嘉澎塑膠
Chia Pang Plastics

2025 GHG Inventory Report

Reference standard
ISO 14064-1:2018

Reporting period
2025/01/01 ~ 2025/12/31

Publication date
2026-05-01

Version
v1.3

✨English edition translated with LLM assistance. Please consult the Traditional Chinese version for authoritative interpretation.

Chia Pang Plastics Co., Ltd.

2025 Internal Verification Statement for the GHG Inventory

The 2025 GHG inventory results for Chia Pang Plastics Co., Ltd. (reporting period: 2025/01/01 ~ 2025/12/31) presented in this report were prepared in accordance with ISO 14064-1:2018 and completed under the Company's three-tier internal verification process: peer review, Administration Department review, and approval by the responsible person.

Upon verification, the total emissions reported for 2025 are **1,836.502 tCO_2e (tonnes of CO_2 equivalent)** — Category 1 direct emissions: 73.1320; Category 2 indirect emissions from imported energy: 9.2630; Category 3 transportation emissions: 35.8590; Category 4 emissions from products: 1,718.2480 (of which §4.1 purchased goods accounts for 1,715.9960 tCO_2e, or 93.44% of total emissions). Data sources are traceable and calculation methodology conforms to ISO 14064-1:2018 and the GHG Protocol Scope 3 Standard. The report content truthfully reflects the Company's 2025 greenhouse gas emissions. **This is an Internal Verification Statement and does not constitute an external third-party verification statement.**

For the full results of internal verification (scope, verifiers and their independence, findings, and remediation) and the planned approach to future external verification, see **Chapter 8 — Verification Statement.**

Report Preparation Lead	Responsible Person	Date of signature
Jan Hsiang-Lei	Wang Cheng-Yen	**2026-05-01**

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Chapter 1 · Company Profile and Policy Statement

1.1 Company Profile

Chia Pang Plastics Co., Ltd. (hereinafter referred to as "Chia Pang" or "the Company") was founded in 1997 and is headquartered in Daya District, Taichung. The Company is a specialized distributor with over 28 years of expertise in industrial plastic piping.

The Company's core business is the sale and technical service of acid- and alkali-resistant plastic pipes, fittings, and valves. Its product portfolio spans UPVC, CPVC, PP, PVDF, PTFE, and PFA in both rigid and flexible forms, with applications across the semiconductor, electronics manufacturing, seawater desalination, chemical, and municipal water industries. Major customers include TSMC, CTCI Corporation, and ASE Technology Holding — benchmark enterprises with rigorous supply-chain sustainability requirements.

As of the base year of this report (2025), Chia Pang has 19 employees across three offices and warehouse sites in Taichung, Tainan, and Kaohsiung. Its service network covers Taiwan's major science parks, industrial parks, and seawater desalination plants.

Item	Content
Company name	Chia Pang Plastics Co., Ltd.
Business registration No.	16691986
Founded	1 May 1997
Responsible Person	Wang Cheng-Yen
Core business	Sale of acid- and alkali-resistant plastic pipes, fittings, and valves
Headcount	19
Headquarters	No. 13, Ln. 513, Shenlin S. Rd., Daya Dist., Taichung City 42859
Offices and warehouses	Taichung, Tainan, Kaohsiung
Phone / Fax	04-25693116 / 04-25693117
Email / Website	service@chia.com.tw / https://www.chia.com.tw/

1.2 Sustainability Philosophy and Corporate Culture

B Corp Certification

In 2016, Chia Pang earned international B Corp Certification, becoming one of Taiwan's **early traditional-industry pioneers** in adopting this framework. The certification requires a company to meet rigorous standards across five dimensions: social responsibility, environmental sustainability, corporate governance, worker care, and customer impact. Chia Pang **passed B Corp Recertification in 2025**, achieving a **B Impact Assessment score of 83.1** — above the 80-point certification threshold and well ahead of the typical baseline of approximately 50.9. The full assessment is published on the B Lab Global Directory. **We believe a good company can deliver returns to shareholders, well-being to its employees, and benefit to the planet — all at the same time.**

Adoption of the Four-Day Workweek

In late 2023, Chia Pang became one of the early adopters of the four-day workweek, applying the internationally recognized **"100-80-100"** model — **100% pay, 80% hours, 100% productivity goal.** Weekly working hours were reduced from 40 to 32 while maintaining the same compensation and the same level of productivity, putting the Company's commitment to employee well-being into practice through its work structure. We believe that **only a company that genuinely takes care of its people has earned the right to speak about contributing to the wider world.**

Empathy × Human-Centered Culture

Chia Pang's day-to-day operations are built on a human-centered culture grounded in empathy. Whether dealing with customers, suppliers, or colleagues, the Company approaches every relationship with empathy and **treats long-term trust as its most valuable asset.** This culture extends to how the Company views the environment — extending empathy to the planet is the fundamental motivation behind this GHG inventory.

1.3 Supply Chain Sustainability Responsibility

Chia Pang's major customers include TSMC, the CTCI Group, and the ASE Group — enterprises with established positions in international supply chains. To date, these customers' sustainability requirements for small and medium-sized suppliers are still mainly limited to "asking whether an inventory has been completed and, if so, requesting Category 1 and 2 data"; a full report or third-party verification is not yet mandated. As a B Corp, however, Chia Pang chooses to **stay ahead of customer requirements.** From 2025 onwards, the Company has voluntarily launched a GHG inventory aligned with the full ISO 14064-1:2018 framework, covering Categories 1 through 4, with complete disclosure through this report. In addition, in 2026 Chia Pang publicly signed its climate commitment on the SME Climate Hub, joining more than 100,000 small and medium-sized enterprises worldwide in the net zero movement, formally committing to achieving net zero emissions before 2050 and continuing to advance its decarbonization roadmap. For Chia Pang, **sustainability is not an assignment from customers but a voluntary expression of corporate culture.**

1.4 Policy Statement from the Responsible Person

> *Climate change is no longer a distant issue. It is already affecting our customers, our suppliers, and the cities and land we call home.*
>
> *As a company built on integrity and a human-centered culture, Chia Pang chose to face this challenge head-on. In 2025, we formally launched our first comprehensive GHG inventory, following the ISO 14064-1:2018 international standard to document both direct and indirect GHG emissions across our three sites in Taichung, Tainan, and Kaohsiung.*
>
> *This report was not prepared to satisfy regulations or to check a box. It is an honest accounting of ourselves — how much we emit, where those emissions come from, and where we can do better.*
>
> *The challenge of sustainability lies not in how loudly we proclaim our goals, but in whether we have the courage to face the truth.*

> *Chia Pang has been a Certified B Corporation since 2016, committed to using business as a force for good — improving both society and the environment. This report is one concrete action through which we honor that commitment. Going forward, we will use these inventory results as a baseline to set annual reduction targets, continue to disclose progress publicly, and welcome scrutiny from all stakeholders.*
>
> *Chia Pang Plastics — 王政彥, Responsible Person — 2025*

1.5 Report Preparation Lead

This report has been prepared in accordance with ISO 14064-1:2018, with an inventory scope covering Category 1 (direct emissions), Category 2 (indirect emissions from imported energy), and Categories 3–6 (other indirect emissions). The personnel below are responsible for overall inventory coordination and report preparation:

Department & Title / Name	Professional Certifications
Executive Director, Administration / Jan Hsiang-Lei	Corporate Sustainability Manager (cert. CPCS-2024-1062) iPAS Net-Zero Carbon Planning Manager – Junior Level (Certificate No. A-Q11-1925-2024) iPAS Net-Zero Carbon Planning Manager – Intermediate Level (Certificate No. A-Q21-0038-2026)

Chapter 2 · Inventory Boundary

2.1 Organizational Boundary

This report applies the **Operational Control Approach** to set the organizational boundary. Any facility or activity over which the Company exercises full operational control is included in the scope of this inventory. The Company is a standalone legal entity with no subsidiaries, joint ventures, or affiliated entities; its organizational boundary is therefore identical to its overall operational scope.

Although the Company leases its three warehouse facilities, it exercises full control over each site's day-to-day operations, equipment maintenance, electricity management, and personnel activities, and bears the energy costs directly. These conditions satisfy the operational control criteria as defined under ISO 14064-1:2018.

2.2 Geographic Boundary (Inventory Sites)

Site	Type	Address
Taichung (HQ)	Leased	No. 13, Ln. 513, Shenlin S. Rd., Daya Dist., Taichung City 42859
Tainan	Leased	No. 56-32, Gangziwei, Anding Dist., Tainan City 74562
Kaohsiung	Leased	No. 342-1, Wenfu Rd., Zuoying Dist., Kaohsiung City 81361

2.3 Operational Boundary (Emissions Scope)

The operational boundary of this inventory covers Categories 1 through 4. Emission sources in each category are summarized below:

Category	Sub-category	Emission source
Category 1	1.3 Company vehicles	Fuel combustion in company vehicles (gasoline vans and owned/leased diesel trucks)
	1.4.1 Refrigerant leaks	Split air conditioners, refrigerators, and vehicle air conditioning (R-32, R-410A, R-134a)

Category	Sub-category	Emission source
	1.4.2 Septic tanks	CH_4 emissions from septic tanks at each site
	1.4.3 Fire extinguishers	ABC dry powder fire extinguishers (inventoried but not quantified)
Category 2	2.1 Purchased electricity	Daily office and warehouse electricity across the three sites
Category 3	3.1 Upstream transportation	Supplier deliveries to the warehouses
	3.2 Business travel	Taiwan High Speed Rail, flights, taxis, and personal vehicles used for business
	3.3 Employee commuting	Daily commuting by employees
	3.4 Downstream transportation	Outbound delivery to customers via partner freight carriers
Category 4	4.1 Purchased goods	Upstream manufacturing emissions of purchased UPVC/CPVC pipes and fittings (Spend-based Method)
	4.3.1 Upstream electricity	Extraction and transmission losses upstream of purchased electricity
	4.3.2 Upstream tap water	Indirect emissions from water supply and wastewater treatment at the three sites
	4.4 Operational waste	Incineration of municipal-stream waste

Exclusion of Categories 5 and 6: As a pure distribution company with no manufacturing or processing operations, Chia Pang has assessed and identified no material emission sources within Category 5 (indirect emissions from the use of products from the organization) or Category 6 (other indirect emissions). These categories are therefore excluded from this inventory.

2.4 Materiality Criteria for Emission Sources

This inventory applies two materiality thresholds: a **quantitative threshold** (any single emission source ≥ 1% of total emissions is treated as material) and **management relevance** (sources below the quantitative threshold are still included if they hold management significance or are of interest to stakeholders). Sources assessed as immaterial and without management significance are excluded with a documented rationale, while an equipment inventory is maintained for verification purposes.

2.5 Reporting Period

Item	Content
Reporting period	1 January 2025 – 31 December 2025
Reference standard	ISO 14064-1:2018
Organizational boundary approach	Operational Control Approach

Chapter 3 · GHG Emissions Quantification

3.1 Calculation Methodology and Reference Standards

This GHG inventory is prepared in accordance with ISO 14064-1:2018. Emissions are quantified using the following general formula:

> Emissions (tCO_2e) = activity data × emission factor × GWP

Factor type	Source	Applicable emission source
Operator-provided factor	Taiwan High Speed Rail Carbon Footprint	High-speed rail by segment
	ICAO Carbon Emissions Calculator	International flights
International emission factor	IPCC Global Warming Potential Values (2024) — drawing on AR4 / AR5 / AR6	Refrigerants
	Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6	Category 4 — 4.1 Purchased goods
National emission factor	Latest official version published by Taiwan's Ministry of Environment	Fuel combustion, electricity, transportation, commuting, tap water, waste, etc.

3.1.1 Management of Global Warming Potential (GWP) Values

All GWP values in this report use the IPCC Sixth Assessment Report (AR6). The table below lists the greenhouse gases and refrigerants relevant to the Company's inventory, with their corresponding GWP values and an indication of whether each was used in this inventory:

GHG / Refrigerant	Chemical class	GWP value (AR5)	GWP value (AR6)	Used in this inventory
CO_2	Carbon dioxide	1	1	AR6
CH_4	Methane	28	27.0	AR6
N_2O	Nitrous oxide	265	273	AR6
R-32	HFC	677	771	AR6

GHG / Refrigerant	Chemical class	GWP value (AR5)	GWP value (AR6)	Used in this inventory
R-134a	HFC	1,300	1,530	AR6
R-410A	HFC blend	1,924	2,256	AR6
R-600a	HC (hydrocarbon)	Not published	Not published	Inventoried but not quantified

3.2 Category 1: Direct GHG Emissions

This category covers Section 1.3 mobile emissions from company vehicles; Section 1.4.1 refrigerants; Section 1.4.2 septic tanks; and Section 1.4.3 fugitive emissions from fire extinguishers. The quantification methodology and activity data for each sub-category are summarized below:

> **1.3 Company vehicles:** Emissions = fuel purchased × (CH_4 EF × CH_4 GWP + CO_2 EF × CO_2 GWP + N_2O EF × N_2O GWP)
>
> **1.4.1 Refrigerants:** Emissions = refrigerant purchased (new equipment charge + maintenance refill on existing equipment) × refrigerant GWP
>
> **1.4.2 Septic tanks:** Emissions = employee person-days × CH_4 EF × CH_4 GWP
>
> **1.4.3 Fire extinguishers:** The Company's fire extinguishers are ABC dry powder type (ammonium phosphate based), which produce no GHG fugitive emissions in practice and are inventoried but not quantified.

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
1.3 Company vehicles	Customer delivery (diesel truck)	8.4860	3.5903	3.5644	kL
	Customer delivery (gasoline van)	0.8516	0.9907	0.7288	kL
1.4.1 Refrigerants	Air conditioning (R-32)	0.0056	—	0.0016	tonnes
	Air conditioning (R-410A)	—	0.0025	—	tonnes

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
	Vehicle AC and water dispenser (R-134a)	0.0029	0.0023	0.0028	tonnes
	Refrigerator (R-600a)	0.1390	0.0540	0.0390	kg
1.4.2 Septic tanks	Employee person-days	1,522.5	841.5	1,078.5	person-days
1.4.3 Fire extinguishers	ABC dry powder	7	6	4	units
Total converted emissions: 73.1320 tCO_2e					

Notes: (1) The — symbol indicates that the site does not use air conditioning containing the specified refrigerant. (2) R-600a is inventoried but not quantified because the IPCC has not published a GWP value for it. (3) ABC dry powder fire extinguishers produce no GHG fugitive emissions in practice and are therefore inventoried but not quantified.

3.3 Category 2: Indirect GHG Emissions from Imported Energy

This category covers Section 2.1 purchased electricity, applying the 2024 grid electricity emission factor published by Taiwan's Ministry of Environment. The quantification methodology and activity data are summarized below:

> 2.1 Purchased electricity: Emissions = electricity consumption (kWh) × the Ministry of Environment's published electricity emission factor (2024)

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
2.1 Purchased electricity	Taipower electricity purchase	8.898	5.709	4.935	MWh
Total converted emissions: 9.2630 tCO_2e					

Note: No items in this category are inventoried-but-not-quantified.

3.4 Category 3: Indirect GHG Emissions from Transportation

This category covers Section 3.1 upstream transportation; Section 3.2 business travel; Section 3.3 employee commuting; and Section 3.4 downstream transportation. The quantification methodology and activity data for each sub-category are summarized below:

> **3.1 Upstream transportation:** Emissions = tonne·km × the Ministry of Environment's published heavy-duty diesel truck emission factor
>
> **3.2 Business travel:** High-speed rail = trips per person × segment factor provided by Taiwan High Speed Rail; international flights = trips per person × ICAO international factor; taxi / personal car for business = person·km × the Ministry of Environment's published gasoline-vehicle factor
>
> **3.3 Employee commuting:** Emissions = person·km × the Ministry of Environment's published factor for each mode (gasoline sedan, scooter)
>
> **3.4 Downstream transportation:** Emissions = tonne·km × the Ministry of Environment's published light diesel truck emission factor

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
3.1 Upstream transportation	Supplier delivery (heavy-duty diesel truck)	8,838.7500	27,096.3900	48,083.3900	tonne·km
3.2 Business travel	High-speed rail	30	34	63	trips per person
	International flights	16	4	8	trips per person
	Taxi (gasoline)	1,828.8000	130.0200	487.9400	person·km
	Personal car for business (gasoline)	1,582.7500	1,012.7300	1,058.4400	person·km
3.3 Employee commuting	Private sedan (gasoline)	8,685.8000	21,900.2000	—	person·km

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
	Scooter (gasoline)	11,843.3000	3,403.4000	19,897.2000	person·km
3.4 Downstream transportation	Customer delivery (diesel truck)	10,366.5100	1,595.5200	5,298.4100	tonne·km
Total converted emissions: 35.8590 tCO_2e					

Note: The — symbol indicates that no employee at this site commutes by the specified mode of transport.

3.5 Category 4: Indirect GHG Emissions from Products Used by the Organization

This category covers four sub-categories: Section 4.1 purchased goods; Section 4.3.1 upstream electricity; Section 4.3.2 upstream tap water; and Section 4.4 operational waste. Combined emissions total 1,718.2480 tCO_2e (93.56% of total emissions). **Section 4.1 purchased goods is the single largest emission source in this inventory, with 1,715.9960 tCO_2e (93.44% of total emissions).**

3.5.1 Category 4: Section 4.1 Purchased Goods — Largest Emission Source in This Inventory

Methodology applied: As an industrial wholesale distributor with no manufacturing processes, and given that upstream suppliers have not yet completed Product Carbon Footprint (PCF) inventories, the Company follows the GHG Protocol Technical Guidance for Calculating Scope 3 Emissions and applies the **Spend-based Method** to estimate emissions from purchased goods in fiscal year 2025.

Item	Value
Purchased item	UPVC / CPVC industrial plastic pipes and fittings (pipes, fittings, accessories)

Item	Value
2025 purchase weight	800.5210 tonnes
2025 purchase amount (TWD)	NT$ 152,371,602

Emission factor: The factor used is from Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6 (NAICS 326122 Plastic Pipe and Pipe Fitting Manufacturing, SEF+MEF version with distribution margins): **0.351 kg CO_2e / USD**.

Exchange rate: The Company applies the 2025 yearly average TWD-to-USD exchange rate published by the U.S. IRS: **31.167 TWD/USD**.

> Currency conversion: NT$ 152,371,602 ÷ 31.167 = USD 4,888,877
>
> Emissions: USD 4,888,877 × 0.351 kg CO_2e/USD ≈ **1,715.9960 tCO_2e.**

Site	Purchase amount (USD)	Emissions (tCO_2e/year)
Taichung	2,501,253	877.9400
Kaohsiung	1,243,770	436.5630
Tainan	1,143,854	401.4930
Total	**4,888,877**	**1,715.9960**

Methodology limitations: (1) The EPA supply chain emission factors reflect U.S. averages; Asian suppliers typically have higher actual carbon intensity, so this estimate is **directionally conservative (a likely underestimate).** (2) The Spend-based Method is a Tier 1 approach, less precise than activity-based methods (Tier 2/3). The Company plans to engage suppliers in completing PCF or LCA studies to upgrade the methodology in future inventories.

3.5.2 Category 4: Sections 4.3 / 4.4 Other Indirect Emissions

This sub-section covers Section 4.3.1 upstream electricity; Section 4.3.2 upstream tap water; and Section 4.4 operational waste. The quantification methodology and activity data for each sub-category are summarized below:

> **4.3.1 Upstream electricity:** Emissions = electricity consumption (kWh) × the Ministry of Environment's 2022 published indirect electricity carbon footprint factor (covering

generation-side fuel extraction and transmission and distribution losses)

4.3.2 Upstream tap water: Emissions = water consumption (m³) × the 2020 tap water emission factor

4.4 Operational waste: Emissions = waste collected (tonnes) × the Ministry of Environment's published incineration plant treatment factor (mapped by site: Taichung → Miaoli; Tainan → Yongkang; Kaohsiung → Gangshan)

Sub-category	Emission source	Taichung	Tainan	Kaohsiung	Unit
4.3.1 Upstream electricity	Commercial electricity	8.898	5.709	4.935	MWh
4.3.2 Upstream tap water	Commercial water use	64	31	88	m³
4.4 Operational waste	Incineration of municipal-stream waste	0.0492	0.0482	0.0326	tonnes
Total converted emissions: 2.2520 tCO_2e					

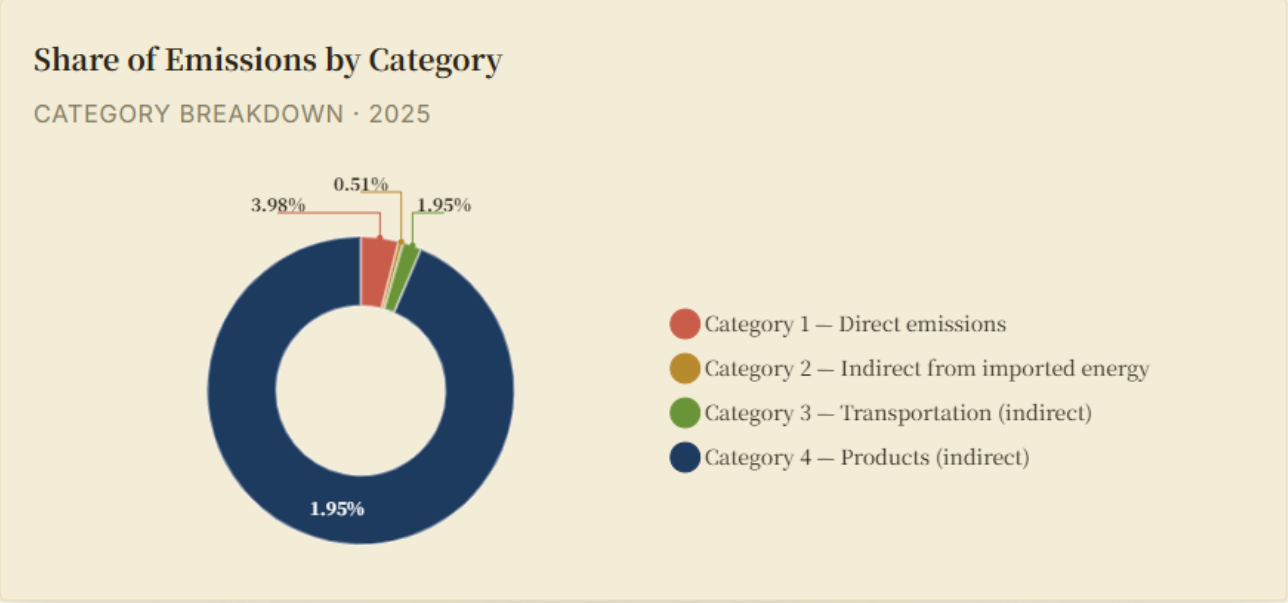
Note: No items in this category are inventoried-but-not-quantified.

Chapter 4 · Emissions Summary

4.1 Annual Total Emissions

Item	Value
Inventory year	2025
Reference standard	ISO 14064-1:2018
Scope covered	Category 1, Category 2, Category 3, Category 4
Total emissions	1,836.502 tCO_2e

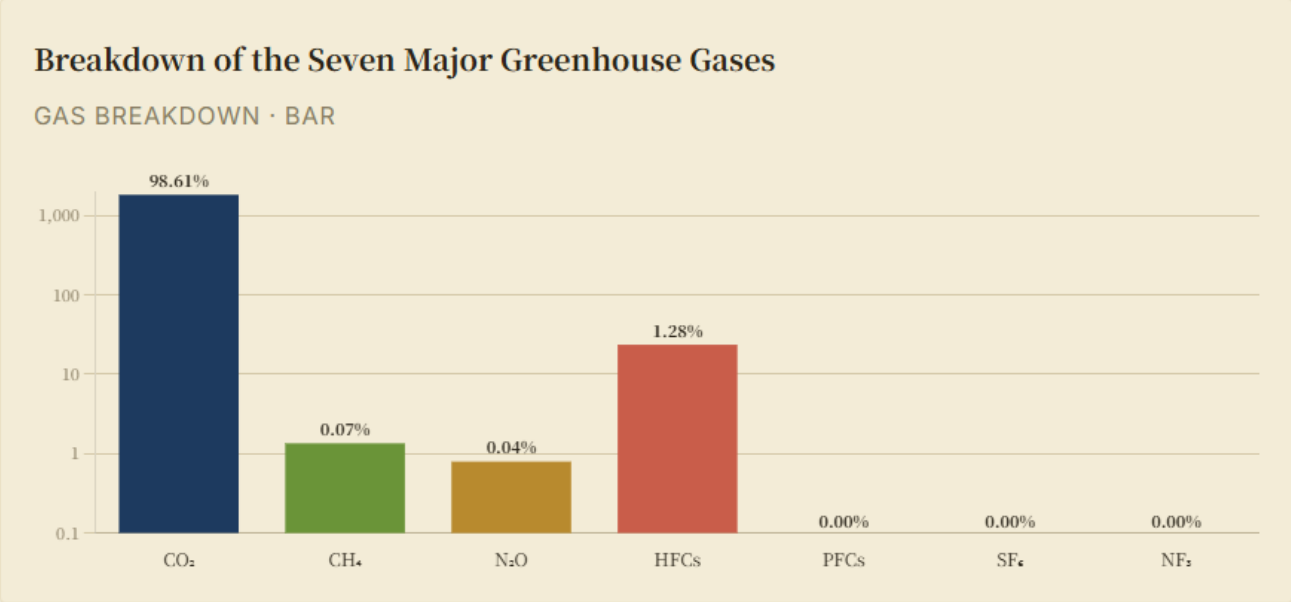
4.2 Emissions by Category



Category	Description	Emissions (tCO_2e/year)	Share
Category 1 — Direct emissions	Company vehicle fuel, refrigerant leaks, septic tanks	73.1320	3.98%
Category 2 — Indirect emissions	Purchased electricity	9.2630	0.51%
Subtotal	Scope 1+2 (direct + indirect)	82.3950	4.49%

Category	Description	Emissions (tCO_2e/year)	Share
Category 3 — Transportation (indirect)	Upstream and downstream transportation, business travel, employee commuting	35.8590	1.95%
Category 4 — Products (indirect)	Purchased goods, upstream electricity, upstream tap water, operational waste	1,718.2480	93.56%
Subtotal	Scope 3 (other indirect)	1,754.1070	95.51%
Total		1,836.502	100%

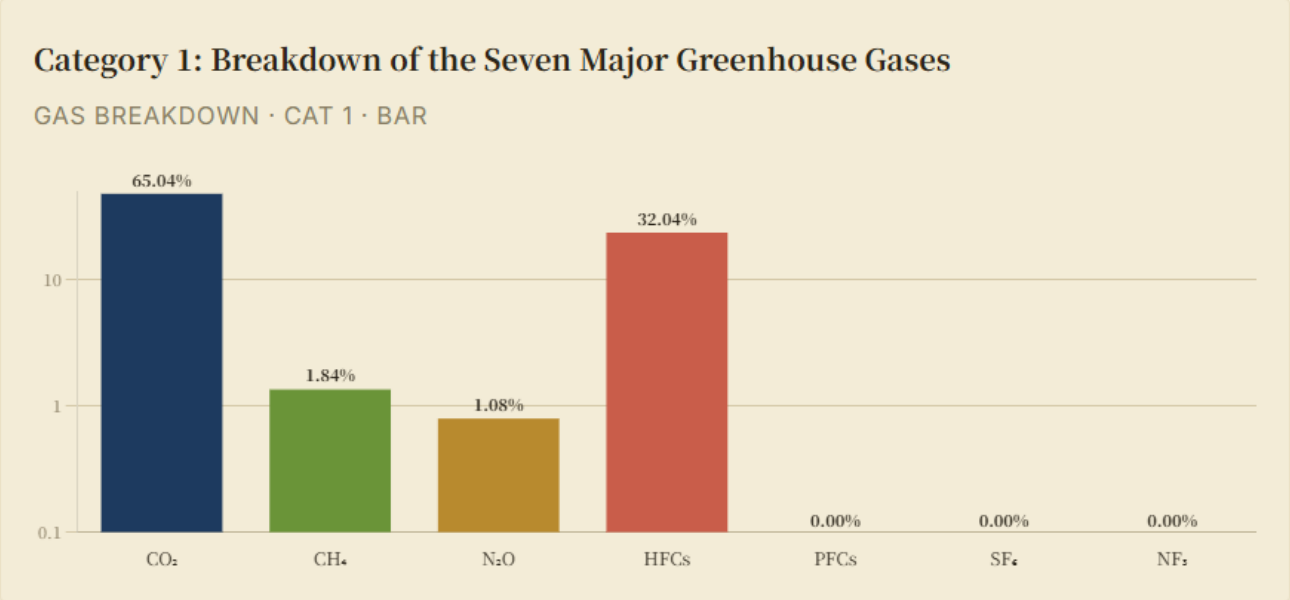
4.3 The Seven Greenhouse Gases



Greenhouse gas	Emissions (tCO_2e/year)	Share
CO_2 (including 1,715.9960 tCO_2e from 4.1 purchased goods)	1,810.9340	98.61%
CH_4	1.3450	0.07%
N_2O	0.7920	0.04%
HFCs	23.4311	1.28%
PFCs	0.0000	0.00%

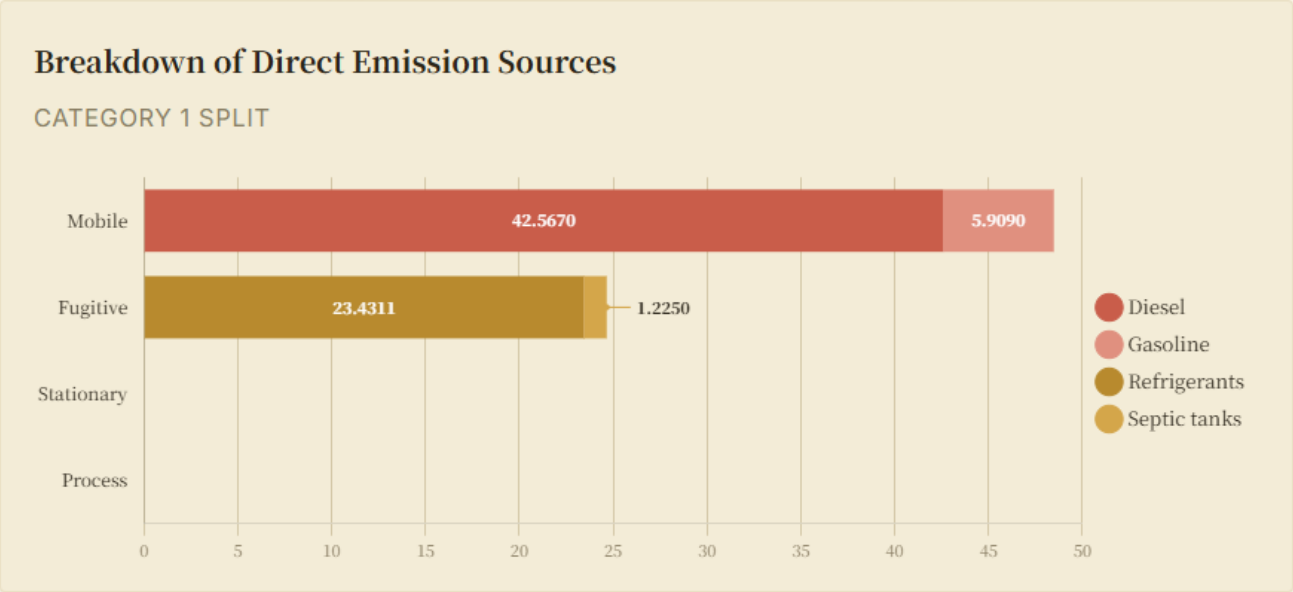
Greenhouse gas	Emissions (tCO_2e/year)	Share
SF_6	0.0000	0.00%
NF_3	0.0000	0.00%
Total	1,836.502	100%

4.3.1 Category 1: The Seven Greenhouse Gases



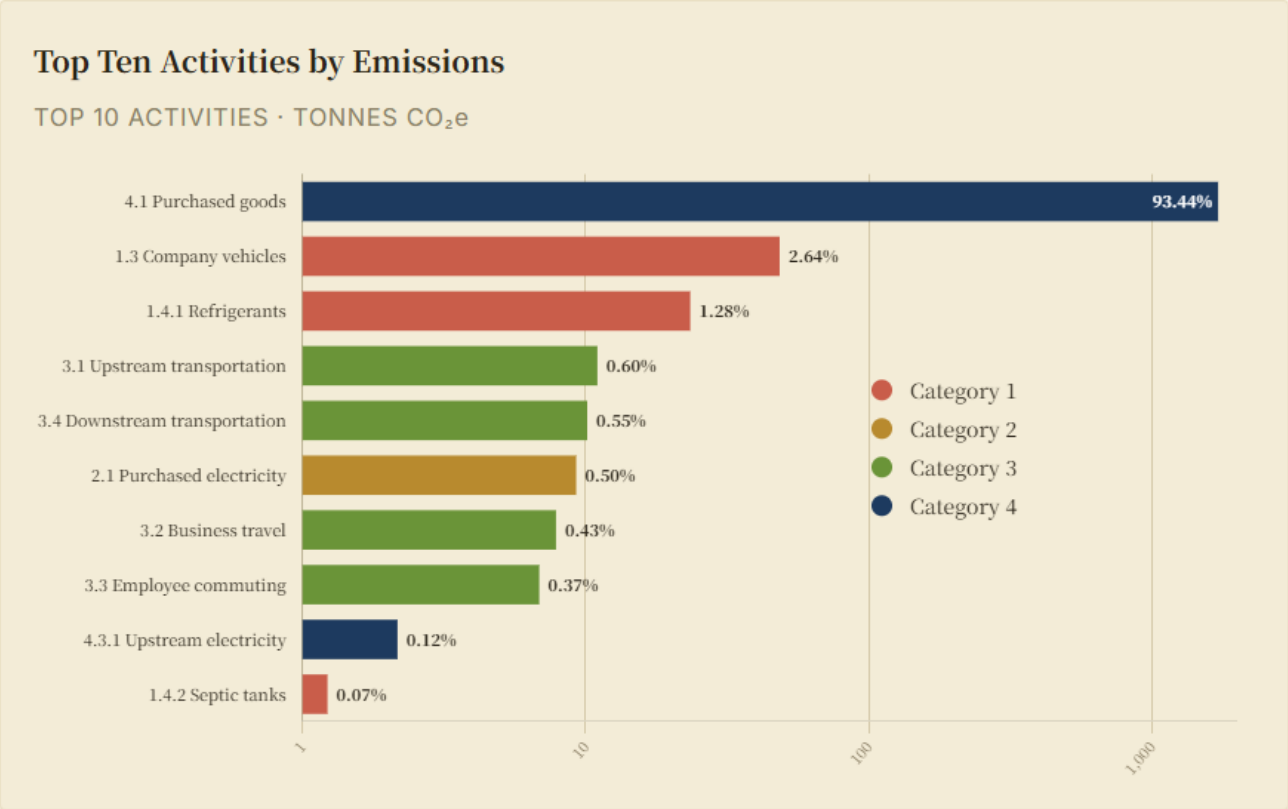
Greenhouse gas	Emissions (tCO_2e/year)	Share of Category 1
CO_2	47.5644	65.04%
CH_4	1.3448	1.84%
N_2O	0.7917	1.08%
HFCs	23.4311	32.04%
PFCs	0.0000	0.00%
SF_6	0.0000	0.00%
NF_3	0.0000	0.00%
Total	73.1320	100%

4.4 Direct Emission Sources



Category	Emission type	Detail	Emissions (tCO_2e/year)	Share of Category 1
Category 1 — Direct emissions	Mobile	Diesel	42.5670	58.21%
		Gasoline	5.9090	8.08%
	Fugitive	Refrigerants	23.4311	32.04%
		Septic tanks	1.2250	1.67%
	Stationary	—	0.000	0.00%
	Process	—	0.000	0.00%
Total			73.1320	100%

4.5 Top Ten Activities by Emissions



Rank	Emission source	Emissions (tCO_2e/year)	Share of total emissions	Cumulative share
1	4.1 Purchased goods	1,715.9960	93.44%	93.44%
2	1.3 Company vehicles (diesel 42.5670 + gasoline 5.9090)	48.4760	2.64%	96.08%
3	1.4.1 Refrigerants	23.4311	1.28%	97.36%
4	3.1 Upstream transportation	11.0060	0.60%	97.95%
5	3.4 Downstream transportation	10.1320	0.55%	98.51%
6	2.1 Purchased electricity	9.2630	0.50%	99.01%
7	3.2 Business travel	7.8610	0.43%	99.44%
8	3.3 Employee commuting	6.8600	0.37%	99.81%
9	4.3.1 Upstream electricity	2.1650	0.12%	99.93%

Rank	Emission source	Emissions (tCO_2e/year)	Share of total emissions	Cumulative share
10	1.4.2 Septic tanks	1.2250	0.07%	100.00%
11	4.4 Operational waste	0.0440	0.0024%	—
12	4.3.2 Upstream tap water	0.0430	0.0023%	—
13	1.4.3 Fire extinguishers (ABC dry powder)	0.0000	0.00%	—
Total		**1,836.502**	**100%**	

4.6 Summary — Key Observations

Observation	Key data	Notes
Emissions structure	Category 4 / 4.1 purchased goods 93.44% vs. Categories 1–3 combined 6.44%	Highly concentrated in **upstream supply chain**
By gas	CO_2 98.61% / HFCs 1.28% / Others <0.2%	**CO_2 is the dominant gas**; refrigerant leakage is the main HFCs source
Mobile	Diesel 87.81% / Gasoline 12.19%	Company vehicle fuel is predominantly **diesel (light trucks)**
Reduction priorities and concrete measures based on the structural characteristics above are detailed in **Chapter 9 — Reduction Strategy**.		

Chapter 5 · Data Quality Management

5.1 Data Management Principles

Principle	Definition
Relevance	The chosen emission sources and calculation methods faithfully reflect the Company's operational activities
Completeness	All identified material emission sources are included; material exclusions are explained with rationale
Consistency	The same source types use consistent methods across the three sites and across reporting years for comparability
Transparency	Data sources, calculation methods, and assumptions are documented and traceable
Accuracy	Actual measurements are prioritized; where measurement is not possible, reasonable estimates are used with documented basis

5.2 Activity Data Sources by Emission Source

The Company gives **priority to traceable original documents (invoices, bills)**. Where such documents are not directly available, equipment nameplates, survey forms, or reasonable estimates are used.

Category	Emission source	Materiality	Activity data source
Category 1	1.3 Company vehicles	Included / ≥ 1%	Fuel-station receipts (liters)
	1.4.1 Refrigerant equipment	Included / ≥ 1%	Equipment nameplates + manufacturer specs
	1.4.2 Septic tanks	Tracked / < 1%	Estimated monthly active person-days
	1.4.3 Fire extinguishers	Inventoried / < 1%	Equipment inventory

Category	Emission source	Materiality	Activity data source
Category 2	2.1 Purchased electricity	Included / managerial	Taipower bills (three sites)
Category 3	3.1 Upstream transportation	Included / managerial	Goods-receipt records, weight × average distance
	3.2 Business travel	Included / managerial	Receipts, travel expense reimbursements, travel requests
	3.3 Employee commuting	Included / managerial	Employee commuting survey
	3.4 Downstream transportation	Included / managerial	Carrier invoices, tonne·km data (requested from carriers)
Category 4	4.1 Purchased goods	Included / ≥ 1%	Procurement ledger, purchase invoices (amount × NAICS code → EPA Supply Chain factor)
	4.3.1 Upstream electricity	Included / managerial	Electricity consumption (same source as 2.1)
	4.3.2 Upstream tap water	Tracked / < 1%	Water bills from Taiwan Water (three sites)
	4.4 Operational waste	Included / managerial	On-site weighing of waste collection, photo evidence

5.3 Quantitative Data Quality Scoring

This section adopts a three-dimensional scoring framework (A1 activity data, A2 instrument calibration, A3 emission factor), drawn from the GHG Protocol Data Quality Indicator and Taiwan's Ministry of Environment Guidelines for Greenhouse Gas Emissions Inventory Operations. Each emission source is scored, weighted by its share of emissions, and aggregated to yield a quality grade for the inventory.

5.3.1 Scoring Framework

Each dimension is scored from 1 to 3 (lower scores indicate higher quality). The score for each

source is A1 × A2 × A3 (range 1 to 27). The inventory score is Σ (source score × source share of emissions).

Dimension	1 point (best)	2 points (medium)	3 points (worst)
A1 Activity data	Continuous monitoring	Periodic monitoring	Internal estimation
A2 Instrument calibration	External calibration ≥ 1×/year	External calibration < 1 ×/year	No measurement (estimate only)
A3 Emission factor	Internally developed / industry-derived	Manufacturer-provided / regional published	National published / international published

Score-to-grade mapping:

Score range	Grade	Interpretation
1–9 points	Grade 1	High quality, reliable
10–18 points	Grade 2	Medium quality, reliable
19–27 points	Grade 3	Quality-limited, requires strengthening

5.3.2 Scores by Emission Source

Emission source	Share C	A1	A2	A3	Source score B	Grade	Weighted B×C
4.1 Purchased goods	93.44%	3	2	3	18	2	16.819
1.3 Company vehicles	2.64%	2	2	3	12	2	0.317
1.4.1 Refrigerants	1.28%	3	3	3	27	3	0.346
3.1 Upstream transportation	0.60%	3	3	3	27	3	0.162
3.4 Downstream transportation	0.55%	3	3	3	27	3	0.149

Emission source	Share C	A1	A2	A3	Source score B	Grade	Weighted B×C
2.1 Purchased electricity	0.50%	1	1	3	3	1	0.015
3.2 Business travel	0.43%	2	2	2	8	1	0.034
3.3 Employee commuting	0.37%	3	3	3	27	3	0.101
4.3.1 Upstream electricity	0.12%	1	1	3	3	1	0.004
1.4.2 Septic tanks	0.07%	3	3	3	27	3	0.019
4.4 Operational waste	0.0024%	2	3	3	18	2	0.000
4.3.2 Upstream tap water	0.0023%	2	1	3	6	1	0.000
1.4.3 Fire extinguishers	—	—	—	—	—	—	Inventoried but not quantified
Sum	100%						17.97

5.3.3 Inventory Grade Conclusion

The weighted total score for this inventory is 17.97, which falls within the 10–18 range. **The inventory is therefore graded "Grade 2" (medium quality, reliable).**

Dominant factor: Section 4.1 purchased goods alone contributes 16.82 points (93.6% of the inventory score). Its dimension scores are A1=3 (purchase value converted to emissions via the Spend-based Method), A2=2 (accounting documents are traceable), and A3=3 (national-average factors from U.S. EPA Supply Chain Factors). While this source is Grade 2 in isolation, its dominant share effectively determines the overall inventory grade.

High-quality sub-items: Section 2.1 purchased electricity, Section 4.3.1 upstream electricity, Section 4.3.2 upstream water supply, and Section 3.2 business travel are all Grade 1, but their combined share is only 1.4%, so their effect on the overall inventory score is limited.

Data-quality-limited sub-items: Section 1.4.1 refrigerants; Sections 3.1 and 3.4 upstream and downstream transportation; Section 3.3 employee commuting; and Section 1.4.2 septic tanks are all Grade 3 (27 points), primarily because activity data require estimation, no measurement instruments are calibrated, and national-average factors are used. Given the Company's nature (a pure distribution business with no process-measurement equipment), these sub-items cannot easily be upgraded in the short term.

Upgrade roadmap: Beginning in 2026, the Company plans to gradually introduce **Tier 2/3 emission** factors for Section 4.1 purchased goods (by requesting actual carbon footprint data or third-party-verified factors from major suppliers), with the goal of upgrading the **inventory to Grade 1 by 2030**.

Chapter 6 · Base Year

6.1 Selection of the Base Year

The Company has selected 2025 as the base year for its first GHG inventory. The rationale: this is the first comprehensive inventory; data traceability is complete; current operational structure is properly reflected; and it aligns with the starting point of the Company's international commitment via the SME Climate Hub.

Base-year emissions and intensity baseline

Item	Value	Use
Base Year	2025	—
Base year | Total emissions	1,836.502 tCO_2e	Absolute value — supplementary observation
Base year | Emissions intensity per million NT$ revenue	9.046 tCO_2e per million NT$	Reduction baseline — primary target
Base year | Emissions intensity per employee	96.66 tCO_2e / person / year	Structural observation — supplementary

6.2 Triggers for Base-Year Recalculation

In accordance with ISO 14064-1:2018, the Company has defined triggers for base-year recalculation, with a significance threshold set at 3%. The base-year emissions will be recalculated whenever any of the following occurs:

- A structural change to the reporting or organizational boundary (i.e., a merger, acquisition, or divestiture / asset sale)
- A change in calculation methodology or emission factors
- The discovery of an error, or a cumulative set of errors, whose aggregate effect is material

When any of these conditions is met, the adjustment and its rationale will be disclosed clearly in that year's report. Year-on-year emission differences caused solely by natural fluctuations in

business volume (e.g., changes in order intake) are excluded from this trigger. **None of the above conditions has occurred to date, so the base year remains 2025.**

6.3 Reduction Target Setting

The Company adopts the global commitment of the SME Climate Hub as the framework for its reduction targets. The SME Climate Hub is an official partner of the Race to Zero campaign under the UNFCCC High Level Champions. In Taiwan, this initiative is introduced locally by the **Vision Project Foundation**, with enterprises such as **TSMC and SinoPac Holdings** listed as co-advocacy partners.

As a **supplier to TSMC**, Chia Pang Plastics has formally adopted the three commitments of the SME Climate Commitment:

> "We pledge to halve our greenhouse gas emissions before 2030, achieve net zero before 2050, and disclose our progress yearly."
>
> The Company commits to **halving its greenhouse gas emissions before 2030, to achieving net zero before 2050**, and to **disclosing its progress yearly**.
>
> — SME Climate Commitment

The Company expresses these commitments domestically through emissions intensity per unit of revenue as its primary local indicator:

Commitment	Target	Corresponding intensity value
2030 halving in intensity	50% reduction in emissions intensity per unit revenue versus the base year	From 9.046 down to ≤ 4.523 tCO_2e / NT$ million
2050 intensity approaching zero (net zero)	Emissions intensity per unit revenue approaches zero; residual emissions are offset with high-quality credits to reach net zero	0 tCO_2e / NT$ million (including offsets)
Annual disclosure	Publicly disclose inventory results and reduction progress each year	Compile and publish this report annually

Policy statement on the use of an intensity-based indicator

1. **Business growth and sustainability should advance together:** as a growing SME distributor, business expansion naturally raises absolute emissions. A target framed in absolute terms could create perverse incentives to "reduce emissions by reducing service".
2. **A falling intensity is true decarbonization:** a decline in emissions per unit of economic output is the genuine indicator of operational efficiency and low-carbon transition.
3. **B Corp principle:** sustainability commitments should not be in tension with business growth — they should reinforce each other.

6.3.1 Alignment with Taiwan NDC 3.0 and International Reduction Frameworks

On 3 November 2025, Taiwan's Executive Yuan approved Nationally Determined Contributions (NDC) 3.0 (Chinese only), setting reduction milestones for 2030, 2032, and 2035, and reaffirming the 2050 net-zero target. Although Chia Pang Plastics is not subject to mandatory inventory under the Climate Change Response Act (its emissions are only 0.33% of the mandatory threshold), the Company voluntarily aligns its **timeline with national policy** as part of its B Corp ethos, echoing the rhythm of Taiwan's sustainability transition.

Alignment of Chia Pang's commitment with the NDC 3.0 timeline

Milestone	Taiwan NDC 3.0 national target (vs. 2005)	Chia Pang's commitment (vs. 2025 base year)
2030	28 ± 2% reduction	50% reduction in emissions intensity per unit revenue
2032	32 ± 2% reduction	Rolling reassessment based on execution and revenue trajectory
2035	38 ± 2% reduction	Rolling reassessment based on execution and revenue trajectory
2050	Net zero	Intensity approaching zero (residuals offset with high-quality credits to reach net zero)

Note on indicator difference: NDC 3.0 targets **absolute** national reductions, whereas Chia Pang adopts **emissions intensity per unit of revenue** as its primary local indicator (per the policy statement in Section 6.3). The two use different baselines (2005 vs. 2025) and different measurement bases (absolute vs. intensity), so direct numerical alignment is not possible. The significance of this table is **timeline alignment** — Chia Pang's 2030 and 2050 commitments are synchronized with national policy on a time-axis basis, and under steady business conditions a halving in intensity would translate into absolute reductions roughly matching the national pathway.

Methodological reference to international reduction frameworks

During target design, the Company referenced the methodological principles of the Science Based Targets initiative (SBTi) — including base-year comparison, the distinction between near-term and long-term targets, Scope 3 disclosure obligations, and the requirement that net zero combine absolute reductions with offsetting. **References to SBTi in this chapter are methodological only; the Company has not submitted an SBTi application and makes no claim of SBTi alignment.**

Significance for downstream customers: For Chia Pang as a publicly committed signatory to the SME Climate Hub, this voluntary alignment with NDC 3.0 reflects the Company's posture of **staying ahead of customer requirements**. As customers raise their supply-chain sustainability expectations in the future, the Company is already positioned to meet them on schedule.

6.4 Progress Tracking and Management Responsibility

Reduction progress is tracked continuously through four mechanisms: an annual inventory and disclosure, annual progress uploads to the SME Climate Hub, internal review meetings, and rolling target adjustment. These activities are coordinated by the Report Preparation Lead, who reports periodically to the Responsible Person.

Chapter 7 · Inventory Procedures

7.1 Inventory Organization and Division of Responsibilities

Given the Company's compact size (19 employees), the inventory is conducted under a **whole-team collaborative model.**

7.1.1 Responsibility Matrix

Function	Role responsible	Responsibilities
Field	Sales and logistics colleagues	Vehicle fuel receipts, travel documents, business private-vehicle reimbursement records, refrigerant equipment nameplate registry, waste weighing records
Office	Warehouse and administrative colleagues	Septic tank usage person-days, fire extinguisher inventory, employee commuting survey, electricity bills, water bills, upstream/downstream delivery tonne·km data
Accounting	Finance and accounting colleagues	Aggregation and reconciliation of fuel, travel, and freight invoices
Administration	Report Preparation Lead Responsible Person	Data ingestion into the DCarbon system, emissions calculation, report drafting, cross-departmental coordination, final approval, and external signature on behalf of the Company

7.1.2 External Support

Role	Unit	Support area
System tool	DCarbon GHG Inventory System	Activity data ingestion, emission factor application, automated emissions calculation and report output
External consultant	DCarbon consultant team	Methodology consultation, emission source identification support

7.2 Standard Operating Procedure (SOP) for Data Collection

Item	Core requirement
1.3 Company vehicles	Fuel cards or invoiced reimbursements only; field staff submit to accounting by the 5th of each month; monthly consumption ≥ 150% of average is investigated by Administration
1.4.1 Refrigerants	Air conditioners, refrigerators, and vehicle AC are included in the refrigerant equipment inventory (with nameplate charge volume and model); external maintenance contractors must issue refill records
§2.1 / §4.3 utilities (electricity, water)	Electricity and water bills for the three sites are centrally archived to the cloud by office supervisors
3.1 Upstream transportation	Suppliers provide monthly outbound weight; Administration allocates by warehouse based on receiving records and estimates distance from supplier-to-warehouse addresses; weight × distance = tonne·km
3.2 Business travel	Travel request forms include mandatory fields for mode of transport and origin/destination; receipts submitted with expense reports
3.3 Employee commuting	Commuting survey distributed in late December each year; department heads spot-check 30% of responses for reasonableness
3.4 Downstream transportation	Carriers provide monthly shipment details (origin/destination, product weight); Administration estimates distance from addresses; weight × distance = tonne·km
§4.1 Purchased goods	Annual purchase totals (by product category) are extracted from the purchasing system, mapped to NAICS codes, and multiplied by the corresponding factor; suppliers are progressively asked for PCF/LCA data, targeting Grade 1 inventory by 2030 (see §5.3.3)
§4.4 Operational waste	Each site weighs waste before each haul-out, with photo evidence

7.3 Internal Review Mechanism

Level	Reviewer	Review focus
Layer 1: Peer review	Cross-team partners	Whether documents are missing; whether numbers are transcribed correctly
Layer 2: Administration review	Report Preparation Lead	Whether system calculation results are reasonable; explanations for outliers
Layer 3: Approval by Responsible Person	Responsible Person	Overall report content; appropriateness of external statements

If major customers or supply-chain ESG policies require external verification in the future, the Company retains the flexibility to initiate it.

7.4 Document and Records Management

Inventory documents are organized into four categories: original documents (invoices, bills, etc.); survey forms (commuting surveys, equipment inventories, etc.); calculation workpapers (DCarbon system outputs); and the report itself. All documents are retained for at least five years and are managed by the Report Preparation Lead.

Chapter 8 · Verification Statement

8.1 Verification Approach

This is the Company's **first GHG inventory report.** To date, major customers (TSMC, CTCI Corporation, and others) ask only whether small and medium-sized suppliers have completed an inventory and, if so, request Category 1 and Category 2 data. They have not yet required a full report or external verification.

Item	Approach
Internal verification	☑ Completed (per the three-level review mechanism in Chapter 7, §7.3)
External third-party verification	✗ Not conducted this year

8.2 Rationale for Not Conducting External Verification

1. **Resource prioritization:** for a first-year inventory, resources are best directed toward establishing data-collection mechanisms and SOPs.
2. **Data maturity:** parts of the data still rely on estimation; engaging external verification will yield greater value once data quality has improved.

8.3 Internal Verification Results

8.3.1 Scope of Verification

The verification scope covers five dimensions: **organizational and geographic boundaries** (all three warehouses included); **emission source identification** (every identified emission source across Categories 1 through 4); **activity data** (original documents, survey forms, and system-imported data); **calculation methodology** (the emission factors and GWP values applied within the DCarbon system); and **emissions aggregation** (the seven-GHG breakdown, the per-category summary, and the emissions intensity indicator).

8.3.2 Verifiers and Their Independence

This internal verification was conducted using the three-layer architecture described in Chapter 7 §7.3: **Layer 1 (peer review)** involves cross-team peer checks to avoid self-verification; **Layer 2 (Administration review)** is performed by the Report Preparation Lead, who is independent of the data collectors; **Layer 3 (approval by the Responsible Person)** involves the Responsible Person making the final decision independently of the report's preparer.

8.3.3 Findings and Remediation

Finding	Resolution
ABC dry powder fire extinguishers were initially included in emission calculations	Confirmed no GHG fugitive emissions; reclassified as inventoried but not quantified
Category 1 company vehicle diesel data were transposed between Taichung and Tainan	Corrected to precise values from the DCarbon system (Taichung 8.486, Tainan 3.5903, Kaohsiung 3.5644 kL); mobile sources total 48.476 tCO_2e
Inventory classification numbering inconsistent with the latest ISO 14064-1:2018 convention	Comprehensive renumbering (1.2→1.3, 3.2↔3.3 swap, 4.1→4.3.2, etc.)

8.4 Internal Verification Statement

> **Chia Pang Plastics Co., Ltd.**
>
> **2025 Internal Verification Statement for the GHG Inventory**
>
> The 2025 GHG inventory results for Chia Pang Plastics Co., Ltd. (reporting period: 2025/01/01 ~ 2025/12/31) presented in this report were prepared in accordance with ISO 14064-1:2018 and completed under the Company's three-tier internal verification process: peer review, Administration Department review, and approval by the responsible person.

Upon verification, the total emissions reported for 2025 are **1,836.502 tCO_2e (tonnes of CO_2 equivalent)** — Category 1 direct emissions: 73.1320; Category 2 indirect emissions from imported energy: 9.2630; Category 3 transportation emissions: 35.8590; Category 4 emissions from products: 1,718.2480 (of which §4.1 purchased goods accounts for 1,715.9960 tCO_2e, or 93.44% of total emissions). Data sources are traceable and calculation methodology conforms to ISO 14064-1:2018 and the GHG Protocol Scope 3 Standard. The report content truthfully reflects the Company's 2025 greenhouse gas emissions. **This is an Internal Verification Statement and does not constitute an external third-party verification statement.**

Report Preparation Lead: Jan Hsiang-Lei | Responsible Person: Wang Cheng-Yen | Date of signature: 2026-05-01

8.5 Plans for Future External Verification

Scenario	Trigger timing
Major customers (TSMC, CTCI Corporation, etc.) raise their supply-chain ESG requirement to include external verification of the inventory report	Year following the customer's upgraded request
Total inventory emissions change by ≥ 20% with structural change	Proactively initiated to maintain data credibility
Company scale grows (more than 50 employees, or Categories 1+2 combined > 500 tCO_2e)	Management complexity rises; verification level proactively upgraded

Chapter 9 · Reduction Strategy

9.1 Core Principles of the Reduction Strategy

The Company's reduction strategy rests on three core principles: **start with the hotspots** (target the largest emission sources first); **efficiency first, then substitution, then offsets** (prioritize energy efficiency → low-carbon substitution → offsets only as a last resort); and **integrated with the core business** (reduction measures must be compatible with the nature of a logistics-and-distribution business). **The Company does not pursue decarbonization for its own sake; it pursues decarbonization in service of a better business model.**

9.2 Reduction and Sustainability Measures Already Implemented

9.2.1 The Four-Day Workweek — Indirect Decarbonization and Human-Centered Care Together

Chia Pang was among the early adopters of the **four-day workweek.** Employee commuting days dropped from 5 to 4, **theoretically reducing commuting emissions by approximately 20%.** With one less operating day per week, electricity consumption for office lighting, air conditioning, and equipment fell accordingly. **Happier employees, lighter footprint on the planet.**

9.2.2 Delivery Route Optimization Across the Three Warehouses

Deliveries are dispatched from the warehouse closest to the customer; routes are consolidated to avoid multiple empty trips per day; and delivery scheduling is coordinated with freight carriers to improve vehicle-utilization efficiency.

9.2.3 Energy-Efficient Lighting and Equipment

All three warehouses are progressively replacing conventional lighting with **LED lighting**, and procurement of refrigerators, air conditioning, and other equipment prioritizes models bearing the **energy-efficiency label**.

9.3 Reduction Priorities Anchored on Emission Hotspots

Priority	Hotspot	2025 emissions	Share of total emissions	Primary reduction lever
1	4.1 Purchased goods	1,715.9960 tCO_2e	93.44%	Engage major suppliers on decarbonization; advance PCF/LCA upgrade of inventory
2	1.3 Company vehicle fuel	48.476 tonnes	2.64%	Driver behavior, route optimization, evaluate electrification of company vehicles
3	1.4.1 Refrigerant equipment leaks	23.431 tCO_2e (HFCs)	1.28%	Equipment maintenance, replace aging models with low-GWP refrigerants
4	§3.1 Upstream / § 3.4 Downstream transportation	21.138 tonnes	1.15%	Carrier selection; collaborate with suppliers to choose low-carbon transport modes

The real reduction battleground is upstream in the supply chain (Section 4.1 purchased goods). A 1% improvement here (approximately 17.1600 tCO_2e) reduces absolute emissions by an amount that far exceeds the effect of a comprehensive reduction across the Company's own operations.

9.4 Planned Reduction Measures (Through ~2030)

9.4.1 Gradual Improvement of Supply-Chain Procurement — Targeting the Largest Source

Target: Category 4 Section 4.1 purchased goods **(93.44% of total emissions)**

- Participate in customer supply-chain decarbonization initiatives (such as those led by TSMC and CTCI Corporation)
- Encourage major suppliers to complete their own carbon footprint inventories

- Establish a decarbonization dialogue: hold reduction-focused exchange sessions with major suppliers and stay engaged with their reduction roadmaps

Expected impact: If upstream suppliers can reduce their carbon intensity by 10%, this single lever would cut **171.6000 tCO_2e**, equivalent to **1.45 times** the Company's own operational emissions.

9.4.2 Electrification of Company Vehicles

Target: Category 1 Section 1.3 fuel for company vehicles (2.64% of total emissions). As gasoline vans and diesel trucks approach the end of their service lives, EV alternatives will be prioritized; charging infrastructure across the three warehouses will be developed in parallel; and driver-behavior training will be promoted during the transition.

9.4.3 Upgrading Refrigerant Equipment Management

Target: Category 1 §1.4.1 refrigerant equipment (1.28% of total emissions). Establish an annual inspection program and, when replacing equipment, prioritize **low-GWP refrigerants** (per IPCC AR6, R-32 has a GWP of 771 — about 66% lower than R-410A's 2,256).

9.5 Customer Value Linkage and Management Responsibility

- **Comprehensive disclosure:** all 13 emission sources across Categories 1 through 4 are included, with Section 4.1 purchased goods estimated under the Spend-based Method.
- **Differentiating value:** whereas most SMEs either disclose nothing or disclose only Categories 1 and 2, this report's comprehensiveness is itself a point of differentiation.
- **Customer alignment:** positions the Company to respond to the supply-chain sustainability procurement and Scope 3 disclosure requirements of semiconductor customers and large EPC (engineering, procurement, and construction) customers.

Chapter 10 · Report Overview and References

10.1 Purpose of This Report

This is the Company's first GHG inventory report prepared in accordance with ISO 14064-1:2018, with four purposes: **internal management** (establishing an emissions baseline); **external communication** (a reference for major customers and stakeholders); **commitment fulfillment** (meeting the SME Climate Hub annual public-disclosure obligation); and **B Corp practice** (giving effect to the Company's environmental responsibility).

10.2 Report Scope Summary

Item	Content
Reporting period	1 January 2025 – 31 December 2025
Reference standard	ISO 14064-1:2018
Organizational boundary	Operational Control Approach
Geographic boundary	Three offices and warehouse sites in Taichung (HQ), Tainan, and Kaohsiung
Scope covered	Category 1, Category 2, Category 3, Category 4
Seven GHGs	CO_2 、CH_4 、N_2O 、HFCs 、PFCs 、SF_6 、NF_3
Base Year	2025
Verification approach	Three-level internal verification (no external third-party verification)

10.3 Report Structure

Chapter	Title	Core content
Chapter 1	Company Profile and Policy Statement	Company background, B Corp ethos, policy statement from the Responsible Person
Chapter 2	Boundary	Organizational, geographic, and operational boundaries
Chapter 3	GHG Emissions Quantification	Calculation methodology and activity data by category
Chapter 4	Emissions Summary	Total emissions, by category, by the seven GHGs, and top ten activities by emissions
Chapter 5	Data Quality Management	Activity data sources and materiality, three-dimensional DQI analysis
Chapter 6	Base Year	Base year selection, recalculation triggers, reduction targets
Chapter 7	Inventory Procedures	Organization and responsibilities, SOPs, internal review
Chapter 8	Verification	Internal verification statement and plan for future external verification
Chapter 9	Reduction	Existing measures, priority items, planned reduction measures
Chapter 10	Report Overview and References	Report purpose, version history, references

10.4 Publication and Communication

This report is released in three ways: **web edition, PDF edition, and upload to the SME Climate Hub platform.**

10.5 Version History

Version	Date	Key changes
v1	2026-05-01	Initial public release
v1.1	2026-05-05	Chapter 3 quantification formula completed; Chapter 4 chart order adjusted; decimal precision aligned
v1.2	2026-05-12	Full English translation completed and launched; added bilingual language switcher
v1.3	2026-06-18	Update - Jan Hsiang-Lei, Executive Director, Certificate No. A-Q21-0038-2026

10.6 Standards and Methodologies Referenced

10.6.1 International Standards

- 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》
- GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard （Chapter 8：Purchased Goods and Services）
- GHG Protocol Technical Guidance for Calculating Scope 3 Emissions
- IPCC Global Warming Potential Values (2024) — a reference table of GHG GWP values, drawing on AR4, AR5, and AR6
- IPCC Guidelines for National Greenhouse Gas Inventories — methodological reference for septic tanks, waste, and related categories

10.6.2 Domestic Regulations

- Climate Change Response Act (Chinese only) — Article 21 and the designated emission sources announced by the Ministry of Environment. The mandatory inventory threshold is 25,000 tCO_2e per year. **The Company's emissions are far below this threshold; this inventory is therefore voluntary.**

- Ministry of Environment of the Republic of China, Guidelines for the Quantification of GHG Emissions (latest official version)
- Ministry of Environment of the Republic of China, Greenhouse Gas Emission Factors — historical grid electricity emission factors
- Ministry of Environment GHG Emissions Information Platform (Chinese only) — public lookup of emissions from mandatory-inventory enterprises

10.6.3 International Initiative Frameworks

- SME Climate Hub climate-commitment platform for SMEs — the Taiwan local contact is the Vision Project Foundation (Chinese only)
- Science Based Targets initiative (SBTi) — **referenced for target-setting methodology only; the Company has not submitted an SBTi application**

10.6.4 Tools and Databases

- **DCarbon GHG Inventory System**
- U.S. EPA Supply Chain GHG Emission Factors v1.3
- U.S. IRS Yearly Average Currency Exchange Rates
- Taiwan High Speed Rail Carbon Footprint (Chinese only) — segment-level emission factors for the high-speed rail
- ICAO Carbon Emissions Calculator — emission factors for international flights

10.7 Contact Information

Contact	Information
Company name	Chia Pang Plastics Co., Ltd.
Business registration No.	16691986
Taichung warehouse (HQ)	No. 13, Ln. 513, Shenlin S. Rd., Daya Dist., Taichung City 42859
Tainan	No. 56-32, Gangziwei, Anding Dist., Tainan City 74562

Contact	Information
Kaohsiung	No. 342-1, Wenfu Rd., Zuoying Dist., Kaohsiung City 81361
Reporting unit	Administration
Contact / Report Preparation Lead	Jan Hsiang-Lei, Executive Director
Responsible Person	Wang Cheng-Yen
Phone	04-25693116
Fax	04-25693117
Email	service@chia.com.tw
Website	https://www.chia.com.tw/

10.8 Closing Remarks

This concludes the Chia Pang Plastics 2025 GHG Inventory Report. This is not the destination of the Company's sustainability journey — it is **the first verifiable starting point.**

- An honest inventory every year, and an honest disclosure every year
- Start with the hotspots; pursue reductions pragmatically
- Stay ahead of customer requirements; demonstrate the sustainability power of SMEs

In an era of climate change, **a good company does not merely pursue growth — it pursues growth that makes more sense.** With this report, Chia Pang demonstrates to all stakeholders that **business and sustainability have never had to be an either-or choice.**

— End of Report —