DT Research Inc.

Greenhouse Gas Inventory Report (2024 Edition)

Inventory Period: January 1, 2024~December 31, 2024

Date/Version	Chairman	Executive Secretary	Prepared/ Responsible By
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Chapter 1: Company Profile and Policy Statement

1.1 Preface

In recent years, facing global warming and climate change, governments worldwide have successively implemented specific action plans to reduce greenhouse gas (GHG) emissions in response to the “United Nations Framework Convention on Climate Change” and “Kyoto Protocol”, and based on their role as members of the global village. Simultaneously, the international trend of GHG management has extended from high-level national negotiations down to the enterprise level through global supply chain requirements, directly impacting business operations. A Low Carbon Economy has become the mainstream of current economic and investment activities.

Out of concern for global climate change, resource conservation, and corporate responsibility, DT Research Inc. (hereinafter referred to as the DTR) has begun promoting systematic GHG emission inventories and establishing emission registries across its production units. This follows the international Organization for Standardization (ISO) requirements and prepares for future GHG reduction, providing a basis for effective improvement and management plans.

1.2 Intended Use

This report aims to disclose the total GHG emissions released into the atmosphere by DTR. We hope this voluntary system will serve as a foundation for future GHG management measures and risk management, driving efforts toward a low-carbon economy and fulfilling our responsibilities as global citizens.

1.3 DT Research Inc. Company Profile

1.3.1 Information

Company Name: DT Research Inc., Ltd. Taiwan Branch
Company Address: 3F, No. 36, Wuquan 7th Rd., Wugu Dist., New Taipei City.
Date of Establishment: Established in 2000
Chairman: Daw Tsai
General Manager: Kiki Tang
Capital: NT$21,000,000
Factory Address: 1F-4F, 6F, No. 36, Wuquan 7th Rd., Wugu Dist., New Taipei City.
Factory Area: 3606 m^2
Number of Employees: 250
Main Products: Rugged tablets, medical tablets, medical cart computers, medical all-in-one computers, etc.
Phone: 02-2298-1039
Website: http://www.dtresearch.com.tw/

1.3.2 Business Philosophy

(1) Comply with environmental regulations and continually promote environmental improvement and pollution prevention.
(2) Maintain effective environmental management systems and achieve environmental goals.
(3) Ensure products comply with environmental RoHS, REACH, and customer standards.
(4) Promote environmental awareness and effective execution among employees.
(5) Promote energy saving, carbon reduction, and GHG emission reduction.
(6) Maintain transparent environmental policies and good community relations.

1.3.3 Important Company History:

Year 2000 – Approved for company and factory registration.
Year 2011 – Completed ISO 9001: 2008 certification.
Year 2015 – Completed ISO 14001: 2004 certification.
Year 2018 – Completed ISO 9001: 2015, ISO 14001: 2015, ISO 13485: 2016 certification.

1.3.4 Company Organization

The organizational structure includes the Chairman/ General Manager, R&D, Manufacturing, QA, Materials, Administration, Operations, RF/ EMI, NPI/ Engineering, PM, Sales, and Marketing (Appendix I).

1.3.5 Production Process

The production process is:

Assembly→Burn-in→Testing→Packaging→OQC→Shipping.

1.4 GHG Inventory Management Statement

DT Research Inc., aware that the global climate is worsening due to the greenhouse effect and recognizing the limits of the Earth's carrying capacity, upholds the spirit of "cherishing earth resources and complying with environmental regulations." We are committed to implementing a GHG inventory management system to accurately monitor our emissions, assess reduction feasibility, and achieve GHG reduction goals.

Chairman: Daw Tsai

Chapter 2: inventory Boundary Setting

2.1 GHG Inventory Promotion Organization

The Company has established a “GHG Inventory Promotion Committee.” The General Manager serves as the management Representative, responsible for convening relevant committee members and forming the promotion committee. All relevant committee members have received training courses held by professional institutions commissioned by the Company. The committee's organization and descriptions of relevant members are detailed in Appendix II, and the related rights and responsibilities are described as follows:

2.1.1 **Management Representative:** Supervises the system, hosts reviews, approves data, and assigns internal verification teams.

2.1.2 **Executive Secretary:** (ISO Certification Supervisor) Plans inventory tasks, coordinates departments, calculates emissions, and acts as the main contact.

2.1.3 **Promotion Committee Members:** Department representatives responsible for data collection and emission calculations within their units.

2.2 Organizational Boundary Setting

The boundary follows ISO/CNS 14064-1 and Ministry of Environment guidelines (Control No. GHG-2024), utilizing the operational control approach. The scope encompasses the U.S. Headquarters (2000 Concourse Dr, San Jose, CA) and the Taiwan Branch (No. 36, Wuquan 7th Rd., Wugu Dist., New Taipei City). Any future changes to these boundaries will prompt report revision.

2.3 Operational Boundary

2.3.1 DTR's operational boundaries include three categories of greenhouse gas emission sources: direct (Scope 1), energy indirect (Scope 2), and other indirect (Scope 3). The items covered under each category of emission source are shown in Table 1 below.

Table 1. Compilation of Operating Boundaries of DT Research Inc.

Operational Boundary	Description	Emission Source
Scope 1 (Direct Emissions)	GHG emissions generated directly from emission sources owned or controlled by the Company, including fuel combustion and fugitive emissions.	Refrigerant fugitive emissions (refrigerators, air conditioners, refrigerated dryers), septic tanks, natural gas combustion (stationary combustion equipment for heating, hot water, etc.)
Scope 2 (Energy Indirect Emissions)	GHG emissions generated from the consumption of purchased electricity, steam, heating, or cooling.	Purchased electricity
Scope 3 (Other Indirect Emissions)	GHG emissions resulting from the Company's activities but occurring at emission sources owned or controlled by other organizations.	Purchased tap water supply and treatment emissions, general industrial waste treatment, recyclable waste treatment, employee commuting/business travel, logistics transportation

2.3.2 If there are any changes to the Company's operational boundaries, this report will be revised and reissued accordingly.

2.4 Exclusion Threshold

2.4.1 Referring to the Ministry of Environment's GHG inventory guidelines, the exclusion threshold for the Company's GHG inventory operations is set at 0.5%. If an emission source contributes less than 0.5%, a simplified quantification method may be used to calculate those emissions, provided that the sum of all simply quantified emissions does not exceed 5% of the total emissions.

2.4.2 For facilities adopting this simplified quantification, the emissions from their initial or most recent year may be directly referenced in subsequent inventory operations and shall not be deleted from the inventory registry; instead, these relevant emission sources must be specified within the report.

2.4.3 Currently, no exclusion threshold has been applied.

Chapter 3: GHG Emission Identification and Compilation

3.1 Emission Types and Identification

3.1.1 The GHG emitted by the Company primarily consists of three types: carbon dioxide (CO_2), methane (CH_4), and hydrofluorocarbons (HFCs). Detailed information regarding the emission sources and the types of greenhouse gases generated is provided in Appendix VI, "2024 Taiwan Branch Greenhouse Gas Data," and Appendix VII, "2024 US Headquarters Greenhouse Gas Data."

3.2 Identification of GHG Emissions

3.2.1 The Company classifies GHG emission activities into three scopes based on the emission sources:

(1) **Scope 1: Direct Emissions**
Refers to greenhouse gases generated directly from emission sources owned or controlled by the Company, including fuel combustion and fugitive emissions.

(2) **Scope 2: Energy Indirect Emissions**
Refers to indirect emissions derived from the use of purchased electricity, heat, or steam, which are generated by the energy provider.

(3) **Scope 3: Other Indirect Emissions**
Refers to greenhouse gas emissions resulting from the Company's operational activities but occurring at emission sources owned or controlled by other organizations, such as upstream products and services, waste, transportation, and water usage.

3.2.2 The identification of GHG emission source is shown in Table 2 and Table 3.

Table 2. DT Research Inc. US Headquarters GHG Emission Source

Activity Name	Raw Material	Description	Scope	Type	Types of GHG		
					CO_2	CH_4	HFCs
Air Conditioning	R-410A	Air Conditioning	Scope 1	Fugitive			V
Household Refrigeration Equipment	R134a	Refrigerator	Scope 1	Fugitive			V
Septic Tank	CH_4	Septic Tank	Scope 1	Fugitive		V	
Gas	Gas	Purchased Gas (PG&E)	Scope 1	Stationary Combustion	V		
Electricity	CO_2	Purchased Electricity (PG&E)	Scope 2	Purchased Electricity	V		
Fuel and Energy-Related Activities	Water	Indirect Carbon Footprint of Tap Water	Scope 3	Purchased Tap Water	V		

Table 3. DT Research Inc. Taiwan Branch GHG Emission Source

Activity Name	Raw Material	Description	Scope	Type	Types of GHG		
					CO_2	CH_4	HFCs
Air Conditioning	R-22	Factory Air Conditioning	Scope 1	Fugitive			V
	R-32	Factory Air Conditioning	Scope 1	Fugitive			V
	R-410A	Factory Air Conditioning	Scope 1	Fugitive			V
Household Refrigeration Equipment	R134a	Factory Refrigerators and Water Dispenser	Scope 1	Fugitive			V
	R-410A	Dehumidifier	Scope 1	Fugitive			V
	R600a	Factory Refrigerator	Scope 1	Fugitive			V
Commercial Refrigeration Equipment	R134a	Refrigerated Dryer for Air Compressor	Scope 1	Fugitive			V
Septic Tank	CH_4	Septic Tank	Scope 1	Fugitive		V	
Tai-power Electricity	CO_2	Purchased Electricity (Tai-power)	Scope 2	Purchased Electricity	V		
Purchased Goods and Services	Intel Core Processor	Purchased CPU	Scope 3	Purchased Goods	V		
	Intel Core Ultra processor	Purchased CPU	Scope 3	Purchased Goods	V		
Fuel and Energy-Related Activities	CO_2	Indirect Carbon Footprint of Tap Water	Scope 3	Purchased Electricity	V		
	Water	Indirect Carbon Footprint of Tap Water	Scope 3	Purchased Tap Water	V		

3.3 Total GHG Emissions

3.3.1 Combined Total emissions (US + Taiwan): 667.037 tCO_2e (CO_2: 639.9377 tCO_2e; CH_4: 12.4839 tCO_2e; HFCs: 14.6150 tCO_2e).

Table 4. DT Research Inc. Total Combined GHG Emissions

Category	Description	Emission CO_2 (tCO_2e/year)	Emission CH_4 (tCO_2e/year)	Emission CO_2 (tCO_2e/year)	Emission Equivalent (tCO_2e/year)	Percentage (%)
Scope 1: Direct Greenhouse Gas Emissions and Removals		16.7851	12.4839	14.6150	43.884	6.58%
1.1 Stationary Emissions	-	16.7851			16.7851	2.52%
1.2 Mobile Emissions						0.00%
1.3 Process Emissions	-					0.00%
1.4 Fugitive Emissions			12.4839	14.6150	27.0989	4.06%
1.5 Direct Emissions from Land Use Change	None					0.00%
Scope 2: Indirect Greenhouse Gas Emissions from Imported Energy		299.4916	0.0000	0.0000	299.492	44.90%
2.1 Imported Electricity		299.4916			299.492	44.90%
2.2 Imported Energy						0.00%
Scope 3: Upstream Emissions		323.6610	0.0000	0.0000	323.661	48.52%
1. Purchased Goods and Services		273.7170			273.717	41.03%
2. Capital Goods						0.00%
3. Fuel and Energy-Related Activities		49.9440			49.944	7.49%
4. Upstream Transportation and Distribution						0.00%
5. Waste Generated in Operations*						0.00%
6. Business Travel*						0.00%
7. Employee Commuting*						0.00%
8. Upstream Leased Assets						0.00%
Total		639.938	12.484	14.615	667.037	100.00%

Note: Business travel, commuting, and operational waste were excluded as "non-significant".

3.3.2 US Headquarters Total emissions: 85.449 tCO_2e (CO_2: 68.4976 tCO_2e; CH_4: 2.8671 tCO_2e; HFCs: 14.0843 tCO_2e).

Table 5. DT Research Inc. US Headquarters GHG Emissions

Category	Description	Emission CO_2 (tCO_2e/year)	Emission CH_4 (tCO_2e/year)	Emission HFCs (tCO_2e/year)	Emission Equivalent (tCO_2e/year)	Percentage (%)
Scope 1: Direct Greenhouse Gas Emissions and Removals		16.7851	2.8671	14.0843	33.7365	39.481%
1.1 Stationary Emissions	-	16.7851			16.7851	19.643%
1.2 Mobile Emissions						0.00%
1.3 Process Emissions	-					0.00%
1.4 Fugitive Emissions			2.8671	14.0843	16.9514	19.838%
1.5 Direct Emissions from Land Use Change	None					0.00%
Scope 2: Indirect Greenhouse Gas Emissions from Imported Energy		51.4937	0.0000	0.0000	51.4937	60.262%
2.1 Imported Electricity		51.4937			51.4937	60.262%
2.2 Imported Energy						0.00%
Scope 3: Upstream Emissions		0.2188	0.0000	0.0000	0.2188	0.256%
1. Purchased Goods and Services						0.00%
2. Capital Goods						0.00%
3. Fuel and Energy-Related Activities		0.2188			0.2188	0.256%
4. Upstream Transportation and Distribution						0.00%
5. Waste Generated in Operations*						0.00%
6. Business Travel*						0.00%
7. Employee Commuting*						0.00%
8. Upstream Leased Assets						0.00%
Total		68.4976	2.8671	14.0843	85.4490	100.00%

Note: Business travel, commuting, and operational waste were excluded as "non-significant".

3.3.3 Taiwan Branch Total emissions: 581.588 tCO_2e (CO_2: 571.4401 tCO_2e; CH_4: 9.6168 tCO_2e; HFCs: 0.5307 tCO_2e).

Table 6. DT Research Inc. Taiwan Branch GHG Emissions

Category	Description	Emission CO_2 (tCO_2e/year)	Emission CH_4 (tCO_2e/year)	Emission HFCs (tCO_2e/year)	Emission Equivalent (tCO_2e/year)	Percentage (%)
Scope 1: Direct Greenhouse Gas Emissions and Removals		0.0000	9.6168	0.5307	10.1475	1.745%
1.1 Stationary Emissions	-					0.00%
1.2 Mobile Emissions						0.00%
1.3 Process Emissions	-					0.00%
1.4 Fugitive Emissions			9.6168	0.5307	10.1475	1.745%
1.5 Direct Emissions from Land Use Change	None					0.00%
Scope 2: Indirect Greenhouse Gas Emissions from Imported Energy		247.9979	0.0000	0.0000	247.9979	42.642%
2.1 Imported Electricity		247.9979			247.9979	42.642%
2.2 Imported Energy						0.00%
Scope 3: Upstream Emissions		323.4422	0.0000	0.0000	323.4422	55.614%
1. Purchased Goods and Services		273.7170			273.7170	47.064%
2. Capital Goods						0.00%
3. Fuel and Energy-Related Activities		49.7252			49.7252	8.550%
4. Upstream Transportation and Distribution						0.00%
5. Waste Generated in Operations*						0.00%
6. Business Travel*						0.00%
7. Employee Commuting*						0.00%
8. Upstream Leased Assets						0.00%
Total		571.4401	9.6168	0.5307	581.5876	100.00%

Note: Business travel, commuting, and operational waste were excluded as "non-significant".

3.4 Direct GHG Emissions (Scope 1)

3.4.1 In 2024, DTR's total direct emissions (Scope 1) were 43.884 tCO_2e. The breakdown of individual direct emissions is described as follows:

(1) Stationary combustion: The GHG emissions were 16.7851 tCO_2e.
(2) Mobile combustion sources: The GHG emissions were 0.0000 tCO_2e.
(3) Process emission sources: The GHG emissions were 0.0000 tCO_2e.
(4) Fugitive emissions: The GHG emissions were 27.0989 tCO_2e.

3.4.2 Scope 1 emissions by organizational boundary are as follows:

(1) US Headquarters: The GHG emissions were 33.7365 tCO_2e。
(2) Taiwan Branch: The GHG emissions were 10.1475 tCO_2e。

3.4.3 Regarding DTR's Scope 1 GHG emissions, CO_2 were 16.7851 tCO_2e, CH_4 were 12.4839 tCO_2e、N_2O were 0.0000 tCO_2e、HFCs were 14.6150 tCO_2e、PFCs were 0.0000 tCO_2e、SF_6 were 0.0000 tCO_2e、 NF_3 were 0.0000 tCO_2e。

Table 7. Scope 1 Emissions of the Seven Major Greenhouse Gases

Category	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
Taiwan (tCO_2e/year)	0.0000	9.6168	0.0000	0.5307	0.0000	0.0000	0.0000	10.1475
Percentage (%)	0.000%	94.770%	0.000%	5.230%	0.000%	0.000%	0.000%	100.000%
US (tCO_2e/year)	16.7851	2.8671	0.0000	14.0843	0.0000	0.0000	0.0000	33.7365
Percentage (%)	49.753%	8.499%	0.000%	41.748%	0.000%	0.000%	0.000%	100.000%
Total (tCO_2e/year)	16.7851	12.4839	0.0000	14.6150	0.0000	0.0000	0.0000	43.8840
Percentage (%)	38.249%	28.448%	0.000%	33.304%	0.000%	0.000%	0.000%	100.000%

3.4.4 DTR had no carbon dioxide emissions resulting from biomass combustion, which is 0.0000 tCO_2e.

3.4.5 Some of DTR's refrigeration equipment use R600A as a refrigerant. In the emission inventory of the Taiwan Ministry of Environment, it can be considered negligible as it is not an HFC-controlled substance; therefore, its GWP value is calculated as 0.

3.4.6 No fire extinguishers were purchased in 2024; therefore, excluded from the calculation.

3.5 Energy Indirect GHG Emissions (Scope 2)

3.5.1 In 2024, DTR's total indirect emissions (Scope 2) were 299.492 tCO_2e。

3.5.2 Scope 2 emissions by organizational boundary are as follows:

(1) US Headquarters: The GHG emissions were 51.494 tCO_2e。
(2) Taiwan Branch: The GHG emissions were 247.998 tCO_2e。

3.6 Other Indirect GHG Emissions (Scope 3)

3.6.1 In 2024, DTR's total indirect emissions (Scope 3) were 323.661 tCO_2e。

3.6.2 Scope 3 emissions by organizational boundary are as follows:

(1) US Headquarters: The GHG emissions were 0.219 tCO_2e。

(2) Taiwan Branch: The GHG emissions were 323.442 tCO_2e。

Table 8. Proportion of Emission Sources for the Entire Company

Emission Source	Scope 1	Scope 2	Scope 3	Total
Taiwan Emission (tCO_2e/year)	10.147	247.998	323.442	581.588
Percentage (%)	1.745%	42.642%	55.614%	100.000%
US Emission (tCO_2e/year)	33.737	51.494	0.219	85.449
Percentage (%)	39.481%	60.262%	0.256%	100.000%
Total Emission (tCO_2e/year)	43.884	299.492	323.661	667.037
Percentage (%)	6.579%	44.899%	48.522%	100.000%

Table 9. Emissions and Percentage by Individual Emission Type

	Scope 1				Scope 2	Scope 3	Total Emission
	Stationary Emissions	Mobile Emissions	Process Emissions	Fugitive Emissions	Purchased Electricity	Purchased Goods and Services	
Emission (tCO_2e/year)	43.884				299.492	323.661	667.037
	16.7851	0.0000	0.0000	27.0989			
Percentage (%)	6.579%				44.899%	48.522%	100.000%
	2.516%	0.000%	0.000%	4.063%			

3.7 Total water consumption by organizational boundary is as follows:

3.7.1 In 2024, the total water consumption of the US Headquarters was 542,296 Gallons.

3.7.2 In 2024, the total water consumption of Taiwan Branch was 3,771 m^3.

Chapter 4: Data Quality Management

4.1 Qualification Methods

4.1.1 Description

(1) Taiwan Tap Water GHG Emissions (tCO_2e)
=Water Consumption(m^3) × Emission Factor*Note 1($kgCO_2e/m^3$) ÷ 1000 × GWP*Note3

(2) Taiwan Purchased Electricity GHG Emissions (tCO_2e)
=Electricity Consumption(kWh) × Electricity Indirect Emission Factor*Note2 ($KgCO_2e$/kWh) ÷ 1000 × GWP*Note3

(3) Taiwan Electricity Indirect Greenhouse Gas Emissions (tCO_2e)
= Electricity Consumption(kWh) × Purchased Electricity Emission Factor*Note2 ($KgCO_2e$/kWh) ÷ 1000 × GWP*Note3

Table 10. Taiwan Carbon Footprint Emission Factors

Factor Name	Carbon Footprint ($kgCO_2e$)	Unit	Government Name	Year
Taiwan Tap Water (2020)	0.233	m^3	Ministry of Environment	2022
Electricity Indirect (2021)	0.0973	kWh	Ministry of Environment	2023
Purchased Electricity (2023)	0.494	kWh	Energy Administration, Ministry of Economic Affairs	2024

**Note 1 Data source: Carbon Footprint Emission Factor website: https://data.moenv.gov.tw/dataset/detail/CFP_P_02?utm_source=chatgpt.com*
**Note 2 Electricity Carbon Emission Factor version (announced on April 26, 2024), website: https://www.moeaea.gov.tw/ecw/populace/content/SubMenu.aspx?menu_id=114. At the time of writing this report, the 2024 emission factor had not yet been announced, so the 2023 factor was adopted.*
**Note 3 GWP is detailed in Section 4.1.3.*

(4) US Drinking Water GHG Emissions (tCO_2e)
=Water Consumption (1000 gallons) × Electricity Consumption*Note4(kWh/1000 gallon) × Emission Factor*Note5(tCO_2/kWh) × GWP*Note3

The U.S. Environmental Protection Agency (EPA) states that the treatment and distribution of 1,000 gallons of drinking water consumes an average of 2.069 kWh of electricity.

Emission Factor Unit Conversion: 430 lb CO_2/MWh × $\frac{1\,MWh}{1000kWh}$ × $\frac{1t}{2204.62lb}$ = 0.0001950 t CO_2e/kWh

Embedded Energy in Water and Wastewater

Delivering safe water and collecting and treating wastewater consumes substantial energy nationwide. Therefore, saving water also reduces the energy needed by the water and wastewater industries. WaterSense uses information from the Electric Power Research Institute (EPRI) to inform the energy use associated with providing drinking water and wastewater services.

- Electricity Use and Management in the Municipal Water Supply and Wastewater Industries, EPRI, 2013
- WaterSense uses the report to estimate energy saved due to the reductions in the energy used to extract, move, and treat water and wastewater.

Service	kWh/1,000 gallons water processed
Drinking Water	2.069
Wastewater	2.521

**Note4 Data source: https://www.epa.gov/watersense/data-and-information-used-watersense?utm_source=chatgpt.com*

Figure 1. EPA Electricity Consumption Description

(5) US Purchased Electricity GHG Emissions (tCO_2e)

=Electricity Consumption(kWh) × Emission Factor*Note5(tCO_2/kWh) × GWP*Note3

Emission Factor Unit Conversion: 430 lb CO_2/MWh × $\frac{1\,MWh}{1000kWh}$ × $\frac{1t}{2204.62lb}$ = 0.0001950 t CO_2e/kWh

(6) Purchased Natural Gas GHG Emissions (tCO_2e)

= Gas Consumption(Therms) × Emission Factor*Note6(tCO_2/Therm) × GWP*Note3

Emission Factor Unit Conversion: 11.7 lb CO_2/Therm × $\frac{1t}{2204.62lb}$ = 0.0053 t CO_2e/Therm

Table 11. US Carbon Footprint Emission Factors

Factor Name	Carbon Footprint（lb CO_2e）	Unit
U.S. EPA eGRID	430	MWh
PG&E Gas	11.7	Therm

**Note5 Data source: GRID Summary Tables 2023 Table1*
**Note6 Data source: Apdx-A_GHG-Tech-MaterialsJan2024 Table4*

(7) Septic Tank Methane (CH_4) Emissions (tCO2e)

= Person-hours × Emission Factor*Note7 × GWP*Note3

Emission Factor＝BOD Emission Factor × Average Wastewater Concentration × Wastewater Volume per Person per Hours × Septic Tank Treatment Efficiency

＝0.3 × $\frac{200}{1,000,000,000}$ × 15.625 × 85% = 0.0000007969 tons/hour

Table 12. Septic Tank Parameters

Parameter	Value	Unit
BOD Emission Factor *	0.3	tons CH4/ton-BOD
Average Wastewater Concentration	200	mg/L
Wastewater Volume per Person per Hours	15.625	L/Hr
Septic Tank Treatment Efficiency	85%	Percentage

**Note 7 Data Source: The emission factor formula is derived from the "Greenhouse Gas Emission Factor Management Table 6.0.4", and the calculation method is from the Ministry of Environment's "Greenhouse Gas Emission Inventory Operation Guidelines 2024 Edition".*
**Note 7 Data Source: BOD Emission Factor =0.6x0.5=0.3，The methane correction factor of 0.5 is sourced from the "Greenhouse Gas Emission Factors Announced on February 5, 2024" on the Enterprise Greenhouse Gas Emissions Information Platform.*

(8) Refrigerant Fugitive Emissions from Refrigeration Equipment (e.g., refrigerators, air conditioners, and refrigerated dryers), the quantification formulas are as follows:

Refrigerant Fugitive Emissions = Original Equipment Charge(Kg) × Fugitive Emission Rate*Note8(%)

GHG Emissions (tCO2e) = Refrigerant Fugitive Emissions ÷ 1000 × GWP*Note3

Table 13. Fugitive Emission Rates of Air Conditioning Systems

Equipment Name	Fugitive Emission Rate (%)	
Domestic refrigeration equipment	0.1-0.5	Average: 0.3
Stand-alone commercial refrigeration equipment	1-15	Average: 8
Residential and commercial air conditioners	1-10	Average: 5.5

**Note 8 Data source: 2006 IPCC Guidelines for National Greenhouse Gas Inventories Table 7-9, https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/3_Volume3/V3_7_Ch7_ODS_Substitutes.pdf*

4.1.2 Description of Activity Data Collection Methods: The quantification methods and activity data collection methods for each emission source of DTR are summarized in the table below.

Table 14. Summary of Activity Data Collection

Operational Boundary	Quantification Method	Emission Source	Description of Activity Data Collection
Direct Emission Sources	Emission Factor Method	Septic Tank	1. The HR Dept. compiles the total monthly working hours (including overtime) based on employee attendance records, serving as the activity data foundation for estimating the septic tank usage load. 2. The total working hours over the 12 months equals the annual person-hours. The total working hours for 2024 were 561,510 person-hours, consisting of 128,960 person-hours for the US Headquarters and 432,550 person-hours for the Taiwan Branch.
		Gas Combustion	1. Natural gas consumption data is compiled based on invoices obtained by the US Headquarters from the local utility provider (PG&E), which include billing periods, consumption volume (therms), and corresponding amounts. 2. The activity data covers the billing periods from January to December 2024 and is consolidated into total annual natural gas consumption. The primary uses of natural gas are building space heating and hot water supply.
	Calculation of GHG Fugitive Emissions	Refrigerant Use (Refrigerated Dryers, Air Conditioners, Refrigerators, etc.)	1. For equipment such as refrigerators, air conditioners, and refrigerated dryers, refrigerant types and original charge capacities are compiled by inspecting equipment nameplates or requesting relevant information from equipment suppliers. 2. The refrigerant charge amounts for the US Headquarters are as follows: (1) Air conditioning: R410A is 113,500 g (2) Domestic Refrigeration Equipment: R-134a is 255.1 g 3. The refrigerant charge amounts for the Taiwan Branch are as follows: (1) Air conditioning R-22 is 43,820 g (2) Air conditioning R-32 is 1,600 g (3) Air conditioning R410A is 38,820 g (4) Domestic Refrigeration Equipment R-134a is 1,782 g (5) Domestic Refrigeration Equipment R410A is 510g (6) Domestic Refrigeration Equipment R600a is 421g (7) Commercial Refrigeration Equipment R-134a is 240g 4. For certain equipment that is outdated, or has unclear/missing nameplates, data from identical equipment types or reference materials provided by suppliers/maintenance vendors are used. (The refrigerant usage for this portion is extremely low and has limited impact on the overall GHG emission results).

Operational Boundary	Quantification Method	Emission Source	Description of Activity Data Collection
Energy Indirect Emission Sources	Emission Factor Method	Purchased Electricity	1. Purchased electricity consumption data is collected based on utility bills from various floors of the Taiwan Branch and facilities of the US Headquarters. The bills contain billing periods, electricity consumption (kWh), and associated costs. 2. Electricity data for the Taiwan Branch is consolidated from the monthly utility bills of each floor, while data for the US Headquarters is compiled from bills provided by the local utility supplier (PG&E). Electricity consumption across all locations is consolidated into an Excel spreadsheet to calculate the total annual electricity consumption (statistical period from January to December 2024). 3. The total electricity consumption for 2024 was 766,090.318 kWh, with 264,070.318 kWh consumed by the US Headquarters and 502,020 kWh consumed by the Taiwan Branch.
Other Indirect Emission Sources	Emission Factor Method	Purchased Goods and Services	1. For carbon footprint data resulting from purchased goods, product carbon footprints or Environmental Product Declarations (EPDs) directly provided by suppliers (such as carbon emission information provided by the original manufacturer/brand owner, Intel) are prioritized. 2. GHG emissions for purchased services are estimated by applying relevant emission factors based on the nature of the service, paired with actual activity data (such as usage volume or expenditure). 3. For this year's Scope 3 inventory, the principles of data availability and emission significance were followed, prioritizing the inventory of representative purchased goods and service categories.

4.1.3 After calculating the emission amounts for each type of greenhouse gas, they are multiplied by the Global Warming Potential (GWP) of the respective greenhouse gas to convert all calculation results into tCO_2e, with the unit expressed as tons of carbon dioxide equivalent per year (tCO_2e/year). In accordance with the recommendations from the GHG Inventory and Registration Guidelines issued by the Climate Change Administration of the Ministry of Environment, DTR adopts the GWP values from the Sixth Assessment Report (AR6, 2021) of the Intergovernmental Panel on Climate Change (IPCC) for its calculations. The greenhouse gases generated by various emission sources during this inventory period include carbon dioxide (CO_2), methane (CH_4), and hydrofluorocarbons (HFC_S), and their GWP are summarized in the table below.

Table 15. Summary Table of Greenhouse Has GWP Values

GHG Type	GWP
Carbon Dioxide (CO_2)	1
Methane (CH_4)	27.9
R-134a	1,530
R-410A	2,256
R-22	1,960
R-32	771

4.2 Explanation of Changes in Quantification Methods

4.2.1 When quantification methods change, in addition to calculating with the new quantification method, a comparison with the original calculation method must be made, and the differences between the two as well as the reasons for selecting the new method must be explained.

4.3 Explanation of Changes in Emission Factors

4.3.1 For this inventory operation, if the quantification method belongs to the emission factor method, its emission factors are cited from government announcements, international standards, as well as corporate self-development or scientific research, and the source references are noted below the table in Section 4.1.1. Taiwan's emission factors are formulated based on IPCC guidelines and are announced or regularly updated by competent authorities such as the Ministry of Environment and the Ministry of Economic Affairs; US emission factors are regularly published based on the US EPA's eGRID (Emissions & Generation Resource Integrated Database) or seminar reports from the region to which the supplier belongs.

4.3.2 The Global Warming Potential (GWP) has been switched to the AR6

(2021) version, whereas the previous GHG reports from 2019 to 2023 used the AR4 (2007) version.

4.3.3 If emission factors change due to modifications in the data sources, besides re-archiving and recalculating, the differences between the modified data and the original data must be explained.

4.4 Significant Figures

The setting of significant figures for the Company's greenhouse gas inventory operations is carried out with reference to the recommendations in the "National Greenhouse Gas Registry Platform Calculation Methods, 4th Edition." The relevant setting principles are as follows:

4.4.1 "Activity data" represents on-site statistical results. If decimal places are involved, the numbers can be rounded to 4 decimal places.

4.4.2 "Emission factors" are the results of formula calculations and are expressed rounded to 10 decimal places, which are then used for subsequent emission quantification operations.

4.4.3 In the "2024 Taiwan Branch Greenhouse Gas Data" and "2024 US Headquarters Greenhouse Gas Data," individual GHG emissions and emission equivalents are the results of formula calculations and are rounded to 4 decimal places, while the total emission equivalents are rounded to 3 decimal places.

4.5 Information Flow of Significant Emission Sources

Regarding the results of the Company's greenhouse gas inventory, the electricity information management process, which accounts for a larger share of emissions, is shown in Appendix VIII.

4.6 Uncertainty Assessment

4.6.1 Explanation of the scope of Uncertainty Quantification Assessment

The uncertainty quantification assessment of the Company's greenhouse gas emissions for 2024 is conducted through a quantitative analysis of "Purchased Electricity" (44.899%) and "Purchased Goods and Services" (48.522%), which have higher emission proportions and representativeness. Together, they cover 93.421% of the Company's total greenhouse gas emissions.

The results of this uncertainty quantification primarily reflect the emission variation range of the aforementioned major emission sources. The remaining emission sources not included in the quantification account for less than 10%, having a limited impact on the overall emissions; therefore, they were not separately subjected to uncertainty quantification.

4.6.2 Uncertainty Assessment Methods and Data Sources

In accordance with the methods outlined in the "Greenhouse Gas Emission Inventory Operation Guidelines 2024 Edition", the Company's uncertainty assessment simultaneously employs the "Uncertainty Percentage Method" and the "Error Grading Method" for analysis. The former is used to quantify the emission variation range of major emission sources under a 95% confidence interval, while the latter is used to evaluate the data quality and reliability of the activity data and emission factors for each emission source, serving as a qualitative judgment basis for the reliability of the inventory data. The two methods serve different purposes and complement each other.

(1) The activity data for "Purchased Electricity" is based on the meter measurement results from the Taiwan Power Company (Tai-power). The meter inspection tolerance in the "Technical Specification for Verification and Inspection of Electricity Meters" published by the Bureau of Standards, Metrology and Inspection is adopted as the basis for the uncertainty assessment. Referring to Tai-power's meter accuracy class of 0.2 and utilizing a 95% confidence interval (empirical coverage factor k=2), the uncertainty of its activity data is ±0.4%.

Additionally, the electricity emission factor announced by the Ministry of Economic Affairs does not provide an uncertainty range; thus, the recommended value of ±7% for energy industry emission factors announced by the IPCC is adopted.

(2) The GHG emissions from "Purchased Goods and Services" are primarily estimated based on product's carbon footprint data provided by suppliers, or by referencing emission factors announced by government agencies and public databases. Since these emissions mostly belong to upstream indirect emissions in the supply chain, and the relevant activity data and emission factors are not directly measured by the Company, their uncertainty is relatively high. Based on the recommendations of the IPCC and domestic inventory guidelines, an assumed uncertainty of ±20% at a 95% confidence interval is adopted for the emission factors of purchased goods and services estimated using the emission factor method.

4.6.3 Overall Uncertainty Quantification Calculation Results

(1) Following the "Greenhouse Gas Emission Inventory Operation Guidelines 2024 Edition", DTR assessed the uncertainty of its two major emission sources: "Purchased Electricity" and "Purchased Goods and Services."

The uncertainty of "Purchased Electricity" is calculated by combining the uncertainties of the activity data and the emission factor using the square root of the sum of the squares (combined uncertainty, U). The uncertainty percentage for "Purchased Goods and Services" adopts an assumed value of ±20% as recommended by the IPCC and domestic inventory guidelines. Simultaneously, the Error Grading Method is used to evaluate the data quality of their activity data and emission factors, serving as a qualitative judgment basis.

Combined uncertainty: $\boldsymbol{U = \sqrt{u_1^2 + u_2^2 + \cdots}}$

Purchased Electricity: Activity data ±0.4%, Emission factor ±7%

$$U_{Power} = \sqrt{(0.4\%)^2 + (7\%)^2} = \mathbf{7.01}\%$$

Purchased Goods and Services: $U_{Goods} = 20\%$

(2) These two major emission sources were used for the uncertainty assessment. Since they account for only 93.421% of total emissions, their weights had to be recalculated. After normalizing the emission proportion w_i for each source, DTR's overall uncertainty was calculated using the weighted sum of squares method.

Table 16. proportion of Emission Sources

Emission Source	Emission Proportion w_i
Purchased Electricity	44.899%
Purchased Goods and Services	48.522%
Total	93.421%

Weight normalization: $\boldsymbol{w_i' = \frac{w_i}{\sum w_i}}$ $\boldsymbol{(\sum w_i = 93.421\%)}$

Purchased Electricity:

$$w'_{Power} = \frac{44.899\%}{93.421\%} = \mathbf{0.4805}$$

Purchased Goods and Services:

$$w'_{Goods} = \frac{48.522\%}{93.421\%} = \mathbf{0.5195}$$

Overall uncertainty: $\boldsymbol{u_{total} = \sqrt{\sum (w_i' \times u_i)^2}}$

u_i: Relative uncertainty of each emission source (%)

w_i': Weight of the emission source relative to total emissions

$$u_{total} = \sqrt{(0.4805 \times 7.01\%)^2 + (0.5195 \times 20\%)^2}$$
$$= \sqrt{(3.37)^2 + (10.39)^2}$$
$$= \sqrt{11.36 + 107.95}$$
$$= \sqrt{119.31}$$
$$= \mathbf{10.92\%}$$

(3) The calculation results indicate that the uncertainty of the Company's greenhouse gas emissions in 2024 at a 95% confidence interval is ±10.92%, as shown in the table below. This result reasonably represents the overall uncertainty level of the Company's greenhouse gas emissions for 2024.

Table 17. Uncertainty Assessment Results of 2024

Sum of Absolute Values of Emissions for Uncertainty Assessment (tons)	Sum of Absolute Values of Total Emissions (tons)	Proportion of Quantified Uncertainty to Total Company Emissions (%)	Uncertainty at 95% Confidence Interval: Lower Limit	Uncertainty at 95% Confidence Interval: Upper Limit
623.153	667.037	93.421%	-10.92%	10.92%

4.6.4 Analysis of Error Grading Results

The data error grade of the emission sources is scored based on three aspects: Activity Data Error Grade (A1), Data Reliability (A2), and Emission Factor Error Grade (A3). The definitions for the error grading of each item are shown in the table below, and the scoring formula is as follows:

(1) Data Error Grade Score for each emission source: $A_i = A1_i \times A2_i \times A3_i$

Table 18. Data Error Grading Principles

Category	Error Grade Score		
	1	2	3
Activity Data Error Grade (A1)	Continuous automatic measurement	Indirect measurement or financial/accounting receipts / nameplate data	Self-estimation
Data Reliability (A2)	Measuring instruments are regularly calibrated externally according to their calibration frequency, or multiple sets of data are available for corroboration.	Measuring instruments are only calibrated internally, or accounting receipts/nameplate data are available for corroboration.	Uncalibrated or lacking accounting receipts, relying solely on estimated values.
Emission Factor Error Grade (A3)	Adoption of self-developed emission factors derived from mass/energy balances, or empirical factors from similar processes/equipment.	Adoption of emission factors provided by manufacturers or regionally published emission factors.	Adoption of national-level emission factors or international emission factors.

The results of the error grading for the 2024 GHG data quality management show that Level 1 (≤ 10 points) accounts for 9 items, and Level 3 (19-27 points) accounts for 1 item. The data error grades are predominantly concentrated in Level 1.

After calculation and determination, the product of the A_i value of each emission

source and its emission proportion is further summed to serve as the overall average error grade score of the emission inventory. The formula is as follows. In 2024, DTR's overall average score was 13.57, which corresponds to Level 2 data grade.

(2) Overall Average Score of the Emission Inventory Grade:

$$A_{total} = \sum_{i=1}^{n} A_i \times w_i$$

A_i: Error grade score of the ith emission source

w_i: Proportion of the emission source relative to the company's total emissions

Table 19. Emission Inventory Grade Determination

Grade	Level 1	Level 2	Level 3
Source Range	X<10 points	10≦X<19	19≦X≦27
Count	9	0	1
Overall Average Score	13.5696	Inventory Grade	**Level 2**

4.6.5 Conclusion of Uncertainty Assessment

Synthesizing the analysis results from both the Uncertainty Percentage Method and the Error Grading Method, the uncertainty assessment of the Company's 2024 greenhouse gas emissions indicates that the uncertainty of major emission sources has been controlled within a reasonable range. The overall emission inventory possesses sufficient representativeness and verifiability, serving as a reliable reference basis for emission management, data quality optimization, and future reduction planning.

Chapter 5: Base Year Explanation

5.1 Based Year Setting and Adjustments

The DTR's original base year was 2019. However, starting in 2024, to enhance transparency and comply with RBA standards, the inventory boundary was expanded to include the US Headquarters and significant Scope 3 emissions. Due to this significant change, the 2019 data is no longer comparable. In accordance with the ISO 14064-1 standard, the base year has been officially reset to 2024 (Baseline: 667.037 tCO_2e).

Table 20. Summary of Base Year GHG Emissions for DT Research, Inc. Taiwan Branch

Scope 1. Emissions of Seven Major Greenhouse Gases

Category	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
Total Emission Equivalent (tCO_2e/year)	16.7851	12.4839	0.0000	14.6150	0.0000	0.0000	0.0000	43.884
Total Proportion (%)	38.249%	28.448%	0.000%	33.304%	0.000%	0.000%	0.000%	100.000%

Note: In accordance with Article 2, Subparagraph 1 of the "Regulations Governing the Inventory and Registration of Greenhouse Gas Emissions", greenhouse gas emissions are expressed in tons of carbon dioxide equivalent (tCO_2e) and rounded to three decimal places.

Scope 2. Emissions of Seven Major Greenhouse Gases

Category	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
Total Emission Equivalent (tCO_2e/year)	299.4916	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	299.492
Total Proportion (%)	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

Note: In accordance with Article 2, Subparagraph 1 of the "Regulations Governing the Inventory and Registration of Greenhouse Gas Emissions", greenhouse gas emissions are expressed in tons of carbon dioxide equivalent (tCO_2e) and rounded to three decimal places.

Scope 3. Emissions of Seven Major Greenhouse Gases

Category	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
Total Emission Equivalent (tCO_2e/year)	323.6610	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	323.661
Total Proportion (%)	100.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	100.000%

Note: In accordance with Article 2, Subparagraph 1 of the "Regulations Governing the Inventory and Registration of Greenhouse Gas Emissions", greenhouse gas emissions are expressed in tons of carbon dioxide equivalent (tCO_2e) and rounded to three decimal places.

Company-Wide: Summary Table of Seven Major GHG Emissions

Category	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total
Total Emission Equivalent (tCO_2e/year)	639.9377	12.4839	0.0000	14.6150	0.0000	0.0000	0.0000	667.037
Total Proportion (%)	95.937%	1.872%	0.000%	2.191%	0.000%	0.000%	0.000%	100.000%

Company-Wide: Summary Table of GHG Emissions by Scope and Scope 1 Emission Type

	Scope 1					Scope 2	Scope 3	
	Stationary Emissions	Mobile Emissions	Process Emissions	Fugitive Emissions	Direct Emissions from Land Use Change	Purchased Electricity	Purchased goods and services	Total Emission
Emission Equivalent (tCO_2e/year)	43.884					299.492	323.661	667.037
	16.7851	0.0000	0.0000	27.0989	0.0000			
Proportion (%)	6.579%					44.899%	48.522%	100.000%
	2.516%	0.000%	0.000%	4.063%	0.000%			

5.2 Base Year adjustments and changes

5.2.1 To ensure the consistency and comparability of the greenhouse gas inventory operations, the Company, referencing international practices, has adjusted the "materiality threshold" for base year recalculation to 5% (originally 3%, established based on the Ministry of Environment's "Greenhouse Gas Emission Inventory Operation Guidelines"). If any of the

following circumstances occur, and such changes cause the Company's total greenhouse gas emissions to fluctuate beyond this threshold, the base year will be adjusted or revised to reflect the new conditions:

(1) Changes in operational boundaries;

(2) Transfer of ownership of greenhouse gas emission sources or sinks into or out of the organizational boundary;

(3) Changes in quantification methodologies that result in significant changes in greenhouse gas emissions or removals.

Chapter 6: Reduction Targets and Management Plans

6.1 Reduction Targets

Based on the 2024 GHG inventory results, and considering operational scale, organizational boundaries, and industry development conditions, DTR has set 2024 as the base year to progressively promote greenhouse gas management and reduction initiatives. The following reduction targets have been established to serve as a reference for internal management and improvement directions:

(1) Short-Term (2026): The management direction is to reduce total emissions by approximately 3% (20 tCO_2e) compared to the base year. Actual reduction performance will be reviewed on a rolling basis depending on operational conditions.
(2) Medium-Term (2030): The medium-term management direction is to reduce total emissions by approximately 30% (200 tCO_2e) compared to the base year. Relevant initiatives will be progressively implemented in accordance with regulatory requirements and technical feasibility.

6.2 Reduction Action Plans

Targeting the significant categories with the highest emissions this year, the following measures are planned for implementation:

6.2.1 Energy Efficiency Improvement (Scopes 1 and 2):

(1) Gradually replace old air conditioners, prioritizing electrical equipment with energy-saving labels.
(2) Comprehensively implement lighting upgrades in office areas.

6.2.2 Supply Chain Carbon Reduction Management (Scope 3):

(1) For core component suppliers (e.g., CPU) that account for the highest proportion of emissions, low-carbon specifications will be progressively incorporated into procurement contracts.
(2) Prioritize the procurement of products from suppliers that possess eco-labels or have conducted organizational carbon inventories.

6.2.3 Operational Waste Reduction and Resource Recovery:

(1) Promote a paperless environment to reduce the demand for office paper.
(2) Promote packaging optimization, reduce packaging materials, introduce recyclable materials, and utilize environmentally friendly materials.
(3) Conduct regular inventories of electronic waste recycling to enhance the transparency of waste management.\

6.2.4 Monitoring and Communication Mechanisms:

(1) Annual Review: The Greenhouse Gas Inventory Promotion Committee will conduct internal audits annually to review the target achievement rate.

(2) Public Reporting: Inventory results and reduction performance will be publicly disclosed on the Company's official website regularly each year to respond to stakeholders' expectations.

6.2.5 The Company's greenhouse gas inventory operations are voluntary. The purpose is to systematically grasp the current status of emissions derived from operational activities and to prepare in advance for future greenhouse gas management and regulatory trends from the Ministry of Environment. The reduction targets and action plans described in this chapter serve as planning directions for internal management and improvement. Actual implementation details and performance will undergo rolling adjustments based on operational conditions, organizational boundaries, and regulatory requirements, and do not constitute specific commitments.

6.3 Report Management

This report is designated as an internal management document of the Company, intended to serve as a reference basis for greenhouse gas inventory and management. Once finalized through internal review, this report will be issued, retained, and version-controlled in accordance with the Company's document management mechanism. In the future, if external disclosure is required due to regulatory mandates or management needs, it will be processed according to internal approval procedures to provide stakeholders with an understanding of the Company's current greenhouse gas management status and future planning directions.

6.4 Information of Report Authors, Custodians, and Maintainers

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6.4.2 Department: ISO Certification Department

6.4.3 Contact Address: 3F, No. 36, Wuquan 7th Rd., Wugu Dist., New Taipei City

6.4.4 Contact Phone: (02) 2298-1039 ext. 310

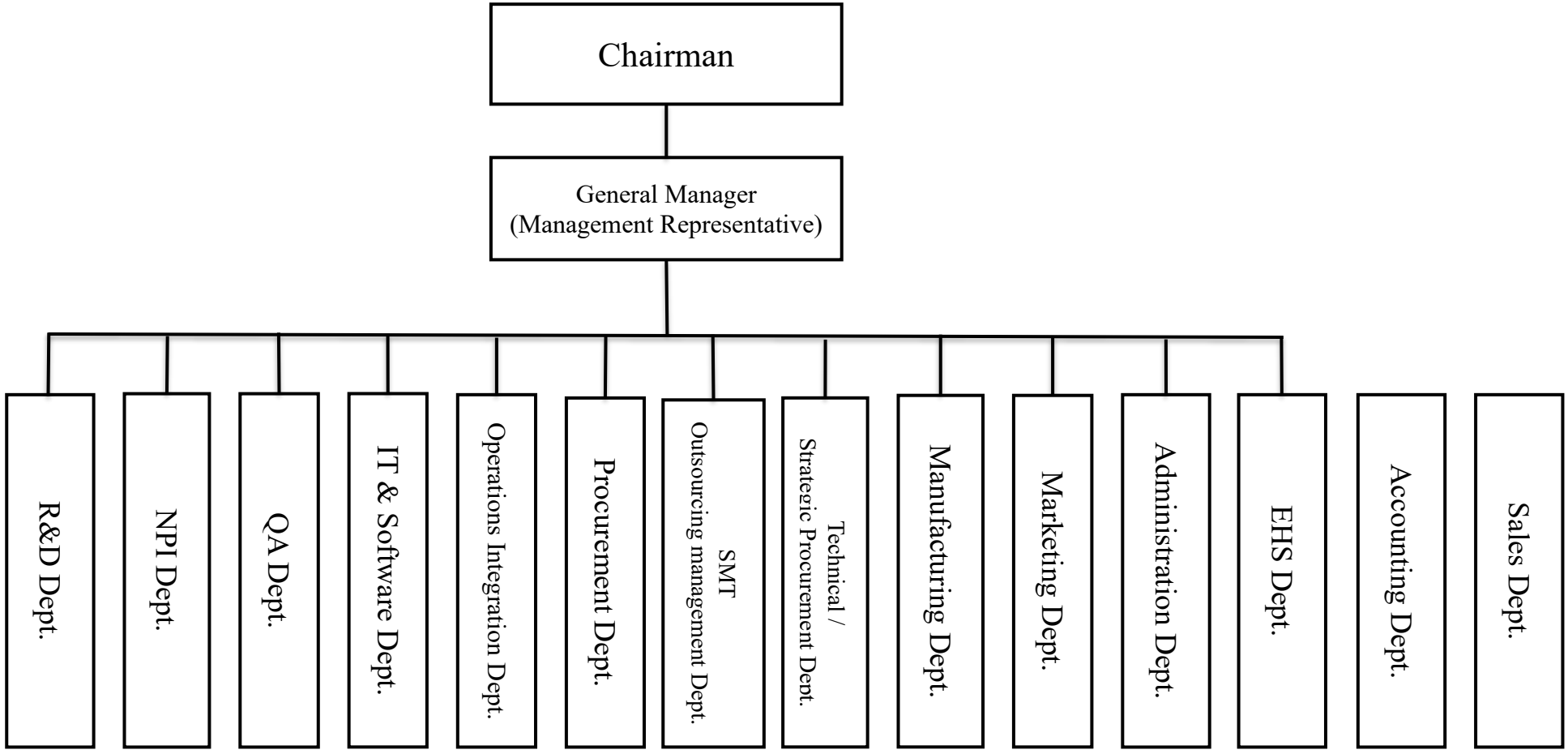
Chapter 7: References & Appendices

This report was prepared with reference to the following documents:

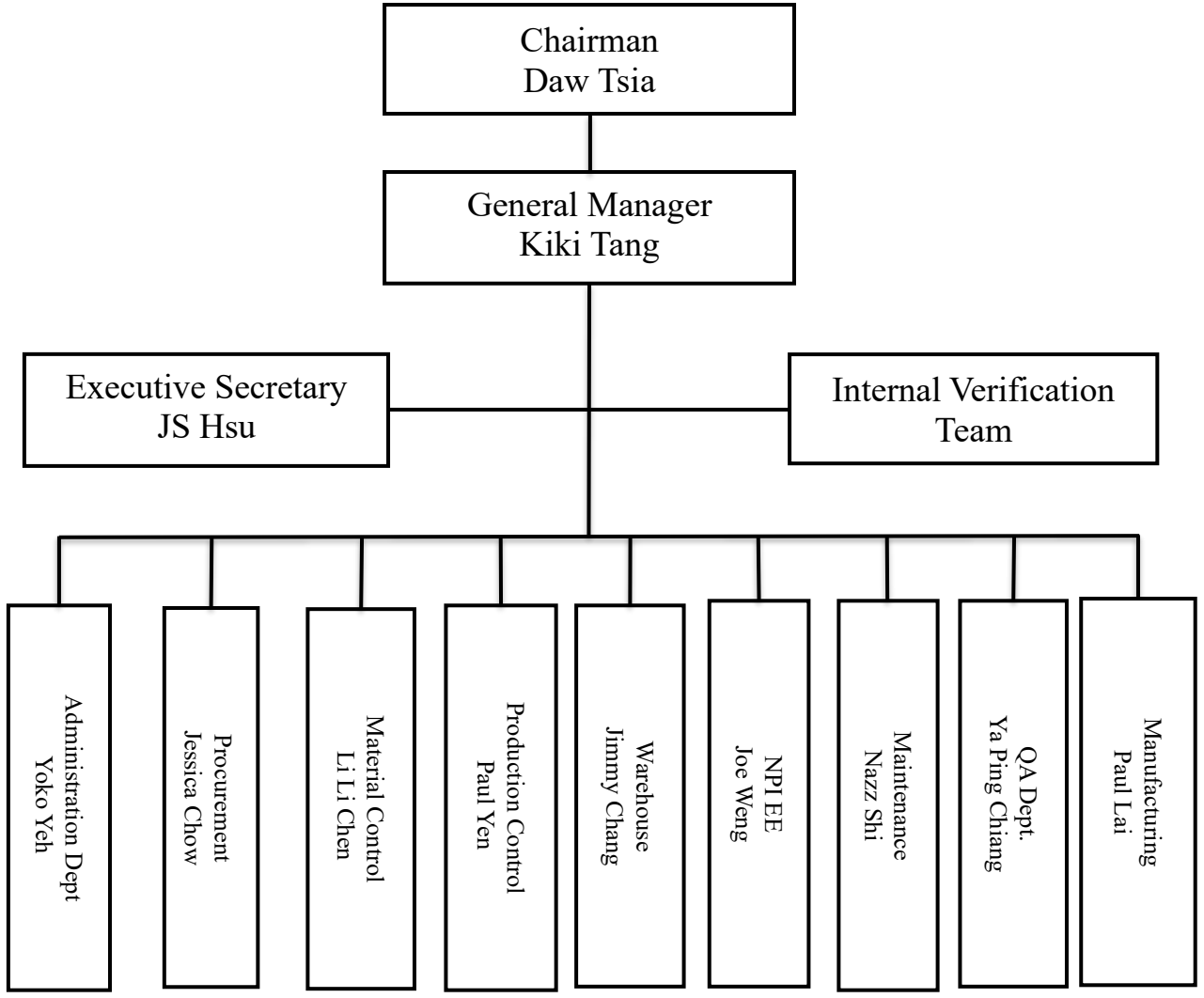
1. Intergovernmental Panel on Climate Change, *IPCC Guidelines for National Greenhouse Gas Inventories*, 2006.10.
2. Intergovernmental Panel on Climate Change, *The Second Assessment Report: Climate Change 1995* – The Science of Climate Change, 1995.
3. ISO *14064-1, Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals,* 2005.8.
4. Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs, *"CNS 14064 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals,"* IS Version, July of ROC 95.
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6. Environmental Protection Administration, Executive Yuan, *"GHG Inventory and Registration Guidelines"*, December of ROC 98.
7. Bureau of Energy, Ministry of Economic Affairs, *"ROC 98 Energy Statistical Handbook"*, ROC 99.
8. Environmental Protection Administration, Executive Yuan, *"Greenhouse Gas Reporting Operation Guidelines"*, September of ROC 102.
9. Environmental Protection Administration, Executive Yuan, *"National Greenhouse Gas Registry Platform Calculation Methods*", April of ROC 103.
10. Ministry of Environment, *"Greenhouse Gas Emission Inventory Operation Guidelines ROC 113 Edition."*
11. Climate Change Administration, Ministry of Environment - National Greenhouse Gas Registry Platform, *"Greenhouse Gas Emission Factor Table."*

Appendix

Appendix I. DT Research, Inc. Organization Chart

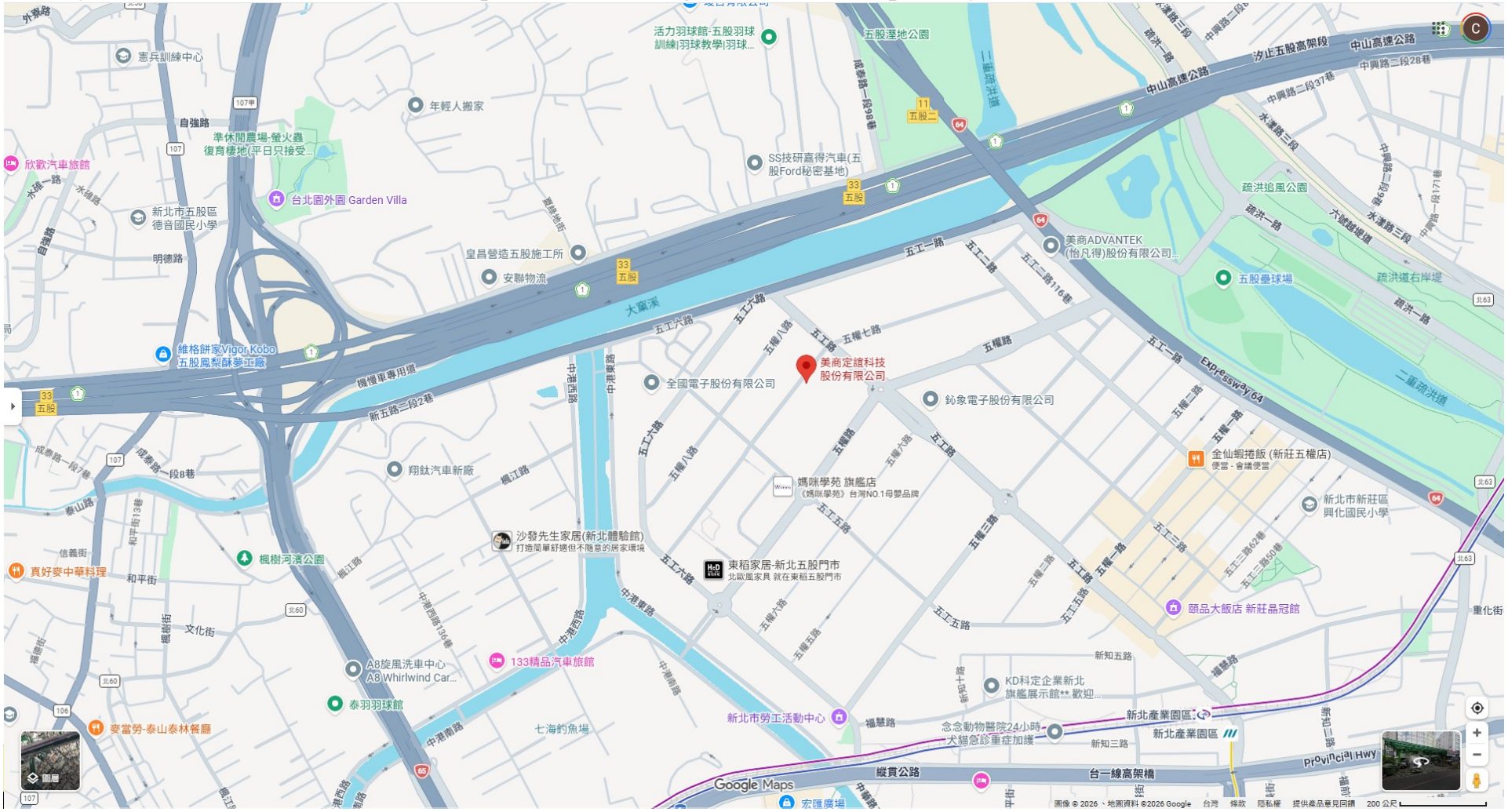


Appendix II. DT Research, Inc. GHG Inventory Team Organization Chart



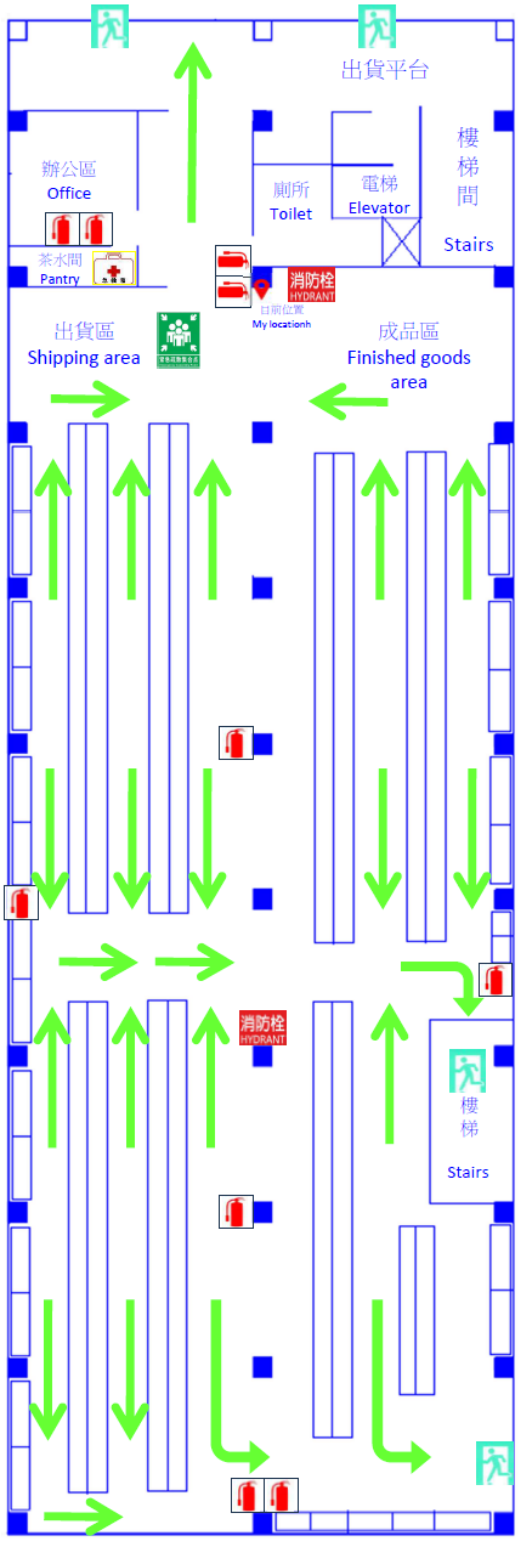
Appendix III. DT Research, Inc. Taiwan Branch Location Map

Factory Address: 1F-4F,6F, No. 36, Wuquan 7th Rd., Wugu Dist., New Taipei City



Appendix IV. DT Research, Inc. Taiwan Branch Facility Layout (1F/2F/3F/4F/6F)

1F避難逃生路線圖



消防栓箱
Hydrant
vòi chữa cháy

緩降機
Escape Sling
Dây thoát hiểm

滅火器
Fire Extinguisher
Bình chữa cháy

逃生方向
Escape direction
Hướng thoát

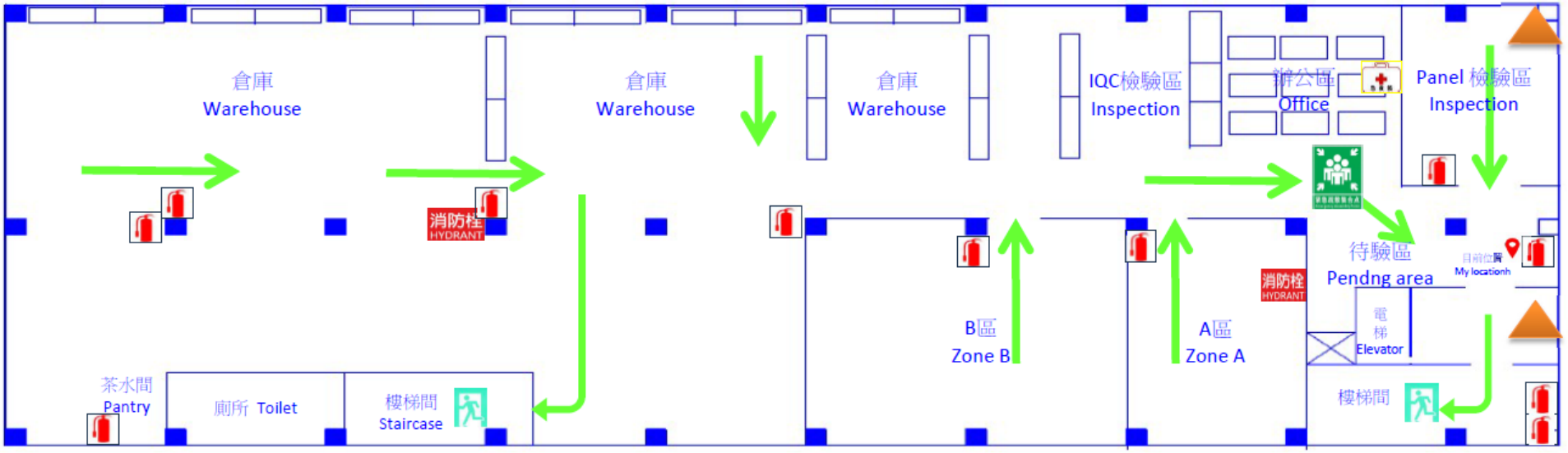
逃生出口
Exit
lối ra

急救箱
First aid kit
bộ dụng cụ sơ cứu

緊急疏散集合點(內部)
Emergency evacuation assembly point
Điểm tập kết sơ tán khẩn cấp

外部緊急疏散集合點:
1F警衛室旁空地
Open space next to the guard room on 1F

2F避難逃生路線圖



消防栓箱
Hydrant
vòi chữa cháy

逃生方向
Escape direction
Hướng thoát

緩降機
Escape Sling
Dây thoát hiểm

緊急疏散集合點(內部)
Emergency evacuation assembly point
Điểm tập kết sơ tán khẩn cấp

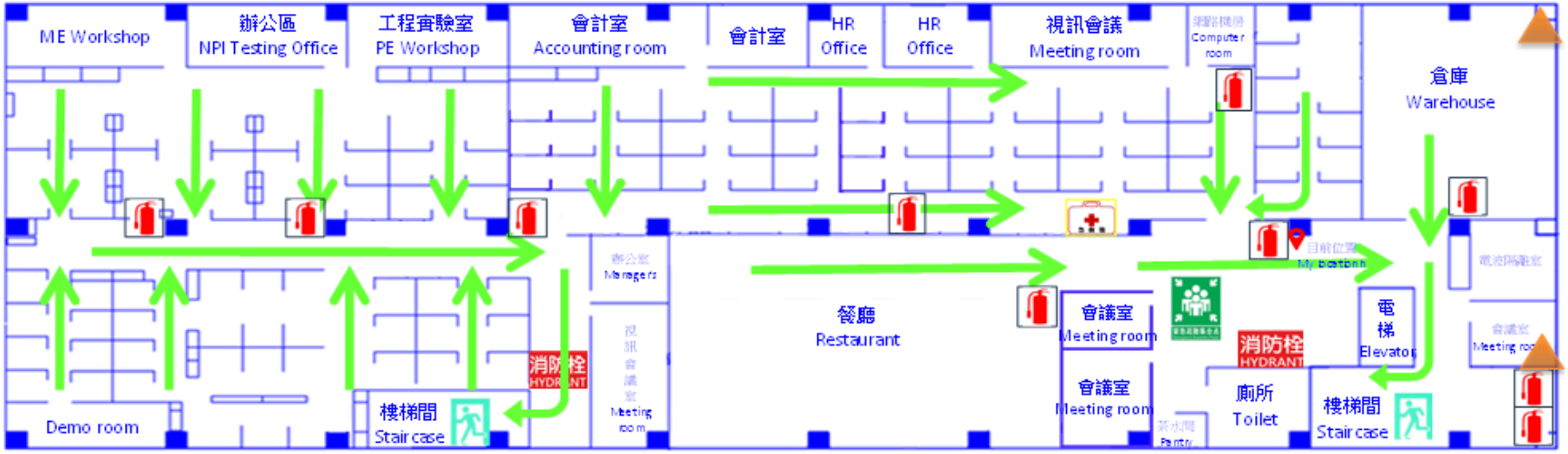
滅火器
Fire Extinguisher
Bình chữa cháy

逃生出口
Exit
lối ra

急救箱
First aid kit
bộ dụng cụ sơ cứu

外部緊急疏散集合點:
1F警衛室旁空地
Open space next to the guard room on 1F

3F避難逃生路線圖



消防栓箱
Hydrant
vòi chữa cháy

逃生方向
Escape direction
Hướng thoát

緩降機
Escape Sling
Dây thoát hiểm

緊急疏散集合點(內部)
Emergency evacuation assembly point
Điểm tập kết sơ tán khẩn cấp

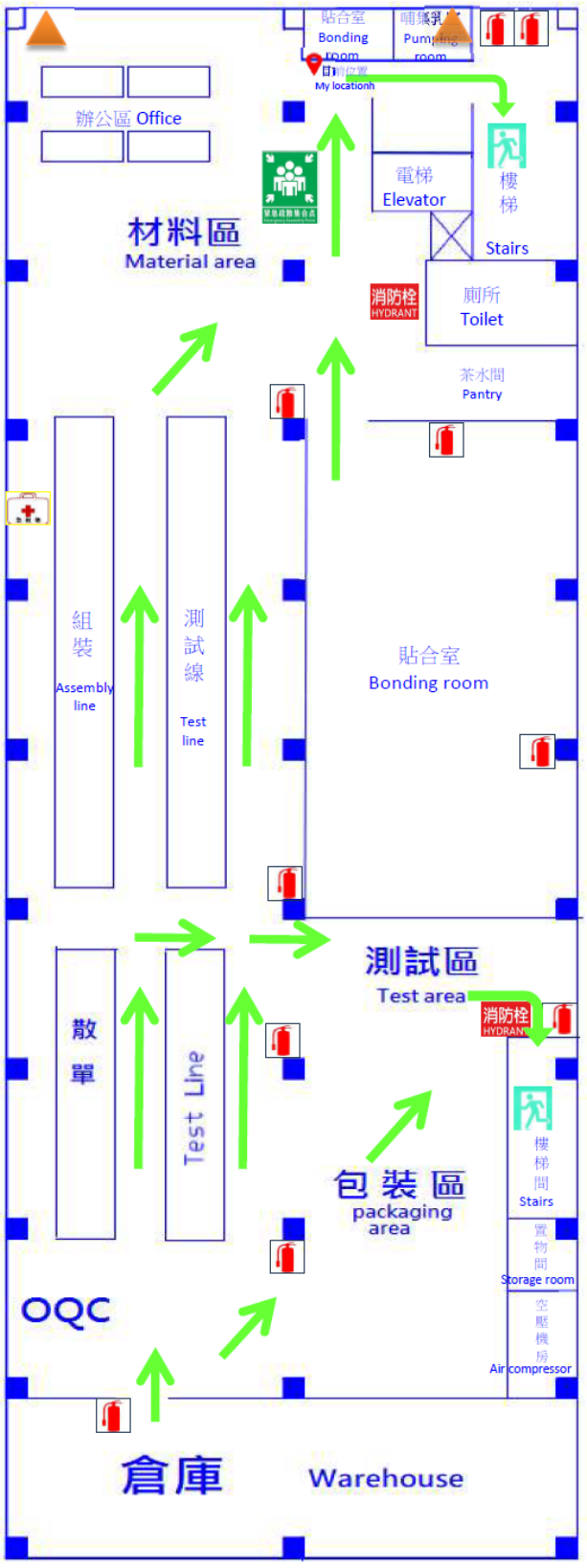
滅火器
Fire Extinguisher
Bình chữa cháy

逃生出口
Exit
lối ra

急救箱
First aid kit
bộ dụng cụ sơ cứu

外部緊急疏散集合點:
1F警衛室旁空地
Open space next to the guard room on 1F

4F避難逃生路線圖



消防栓箱
Hydrant
vòi chữa cháy

緩降機
Escape Sling
Dây thoát hiểm

滅火器
Fire Extinguisher
Bình chữa cháy

逃生方向
Escape direction
Hướng thoát

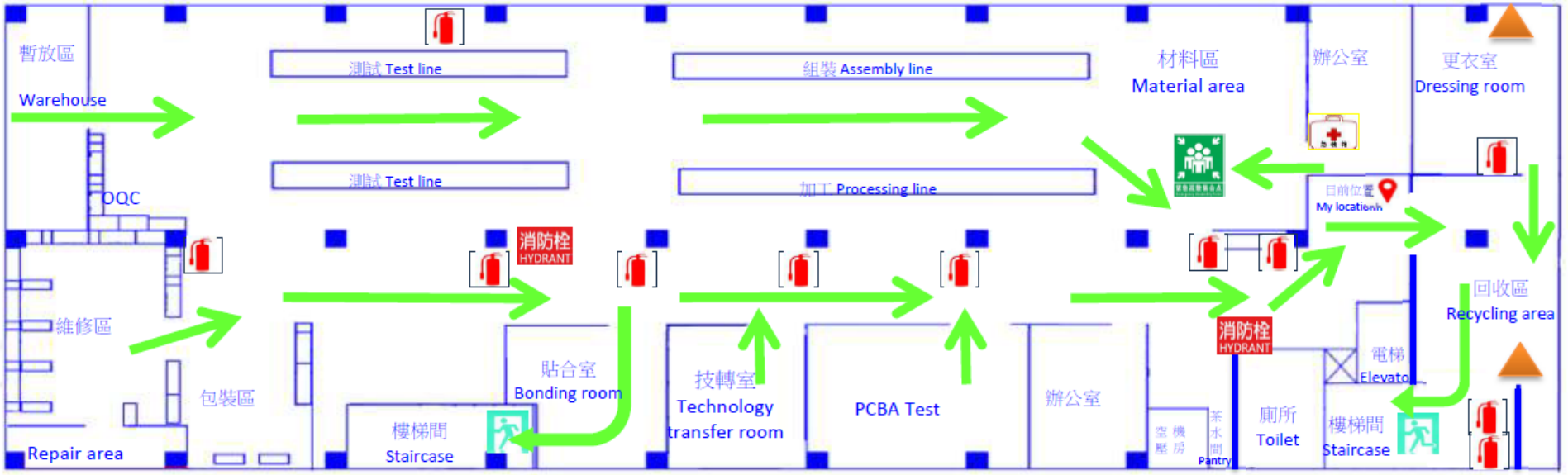
逃生出口
Exit
lối ra

急救箱
First aid kit
bộ dụng cụ sơ cứu

緊急疏散集合點(內部)
Emergency evacuation assembly point
Điểm tập kết sơ tán khẩn cấp

外部緊急疏散集合點:
1F警衛室旁空地
Open space next to the guard room on 1F

6F避難逃生路線圖



消防栓箱
Hydrant
vòi chữa cháy

逃生方向
Escape direction
Hướng thoát

緩降機
Escape Sling
Dây thoát hiểm

緊急疏散集合點(內部)
Emergency evacuation assembly point
Điểm tập kết sơ tán khẩn cấp

滅火器
Fire Extinguisher
Bình chữa cháy

逃生出口
Exit
lối ra

急救箱
First aid kit
bộ dụng cụ sơ cứu

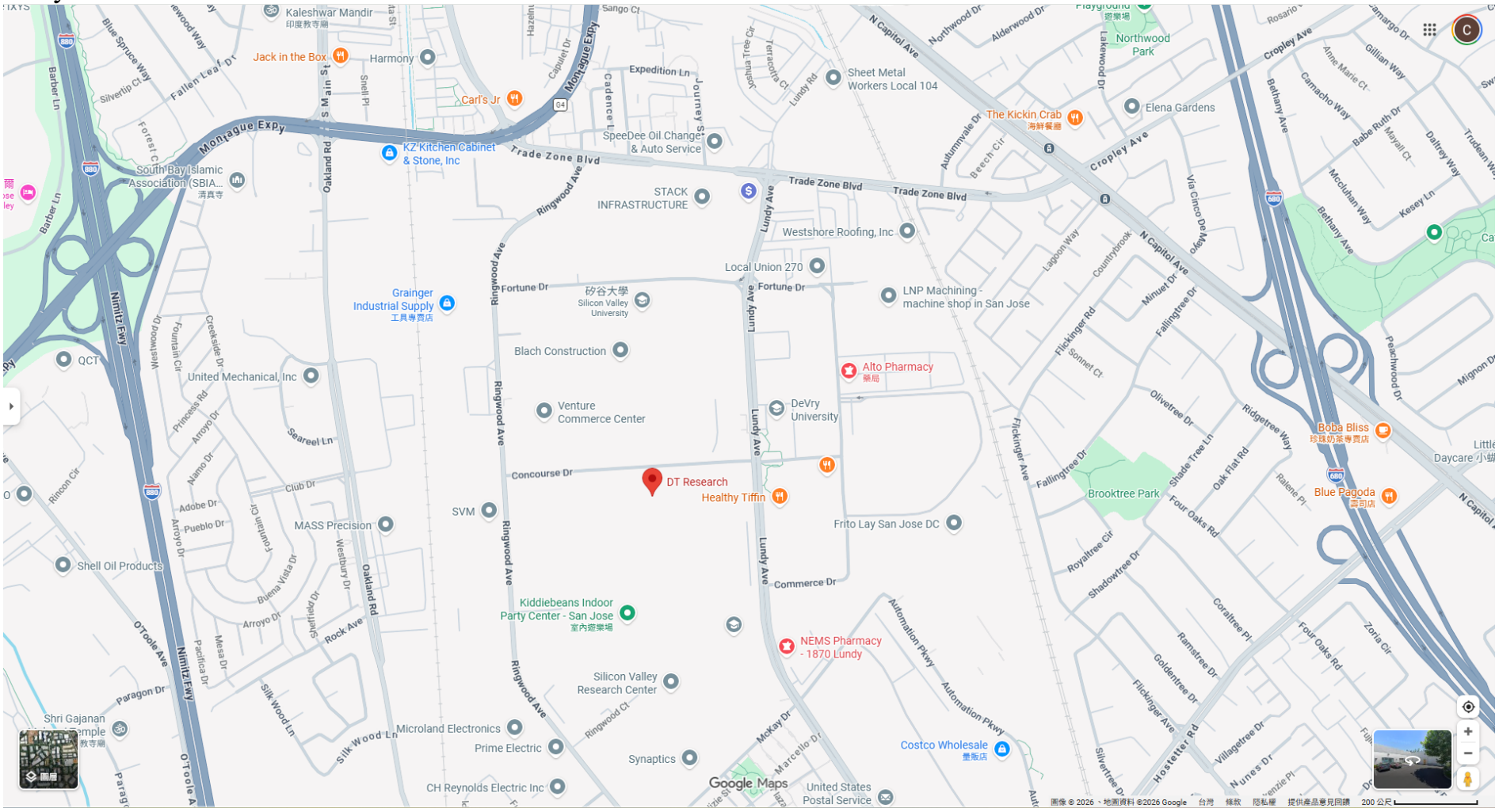
外部緊急疏散集合點:

1F警衛室旁空地

Open space next to the guard room on 1F

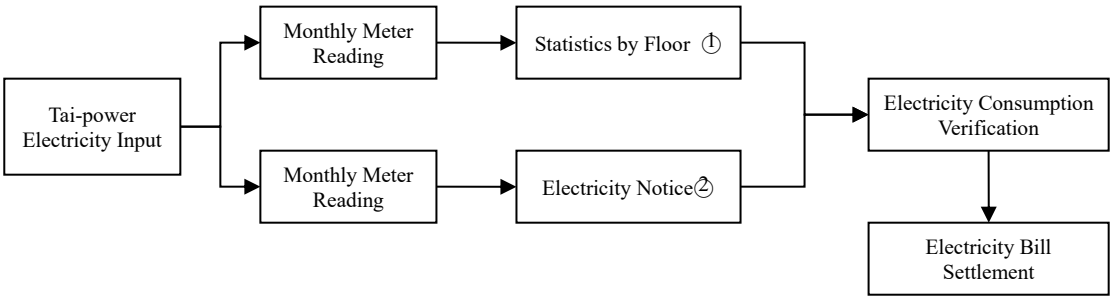
Appendix V. DT Research, Inc. US Headquarter Location Map

Factory Address: 2000 Concourse Dr San Jose CA 95131-170 U.S.A.



Appendix VI. 2024 Taiwan Branch Greenhouse Gas Data (Excel)
Appendix VII. 2024 US Headquarters Greenhouse Gas Data (Excel)
Appendix VIII. Information Flow of Significant Emission Sources

Electricity Information Flow



① Electricity consumption statistics by floor: The landlord takes regular monthly meter readings to allocate the electricity usage for the 1st, 2nd, 3rd, 4th, and 6th floors.
② Electricity Notice: Tai-power takes regular monthly meter readings to calculate the total electricity consumption of the entire building.