

Environmental Protection

- (1) Environmental Management Policies and Systems
 - a. The Company complies with the requirements of ISO 14001 to establishes an environmental management system. We have been paying considerable attention to such significant environmental issues as the pollutions (including air pollution, water pollution and waste), water and electricity consumption and hazardous substances, which have been generated during the production process. We set up dedicated management units and personnel to prevent environmental pollution, which include air pollution, water pollution and waste, and to manage energy consumption efficiently.
 - b. The Company regularly checks greenhouse gas emissions in accordance with ISO 14064-1 to review the impact on our operations. Based on the results of the greenhouse gas inventory, we will continue to implement carbon reduction measures to effectively reduce the risk of Scope 1 emissions and the indirect emissions of Scope 2 greenhouse gases caused by the use of electricity. In 2023, the greenhouse gas inventory inspection has been completed and verified by a third-party for the first time, and it will continue to be conducted every year. The annual internal audit plan is planned, aiming at the compliance with various relevant environmental laws and regulations, and at auditing each operating process to ensure that they are in accordance with the regulations.

(2) Energy Management

The energy used by the Company is mostly from purchased electricity, which is mainly used in the production processes and plant systems, followed by the consumption of natural gas used in the process of lamination. The other energy purchased are gas used in plants and gasoline and diesel used in passenger vehicles and light trucks.

Туре	Unit	Plant	2021	2022	2023
		Taoyuan Plant I	24,030.678	19,737.440	16,313.658
		Taoyuan Plant II	13,3081.4	118,148.400	111,949.400
Electricity	1,000 kWh	Pingzhen Plant	46,311.406	46,772.251	43,518.935
		Changshu Plant	125,513.201	131,644.340	131,053.988
		Total	328,936.685	316,302.431	302,835.981
		Taoyuan Plant I	0	4.018	4.113
		Taoyuan Plant II	9.572	0	0.380
Gasoline	Gasoline 1 M ³	Pingzhen Plant	0	0	0
		Changshu Plant	20.857	19.692	18.076
		Total	30.429	23.710	22.569
		Taoyuan Plant I	13.153	12.494	11.362
		Taoyuan Plant II	21.163	11.932	7.336
Diesel	1 M ³	Pingzhen Plant	31.93	12.301	30.289
		Changshu Plant	36.78	26.820	29.544
		Total	103.026	63.546	78.532
		Taoyuan Plant I	0	0	0
		Taoyuan Plant II	829.56	756.242	711.847
Natural gas	1,000 M ³	Pingzhen Plant	234.835	212.873	157.900
		Changshu Plant	592.289	519.251	522.533
		Total	1,656.684	1,488.366	1,392.280

The Company has been managing energy saving, implementing energy management, and reducing production costs. Efficiency evaluation will be carried out when the equipment is installed. Irregular inspections of electricity consumption in the plants are carried out and the following energy-saving projects are implemented.

In order to cope with future energy risks, the Company continues to

implement energy-saving and power-saving plans to reduce power consumption in the production process. Each plant gradually replaces low-efficiency equipment and lamps, and formulates equipment energy-saving plans without affecting production efficiency.

• Electricity Consumption Intensity in 2021-2023

	Electricity Consumption Intensity								
Resource	Unit	Plant	2021	2022	2023				
Electricity Consumption		Taoyuan Plant I	24,657	19,737	16,314				
	O)A/I	Taoyuan Plant II	133,121	118,148	111,949				
	GWh	Pingzhen Plant	44,333	46,772	43,519				
		Changshu Plant	140,340	131,644	131,054				
	Tota	l	342,452	316,302	302,836				
GWh / NT\$ 1,0	000,000	(Production Value)	22,077	20,450	21.777				
Target for E		y Consumption	8%	8%	5%				
	Intens	ity							
ŀ	Performa	ance	12.9%	7.4%	1.4%				

The overall electricity consumption intensity in 2023 was 21.777 GWh / NT\$ 1,000,000 (Production Value), which was 1.4% lower than that in 2022. Although the target of reducing electricity consumption intensity by 5% has not been achieved, the Company continues to develop a variety of energy-saving projects and sets a 2024 target of reducing the consumption intensity by 5%.

	Carbon Dioxide Equivalent Intensity									
with E	with Electricity Consumption Converted into Carbon Dioxide Equivalent									
Resource	Unit	Plant	2021	2022	2023					
		Taoyuan Plant I	12,551	10,046	8,304					
Electricity	CO2e	Taoyuan Plant II	67,759	60,138	56,982					
Consumption	COZE	Pingzhen Plant	22,566	23,807	22,151					
		Changshu Plant	71,433	67,007	66,706					
	Total		174,308	160,998	154,144					
Carbon Dioxide Equivalent / NT\$ 1,000,000 (Production Value)			11.2	10.4	11.1					
Target for Ele	ectricity Con	sumption Intensity	8%	8%	5%					
	Performar	nce	12.9%	7.4%	1.5%					

In 2023, the overall carbon dioxide equivalent intensity of electricity consumption was 11.1 CO2e / NT\$ 1,000,000 (Production Value), which was 1.5% lower than that in 2022, and has not reached the target of reducing by

5%. The Company continues to reduce electricity consumption and expects to achieve the target of reducing by 5% in 2024.

(3) Water Management

a. Water Usage

Through the improvement of production processes and equipment, the efficiency of water usage is improved and the amount of recycled water is increased, thereby reducing the cost of water usage. The Company's manufacturing sites are mainly located in Taiwan and in China. Taoyuan Plant I, Taoyuan Plant II and Pingzhen Plant are all located in Taoyuan City, Taiwan. Changshu Plant I and Changshu Plant II are located in Changshu, China. The water source for plants and offices is 100% tap water.

The sources of tap water in the Taoyuan City are Danan Water Treatment Plant and Pingzhen Water Treatment Plant. Their water reservoir is in the Shimen Dam. Due to the geographical location and topographical characteristics, there are often problems such as uneven rainfall and reservoir siltation in the area of Shimen Dam, which cause water shortage from time to time. The PCB industry needs large water consumption so that the stability of water resources is very important to its production.

In China, the Changshu plants use tap water from the Third Water Treatment Plant of Changshu Sino French Water Co., LTD. and its water reservoir comes from the upstream of the Yangtze River. The water source is sufficient and there are no water supply problems. Our usage does not affect the ecology of the water resource and have no impact on other purposes for the water source as well.

The distribution of rainfall in extreme climates around the world is extremely uneven, which is likely to cause regional and seasonal droughts, so that we can no longer ignore the problems of water utilization. We have been improving the usage of water and adopt the practices of "reducing, recycling, and reusing" to enhance the efficiency of water usage.

The Company understands that water is not easy to come by. It should formulate reasonable plans of water consumption for equipment, continuously improve technology to reduce water consumption, enhance water efficiency by effective usage of water and implement water-saving projects to reduce water consumption. It is our responsibility to continuously improve the use of water resources to increase economic benefits and to reduce the impact on the environment.

But on the whole, the total water consumption in our group has not increased significantly in the past three years and its water consumption per unit of revenue has gradually declined. The water consumption intensity by NT\$ 1 million of production value in 2021, 2022 and 2023 were 0.251 ML, 0.241 ML and 0.249 ML respectively. That in 2022 was 1% lower than that in 2022. There was a downward trend in our water consumption intensity by NT\$ 1 million of production value. And it is estimated that that will decrease further by 5% in 2024.

Due to the requirements of PCB production, the Company needs to use chemical substances in the manufacturing process, which consumes a lot of water. Based on the commitment of environmental conservation and of cherishing water resources, and on the approaches of "reducing, recycling, and reusing", each plant manages to implement a variety of projects to reduce water consumption and to recycle the used water. In order to improve the efficiency of water usage in the plants, water saving projects are mainly divided into three major categories: replacement of equipment in utilities, replacement of equipment in production and optimization of operations.

	Water Consumption Intensity								
Resource	Unit	Plant	2021	2022	2023				
Water Consumption		Taoyuan Plant I	134.5	97.4	73				
	4 1 1 1	Taoyuan Plant II	1601.9	1373.2	1301				
	1 ML	Pingzhen Plant	453.8	597.6	527				
		Changshu Plant	1711.9	1662.1	1559				
	Tota	al	3902.1	3730.3	3460				
ML / NT\$ 1,000,000 (Production Value)			0.251	0.241	0.249				
Target for Water Consumption Intensity			8%	5%	5%				
	Perform	ance	10%	4%	1%				

In 2023, the overall carbon dioxide equivalent intensity of water consumption was 0.000058 CO2e / NT\$ 1,000,000 (Production Value), which was 1% lower than that in 2022, and has not reached the target of reducing carbon dioxide equivalent intensity by 5%. The Company continues to improve it and expects to achieve the target of reducing by 5% in 2024.

with	Carbon Dioxide Equivalent Intensity with Water Consumption Converted into Carbon Dioxide Equivalent								
Resource	Unit	Plant	2021	2022	2023				
		Taoyuan Plant I	0.031	0.023	0.017				
Water Consumption	CO2e	Taoyuan Plant II	0.373	0.320	0.303				
	0.0.0	Pingzhen Plant	0.106	0.139	0.123				
		Changshu Plant	0.399	0.387	0.363				
	Total		0.909	0.869	0.806				
Carbon Dioxide Equivalent / NT\$ 1,000,000 (Production Value)			0.000059	0.000056	0.000058				
Target for Water Consumption Intensity			8%	5%	5%				
	Performa	nce	10%	4%	1%				

• 2021~2023 water usage

Plant	Tao	Taoyuan Plant I		Taoy	/uan Pla	ant II	Pinç	gzhen F	Plant	Changshu Plant		
Water Source		ınan Wa atment F		Danan Water Treatment Plant		Pingzhen Water Treatment Plant			Changshu Sino French Water Co., LTD.			
Water Reservoir	Sh	imen D	am	Sh	imen D	am	Sh	imen D	am	Ya	ngtze Ri	iver
Wastewater Plant		Ours		Ours		ORzone Environmental Technology Co., Ltd.		Ours				
Year	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Water Consumption (ML)	134.5	96.4	73.0	1601.9	1373.2	1301	453.8	597.6	527	1711.9	1662.1	1559
Production Value (NT\$ 1 million)	979.2	1079.2	1128.3	5313.5	4685.7	3967.6	2558.4	2897.9	2972.4	6660.6	6804.3	5837.9
Water Consumption by Production Value (1 ML / NT\$ 1 million)	0.14	0.09	0.06	0.30	0.29	0.33	0.18	0.21	0.18	0.26	0.24	0.27
Recycled Water (ML)	-		-		-				331.71			
Water Recycling Rate		-		-		-		-	-	21%		

b. Waste Water Management

The waste water from production and from domestic sewage, which are produced by various plants in the Company, are divided into separate pipes and collected separately. After having been properly treated by appropriate waste water treatment and controlled by a series of measurements to meet the discharging requirements, they will be directly discharged to receiving water or sewage treatment centers in industrial areas according to laws and regulations.

After having been treated by a high-concentration pretreatment system, biological oxidation treatment, chemical coagulation treatment, sand filtration and activated carbon purification, the treated water of our Taoyuan Plant I and Taoyuan Plant II are discharged into Dakeng Creek or Wayao Creek and finally flow into Nankan River. The treated water of our Pingzhen Plant, after having been treated by a high-concentration pretreatment system, biological oxidation treatment and chemical coagulation treatment, are discharged into the sewage treatment center of Pingzhen Industrial Park. Our Changshu plants has a dedicated waste water treatment plant which discharges the treated water to Dawengjiang after having treated them by a high-concentration pre-treatment system, an A2O system, a chemical coagulation system and a tertiary treatment system. Relevant water quality conditions are uploaded to the website of the local environmental protection agency in real time in accordance with the regulations of the local environmental protection agency and are available for public inspection.

In 2023, the volume of the treated water discharged from our plants in Taiwan and in China were around 1.70 million and 1.14 million tons respectively, accounting for 60% and 40% of our total discharge. The average wastewater discharge intensity by NT\$ 1 million of production value in 2021, in 2022 and in 2023 are 218.1 m³, 191.0 m³ and 204.0 m³ respectively. Our Taoyuan Plants and Pingzhen Plant have also cooperated with environmental protection agencies and the sewage treatment center in Pingzhen Industrial Park to implement total discharge control or voluntary discharge reduction to decrease the loading of sewage treatment. In addition to complying with regulations, we have adopted stricter standards to manage

copper residue and ammonia nitrogen in the discharged water in order to reduce the pollution and the impact on the receiving water and to achieve the goal of environmental friendliness.

	Volume and Intensity of Wastewater Discharge									
Plant	Receiving Water	Unit	2021	2022	2023					
Taoyuan Plant I	Wayao Creek		129,344	94,033	69,158					
Taoyuan Plant II	Wayao Creek	m ³	1,502,561	1,282,016	1,211,281					
Pingzhen Plant	Pingzhen Sewage Treatment Center	III	362,598	389,366	421,714					
Changshu Plants	Dawengjiang		1,389,186	1,189,268	1,135,116					
Total			3,505,676	2,954,683	2,837,269					
1,000 m ³ / N	Γ\$ 1 million of Produc	tion Value	218.1	191.0	204.0					

Furthermore, in order to confirm the results of waste water treatment, we actively review and improve the waste water pollution prevention and control system in our plants. Currently, the discharge levels of our plants in Taiwan and in China are maintained far better than the required criteria of local regulations.

The following table shows the water quality measured by our plants on a regular basis. All of them meet the national criteria for the discharged water.

	W	ater Discha	arge Criteria	a and Our F	Plants' Stat	us		
Monitoring Itoms	Taoyua	n Plant I	Taoyuar	n Plant II	Pingzhe	en Plants	Changs	hu Plants
Monitoring Items	Criteria	Status	Criteria	Status	Criteria	Status	Criteria	Status
Discharge Volume (million tons / year)	0.53	0.07	2.55	1.21	0.65	P1:0.06 P5:0.36	2.23	0.12
рН	6~9	7.48	6~9	7.45	5~9	P1: 7.61 P5: 7.76	6~9	7.31
Copper (mg/l)	1.5	0.27	1.5	0.22	1.5	P1:0.19 P5:0.41	0.3	0.09
COD (mg/l)	120	28.1	120	40.80	400	P1:130 P5:143	50	23.19
BOD (mg/l)	50	15.8	50	4.00	-	-	-	-
Suspended Solids (mg/l)	50	6.6	50	2.2	100	P1:6.95 P5:13	30	7.56
Ammonia Nitrogen (mg/l)	-	-	T2-1: 19 T2-2: 30	9.85	30	P1:3.93 P5:17.65	5	0.98

The average wastewater discharge in 2023 is within the criteria for all monitoring items required by the government.

Taoyuan Plant

Plant		Т	1	Chan	g-Jung	T2	2-2	T2	2-1
Total Discharge (1	tons)	37,	234	31,	924	457	,202	754	,079
Items	Unit	Criteria	Average	Criteria	Average	Criteria	Average	Criteria	Average
Water Temperature	$^{\circ}\!\mathbb{C}$	20~30	28.35	20~30	25.90	20~30	28.05	20~30	29.05
рН	-	6~9	7.63	6~9	7.50	6~9	7.58	6~9	7.53
Water volume	CMH	-	40.00	-	40.00	-	140.00	-	140.00
BOD	mg/L	50	12.48	50	15.00	50	5.90	50	3.78
COD	mg/L	120	28.05	120	8.25	120	64.13	120	41.38
SS	mg/L	50	7.43	50	3.93	50	9.33	50	2.08
Fluoride Salt	mg/L	15	0.15	15	0.15	15	0.15	15	0.15
Nitrate Nitrogen	mg/L	50	4.59	50	0.59	50	7.28	50	18.10
Anionic Surfactant	mg/L	-	-	-	-	5	0.31	5	Exemption
Boron	mg/L	5	0.17	5	0.03	1.5	0.00	5	0.18
Chromium and its Compounds	mg/L	1.5	0.00	1.5	0.00	1.5	0.00	1.5	0.00
Copper	mg/L	1.5	0.28	1.5	0.23	0.5	0.01	0.5	0.00
Nickel	mg/L	0.7	Exemption	0.7	0.00	3.5	0.05	3.5	0.02
Zinc	mg/L	3.5	0.47	3.5	0.07	2.0	0.00	2.0	0.00
Molybdenum	mg/L	0.6	0.03	0.6	0.03	0.5	0.00	0.005	0.00
Hg	mg/L	0.005	Exemption	0.005	0.00	1.0	Exemption	0.03	0.00
Tin	mg/L	2.0	0.00	2.0	0.00	0.03	0.00	0.5	0.00
Hexavalent Chromium	mg/L	0.5	Exemption	0.5	Exemption	0.5	Exemption	0.5	Exemption
Cadmium	mg/L	0.03	Exemption	0.03	Exemption	0.03	Exemption	1.5	0.00
Arsenic	mg/L	0.5	Exemption	0.5	Exemption	0.7	Exemption	0.5	0.00
Lead	mg/L	0.5	0.009	0.5	Exemption	0.6	0.03	0.6	0.03
Cyanide	mg/L	1.0	Exemption	1.0	Exemption	0.005	0.00	0.005	Exemption
Manganese	mg/L	-	-	-	-		-	0.03	Exemption

• Pingzhen Plant & Changshu Plants

Plant		Р	1	P5		Changsu	
Total Discharge (t	Total Discharge (tons)		266	36,3	3448	94,	593
Items	Unit	Criteria	Average	Criteria	Average	Criteria	Average
Ammonia Nitrogen	mg/L	30	3.94	30	17.66	5	0.50
COD	mg/L	400	130.57	400	143.50	50	20.34
Ph	-	5~9	7.62	5~9	7.41	6~9	7.47
Copper and its Compounds	mg/L	1.5	0.19	1.5	0.42	0.3	0.06
Suspended Solids	mg/L	100	6.96	100	13.03	30	7.14
Total Phosphorus	mg/L	-	-	-	-	0.5	0.07
Total Nitrogen	mg/L	-	-	-	-	15	5.08
Formaldehyde	mg/L	-	-	-	-	1	0.003
Cyanide	mg/L	-	-	-	-	0.2	0.03
Nickel and its Compounds	mg/L	-	-	-	-	0.1	0.02
Silver and its Compounds	mg/L	-	-	-	-	0.1	0.003

(4) Capital Expenditure related to Energy Conservation, Water Conservation and Pollution Prevention

The Company actively implements the ISO 14001 management system and responds to sustainable development requirements. In 2021, the capital expenditure related to energy conservation, water conservation and pollution prevention for our plants in Taiwan and in China were NT\$ 34.74 million and NT\$ 28.66 million respectively, accounting for 8.0% and 2.7% of our total capital expenditure. Those in 2022 were NT\$ 26.95 million and NT\$ 45.88 million respectively, accounting for 5.8% and 13% of our total capital expenditure. Those in 2023 were NT\$ 78.47 million and NT\$ 7.08 million respectively, accounting for 25.9% and 7.8% of our total capital expenditure. The amount of that in 2023 is less than that in 2022, but we still continue to look for and focus on new technologies and approaches to optimize the equipment and projects for energy conservation, water conservation and pollution prevention in our plants.

ll a cons	20	2021		22	2023	
Items	Taiwan	China	Taiwan	China	Taiwan	China
Total Capital Expenditure (NT\$ in millions)	431.82	1,053.96	467.24	354.12	302.70	90.16
Capital Expenditure of Energy Conservation, Water Conservation and Pollution Prevention (NT\$ in millions)	34.74	28.66	26.95	45.88	78.47	7.08

Note: Exchange Rate: 1CNY = 4.4 NTD

(5) Use of Recycled Materials and Green Product Management

a. Compliance with laws and regulations

The Company actively follows the trend of green environmental protection and conforms to our customers' requirements of green products, and takes such approaches as a full participation of all employees and a comprehensive implementation of green products in the manufacturing and maintaining. We have formulated "Hazardous Substance Management Procedure ", and manages suppliers, raw materials and product quality accordingly to ensure that products meet relevant international standards on requirements of hazardous substances management (such as: RoHS, REACH, California's Proposition 65, etc.), which are our customers' requirements as well. We have achieved 100% compliance with laws and regulations in 2023.

2023	Number of Cases	Compliance Rate
Compliance Risk Assessment	43	100%

b. Hazardous Substance Management

In order to effectively manage the implementation of suppliers' green products approaches, we compulsorily require suppliers to provide such documents as "Warranty of Non-Use of The Hazardous Substances" and "The Activity in Compliance with REACH Regulation" and other surveys and commitments. We also commission third party inspection organizations to provide reports to verify whether there are hazardous substances. In order to avoid contamination of raw materials, packaging materials and finished printed circuit boards during transportation or

production, we also arrange for XRF testing of raw materials, packaging materials and finished goods every month.

c. Actions of Green Products Management

Item	Subitem	Achievement
		Rate
Commitment/	Warranty of Non-Use of The	100%
Declaration	Hazardous Substances Signed by	
Signing	Suppliers	
Completion Rate	Declaration of Environmental And	100%
	Occupational Health And Safety	
	Management System	
Questionnaire	The Activity in Compliance with	100%
Completion Rate	REACH Regulation	
	Supplier Hazardous Substance	100%
	Questionnaire	
XRF Inspection	Raw Materials/Packaging Materials	100%
Pass Rate	Final Product	100%
Third-Part	Inspection Report Pass Rate	100%

In addition, for raw material suppliers, we conduct regular audit plans every year. For suppliers with audit deficiencies, we will provide specific improvement suggestions and time limit for correction. In order to maintain better mutual understanding and good interaction with our supplier, we will hold seminars and training programs for our supplier from time to time and provide multiple and timely communication channels, such as: Email, telephone or face-to-face communication. We have established a dedicated unit for a direct contact to enhance our suppliers' better understanding of green products.

(6) Waste management

In order to achieve sustainable resources recycling, the Company's principle of waste treatment is to give priority to reuse in the factories and reducing the use of raw materials. The resources which cannot be reused in the factories will be sent to recycling facilities. In the end, those which cannot be recycled will be treated with incineration or other treatments. We have been managing to actively move towards the goal of green industry. The wastes needed to be cleaned up must be clearly classified first, and then be commissioned to the companies obtaining the waste clearance and disposal permission in

accordance with the Waste Disposal Act. All commissioned companies are required to have obtained the waste clearance and disposal permission. Those companies should be under strict selection procedures before the commissions and their performance should be subject to uncompromising audits. Following the correct procedures of clearance and disposal of the wastes, we will file the wastes clearance declaration before their removal, classify them during their removal, and obtain proper disposal documents after their treatment.

The types of waste are divided into two categories: general industrial waste and hazardous industrial waste. Their volume in the past four years is as follows:

Categories Treatment		2020		2021		2022		2023	
Categories	rrealment	kg	kg / M²						
General	Incineration & Physical Treatments	2,204,391	1.49	2,376,451	1.46	2,105,870	1.51	1,241,118	1
	Recycling	1,084,368	0.73	1,112,006	0.68	1,285,258	0.92	1,190,343	0.96
	Incineration & Physical Treatments	932,878	0.63	988,933	0.61	810,080	0.58	697,742	0.56
Hazardous	Chemical Treatments & Stabilization	1,186,812	0.80	1,971,778	1.21	1,414,469	1.01	1,460,648	1.18
	Recycling	2,380,010	1.61	2,762,200	1.7	2,553,879	1.83	2,375,529	1.92

Whether it is general industrial waste or hazardous industrial waste, we gradually enhance the recycling methods to reduce the impact on the environment.

(7) Air Pollution Management

The air pollutants generated in the production of printed circuit boards mainly include acid waste gas, alkaline waste gas and volatile organic waste gas. In our results of air pollution management, the total emissions of all pollutants in 2023 decreased compared with 2022, except for nitrogen oxides which increased by 6%. There will be no emissions of sulfur oxides. And volatile organic compounds and suspended particles decreased by 38% and by 28% respectively.

The Company has been managing to reduce the air pollutants emitted during

production by taking such measures as changing raw materials, increasing the efficiency of collecting air pollutants at the processes of production and properly maintaining equipment for air pollution prevention that the levels of pollutants detected over the years were all lower than the criteria set by the laws and regulations of environmental protection.

In order to reduce more air pollutants emitted by production, in addition to setting up a variety of facilities for air pollution prevention and control, the Company has also actively carried out a lot of projects to improve air pollution prevention. The achievements over the years are as follows:

- Replacing diesel boilers with natural gas boilers in Taoyuan Plants and having reduced annual emission of sulfur oxide by 2.6 kg and of nitrogen oxide by 130.8 kg.
- Centralizing production of aluminum lamination in Pingzhen Plant to reduce consumption of natural gas on idle time in production and having reduced annual emission of nitrogen oxide by 1200 kg.
- Replacing organic 2-1 unit of processing volatile organic compound with zeolite rotor concentrator + CO exhaust gas treatment device in Changshu Plant I and having reduced annual emission of volatile organic compounds by 160 kg.
- Replacing pleated filters in the dust collectors with sintered porous polyethylene (PE) filter in Changshu Plant II and having reduced annual emission by 1721 kg per year.
- Re-modelling the boilers into using low-nitrogen combustion and having reduced annual emission of nitrogen oxide by 1001 kg.

These measures and others have effectively enhanced the efficiency of air pollution prevention and control.

The air pollutants emission intensity by NT\$ 1 million of production value in 2021, in 2022 and in 2023 was 4.27 kg, 3.79 kg and 3.10 kg, which shows a downward trend.

• 2021-2023 Statistics of Air Pollutants Emission

Air Pollutants Emiss	sion and its Inter	nsity			
Pollutant	Unit	Plant	2021	2022	2023
		Taoyuan Plant I	0.0	0.0	0.0
		Taoyuan Plant II	1,100.7	1,053.2	996.7
	kg	Pincheng Plant	1,348.5	1,342.1	1,347.1
Nitrogen oxides		Changshu Plant I	155.0	238.0	310.8
		Changshu Plant II	259.0	1,533.0	372.8
		Total	3,279.74	2,863.2	3,027.4
	kg / NT\$ 1	,000,000 (Revenue)	0.26	0.18	0.22
		Taoyuan Plant I	0.0	0.0	0.0
		Taoyuan Plant II	0.0	0.0	0.0
	kg	Pincheng Plant	0.0	0.0	0.0
Sulfur oxides		Changshu Plant I	0.0	0.0	0.0
		Changshu Plant II	0.0	0.0	0.0
	Total		0.1	0.0	0.0
	kg / NT\$ 1	kg / NT\$ 1,000,000 (Revenue)		0.00	0.00
	kg	Taoyuan Plant I	26,508.2	22,275.3	19,289.4
		Taoyuan Plant II	19,426.1	12,446.3	9,736.1
		Pincheng Plant	9,693.5	12,861.5	5,112.8
Volatile Organic Compounds		Changshu Plant I	1,026.0	1,869.0	1,335.6
Compounds		Changshu Plant II	1,398.0	1,081.0	691.1
		Total	58,051.8	50,533.1	36,165.1
	kg / NT\$ 1	,000,000 (Revenue)	3.74	3.27	2.60
		Taoyuan Plant I	4.2	5.0	6.2
		Taoyuan Plant II	3,817.5	3,076.0	2742.9
	kg	Pincheng Plant	32.8	37.3	37.0
Suspended Particles		Changshu Plant I	205.0	38.8	43.9
i arnolos		Changshu Plant II	1311.0	683.3	1019.9
	Total		5,370.5	3,840.3	3,849.9
	kg / NT\$ 1	,000,000 (Revenue)	0.35	0.25	0.28

(8) Inventory of greenhouse gas emissions and its Assurance

The Company is	The least requirement according to the sustainable developmen road map of listed companies:	
 Companies with capital of more 	■ Inventory only on the	 Inventory on its subsidiaries
than NT\$ 10 billion or Companies in	parent company	included in its consolidated
steel industry or cement industry		financial statements
□ Companies with capital of more	□ Assurance only on the	Assurance on its subsidiaries
than NT\$ 5 billion but less than	parent company	included in its consolidated
NT\$ 10 billion		financial statements
■ Companies with capital of less than		
NT\$ 5 billion		

a. Inventory of greenhouse gas emissions

The Company regularly checks greenhouse gas emission in accordance with ISO 14064-1. The boundary range includes plants in Taiwan and in China, so as to grasp the overall greenhouse gas emission status and to review and set our yearly goals. Our results of the greenhouse gas inventory in 2021, in 2022 and in 2023 were 197,445.978 tons CO2e / year, 173,929.290 tons CO2e / year and 167,093.377 tons CO2e / year, respectively. That in 2022 was 12% lower than that in 2021 and that in 2023 was 15% lower than that in 2022. In response to the requirements of the government and customers, Scope 3 will be included in the scope of inventory of greenhouse gas emissions in 2023. The results of the Scope 3 inventory are 83,651.663 tons CO2e/year, and the total emissions in 2023 will be 250,745.040 tons CO2e/year. We will continue to implement carbon reduction measures to meet the emission targets expected by our customers and the government.

The scope of inventory is as follows:

Category	Scope	Execution Method
Scope 1 Direct greenhouse gas emission	 Direct emissions from stationary combustion, such as electricity generators, boilers Direct emissions from mobile combustion, such as official vehicles, stackers, etc., which consume petrochemical raw materials to produce greenhouse gases. Direct fugitive emissions from the release. 	Qualitative and quantitative examination.
Scope 2 Energy indirect greenhouse gas	Imported electricity	Qualitative and quantitative inspections.

emission		
Soono 2		No inventory
Scope 3 Other indirect greenhouse gas emission	Employees' commuting, outsourcing, such as: waste removal, air/sea/land transportation contractors, etc.	was carried out in 2021, and its inventory begun in 2022.

Unit: tons CO_{2e}/ year

Greenhouse Gas Emissions

Region		Taiwan	China
	Scope 1	5,141.674	4,870.448
0001	Scope 2	102,451.450	84,982.405
2021	Subtotal	107593.124	89,852.854
	Scope 1+ Scope 2	197,445	.978
	Scope 1	2,171.627	1,434.032
	Scope 2	93,838.269	76,485.362
	Subtotal	96,009.896	77,919.394
2022	Scope 1+ Scope 2	173,929	.290
	Scope 3	86,973.725	8,355.247
	Subtotal	182,983.621	86,274.641
	Total	269,258.262	
	Scope 1	4,659.171	2,729.534
	Scope 2	87,032.283	72,672.389
	Subtotal	91,691.454	75,401.923
0000	Scope 1+ Scope 2	167,093.377	
2023	Scope 3 (upstream)	76,538.449	5,665.034
	Scope 3 (downstream)	1,448.181	-
	Subtotal	169,678.083	81,066.957
	Total	250,745	.040

b. Assurance on Inventory of greenhouse gas emissions

Scope 1	Total Emissions (tons CO _{2e})	Carbon Dioxide Equivalent Intensity tons CO _{2e} / NT\$ 1,000,000 (Production Value) (Note 2)	Assurance Agency	Assurance Results (Note 3)	
Taiwan	4,659.171	0.58		Of the total greenhouse gas emissions disclosed by the Company, 7,388.705 tons of CO2e	
China	2,729.534	0.47	Taiwan: BellCERT	(accounting for 3% of the total emissions) has been confirmed by the certification agency using	
Total	7,388.705	0.53	China: BSI		ISAE3410 / ISO 14064-3 standards. The assurance opinion is reasonable assurance / limited assurance / reasonable guarantee / limited guarantee.
Scope 2	Total Emissions (tons CO _{2e})	Carbon Dioxide Equivalent Intensity tons CO _{2e} / NT\$ 1,000,000 (Production Value) (Note 2)	Assurance Agency	Assurance Results (Note 3)	
Taiwan	87,032.283	10.79		Of the total greenhouse gas emissions disclosed by the Company, 159,704.672 tons of	
China	72,672.389	12.45	Taiwan: BellCERT China: BSI	CO2e (accounting for 64% of the total emissions) has been confirmed by the certification	
Total	159,704.672	11.48			agency using ISAE3410 / ISO 14064-3 standards. The assurance opinion is reasonable assurance / limited assurance / reasonable guarantee / limited guarantee.
Scope 3	Total Emissions (tons CO _{2e})	Carbon Dioxide Equivalent Intensity tons CO _{2e} / NT\$ 1,000,000 (Production Value) (Note 2)	Assurance Agency	Assurance Results (Note 3)	
Taiwan	77,986.629	9.67	Taiwan: BellCERT China: BSI	Of the total greenhouse gas emissions disclosed by the Company, 83,651.663 tons of	
China	5,665.034	0.97		total emissions) has been confirmed by the certification	
Total	83,651.663	6.02		agency using ISAE3410 / ISO 14064-3 standards. The assurance opinion is reasonable assurance / limited assurance / limited guarantee / limited guarantee.	

Note:

- Scope 1 and 2 information in this table shall be handled in accordance with the timetable stipulated in Article 10, Paragraph 2 of this Standard. Enterprises may disclose scope 3 information voluntarily. Scope 3 information on the plants in China only includes that on category 3 (indirect greenhouse gas emissions – transportation).
- 2. The Company conduct greenhouse gas inventory according to the following standards:
 - (1) Greenhouse Gas Protocol (GHG Protocol).
 - (2) ISO 14064-1 issued by the International Organization for Standardization (ISO).
- The assurance agency shall comply with the relevant requirements for assurance of sustainability reports, which are stipulated by the Taiwan Stock Exchange Co., Ltd. and the Securities Over-the-Counter Trading Center of the Republic of China.
- 4. Information on subsidiaries can be reported individually, collectively (for example, by country or by region), or combined (Note 1).
- 5. The intensity of greenhouse gas emissions can be calculated per unit of product/service or production value, but at least data calculated in terms of production value (NT\$ million) should be disclosed (Note 2).
- 6. The proportion of operating sites or subsidiaries not included in the inventory shall not exceed 5% of the total emissions. The total emissions mentioned above refer to the emissions calculated according to the mandatory inventory stipulated in Instruction 1.
- 7. The assurance results should summarize the content of the assurance opinion of the assurance agency and attach the complete assurance opinion to the annual report (Note 3).

(9) Climate Change Management Policy

The Company takes the Sustainability Committee as the top authority on climate change management, which is presided by the chairperson of the Board of Directors. It reviews the Company's climate change strategy and goals, manages climate change risks and opportunities, reviews the implementation status and discusses future plans, and reports to the Board of Directors every year.

The Company regularly checks greenhouse gas emissions in accordance

with ISO 14064-1 to review the impact on our operations. Based on the 2024 results of the greenhouse gas inventory, we will continue to implement carbon reduction measures. The third-party assurance on greenhouse gas inventory has been completed in 2023, and the subsidiary in China and the parent company in Taiwan obtained assurance certificates in June 2023. The assurance for 2024 is also in progress. The subsidiary in China has obtained the assurance certificate in March 2024. The parent company in Taiwan is expected to complete the third-party assurance on greenhouse gas inventory in May and is expected to receive the assurance certificate in July.

At the same time, in accordance with the framework developed by the Task Force on Climate-related Financial Disclosures (TCFD) published by the Financial Stability Board, the Company have considered the characteristics of the production process and supply chain in the PCB industry, and evaluated the risks and opportunities of climate change for the Company. In order to reduce the risk factors, the Company has also established the Sustainability Committee to supervise and manage issues on environmental conservation and climate change, to identify feasible opportunities and develop proper approaches, and to evaluate and manage the short-term, medium- term and long-term risks and to develop the transformation strategies for climate change. The committee use the "risk matrix" to evaluates the frequency of major climate risk events and the severity of their impact on our operations, to prioritize items of risk control and define a full spectrum of risk levels and to take proper approaches of risk control to deal with issues with different risk level. In the long-term, our vision is to implemented in the Company the system developed by Task Force on Climate-Related Financial Disclosure (TCFD) and to disclose the TCFD report. The Company is planning to gradually improve our related disclosure from "climate risk disclosure" to "climate-related financial disclosure", and to establish a target management and a disclosure mechanism, which are based all on quantitative performance indicators.

a. Framework for Climate Risk and Opportunities

Working Group I report in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) states that the average global surface temperature from 2011 to 2020 was approximately 1.09°C higher than the average temperature from 1850 to 1900, representing the preindustrialization period. The report explicitly indicates the need for active

measures such as net-zero carbon emissions or carbon neutrality to control global warming and limit temperature increase to no more than 1.5°C.

In the face of highly uncertain climate risks and the global pursuit of net-zero carbon emissions, the Financial Stability Board (FSB) has introduced the Task Force on Climate-Related Financial Disclosures (TCFD) framework to assist enterprises in managing climate-related issues.

We recognize that climate change risks and opportunities for enterprises should not only be identified but also linked to operational strategies through assessment and management. This is one of the most critical issues of sustainable management for enterprises. Therefore, the Company has adopted the TCFD framework to analyze risks and opportunities in various aspects, such as policy and regulations, market and technological transitions, reputational and physical risks. We develop adaptation and mitigation strategies, disclose climate-related financial information, and enhance communication with stakeholders.

Framework	Strategies and Actions	
Governance	 "Board of Directors": It reviews sustainable management strategies, major action plans, risk management policies, and annual execution results. "Sustainable Development Committee": This is the highest management committee responsible for climate-related issues, which is chaired by the Chairperson, independent directors and CEO with department heads overseeing the operation of subsidiary committees. The committee includes representatives from all operational units and is responsible for establishing and implementing guidelines for ESG issues, reviewing performance targets, monitoring implementation, and reporting to the Board of Directors annually. "Greenhouse Gas Audit Team": Under the jurisdiction of the Sustainable Development Committee, this team is primarily responsible for assessing and/or managing climate-related issues, reviewing key performance indicators, setting short, medium, and long-term goals, and implementing strategies to enhance resource efficiency, to assess the use of renewable energy and to 	

Framework	Strategies and Actions
	manage carbon emissions, and actively achieving effective green management.
Strategy	 Five opportunities and ten risks have been identified based on the TCFD framework. Three different warming scenarios are analyzed to assess the potential financial impacts of climate change on the Company's operations. Guided by the "ESG Policy" and "Environmental Resource Policy," plans and actions are implemented to mitigate climate change-related issues, while staying updated on global climate action trends and continuously striving towards carbon neutrality goals.
Risk Management	 Based on the range and conditions of climate change impacts, risks are scored according to the probability and severity of physical and transitional risks (degree of impact). They are then divided into different quadrants. For risks of high- frequency and of high-severity, the management measures are developed through cross-departmental discussions.
Indicators & Goals	 Climate change-related management indicators are set, including: Greenhouse gases: Greenhouse gas emission intensity (tCO2e / NT\$ 1 million of production values) will remain below 12.35 in 2024 and below 12.09 in 2026. (Based on Scope 1 + Scope 2) Water resources: Water consumption intensity (ML / NT\$ 1 million of production values) will remain below 0.239 in 2024 and below 0.236 in 2026. Energy management: The power consumption intensity (GWh / NT\$ 1 million of production values) will remain below 20.973 in 2024 and below 20.752 in 2026. In accordance with the Greenhouse Gas Inventory Guidelines and ISO 14064-1 standard, our emissions inventory has been audited and verified by a third-party to assess the climate change impacts faced by the Company and to implement mitigation measures. The third-party assurance on greenhouse gas inventory has been completed in 2023, and the subsidiary in China and the parent company in Taiwan obtained assurance certificates in June 2023. The assurance for 2024 is also in progress. The subsidiary in China has obtained the assurance certificate in March 2024. The parent company in Taiwan is expected to complete the third-party assurance on greenhouse gas inventory in May and is expected to receive the assurance certificate in July.

Framework	Strategies and Actions	
	• In response to regulations on climate change and greenhouse gas reduction, our targets for greenhouse gas reduction have	
	been set for 2025 (-25%) and 2050 (net zero).	

b. Identification of Climate Change Risks and Opportunities

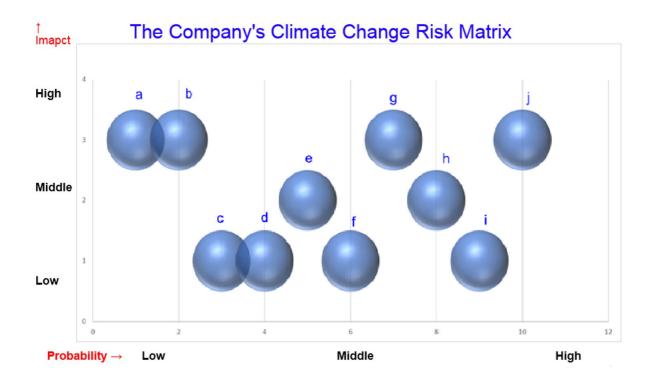
Through relevant departments within the "Sustainable Development Committee," climate change risks and opportunities that may be faced within their business scope respectively are identified and analyzed. Using a matrix based on the probability (3 levels) and impact (3 levels) of each risk and opportunity, significant risks and opportunities are identified, and management measures are developed to mitigate, transfer, or avoid potential impacts. The matrix analysis indicate that transitional and physical risks include total amount control, carbon emissions trading, changes in average rainfall, uncertainty of new regulations, carbon taxes, energy taxes / fuel taxes, renewable energy regulations, etc. In terms of opportunities, they include production processes, low-carbon energy, water utilization, alternative or diversified resources, etc.

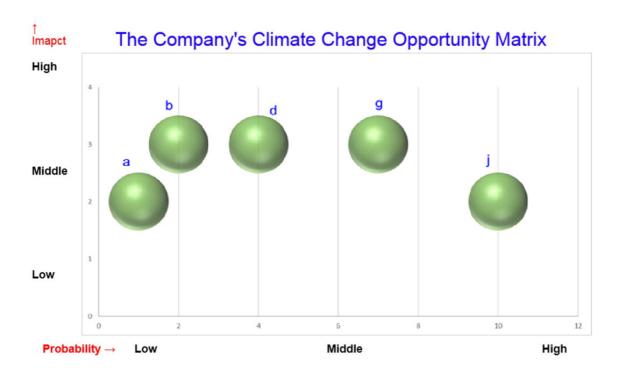
Indicator	Description	Risk Level
Exposure	lalimata ahanga	1 : Below NT\$ 200,000 2 : NT\$ 200,000~1,000,000 3 : Above NT\$ 1,000,000
Vulnerability		1: completely or almost unlikely 2: likely to happen 3: very likely or certainly to happen
Hazard	Probability of climate disasters occurring in the future	1 : 50%↓ 2 : 50~90% 3 : 90%↑

Indicator	Description	Risk Level
Renetit	Benefits from the resources invested	1 : Below NT\$ 1,000,000 2 : NT\$ 1,000,000~5,000,000 3 : Above NT\$ 5,000,000
Positivity	Likelihood that the business will be subject to positive change	1: completely or almost unlikely 2: likely to happen 3: very likely or certainly to happen
Occurrence	Probability of external opportunities occurring in the future	1 : 50%↓ 2 : 50~90% 3 : 90%↑

Hazard / Benefit		Low	Middle	High	Low	Middle	High	Low	Middle	High	Vulnerability / Occurrence	
		1	2	3	1	2	3	1	2	3	ramorasimy / cocarrones	
	High	3	М	М	Н	М	Н	Н	Н	Н	Н	
	Middle	2	L	L	М	L	M	Н	М	Н	Н	
	Low	1	L	L	М	L	L	M	L	М	Н	
Climate Risk Assessment		1		2		3			Exposure / Positivity			
			Low			Middle			High		Exposure / Positivity	

Code	Assessment Item	Pisk				Risk Status	Opportunity			opportunity Status	
		Impact Probability					Impact Probability				
		Exposure	Hazard	Vulnerability	Hazard * Vulnerability		Positivity	Benefit	Occurrence	Benefit * Occurrence	
а	Triggered Natural Resource Changes	3	1	2	2	Middle	2	1	3	3	Middle
b	Introduction of New Technologies (low- carbon, environmentally friendly technologies, etc.)	3	2	1	2	Middle	3	3	2	6	High
С	Sea Level Rise	1	2	3	6	Middle	-	-	-	-	-
d	Regulatory Compliance (renewable energy, carbon emissions, etc.)	1	3	3	9	High	3	1	2	2	Middle
е	Mandatory Reporting (carbon emissions, air pollution control)	2	3	3	9	High	-	-	-	-	-
f	Temperature Changes	1	3	2	6	Middle	-	-	-	-	-
g	Investment in New Equipment	3	2	2	4	High	3	3	2	6	High
h	New Tax Systems (fuel/energy/carbon taxes)	2	2	3	6	High	-	-	-	-	-
i	Shifts in Rainfall Patterns	1	3	2	6	Middle	-	-	-	-	-
j	Total Amount Control / Carbon Emissions Trading	3	3	3	9	High	2	3	3	9	High





Category	Source of Risk/Opportunity	Risk Detail	Category	Impact/Relevance	Likely Time to Occur
	New Tax Systems (carbon taxes)	Carbon tax	Transformational	High	Medium-term
	Mandatory Reporting (carbon emissions, air pollution control)	Carbon emissions control	Transformational	High	Medium-term
	Triggered Natural Resource Changes	Requirements for the proportion of renewable energy	Transformational	Middle	Medium-term
	Total Amount Control / Carbon Emissions Trading	Increased requirements for climate information disclosure	Transformational	High	Medium-term
Transformational / Physical Risks	Total Amount Control / Carbon Emissions Trading	More demand from customers for verification of implementation on sustainable development	Transformational	High	Medium-term
	Introduction of New Technologies (low-carbon, technologies)	Low carbon technology transformation	Transformational	Middle	Long-term
	New Tax Systems (fuel/energy tax)	Rising fossil fuel prices and changes to tax requirements	Transformational	High	Long-term
	Regulatory Compliance (renewable energy, carbon emissions, etc.)	Uncertainty of new regulations	Transformational	High	Medium-term
	Temperature Changes	Extreme temperature changes	Physical	Middle	Long-term
	Shifts in Rainfall Patterns	Changes in rainfall patterns and distribution	Physical	Middle	Long-term
	Investment in New Equipment	Production processes	Opportunity	High	Long-term
Oppostupitu	Triggered Natural Resource Changes	Low carbon energy	Opportunity	Middle	Medium-term
Opportunity	Triggered Natural Resource Changes	Water utilization	Opportunity	Middle	Medium-term
	Triggered Natural Resource Changes	Alternative or multi-sourced resources	Opportunity	Middle	Medium-term
Remarks: Short-terr	n: 1~3 years; Medium-term: 4~7 years; Long-t	term: more than 7 years			

Risk Sources	Category	Occurrence	Impact	Management Measures
Total Amount	Category	Occurrence	China - In response to Suzhou's	Follow the ISO14064
Control / Carbon Emissions Trading (Increased requirements for climate information disclosure) (More demand from customers for verification of implementation on sustainable development)	Transfor- mational	Medium- term	energy development plan, Changshu Plants implements energy transformation from six aspects such as energy, supply, structure, industry, technology and change. Facing more stringent power and carbon total amount control in the future, we need to consider equipment with capability of power saving and low carbon emissions when we are planning to expand our operation scale and production capacity.	greenhouse gas inventory standard to implement inventory operations, and continuously monitor and manage to reduce carbon emission intensity. Continue to expand R&D capabilities and cooperate with equipment manufacturers and material manufacturers to develop low-carbon technologies.
Shifts in Rainfall Patterns (Changes in rainfall patterns and distribution)	Physical	Long-term	Most of the rainfall is concentrated in some areas, leading to water shortages.	 Regularly monitor the water situation. At the initial stage of construction, each plant has taken into account the usage and retention of water resources and has set up water storage tanks in the plant. In normal times, track the storage volume of reservoirs in each region and monitor and manage the water usage of each plant. Hold a contingency meeting during the drought. The emergency response team for water usage will make unified scheduling of water trucks, water tanks, water sources and other

Risk Sources	Category	Occurrence	Impact	Management Measures
				water resources to ensure
Regulatory Compliance (renewable energy, carbon emissions, etc.) Triggered Natural Resource Changes	Transfor- mational	Medium- term	"Climate Change Response Act", "Renewable Energy Development Act ", "Sustainable Development Roadmap for Listed Companies" and other regulations and requirements in the future.	uninterrupted operation. Continue to pay attention to the trend of regulations and assess the content of the drafts of new regulations.
New Tax Systems (carbon taxes) Introduction of New Technologies (low-carbon technologies)	Transfor- mational	Medium- term	"Climate Change Response Act" will levy carbon fees in Taiwan, which will limit capacity expansion and increase operating costs. The installation and operation of carbon reduction equipment will increase operating costs.	 Follow the ISO 14064 greenhouse gas inventory standard, implement inventory and continuous monitoring management and reduce carbon emission intensity. Continue to expand R&D capabilities and cooperate with equipment manufacturers and material manufacturers to develop low-carbon technologies. Set carbon reduction goals, continuously evaluate and plan carbon offset strategies, and move towards the goal of carbon neutrality.
New Tax Systems (fuel / energy taxes)	Transfor- mational	Long-term	The introduction of energy tax and fuel tax will increase operating expenses.	 Pay attention to changes in laws and regulations, and establish the responsive measures in advance to meet the requirements of laws and regulations. Improve energy efficiency through equipment improvement and renewal.
Triggered Natural Resource Changes (Requirements for the proportion of renewable energy) Regulatory Compliance (renewable energy)	Transfor- mational	Medium- term	In response to the regulations on the development of renewable energy, the plants in Taiwan will install and use renewable energy in accordance with the regulations, which will increase capital expenditure.	Plan the use of renewable energy according to the demand and evaluate the installation of solar photovoltaic before 2030.
Temperature Changes (Extreme temperature changes)	Physical	Long-term	The average temperature rises in summer. In order to maintain the temperature and humidity conditions in the plants, more airconditioning systems need to be turned on to meet the demand for production or electricity.	Improve the efficiency of the air conditioning system and install inverters for intelligent control, which can reduce energy usage and greenhouse gas emissions

Opportunity Sources	Category	Occurrence	Impact
Investment in New Equipment (Production processes)	Long- term	 Reduce the defective rate of products to reduce the cost of scrapping. Reduce the consumption of other potions to reduce the cost of potions. 	 Introduce circular economy thinking to reduce carbon emissions and energy usage. Introduces new potions used in the plating process.
Triggered Natural Resource Changes (Low carbon energy)	Medium -term	The boilers in our plants used to use fuel oil, diesel oil, etc. as fuel, and have gradually changed the fuel source to natural gas, which can effectively reduce the greenhouse gas emissions generated by burning fossil fuels.	Continue to replace high-energy- consuming equipment and improve energy efficiency before 2025, plan to use renewable energy and solar photovoltaic devices before 2030, and continue to pay attention to the trend of laws and policies to promote improvement plans for low-carbon and energy-saving.
Triggered Natural Resource Changes (Water utilization)	Medium -term	Improve water usage efficiency and reduce dependence on raw water.	 Recycle the water used in production, monitor the water quality of recycled water, direct them to proper systems according to their water quality, and continuously improve the recycling rate of used water.
Triggered Natural Resource Changes (Alternative or multisourced resources)	Medium -term	Improve the climate resilience and risk tolerance of the supply chain and stabilize supply sources.	Plan to assess and manage procurement risks through cross-departmental supply chain management.

c. Climate Transition Scenario Analysis

Based on the identification of climate risks, the Company has conducted an analysis of three different warming scenarios such as RCP2.6, RCP4.5-6.0, and RCP8.5, which are projected for the year 2050. These scenarios represent three scenarios with strict temperature control, with attempts to reduce greenhouse gas emissions and with no attempts at all respectively. We have made the parametric assumptions on the transformational and physical risk factors and estimated financial impacts. The risk factors assumed were carbon taxes, market share and changes in temperature and precipitation. We have conducted the simulations based on them. In all three scenarios, the primary financial impacts were increased costs and decreased revenue.

Item		Scenario Analysis				
		RCP2.6 (low emission)	RCP4.5-6.0 (stable / moderate emission)	RCP8.5 (high emission)		
Transformational Risk Factors	Emission Intensity (tCO2e / NT\$ 1 million of production value)	15.5	12	-		
	Market Share (%)	Down by 3%-5%	Down by 3%-5%	-		
Physical Pick	Temperature	<1.5℃	+0.9~2.3℃	+3.2~5.4℃		
Physical Risk Factors	Rainfall (mm / day)	4.2 mm / day	4.55 mm / day	4.8 mm / day		
Impact on Financials		Carbon tax leads to cost increase. Products are replaced by low-carbon products, resulting in decrease of the revenue.	Carbon tax leads to cost increase. Products are replaced by low-carbon products, resulting in decrease of the revenue.	Extreme weather causes damage to equipment and interrupt operations. Extreme weather leads to supply chain disruption.		

- Note 1: Representative Concentration Pathways (RCP) are "scenario assumptions" for different levels of anthropogenic greenhouse gas emissions.
- Note 2: RCP2.6 represents a scenario with relatively lower greenhouse gas increases. Radiative forcing peaks around the mid-21st century at 3Wm-2, approximately equivalent to a carbon dioxide concentration of 490ppm, and then gradually declines by the end of the 21st century. This scenario assumes strict temperature control by countries and significant reductions in greenhouse gas emissions.
- Note 3: RCP4.5-6.0 represents a scenario where radiative forcing stabilizes by the end of the 21st century, ranging from approximately 4.5Wm-2 to 6Wm-2, approximately equivalent to carbon dioxide concentrations of 650-850ppm. It signifies efforts by countries to achieve greenhouse gas reduction targets while maintaining moderate to moderately high emissions.
- Note 4: RCP8.5 represents a scenario with a continuous increase in radiative forcing exceeding 8.5Wm-2, resulting in carbon dioxide concentrations greater than 1,370ppm. This represents the worst-case scenario with no reduction in greenhouse gas emissions by countries and high emissions continuing.
- Note 5: The decrease in market share is attributed to the continuous high expectations and requirements for green products in the market.