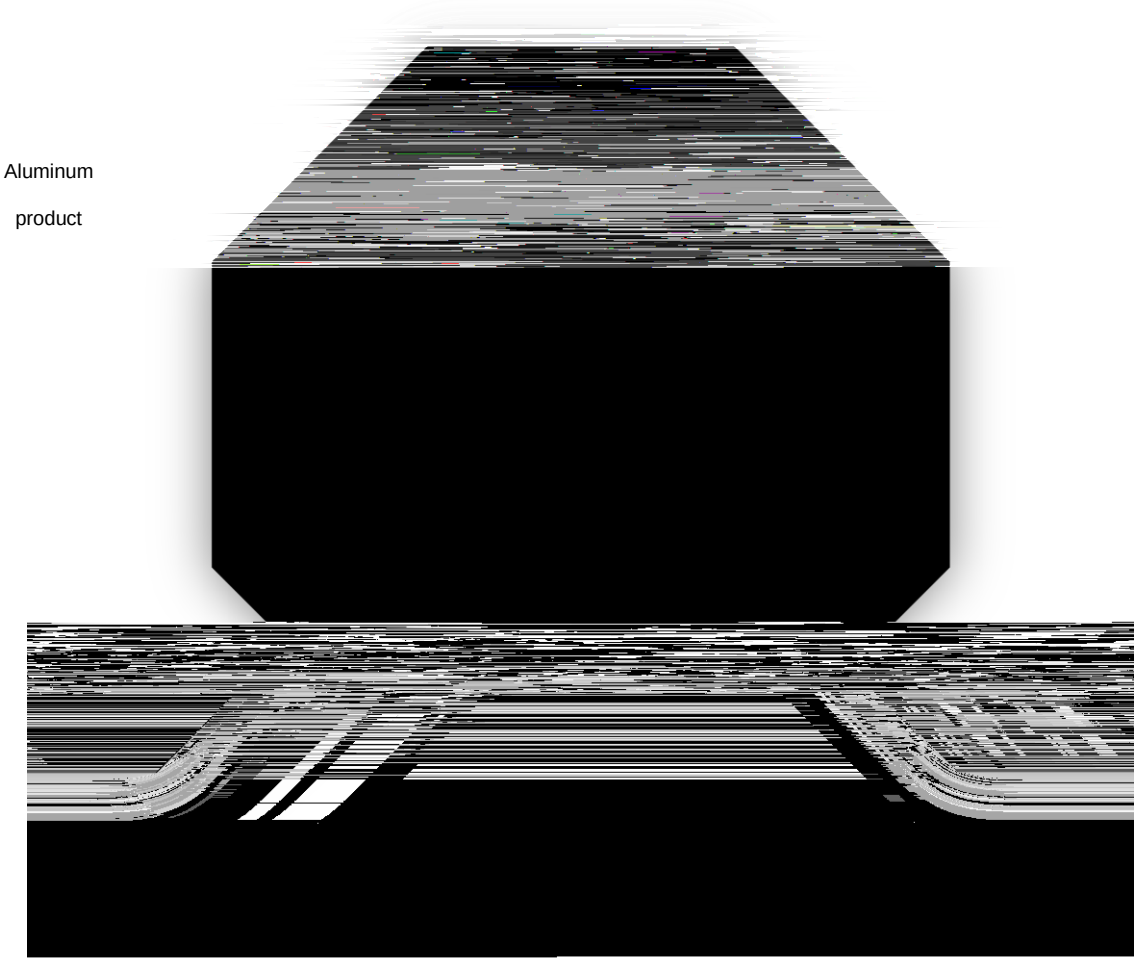
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	PP product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	40526.97	kg	Raw material acquisition record	5.1969 $kgCO_2e/kg$	Ecoinvent 3.10 database	210.6151
	Purchased raw material	material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	1510[illegible]	kg	raw material acquisition record	[illegible] $kgCO_2e/kg$	Ecoinvent 3.10 database	21718.6158

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	PTFE product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	684.27	kg	Raw material acquisition record	143.6500 $kgCO_2e/kg$	Ecoinvent 3.10 database	98.2954
	Purchased raw material	PVC material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	7171.9500	kg	raw material acquisition record	2.9577 $kgCO_2e/kg$	Ecoinvent 3.10 database	2121.0542

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Propane	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not	546.00					



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Aluminum product							



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Nitrogen gas	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	15856.25	kg	Raw material acquisition record	0.4471 $kgCO_2e/kg$	Ecoinvent 3.10 database	7.0891
	Purchased raw material	Galvanized steel strip	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	3005.1300	kg	raw material acquisition record	3.0112 $kgCO_2e/kg$	Ecoinvent 3.10 database	9321.1004

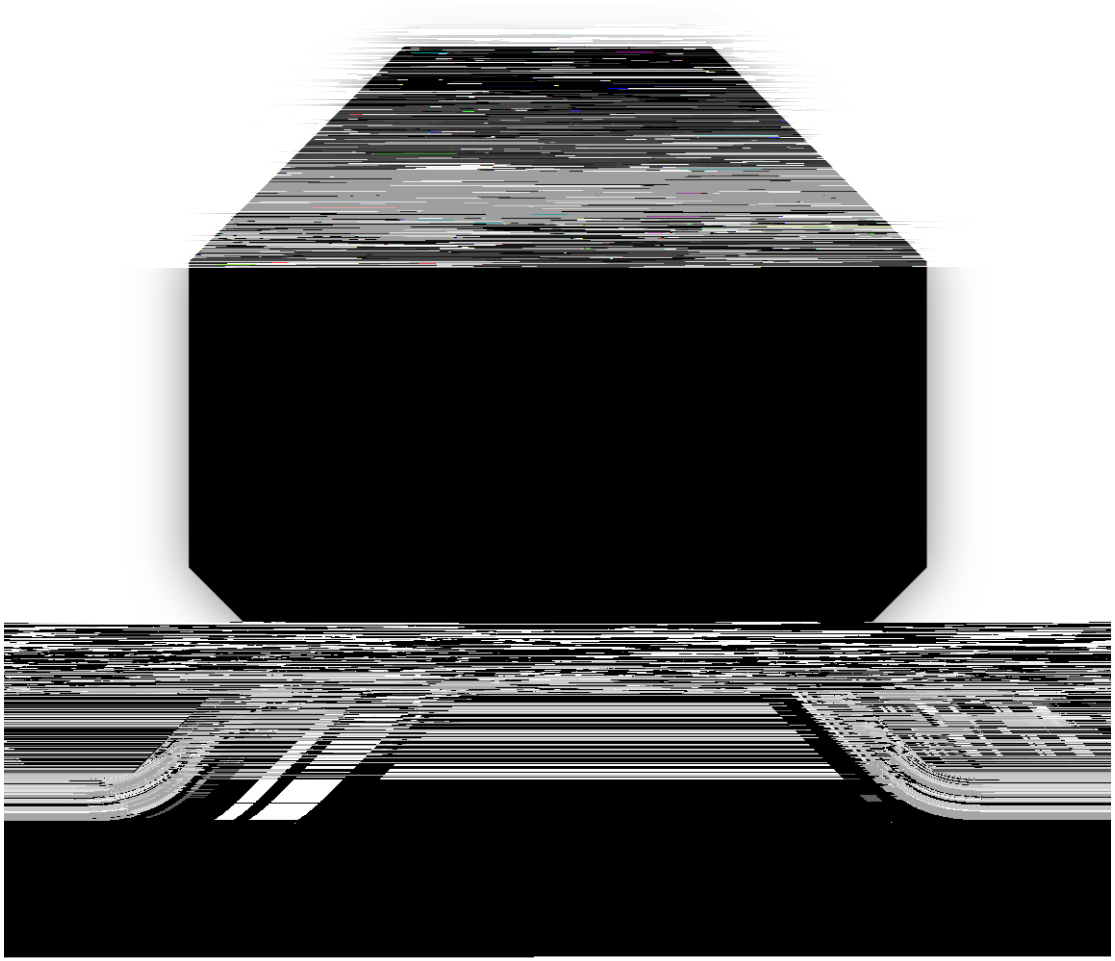
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Galvanized steel wire	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	7849.85	kg	Raw material acquisition record	2.9767 $kgCO_2e/kg$	Ecoinvent 3.10 database	23.3664
	Purchased raw material	Cable	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	10225215.65	kg	raw material acquisition record	0.2823 $kgCO_2e/kg$	Ecoinvent 3.10 database	64238.2961

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Power supply	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	825.00	kg	Raw material acquisition record	14.2176 $kgCO_2e/kg$	Ecoinvent 3.10 database	11.7295
	Purchased raw material	Resistor	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	119.78	kg	raw material acquisition record	29.0618 $kgCO_2e/kg$	Ecoinvent 3.10 database	34.7923

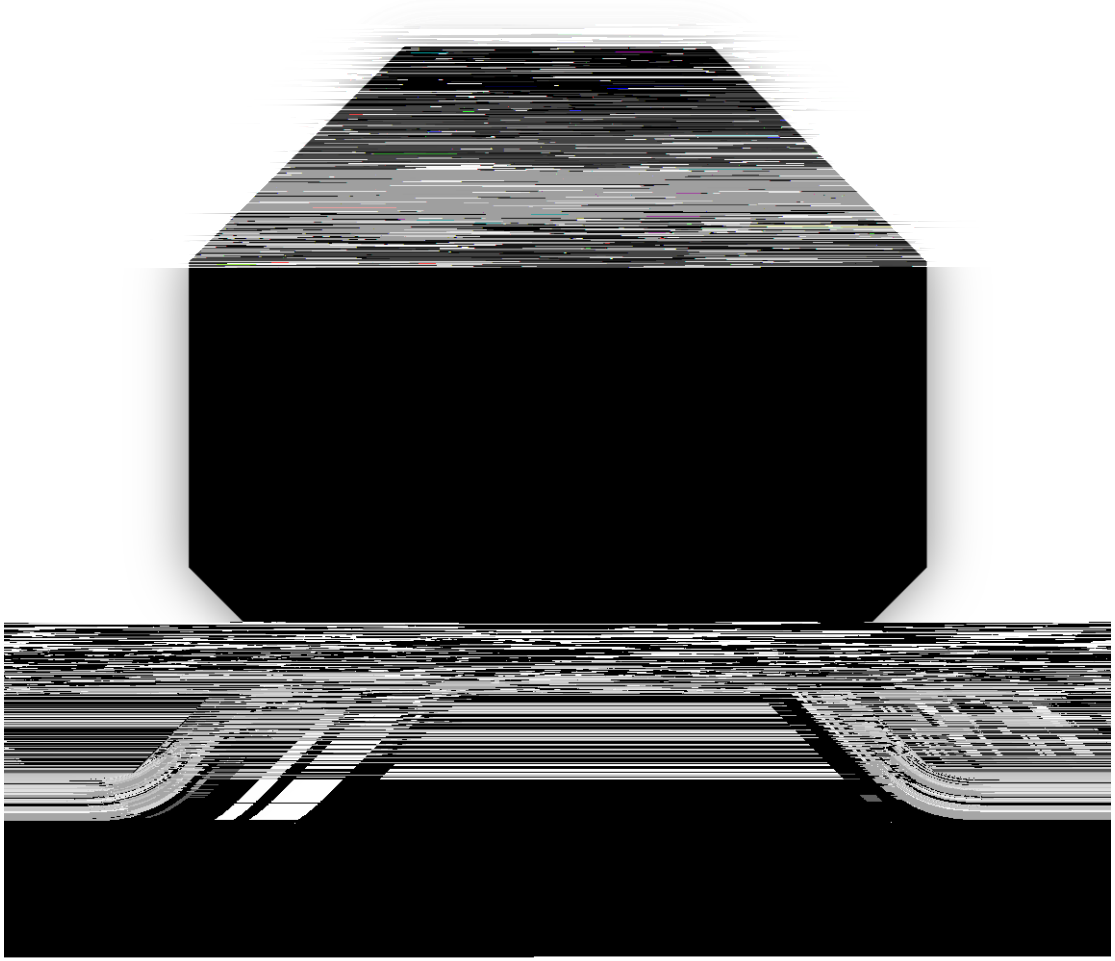
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Optical fiber	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	4157.03	kg	Raw material acquisition record	9.5412 $kgCO_2e/kg$	Ecoinvent 3.10 database	39.6629
	Purchased raw material	Carbon dioxide	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	4446.2	kg	raw material acquisition record	9.500 $kgCO_2e/kg$	Ecoinvent 3.10 database	40.0224

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Helium gas	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	5421.00	kg	Raw material acquisition record	6.1431 $kgCO_2e/kg$	Ecoinvent 3.10 database	33.3018
	Purchased raw material	Co	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	8696.35	kg	raw material acquisition record	117.2070 $kgCO_2e/kg$	Ecoinvent 3.10 database	1019.5072



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Brass product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	750478.21	kg	Raw material acquisition record	9.1348 $kgCO_2e/kg$	Ecoinvent 3.10 database	6855.4566
	Purchased raw material	Brass ship	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	460.26	kg	raw material acquisition record	65.1040 $kgCO_2e/kg$	Ecoinvent 3.10 database	29.9878



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Plywood	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	1126963.00	kg	Raw material acquisition record	0.8998 $kgCO_2e/kg$	Ecoinvent 3.10 database	1014.0485
	Purchased raw material	Metal processing	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	1416.1[illegible]	kg	raw material acquisition record	0.9206 $kgCO_2e/kg$	Ecoinvent 3.10 database	61.1840

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Poly olefin material	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	1160.00	kg	Raw material acquisition record	2.5188 $kgCO_2e/kg$	Ecoinvent 3.10 database	2.9218
	Purchased raw material	Aluminum alloy product	Goods, s capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	3000.00	kg	raw material acquisition record	12.0843 $kgCO_2e/kg$	Ecoinvent 3.10 database	36.2528

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Wood pallet	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	3314660.00	kg	Raw material acquisition record	0.3291 $kgCO_2e/kg$	Ecoinvent 3.10 database	1090.6983
	Purchased raw material	Nylon material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	410.38	kg	raw material acquisition record	2.2297 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.9077

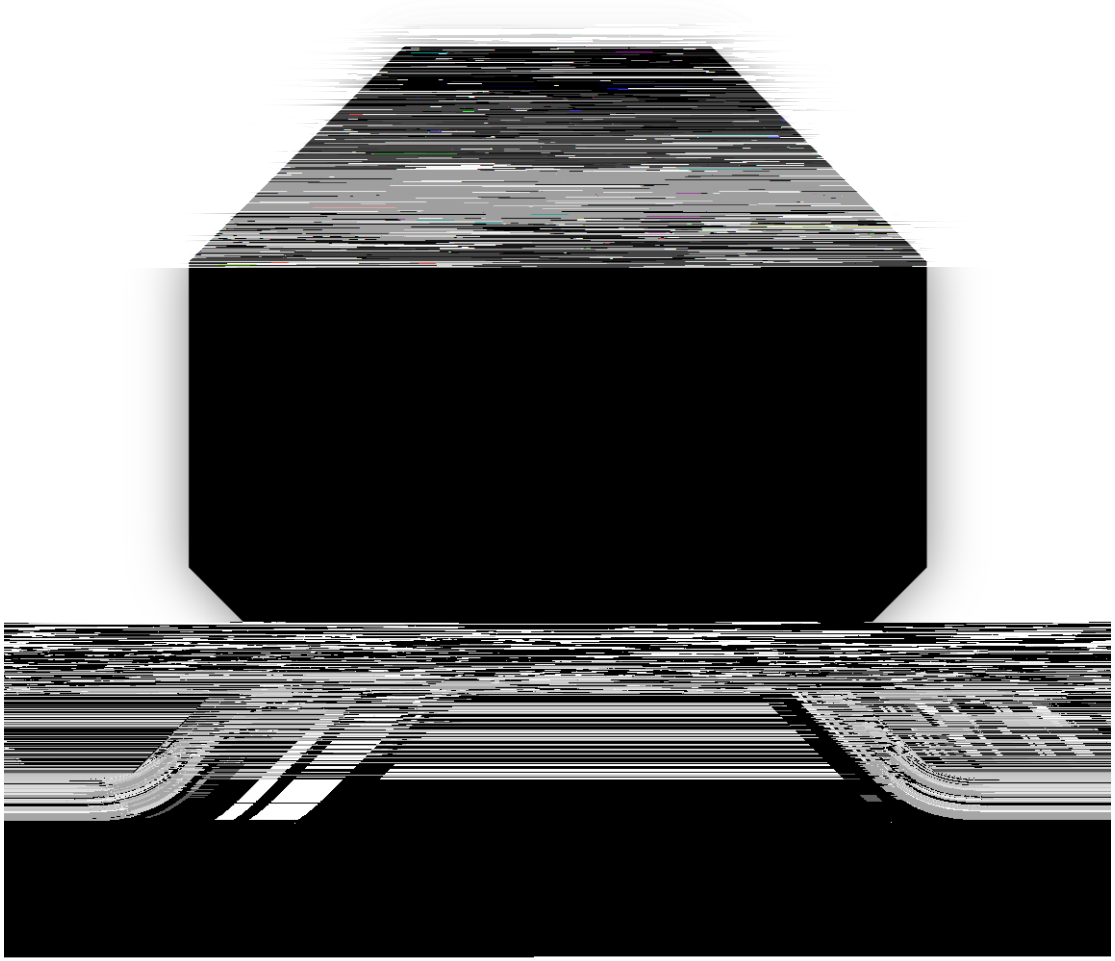
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Nylon product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	206.67	kg	Raw material acquisition record	8.8859 $kgCO_2e/kg$	Ecoinvent 3.10 database	1.8364
	Purchased raw material	Kraft paper	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	404956.40	kg	raw material acquisition record	0.8620 $kgCO_2e/kg$	Ecoinvent 3.10 database	473.3058

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Hot melt adhesive	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	68000.00	kg	Raw material acquisition record	3.4399 $kgCO_2e/kg$	Ecoinvent 3.10 database	233.9124
	Purchased raw material	Carton	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	11300.00	kg	raw material acquisition record	0.2511 $kgCO_2e/kg$	Ecoinvent 3.10 database	2.8580

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Wood product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	610.00	kg	Raw material acquisition record	0.1093 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.0667
	Purchased raw material	Titanium alloy product	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	8059.23	kg	raw material acquisition record	48.3483 $kgCO_2e/kg$	Ecoinvent 3.10 database	439.1707

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Carbon steel strip	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	4280.00	kg	Raw material acquisition record	2.3472 $kgCO_2e/kg$	Ecoinvent 3.10 database	10.0459
	Purchased raw material	Carbon steel wire	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	111082.40	kg	raw material acquisition record	2.3126 $kgCO_2e/kg$	Ecoinvent 3.10 database	258.7444

Emission categories	



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission fac ational C

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Corrugated board	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not Goods, capital g ☐ Supp method	203175.50	kg	Raw material acquisition record	1.2765 $kgCO_2e/kg$	Ecoinvent 3.10 database	259.3501
	Purchased raw material	Cable connector	☐ Hybrid method ☒ Average-data method						

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Passive electronic component	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not a	140676.87	kg	Raw material acquisition record	63.7453 $kgCO_2e/kg$	Ecoinvent 3.10 database	8967.4962
	Purchased raw material	Solder material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	50800.00	kg	raw material acquisition record	28.8498 $kgCO_2e/kg$	Ecoinvent 3.10 database	1466.4494

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Rubber	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	60.00	kg	Raw material acquisition record	3.4168 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.2050
	Purchased raw material	Argon gas	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	64.77	kg	raw material acquisition record	2.5263 $kgCO_2e/kg$	Ecoinvent 3.10 database	156.0685

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Zinc oxide	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	44826.56	kg	Raw material acquisition record	0.7497 $kgCO_2e/kg$	Ecoinvent 3.10 database	33.6051
	Purchased raw material	Oxygen gas	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	136.01	kg	raw material acquisition record	1.1268 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.1532

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Ethanol	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	330.00	kg	Raw material acquisition record	0.7000 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.2310
	Purchased raw material	Acetylene	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	30.00	kg	raw material acquisition record	3.5385 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.0762

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Isopropanol	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	7240.00	kg	Raw material acquisition record	3.3103 $kgCO_2e/kg$	Ecoinvent 3.10 database	23.9667
	Purchased raw material	Tolu	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	225.45	kg	raw material acquisition record	5.835 $kgCO_2e/kg$	Ecoinvent 3.10 database	1.3155

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Active electronic component	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	1178.40	kg	Raw material acquisition record	1273.7223 $kgCO_2e/kg$	Ecoinvent 3.10 database	1500.9543
	Purchased raw material	Gradar	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	3388.5	kg	raw material acquisition record	2.7555 $kgCO_2e/kg$	Ecoinvent 3.10 database	91.1655

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Paper product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spe method ☐ Not Goods, capital g ☐ Supp method	1.00	kg	Raw material acquisition record	0.9620 kgCO_2e/kg	Ecoinvent 3.10 database	0.0010
	Purchased raw material	Bamboo product	☐ Hybrid method						

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Copper-plastic product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	670.00	kg	Raw material acquisition record	76.5347 $kgCO_2e/kg$	Ecoinvent 3.10 database	51.2782
	Purchased raw material	Anode copper material	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	3495.75	kg	raw material acquisition record	7.8270 $kgCO_2e/kg$	Ecoinvent 3.10 database	27.3481

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Anode copper product	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	1515352.60	kg	Raw material acquisition record	11.8994 $kgCO_2e/kg$	Ecoinvent 3.10 database	18031.7812
	Purchased raw material	Anode copper strip	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	7163352.24	kg	raw material acquisition record	9.1686 $kgCO_2e/kg$	Ecoinvent 3.10 database	65677.7334

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Anode copper wire	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	1862148.51	kg	Raw material acquisition record	9.3533 $kgCO_2e/kg$	Ecoinvent 3.10 database	17417.2752
	Purchased raw material	Aluminum-plastic product	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	1440.31	kg	raw material acquisition record	2.5062 $kgCO_2e/kg$	Ecoinvent 3.10 database	3576.5329

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Purchased raw material	Indoor antenna	Goods, services and capital goods: ☐ Supplier-specific method ☐ Hybrid method ☒ Average-data method ☐ Spec method ☐ Not	28799.48	kg	Raw material acquisition record	5.4404 $kgCO_2e/kg$	Ecoinvent 3.10 database	156.6816
	Purchased raw material	Outdoor antenna	Goods, capital g ☐ Supp method ☐ Hybrid method ☒ Average-data method ☐ Spec ed	6.08	kg	raw material acquisition record	5.5122 $kgCO_2e/kg$	Ecoinvent 3.10 database	0.0640

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Solid waste treatment	Cable treatment	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	305569.77	kg	2024 solid waste inventory record	0.9103 kgCO_2e/kg	Ecoinvent 3.10 database	278.1685
	Solid waste treatment	Steel recycle	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	0.0000

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Solid waste treatment	Copper recycle	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	460043.01	kg	2024 solid waste			

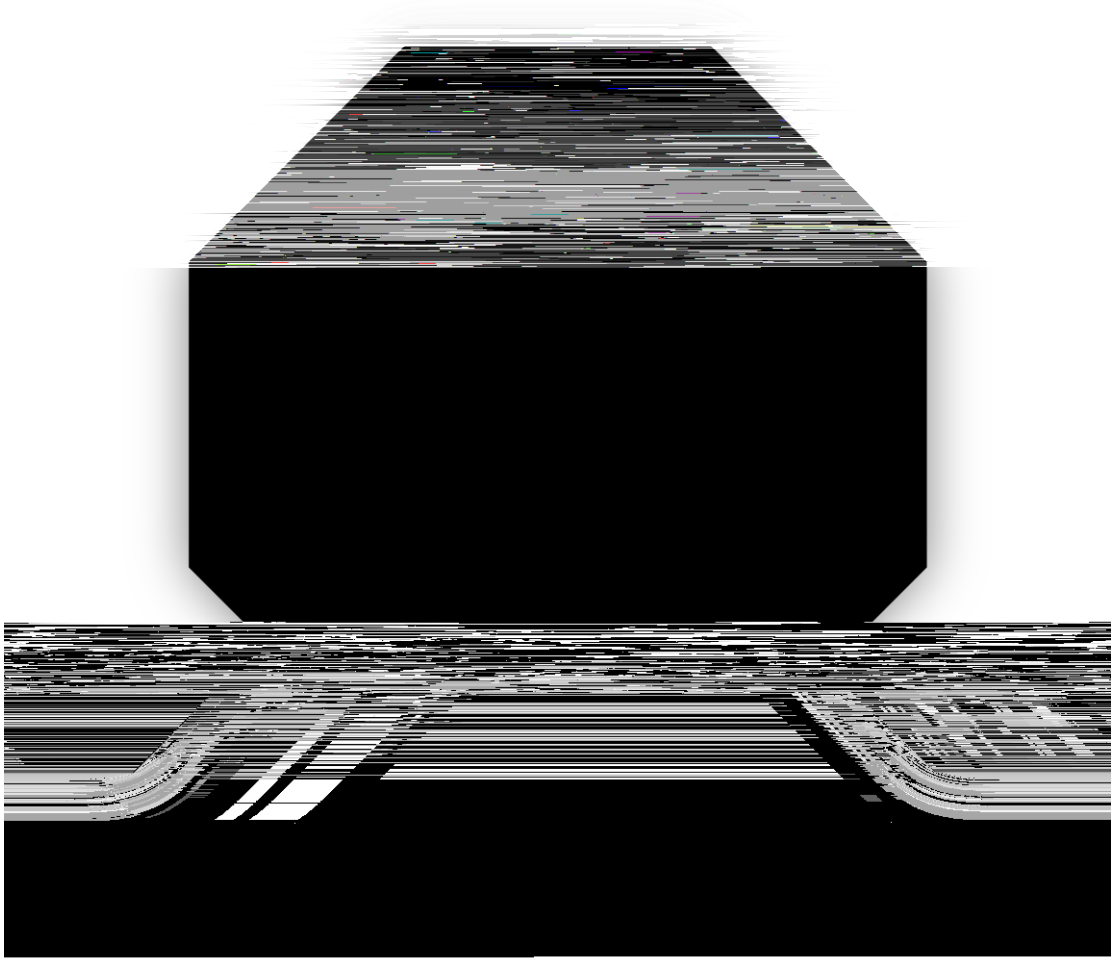
Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
Solid waste treatment	Equipment recycle	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	7340.00	kg	2024 solid waste inventory record	0.0000 kgCO_2e/kg	Ecoinvent 3.10 database	0.0000
Solid waste treatment	Plastic recycle	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO₂e/kg	Ecoinvent 3.10 database	0.0000

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Solid waste treatment	Paper board recycle	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	51984.00	kg	2024 solid waste inventory record	0.0000 kgCO_2e/kg	Ecoinvent 3.10 database	0.0000
	Solid waste treatment	Wood recycle	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	0.0000

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Hazardous waste treatment	Waste bucket treatment	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	3.95	t	2021 Hazardous waste transfer joint order	2.5237 $kgCO_2e/kg$	Ecoinvent 3.10 database	9.9659
	Hazardous waste treatment	Saponified liquid treatment	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	5.7539

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Hazardous waste treatment	Waste grease treatment	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	2.14	t	2021 Hazardous waste transfer joint order	2.5237 $kgCO_2e/kg$	Ecoinvent 3.10 database	5.4006
	Hazardous waste treatment	Waste activated carbon treatment	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	11.2303

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Wastewater treatment	Wastewater treatment	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	15232.73	m^3	Water balance schematic	0.2921 $kgCO_2e/m^3$	Ecoinvent 3.10 database	4.4493
	Diesel	Diesel upstream	Goods, capital g ☐ Supp method ☐ Hybr ☒ Average method ☐ Spend-based method ☐ Not				gCO_2e/kg	Ecoinvent 3.10 database	12.8027



Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
Category 5: indirect GHG emissions associated with the use of products from the organization	Product disposal	Waste ABS	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	640.00	kg	Raw material acquisition record	2.3799 kgCO_2e/kg	Ecoinvent 3.10 database	1.5232
	Product disposal	Waste PP	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	144.4671

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Waste rubber	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	30.00	kg	Raw material acquisition record	3.1577 kgCO_2e/kg	Ecoinvent 3.10 database	0.0947
	Product disposal	Other waste plastics	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO₂e/kg	Ecoinvent 3.10 database	23669.4469

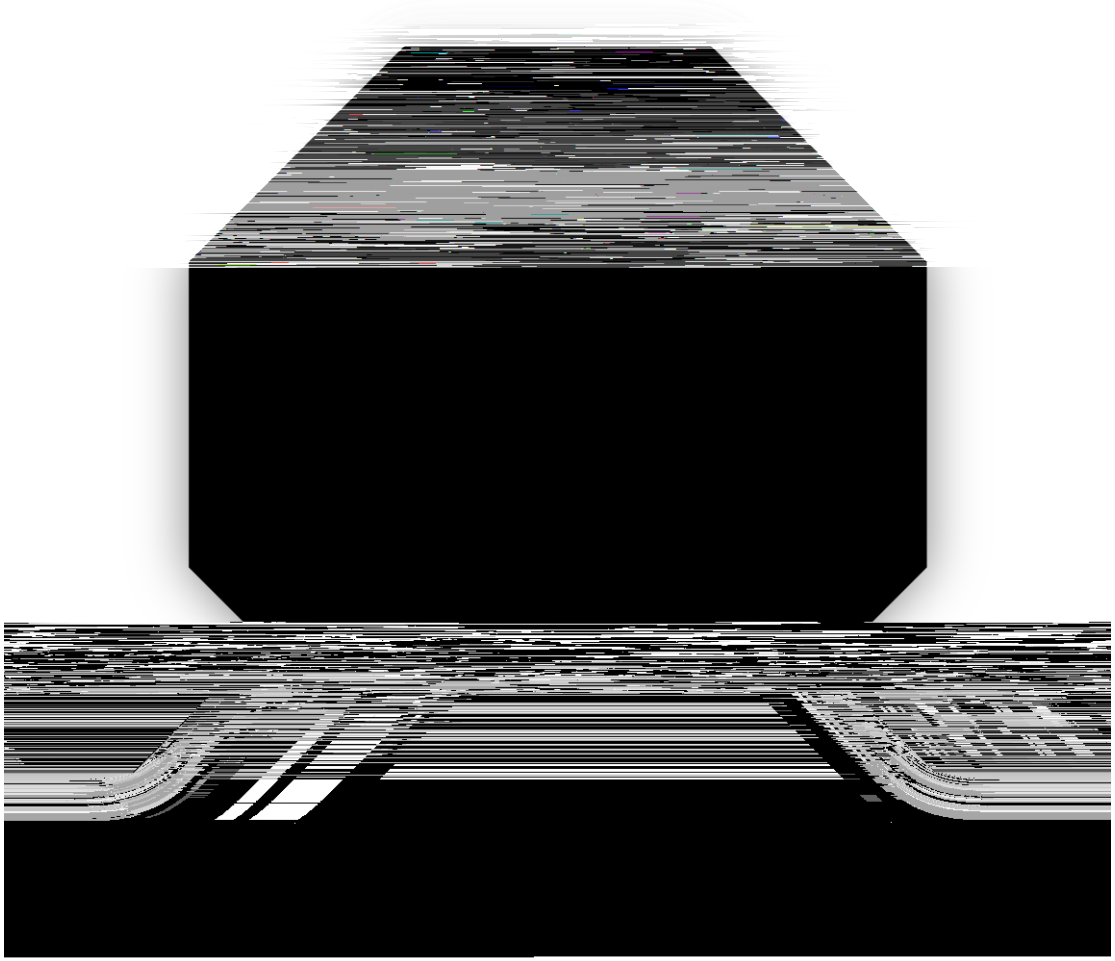
Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Waste electronic component	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	743444.20	kg	Raw material acquisition record	1.0655 kgCO_2e/kg	Ecoinvent 3.10 database	792.1635
	Product disposal	Waste wood	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO₂e/kg	Ecoinvent 3.10 database	34.6067

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Waste paper	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not	695172.90	kg	Raw material acquisition record	0.0335 $kgCO_2e/kg$	Ecoinvent 3.10 database	23.2878
	Product disposal	Waste cable	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	9308.2946

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Waste steel	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	18029998.94	kg	Raw material acquisition record	0.0186 kgCO_2e/kg	Ecoinvent 3.10 database	33.5421
	Product disposal	Waste aluminum	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	13.4936

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Waste copper	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	4709416.68	kg	Raw material acquisition record	0.0234 kgCO_2e/kg	Ecoinvent 3.10 database	110.1286
	Product disposal	Other waste metal	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	11.1524

Emission categories	Emission source	Facilities or process	Accounting method	Activity data	Unit	Source of activity data	Emission factor/Mass balance coefficient	Source of activity data	GHG emission (tCO_2e)
	Product disposal	Metal-plastic mixed waste	Waste: ☐ Supplier-specific method ☐ Waste-type-specific method ☒ Average-data method ☐ Not a	1197705.98	kg	Raw material acquisition record	0.5189 kgCO_2e/kg	Ecoinvent 3.10 database	621.5466
	Product disposal	Other waste	Waste: ☐ Supp method ☐ Was method ☒ Average method ☐ Not applicable				gCO_2e/kg	Ecoinvent 3.10 database	122.4228



Global warming potential

The global warming potentials of direct and indirect greenhouse gases emitted by the enterprise were taken from the IPCC sixth assessment report, which meet the requirements of the guidelines. The specific values are as follows:

Gas name	Types of greenhouse gases involved in the verification process	Global warming potential
Carbon dioxide	CO_2	1
Methane	CH_4	27.9
Nitrous oxide	N_2O	273

Anthropogenic biogenic CO_2 emissions	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Anthropogenic biogenic other GHG emissions	64.8893	0.0000	0.0000	0.0000	0.0000	0.0000	64.8893
Total	195.3576	7483.0827	23451.2019	432536.2641	35545.1321	0.0000	499211.0385

GHG emission analysis	
Analysis of emissions of different categories of emission sources	· Among the emission categories, anode copper strip is the largest emi[redacted] accounting for about 13.16%. · To fulfil corporate social responsibility and reduce the organization's carbon emissions, it is recommended to find green supplier and incentivize supplier's energy reduction and greener design.
Analysis on emissions of different greenhouse gas emission categories	[redacted]gest emission mainly from , mainly from
Uncertainty analysis	The uncertainty [redacted] category, emission

obtained by summing.

1）Activity data is divided into three categories according to the collection category, and assigned a score of 1, 3, and 6 respectively

2）Emission factor categories and grades are divided into six categories according to the source of collection, and assigned scores of 6, 5, 4, 3, 2 and 1 respectively. For details, see Table 3-8.

3）The calibration level of the instrument is assigned a score of 6, 3 and 1 according to the calibration situation.

4）The data level is divided into five levels, the higher the level, the better the data quality

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
14	Employee commuting vehicle	Outsourcing vehicle	1	1	3	1.67	162.0829	0.03%	0.0005
15	Employee commuting electric vehicle	Outsourcing electric vehicle	1	1	3	1.67	68.6778	0.01%	0.0002
16	Employee commuting electric bike	Outsourcing electric bike	1	1	3	1.67	6.5222	0.00%	0.0000
17	Employee taxi traveling							00%	0.0000
18	Employee plane traveling							00%	0.0001
19	Employee rail traveling	Rail traveling	1	1	3	2.33	0.7253	0.00%	0.0000
20	Employee subway traveling	Subway traveling						0.00%	0.0000
21	traveling	traveling							
22	Upstream material transportation	Upstream material road transportation <3.5t	3	1	3	2.33	1393.3173	0.28%	0.0065

No.	Emission categories	Facilities	Activity

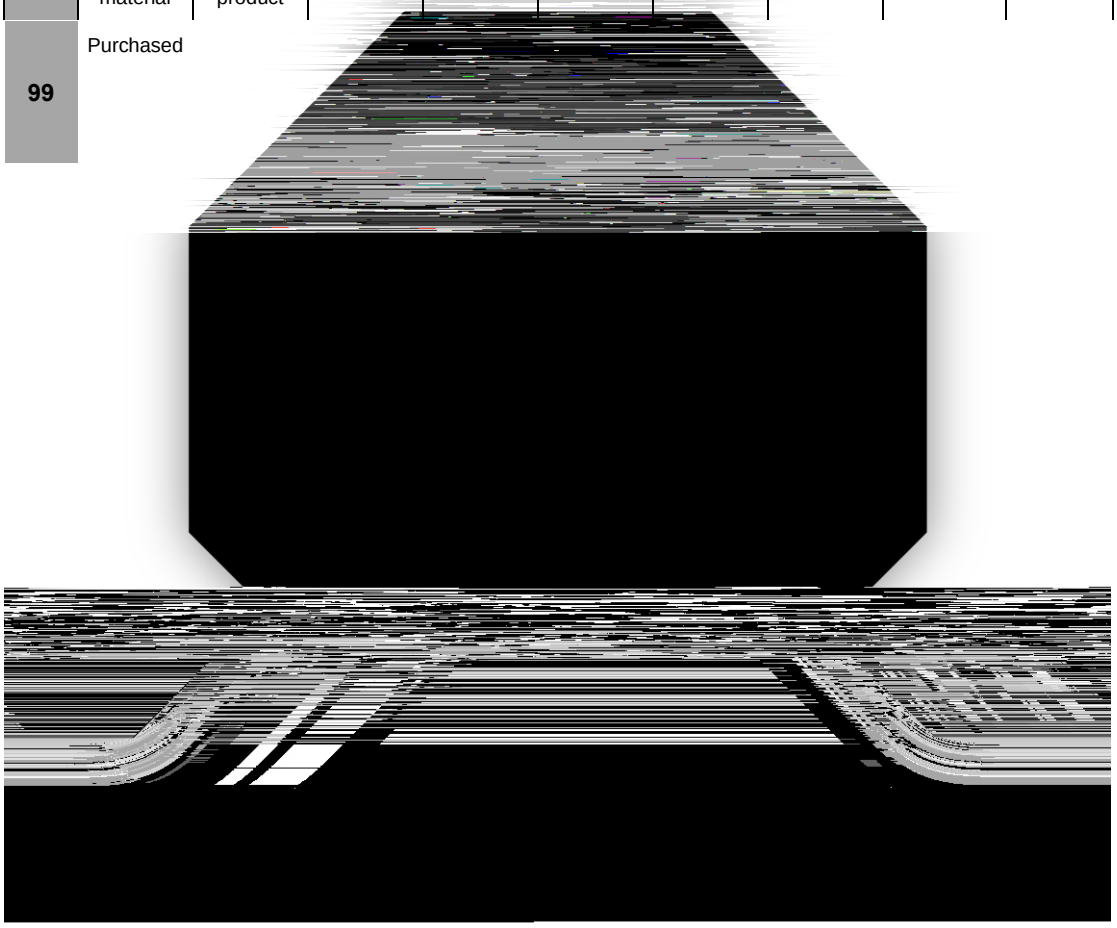
No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
53	Purchased raw material	PET product	3	1	3	2.33	364.9446	0.07%	0.0017
54	Purchased raw material	PE film	3	1	3	2.33	540.4540	0.11%	0.0025
55	Purchased raw material	PFA material	3	1	3	2.33	17.8742	0.00%	0.0001
56	Purchased raw material	PO	3	1	3	2.33	5353.737	1.07%	0.0250
57	Purchased raw material							0.07%	0.0017
58	Purchased raw material							0.00%	0.0000
59	Purchased raw material	PP product	3	1	3	2.33	210.6151	0.04%	0.0010
60	Purchased raw material	PTFE material	3	1	3	2.33	1.0000	0.00%	0.0000
61	raw material	PTFE product	3	1	3	2.33	98.2954	0.02%	0.0005
62	Purchased raw material	PVC material	3	1	3	2.33	2121.0542	0.42%	0.0099
63	Purchased raw material	Propane	3	1	3	2.33	0.5913	0.00%	0.0000

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
64	Purchased raw material	Glass fiber material	3	1	3	2.33	9.0274	0.00%	0.0000
65	Purchased raw material	Stainless steel wire	3	1	3	2.33	10.0112	0.00%	0.0000
66	Purchased raw material	Stainless steel product	3	1	3	2.33	42951.1381	8.60%	0.2005
67	Purchased raw material	Aluminum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]01%	0.0002
68	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]35%	0.1946
69	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]00%	0.0000
70	Purchased raw material	Galvanized steel strip	3	1	3	2.33	9321.1001	1.87%	0.0435
71	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
72	raw material	Cable	3	1	3	2.33	64238.2961	12.87%	0.2998
73	Purchased raw material	Power supply	3	1	3	2.33	11.7295	0.00%	0.0001
74	Purchased raw material	Resistor	3	1	3	2.33	34.7923	0.01%	0.0002

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
75	Purchased raw material	Optical fiber	3	1	3	2.33	39.6629	0.01%	0.0002
76	Purchased raw material	Carbon dioxide	3	1	3	2.33	40.0224	0.01%	0.0002
77	Purchased raw material	Silicone product	3	1	3	2.33	0.7106	0.00%	0.0000
78	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	00%	0.0000
79	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01%	0.0002
80	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20%	0.0048
81	Purchased raw material	Chemicals	3	1	3	2.33	7005	0.00%	0.0000
82	Purchased [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
83	raw material	Brass product	3	1	3	2.33	6855.4566	1.37%	0.0320
84									

No.	Emission categories	Facilities	Activity datax

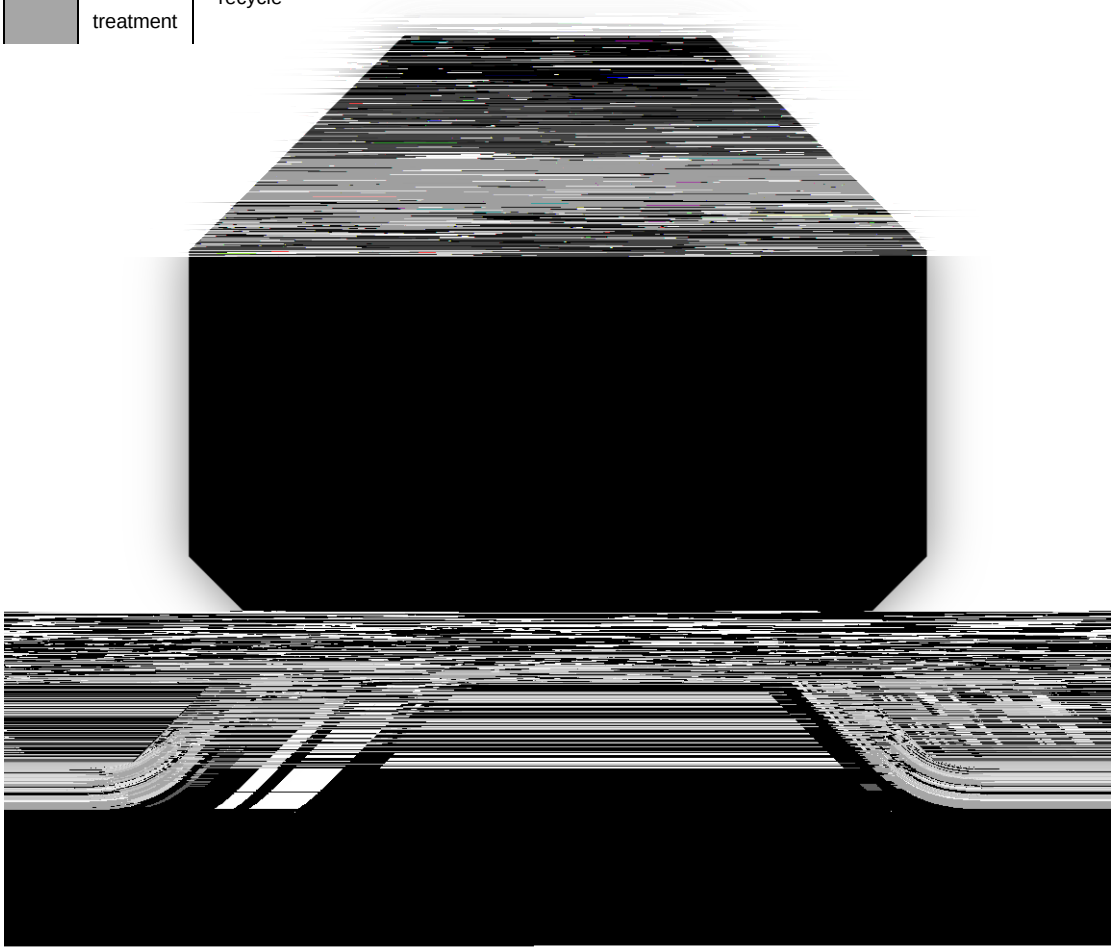
No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
97	Purchased raw material	Wood product	3	1	3	2.33	0.0667	0.00%	0.0000
98	Purchased raw material	Titanium alloy product	3	1	3	2.33	439.1707	0.09%	0.0020
99	Purchased								



No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
107	Purchased raw material	Passive electronic component	3	1	3	2.33	8967.4962	1.80%	0.0419
108	Purchased raw material	Solder material	3	1	3	2.33	1719.4494	0.34%	0.0080
109	Purchased raw material	Rubber	3	1	3	2.33	0.2050	0.00%	0.0000
110	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	03%	0.0007
111	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	01%	0.0002
112	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	00%	0.0000
113	Purchased raw material	Ethanol	3	1	3	2.33	0.2310	0.00%	0.0000
114	Purchased	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
115	raw material	Isopropanol	3	1	3	2.33	23.9667	0.00%	0.0001
116	Purchased raw material	Toner ink	3	1	3	2.33	1.3155	0.00%	0.0000
117	Purchased raw material	Active electronic component	3	1	3	2.33	1500.9543	0.30%	0.0070

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
118	Purchased raw material	Grease	3	1	3	2.33	91.1655	0.02%	0.0004
119	Purchased raw material	Paper product	3	1	3	2.33	0.0010	0.00%	0.0000
120	Purchased raw material	Bamboo product	3	1	3	2.33	64.4002	0.01%	0.0003
121	Purchased raw material	Copper [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]01%	0.0002
122	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]01%	0.0001
123	Purchased raw material	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]61%	0.0842
124	Purchased raw material	Anode copper strip	3	1	3	2.33	650[illegible]73 [illegible]4	13.16%	0.3056
125	Purchased [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
126	raw material	plastic product	3	1	3	2.33	3576.5329	0.72%	0.0167
127	Purchased raw material	Indoor antenna	3	1	3	2.33	156.6816	0.03%	0.0007
128	Purchased raw material	Outdoor antenna	3	1	3	2.33	0.0640	0.00%	0.0000

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
129	Solid waste treatment	Cable treatment	3	1	3	2.33	[redacted]		
130	Solid waste treatment	Steel recycle	3	1	3	2.33	0.0000	0.00%	0.0000



No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
140	Hazardous waste treatment	Waste activated carbon treatment	3	1	3	2.33	11.2303	0.00%	0.0001
141	Wastewater treatment	Wastewater treatment	3	1	3	2.33	4.4493	0.00%	0.0000
142	Diesel	Diesel upstream	3	1	3	2.33	12.8027	0.00%	0.0001
143	Imported electricity	Electricity upstream production	3	2	3	2.67	1374.5736	0.28%	0.0074
144	Imported electricity	Electricity transmission and distribution loss	3	2	3	2.67	462.5893	0.09%	0.0025
145	Imported electricity	Photovoltaic electricity	3	2	3	2.67	203.6972	0.04%	0.0011
146	Product disposal	Waste ABS	3	1	3	2.33	1.5232	0.00%	0.0000
147	Product disposal	Waste PP	3	1	3	2.33	144.4671	0.03%	0.0007
148	Product disposal	Waste rubber	3	1	3	2.33	0.0947	0.00%	0.0000
149	Product disposal	Other waste plastics	3	1	3	2.33	23669.4469	4.74%	0.1105
150	Product disposal	Waste electronic component	3	1	3	2.33	792.1635	0.16%	0.0037
151	Product disposal	Waste wood	3	1	3	2.33	34.6067	0.01%	0.0002

No.	Emission categories	Facilities	Activity data categories	Emission factor categories	Instrument calibration categories	Average score	Total emission (tCO_2e)	Emission proportion	Weighted average score
152	Product disposal	Waste paper	3	1	3	2.33	23.2878	0.00%	0.0001
153	Product disposal	Waste cable	3	1	3	2.33	9308.2946	1.86%	0.0434
154	Product disposal	Waste steel	3	1	3	2.33	33.5421	0.01%	0.0002
155	Product disposal	Waste aluminum	3	1	3	2.33	13.4936	0.00%	0.0001
156	Product disposal	Waste copper	3	1	3	2.33	110.1286	0.02%	0.0005
157	Product disposal	Other waste metal	3	1	3	2.33	11.1524	0.00%	0.0001
158	Product disposal	Metal-plastic mixed waste	3	1	3	2.33	621.5466	0.12%	0.0029
159	Product disposal	Other waste	3	1	3	2.33	122.4228	0.02%	0.0006
160	Product disposal transportation	Waste transportation	3	1	3	2.33	658.9617	0.13%	0.0031
	Total	/	/	/	/	/	499211.0385	100.00%	2.3233
	Weighted total								**2.32**
	Weighted level								**4**

uncertainty analysis	- Three factors, namely activity level data, emission factor and correction level, were evaluated. - Activity level data with low accuracy level include employee commuting, septic tank and other data. The responsible party should obtain activity level data by measured method as far as possible to improve data accuracy under the condition of technical feasibility and reasonable cost. - The lower level of accuracy of emission factor data is the data from purchased raw material, solid waste treatment, upstream & downstream material transportation, product disposal and other data. It is suggested that the responsible party adopt the detection method for characteristic emission factors to obtain a higher level of data accuracy. - Responsible parties are advised to incorporate calibration of monitoring equipment involving carbon activity level data

Material discrepancy
After verification, the total greenhouse gas emissions of the responsible party at the organizational level in 2024-01-01~2024-12-31 were 499211.0385 tCO_2e, and the emissions reported by the greenhouse gas inventory were 499211.0385 tCO_2e. Therefore, the material deviation claimed by the responsible party is within the material threshold of verification.

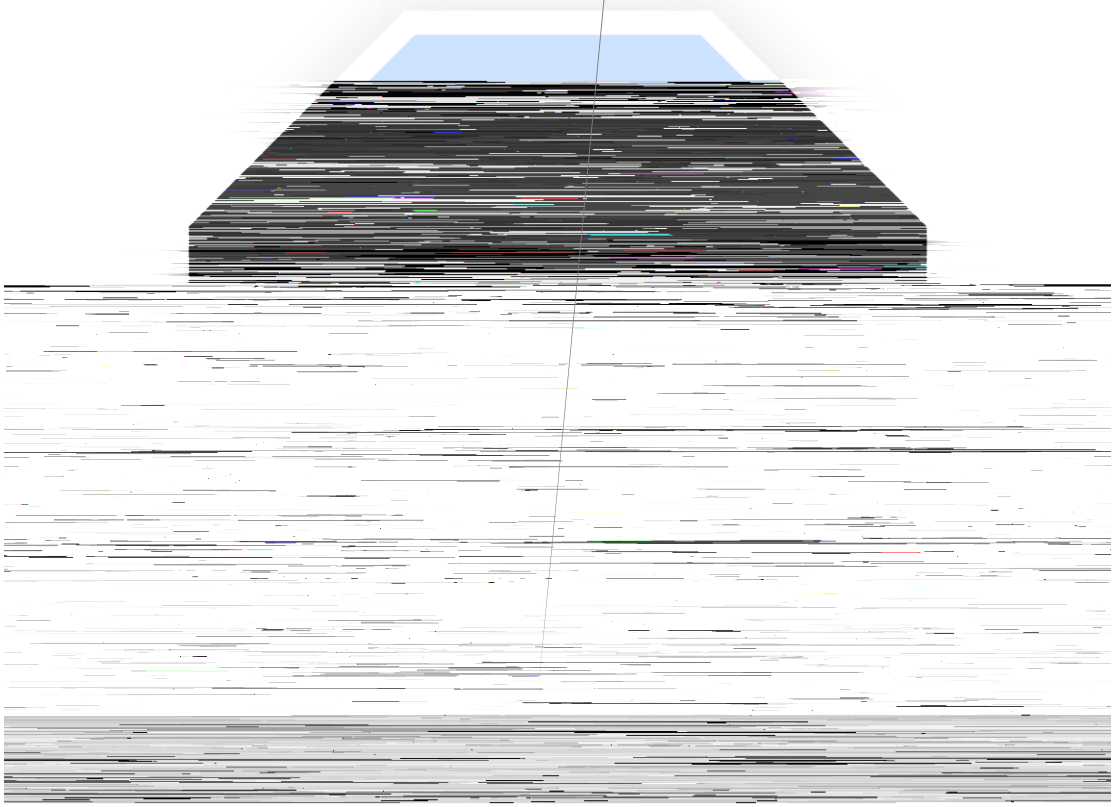
3.3. Assessment of changes from prior period

The reporting boundary in 2023 from the responsible party is category 1 and category 2, and the organizational boundary in 2023 from the responsible party is No 105 Qixin Road, Economic & Technological Development Zone, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA. The reporting boundary in 2024 from the responsible party is category 1-6, and the organizational boundary in 2024 from the responsible party is No 105 Qixin Road, Economic & Technological Development Zone, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA, No 1 Tianchi Road, Hekou Town, Rudong, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA, Second Floor of Office Building 3, Zhongtian Industrial Park, Hekou Town, Rudong, Nantong, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA. As both the reporting boundary and organizational boundary were changed in 2024, the base year was adjusted to 2024-01-01~2024-12-31.

4. References

1) ISO 14064-1:2018 *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*

2)



Verification team qualifications:

Team leader Johny Wang: