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7.1 ESG Data Sheet

7.1.1 TCC Key Indicators — Governance

7.1.1.1 2025 TCC Tax Information Unit: NT\$1,000

	Mainland China (including							
Region	Taiwan	Hong Kong)	Portugal	Türkiye	Africa	Other	Total	
Operating Revenue	50,858,472	30,080,290	29,910,741	28,800,702	1,665,611	8,488,319	149,804,135	
Income Tax Payable	2,115,888	279,886	843,585	1,583,521	28,366	84,660	4,935,906	
Income Tax Paid	2,378,475	484,796	1,103,345	1,619,014	66,166	162,157	5,813,953	
Profit Before Tax	(25,511,812)	(1,931,262)	9,609,468	10,493,191	(329,903)	3,179,512	(4,490,806)	
Proportion of Income	41%	8%	19%	28%	1%	3%	100%	
Tax Paid by Region								
Primary Activities	Cement manufacturing and distribution, logistics transportation, manufacturing and distribution of slag powder, sand and gravel screening and ready-mixed concrete sales, waste removal and disposal, resource recycling technology development, etc.		Investment holding, renewable energy and energy storage construction, renewable energy and charging business, electric vehicle charging equipment, production of cement, clinker and concrete .	Production of cement, clinker and concrete.	Cement grinding and production.	Investment holding, production and sales of cement ready-mixed concrete, renewable energy and charging business, battery research, development and sales, shipping transportation , and other activities.		
Effective Tax Rate								(25.8%)
Cash Tax Rate								(63.23%)

Note 1: The data in the above table is presented without eliminating related party transactions that should be included in the consolidated entity.

Note 2: For the number of employees, please refer to [CH 7.1.3.1 2025 Employee Diversity Composition](#)

7.1.1.2 Financial Performance for the Past Three Years Unit: NT\$ for EPS & DPS; NT\$1,000 for the remainders

Type	Item	2023	2024	2025
Economic Value Generated	Operating Revenue	109,314,335	154,606,511	149,804,135
	Operating Income (Loss)	10,030,160	17,126,617	10,077,592
	Non-operating Income and Expenses	4,326,671	5,706,142	(19,507,088)
Economic Value Distributed	Operating Costs	88,780,566	121,878,486	122,246,546
	EPS	1.06	1.45	(1.60)
	DPS	1	1	0.8
	Cash Dividend per Share	1	1	0.8
	Stock Dividend per Share	0	0	0
	Income Tax	4,352,218	7,203,262	2,433,090
	Employee Wages and Benefits	10,606,016	18,140,124	19,539,878
Economic Value Retained	Retained Earnings	70,576,781	72,771,952	54,358,169

7.1.1.3 Table of Significant Environmental Law/Regulation Violations in 4 Years

Items	2022	2023	2024	2025
Violations of Legal Obligations/Regulations	1	0	6	12
Amount of Fines as the Result of Significant Penalty Cases Above (Unit: NT\$1,000)	425	0	20,610	28,136
Accrued Year-end Penalty Amount (Unit: NT\$1,000)	0	0	0	0

Note 1: A significant penalty event is defined as any single penalty with an amount exceeding USD 10,000.

7.1.1.4 Contributions & Other Spending in 4 Years Unit: NT\$

Total Invested Amount	2022	2023	2024	2025
Lobbying, Interest Representation or Similar	0	0	0	0
Local, Regional or National Political Campaigns / Organizations / Candidates	800,000	700,000	10,000	2,449,343
Trade Associations or Tax-exempt Groups (e.g. Think Tanks)	54,230,375	45,175,671	55,945,099	4,970,061
Other (e.g. Spending Related to Ballot Measures or Referendums)	0	0	0	287,667
Total	55,030,375	45,875,671	55,955,099	7,707,071
Data Coverage	100%	100%	100%	100%

Note 1: The scope expanded in 2024 due to the merger with the European subsidiary, resulting in an increase in public participation expenses compared to the previous three years.



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7.1.1.5 Number of Significant Suppliers and Procurement Share in 2025

Items	Cement and Environmental Protection Business (Asia)	Energy for Social Transformation Business	Total
Total Number of Tier-1 Suppliers	3,144	432	3,456
Total Number of Significant Suppliers in Tier-1	249	18	265
Share of Significant Suppliers in Tier-1	7.92%	4.17%	7.67%
Share of Total Spend on Significant Suppliers in Tier-1	81.25%	86.67%	82.69%
Total Number of significant suppliers in non-Tier-1	29	0	29
Total Number of Significant Suppliers (Including Tier-1 and non-Tier-1)	278	18	294

Note 1: Due to overlapping suppliers between Cement and Environmental Protection Business (Asia) and Energy for Social Transformation Business, the "Total" column does not represent a direct sum.

7.1.1.6 Supplier Assessment Performance and Targets for 2025

Supplier Assessment	2025	2025 Target
Total Number of Suppliers Assessed (via Desk Assessments/On-site Assessments)	306	275
Results		
Number of Significant Suppliers with Substantial Actual/Potential Negative Impacts	10	-
Share of Suppliers with Agreed Corrective Action/Improvement Plan	100%	-
Number of Significant Suppliers with Substantial Actual/Potential Negative Impacts that were terminated	1	-
Supplier Corrective Plan Performance and Targets		
Total Number of Significant Suppliers with Substantial Actual/Potential Negative Impacts Expected to Be Supported in Corrective Action Plan Implementation	10	100%
Total Number of Suppliers Supported in Corrective Action Plan Implementation	9	-
Performance and Targets of Suppliers Capacity Building Programs		
Total Number of Suppliers in Capacity Building Programs	148	135

Note 1: The scope covers Cement and Environmental Protection Business in Taiwan and Mainland China.

7.1.1.7 2025 Mean Salary and Median Salary of Full-Time, Non-Managerial Employees and Their Historical Differences in Taiwan Unit: NT\$,1,000

Items	2024	2025	Difference
“Mean Salary” of Full-Time, Non-Managerial Employees	1,003	995	-0.80%
“Median Salary” of Full-Time, Non-Managerial Employees	877	895	2.05%

Note 1: This table discloses salary information for Taiwan based on the "Instructions for Reporting Salary Information of Full-Time Employees Not Holding Supervisory Positions" issued by the Taiwan Stock Exchange.

7.1.1.8 2025 Cement and Concrete Production

Product Category	Cement and Environmental Protection Business (Asia)	Cement and Environmental Protection Business (Europe-Africa)
Total Clinker Production (tons)	29,353,566.20	12,607,407.27
Total Cement Production (tons)	31,511,995.55	16,820,936.84
Total Production of Cementitious Materials (tons)	36,800,228.88	17,208,596.94
280 Specification Concrete (m³)	2,983,553.50	-
350 Specification Concrete (m³)	654,686.50	-
420 Specification Concrete (m³)	467,035.50	-
Total concrete production (m³)	5,999,772.00	12,593,706.31



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7.1.2 TCC Key Indicators — Environmental

7.1.2.1 Global Environmental Management Certification Unit: site

Certification Item	Cement and Environmental Protection Business (Asia)	Cement and Environmental Protection Business (Europe-Africa)	Energy for Social Transformation Business	Other Business Groups
ISO 14001 Environmental Management System (EMS)	29 sites	2 sites	1 site	9 sites
ISO 14046 Water Footprint	22 sites			
ISO 14064 GHG Management	21 sites	1 site	1 site	7 sites
ISO 14067 Carbon Footprint of Product	5 sites			2 sites
ISO 46001 Water Efficiency Management Systems	6 sites			
ISO 50001 Energy Management Systems	26 sites	2 sites	1 site	2 sites
Clean Production System Certification, Green Factory Label	6 sites			

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 2: TCC's cement products of Portland Series obtained the Carbon Footprint Label (MOE Taiwan), Carbon Footprint Reduction Label (MOE Taiwan), Gold-rated Green Mark (MOE Taiwan), Low-carbon Product Certification (Mainland China), and EPD Type III Environmental Product Declaration; TCC's concrete products of Portland Series obtained the Carbon Footprint Label (MOE Taiwan), Carbon Footprint Reduction Label (MOE Taiwan), Green Building Material Label (MOI Taiwan), Low-carbon Circular Building Material Certification (MOI Taiwan), and EPD Type III Environmental Product Declaration.

7.1.2.2 GHG Emissions in 4 Years Unit: tCO₂e

Item	2022	2023	2024	2025
Scope 1				
Cement and Environmental Protection Business (Asia)	25,029,617	20,882,254	23,612,270	23,297,449
Cement and Environmental Protection Business (Europe-Africa)	-	-	9,183,229	10,851,215
Energy for Social Transformation Business	7,380,815	7,995,242	6,936,330	7,468,538
Other Business Groups	-	-	-	66,670
Total	32,410,432	28,877,496	39,731,829	41,683,872
Scope 2 (Location-based method)				
Cement and Environmental Protection Business (Asia)	1,065,054	852,329	906,941	930,673
Cement and Environmental Protection Business (Europe-Africa)	-	-	482,671	609,848

Item	2022	2023	2024	2025
Energy for Social Transformation Business	750	1	2,787	541
Other Business Groups	-	-	-	56,444
Total	1,065,804	852,330	1,392,399	1,597,506
Scope 2 (Market-based method)				
Cement and Environmental Protection Business (Asia)	1,065,054	852,329	891,510	896,035
Cement and Environmental Protection Business (Europe-Africa)	-	-	537,745	632,707
Energy for Social Transformation Business	750	1	2,787	541
Other Business Groups	-	-	-	55,805
Total	1,065,804	852,330	1,432,042	1,585,089
Scope 1 + Scope 2 (Market-based) Total				
Cement and Environmental Protection Business (Asia)	26,094,671	21,734,583	24,503,781	24,193,484
Cement and Environmental Protection Business (Europe-Africa)	-	-	9,720,974	11,483,921
Energy for Social Transformation Business	7,381,565	7,995,243	6,939,117	7,469,080
Other Business Groups	-	-	-	122,475
Total	33,476,236	29,729,826	41,163,872	43,268,961
Scope 3				
Cement and Environmental Protection Business (Asia)	17,428	1,385,299	2,329,250	3,282,338
Cement and Environmental Protection Business (Europe-Africa)	-	-	1,867,000	2,890,242
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	1,277,280
Total	17,428	1,385,299	4,196,250	7,449,861

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 2: The newly disclosed scope in 2023 includes Ho Sheng Mining Co., Ltd. The newly disclosed scope in 2024 includes Longshan, Huaihua, and Liaoning cement plants; Fuzhou and Liuzhou grinding plants; Feng Sheng Enterprise Co., 123 Environmental Protection Technology Co., Ltd., Beijing TCC Environmental Technology Co., Ltd., TCC (Guangdong) Renewable Resources Technology Co. Ltd., CIMPOR, OYAK Cement, and the European Operations Headquarters. The newly disclosed scope in 2025 includes mining company in Taiwan and Mainland China, Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 3: CIMPOR and OYAK Cement were officially included in TCC's consolidated financial statements starting from March 2024. Therefore, the GHG emissions presented above only account for the period from March to December 2024.

Note 4: The GHG emissions were inventoried in terms of operational control. The formula used is emissions = activity data × emissions factor (EF) × global warming potential (GWP).

Note 5: The scope 3 emissions cover all 15 categories defined by the GHG Protocol.

Note 6: To comply with the requirements of the Financial Supervisory Commission, this table adopts the greenhouse gas GWP values from IPCC AR6 for calculation.



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7.1.2.3 Total Emissions of Various Greenhouse Gases
for Scope 1 and Scope 2 in 3 Years Unit: tCO₂e

Item	2023	2024	2025
CO₂			
Cement and Environmental Protection Business (Asia)	26,238,465	23,627,754	23,274,455
Cement and Environmental Protection Business (Europe-Africa)	-	-	10,822,265
Energy for Social Transformation Business	-	-	7,434,071
Other Business Groups	-	-	63,117
Total	26,238,465	23,627,754	41,593,908
CH₄			
Cement and Environmental Protection Business (Asia)	2,286	2,640	1,829
Cement and Environmental Protection Business (Europe-Africa)	-	-	10,828
Energy for Social Transformation Business	-	-	2,224
Other Business Groups	-	-	108
Total	2,286	2,640	14,989
N₂O			
Cement and Environmental Protection Business (Asia)	6,684	6,933	7,294
Cement and Environmental Protection Business (Europe-Africa)	-	-	18,123
Energy for Social Transformation Business	-	-	32,056
Other Business Groups	-	-	764
Total	6,684	6,933	58,237
HFCs			
Cement and Environmental Protection Business (Asia)	7,787	2,052	4,925
Cement and Environmental Protection Business (Europe-Africa)	-	-	-
Energy for Social Transformation Business	-	-	187
Other Business Groups	-	-	1,741
Total	7,787	2,052	6,853
SF₆			
Cement and Environmental Protection Business (Asia)	395	315	9,048
Cement and Environmental Protection Business (Europe-Africa)	-	-	-
Energy for Social Transformation Business	-	-	-
Other Business Groups	-	-	302
Total	395	315	9,351
Biogenic CO₂ Emissions			
Cement and Environmental Protection Business (Asia)	-	-	1,101,042
Cement and Environmental Protection Business (Europe-Africa)	-	-	596,003
Energy for Social Transformation Business	-	-	-
Other Business Groups	-	-	16
Total	-	-	1,697,061

Item	2023	2024	2025
GHG Removals			
Cement and Environmental Protection Business (Asia)	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	-	-	-
Energy for Social Transformation Business	-	-	-
Other Business Groups	-	-	-
Total	-	-	-

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 2: The newly disclosed scope in 2023 includes Ho Sheng Mining Co., Ltd. The newly disclosed scope in 2024 includes Longshan, Huaihua, and Liaoning cement plants; Fuzhou and Liuzhou grinding plants; Feng Sheng Enterprise Co., 123 Environmental Protection Technology Co., Ltd., Beijing TCC Environmental Technology Co., Ltd., and TCC (Guangdong) Renewable Resources Technology Co., Ltd. The newly disclosed scope in 2025 includes Cement and Environmental Protection Business (Europe-Africa), Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 3: To comply with the requirements of the Financial Supervisory Commission, this table adopts the greenhouse gas GWP values from IPCC AR6 for calculation.

Note 4: The 2025 disclosure newly adds "biogenic CO₂ emissions " and "GHG removals."

Note 5: From 2023 to 2025, there were no emissions of PFCs and NFs.

7.1.2.4 Energy Use in 4 Years

Energy Consumption Converted to GJ	2022	2023	2024	2025
Coal				
Cement and Environmental Protection Business (Asia)	93,922,278	76,556,061	64,368,380	81,465,390
Cement and Environmental Protection Business (Europe-Africa)	3,143,557	3,066,636	2,703,927	3,543,996
Energy for Social Transformation Business	73,735,718	79,333,950	69,716,746	75,049,697
Other Business Groups	-	-	-	-
Total	170,801,553	158,956,647	136,789,053	160,059,083
Coke				
Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	-	-	-	1,639,722
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	-	-	-	1,639,722
Petroleum Coke				
Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	29,948,674	29,678,272	32,422,512	28,060,660
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	29,948,674	29,678,272	32,422,512	28,060,660



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Energy Consumption Converted to GJ	2022	2023	2024	2025
Diesel				
Cement and Environmental Protection Business (Asia)	527,966	478,730	579,002	644,148
Cement and Environmental Protection Business (Europe-Africa)	311,674	319,410	992,452	1,239,664
Energy for Social Transformation Business	267,204	130,002	303,557	163,935
Other Business Groups	-	-	-	230,689
Total	1,106,844	928,142	1,875,011	2,278,436
Gasoline				
Cement and Environmental Protection Business (Asia)	14,594	14,703	32,474	19,362
Cement and Environmental Protection Business (Europe-Africa)	17,853	26,691	29,284	24,006
Energy for Social Transformation Business	486	246	224	-
Other Business Groups	-	-	-	884
Total	32,933	41,640	61,982	44,252
Purchased Electricity				
Cement and Environmental Protection Business (Asia)	7,365,600	6,390,020	8,626,494	7,233,866
Cement and Environmental Protection Business (Europe-Africa)	5,080,290	5,241,175	5,806,177	5,627,569
Energy for Social Transformation Business	5,451	10	20,312	4,112
Other Business Groups	-	-	-	358,723
Total	12,451,341	11,631,205	14,452,983	13,224,271
Power Gen-eration by Waste Heat Recovery				
Cement and Environmental Protection Business (Asia)	3,308,400	2,794,580	3,374,714	3,044,060
Cement and Environmental Protection Business (Europe-Africa)	267,507	269,414	254,794	349,708
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	3,575,907	3,063,994	3,629,508	3,393,768
Natural Gas				
Cement and Environmental Protection Business (Asia)	58	58	320	458
Cement and Environmental Protection Business (Europe-Africa)	233,112	253,732	268,125	363,856
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	346,070
Total	233,170	253,790	268,445	710,385
Alternative Fuels				
Cement and Environmental Protection Business (Asia)	6,336,276	9,862,413	14,856,604	14,356,294
Cement and Environmental Protection Business (Europe-Africa)	9,312,291	10,754,476	11,695,266	14,001,088
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	15,648,567	20,616,889	26,551,870	28,357,382
Renewable Energy				
Cement and Environmental Protection Business (Asia)	4,310	60,600	250,531	347,484
Cement and Environmental Protection Business (Europe-Africa)	36,505	41,453	672,284	465,496
Energy for Social Transformation Business	1,161	2,377	2,909	3,031
Other Business Groups	-	-	-	12,048
Total	41,976	104,430	925,724	828,059

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 2: The newly disclosed scope in 2024 includes Longshan, Huaihua, and Liaoning cement plants; Fuzhou and Liuzhou grinding plants; Feng Sheng Enterprise Co., 123 Environmental Protection Technology Co., Ltd., Beijing TCC Environmental Technology Co., Ltd., and TCC (Guangdong) Renewable Resources Technology Co., Ltd., CIMPOR, and OYAK Cement. The newly added disclosure scope in 2025 includes Mining Companies in Taiwan and Mainland China, Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 3: The coal calorific values are determined by location: 5,607 kcal/kg for Taiwan, 5,213 kcal/kg for Mainland China, and 5,897 kcal/kg for CIMPOR and OYAK Cement. Calorific values for other fossil fuels are based on data published by the Energy Administration, MOEA: diesel (8,629 kcal/l), gasoline (7,520 kcal/l), electricity (3,600 GJ/million kWh), natural gas (8,710 kcal/m³), coke (6,703 kcal/kg), and petroleum coke (8,521 kcal/kg).

Note 4: Energy consumption is based on data declared to the Energy Administration.

Note 5: Certain energy types (heavy oil, fuel oil, and liquefied petroleum gas) are excluded from the table due to their negligible actual consumption.

7.1.2.5 2025 Energy Conservation Plans

Energy-Saving Plans	Operating Sites	Energy Saved
Water Dispenser Energy Saving	Bade Branch, Taoyuan2 nd Branch, Kaohsiung Plant	Electricity saved 4,502 kWh
Vehicle Electrification (e.g., Official Cars, Mining Trucks)	Taichung Plant, Ho Sheng Hualien Branch	Gasoline saved 711 L; diesel saved 48,471.58 L
Replacement with Energy-Saving Light Sets, Fixtures, and Lighting Systems	TCC Taipei Plant, Taipei Headquarter, Tucheng Branch, Building Materials Building, Molicel Tainan Plant, TAHO OCEANIA, TAHO CIRCULAR, TAHO AMERICA, Mardin Plant	Electricity saved 25,636 kWh; fuel saved 57 t
Installation or Replacement of Variable Frequency Drives	Taipei Headquarter, Molicel Tainan Plant, Alhandra Plant, Iskenderun Plant, Loulé Plant	Electricity saved 628,806 kWh
Energy Saving in AC and Cooling Systems	Taipei Headquarter, Hoping Plant, Research Building, Molicel Tainan Plant, Suao Plant, Kaohsiung Plant, Loulé Plant	Electricity saved 2,336,932 kWh
Maintenance of Unit Boiler Water Pumps and Fan Systems	Ho-Ping Power Company	Electricity saved 6,246,409 kWh
Optimization of Air Compressor Systems (e.g., Motor Replacement, Inverter Introduction)	Molicel Tainan Plant, Adana Plant, Ankara Plant, Loulé Plant, Mardin Plant, Ünye Plant	Electricity saved 947,027 kWh
Switch to High-Performance Drag-Reducing Paint and Graphene Coatings	TAHO VIRTUE, TAHO EUDAIMONIA, TAHO AUSTRALIA, TAHO CIRCULAR	Fuel saved 526 t
Installation of Alternative Maritime Power (AMP) System	TAHO COMPLIANCE, TAHO AFRICA, TAHO OCEANIA	Fuel saved 1,069 t
Fan Modification	Kaili Plant, Anshun Plant, Guangan Plant, Guigang Plant, Jingzhou Plant, Longshan Plant	Electricity saved 9,567,103 kWh



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Energy-Saving Plans	Operating Sites	Energy Saved
Installation of Solar Photovoltaic Systems	Longshan Plant, Adana Plant, Alhandra Plant, Souselas Plant	Electricity saved 13,659,016 kWh
Replaced with High-efficiency Motors	Aslan Plant	Electricity saved 54,018 kWh
Replaced Filter Bags of Process Equipment (e.g., Dust Collectors and Vertical Mills)	Alhandra Plant, Ankara Plant	Electricity saved 2,893,732 kWh
Replaced Coal Mill and Cement Mill Diaphragms	Souselas Plant	Electricity saved 105,200 kWh
Constructed 43.2 MW/107.3 MWh Energy Storage Station	Yingde Plant	Electricity costs saved NT\$210,075,000
Constructed New Alternative Fuel Storage Shed Project	Liaoning Plant	Coal saved 4,718.34 t
Utilized Furnace Surface Temperature to Preheat Combustion Fan Intake Air to Reduce Gas Consumption	Liuzhou Plant	Blast furnace gas saved 1,641,440 m³
Lines 1 and 2 Calciner Expansion Modification, System Air Duct Resistance Reduction Modification	Longshan Plant	Coal saved 15,210 t
Recovered Heat Through the High-speed Airflow Grinding System (Rocketmill) Project	Aslan Plant	Energy saved 266 GJ
Applied PID Control to Stabilize Calciner Temperature, Improving Thermal Efficiency	Aslan Plant	Energy saved 59 GJ
Installed New Kiln 6 Satellite Cooler with High-efficiency Lining	Alhandra Plant	Energy saved 116,029 GJ
Other Energy-saving Solutions	Taichung Plant, Taipei Plant, Hoping Plant, Ho-Ping Power Company, Anshun Plant, Guigang Plant, Longshan Plant, Adana Plant, Atlante Office, Bolu Plant, Ereğli Plant, İskenderun Plant, Loulé Plant, Mardin Plant, Souselas Plant, Ünye Plant	Power saved 1,996,288 kWh
Total Energy Saved Converted to GJ		853,459 GJ
Capital Investment		NT\$4,288,607,000
Operating Expenses		NT\$184,705,000
Cost Saved		NT\$726,227,000

7.1.2.6 Air Pollutant Emissions in 4 Years

Item - Nitrogen Oxides (NOx)	2022	2023	2024	2025
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	13,634.00	9,976.00	9,221.00	9,471.64
Cement and Environmental Protection Business (Europe-Africa)	13,613.30	11,550.10	14,610.83	12,208.91
Energy for Social Transformation Business	2,129.32	2,193.51	1,857.43	2,072.93
Other Business Groups	-	-	3,138.88	4,093.09
Total	29,376.62	23,719.61	28,828.14	27,846.57

Item - Sulfur Oxides (SOx)	2022	2023	2024	2025
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	1,161.00	1,059.00	1,115.00	1,088.19
Cement and Environmental Protection Business (Europe-Africa)	927.00	1,381.00	1,761.41	913.61
Energy for Social Transformation Business	1,993.20	1,945.75	1,866.56	1,879.21
Other Business Groups	-	-	421.21	153.50
Total	4,081.20	4,385.75	5,164.18	4,034.51
Item - Particulate Matter (PM)				
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	475.00	570.00	648.00	688.03
Cement and Environmental Protection Business (Europe-Africa)	227.30	198.77	301.94	343.60
Energy for Social Transformation Business	249.52	183.27	132.21	122.87
Other Business Groups	-	-	0.09	1.39
Total	951.82	952.04	1,082.24	1,155.89
Item - Volatile Organic Compounds (VOCs)				
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	0.0043	0.0042	0.0156	36.6244
Cement and Environmental Protection Business (Europe-Africa)	740.42	728.02	808.6900	633.3291
Energy for Social Transformation Business	0.3200	0.3100	0.3300	0.3120
Other Business Groups	-	-	-	165.4088
Total	0.3243	0.3142	809.0356	835.6743
Item - Dioxins and Furans (PCDD/F)				
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	0.7576	0.0299	0.0505	0.7699
Cement and Environmental Protection Business (Europe-Africa)	0.1001	0.0867	0.246	0.005
Energy for Social Transformation Business	0.0687	0.0591	0.0419	0.1087
Other Business Groups	-	-	-	-
Total	0.93	0.18	0.3384	0.8836
Item - Mercury Emissions (Hg)				
Unit - ton				
Region/Business Group				
Cement and Environmental Protection Business (Asia)	0.2264	0.1669	0.3787	0.2116
Cement and Environmental Protection Business (Europe-Africa)	0.0015	0.0035	0.0110	0.0511
Energy for Social Transformation Business	0.0485	0.0291	0.0127	0.0048
Other Business Groups	-	-	-	-
Total	0.2764	0.1995	0.4024	0.2674



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Note 1: The calculation method is direct measurement of emissions or calculation based on specific on-site data. Sources of coefficients: Emission Factors, Control Efficiencies, and Other Measurement Regulations for Particulate Matter, Lead, Cadmium, Mercury, Arsenic, Hexavalent Chromium, and Dioxins for the Declaration of Air Pollution Control Fees by Stationary Pollution Sources in Public and Private Premises; Appendix 1: Particulate Matter Emission Factors for Industrial Processes; Appendix 3: Emission Factors for Lead, Cadmium, Mercury, Arsenic, Hexavalent Chromium, and Dioxins for Industrial Processes; and Emission Factors for Volatile Organic Compounds for Industrial Processes, Operating Units (Including Equipment Components), Control Efficiencies, and Other Measurement Regulations for the Declaration of Air Pollution Control Fees by Stationary Pollution Sources in Public and Private Premises.

Note 2: The business nature of the RMC Plant is the batching and conveying of finished cement products; therefore, there are no air pollutant emissions.

Note 3: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and the disclosure scope added Mining Companies in Taiwan and Mainland China in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 4: The newly added disclosure scope in 2024 includes Longshan, Huaihua, and Liaoning cement plants; Fuzhou and Liuzhou grinding stations; Feng Sheng Enterprise Company, 123 Environmental Protection Technology Co., Ltd., Beijing TCC Environmental Technology Co., Ltd., TCC (Guangdong) Renewable Resources Technology Company Limited, CIMPOR and OYAK Cement. The newly added disclosure scope in 2025 includes Mining Companies in Taiwan and Mainland China, Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 5: VOCs follow local compliance standards: Taiwan sites under Cement and Environmental Protection Business (Asia) calculate storage tank emissions, while its mainland China sites and Cement and Environmental Protection Business (Europe-Africa) measure process emissions (Europe-Africa data third-party verified); Ta-Ho Maritime uses emission factor estimations.

7.1.2.7 Water Resources Usage in 4 Years Unit: Million Liters

Item - Water Withdrawal	2022	2023	2024	2025
Third-Party Water—Municipal Water				
Cement and Environmental Protection Business (Asia)	682.00	812.00	821.00	848.58
Cement and Environmental Protection Business (Europe-Africa)	158.00	192.00	240.00	155.07
Energy for Social Transformation Business	25.00	21.00	29.00	29.00
Other Business Groups	-	-	315.72	257.98
Total	865.00	1,025.00	1,405.72	1,290.63
Third-Party Water — Industrial Water				
Cement and Environmental Protection Business (Asia)	1,275.00	1,504.00	1,672.00	1,402.29
Cement and Environmental Protection Business (Europe-Africa)	444.00	567.00	719.00	53.72
Energy for Social Transformation Business	1,533.00	1,676.00	1,482.00	1,305.00
Other Business Groups	-	-	-	0.06
Total	3,252.00	3,747.00	3,873.00	2,761.07
Surface Water				
Cement and Environmental Protection Business (Asia)	8,466.00	9,451.00	12,173.00	11,446.73
Cement and Environmental Protection Business (Europe-Africa)	281.76	226.04	322.16	217.21
Energy for Social Transformation Business	-	-	53.00	-
Other Business Groups	-	-	-	3.80
Total	8,747.76	9,677.04	12,548.16	11,667.74
Groundwater				
Cement and Environmental Protection Business (Asia)	1,523.00	1,123.00	1,723.00	1,965.60
Cement and Environmental Protection Business (Europe-Africa)	2,881.31	2,600.17	2,982.40	3,829.47
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	4,404.31	3,723.17	4,705.40	5,795.07
Seawater				
Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	18,569.89	17,888.55	19,928.91	15,151.93
Energy for Social Transformation Business	1,231,339.00	1,274,384.00	1,219,195.00	1,241,287.00
Other Business Groups	-	-	17.54	1,860.93
Total	1,249,908.89	1,292,272.55	1,239,141.45	1,258,299.86

Total	2022	2023	2024	2025
Cement and Environmental Protection Business (Asia)	12,059.00	12,962.00	16,478.00	15,663.20
Cement and Environmental Protection Business (Europe-Africa)	22,334.97	21,473.76	24,192.47	19,407.39
Energy for Social Transformation Business	1,233,127.00	1,276,275.00	1,220,898.00	1,242,621.00
Other Business Groups	-	-	333.26	2,122.77
Total	1,267,520.97	1,310,710.76	1,261,901.73	1,279,814.36

Item - Water Discharge

Surface Water

Cement and Environmental Protection Business (Asia)	-	-	464.00	164.71
Cement and Environmental Protection Business (Europe-Africa)	596.77	523.92	443.26	760.04
Energy for Social Transformation Business	217.00	184.00	184.00	156.00
Other Business Groups	-	-	-	48.52
Total	813.77	707.92	1,091.26	1,129.27

Groundwater

Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	20.70	-	71.02	6.12
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	-
Total	20.70	-	71.02	6.12

Seawater

Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	18,569.89	17,888.55	19,929.00	15,151.93
Energy for Social Transformation Business	1,231,339.00	1,274,384.00	1,219,195.00	1,241,287.00
Other Business Groups	-	-	-	1,860.93
Total	1,249,908.89	1,292,272.55	1,239,124.00	1,258,299.86

Third-Party Water

Cement and Environmental Protection Business (Asia)	-	-	148.00	106.06
Cement and Environmental Protection Business (Europe-Africa)	18.92	13.10	13.95	24.96
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	117.34	1.23
Total	18.92	13.10	279.29	132.25

Total

Cement and Environmental Protection Business (Asia)	-	-	612.00	270.76
Cement and Environmental Protection Business (Europe-Africa)	19,206.29	18,425.57	20,457.23	15,943.05
Energy for Social Transformation Business	1,231,556.00	1,274,568.00	1,219,379.00	1,241,443.00
Other Business Groups	-	-	117.34	1,910.68
Total	1,250,762.29	1,292,993.57	1,240,565.57	1,259,567.49

Item - Water Consumption

Water Consumption

Cement and Environmental Protection Business (Asia)	12,059.00	12,962.00	15,865.00	15,392.44
Cement and Environmental Protection Business (Europe-Africa)	3,128.68	3,048.19	3,735.25	3,464.34
Energy for Social Transformation Business	1,571.00	1,707.00	1,519.00	1,178.00
Other Business Groups	-	-	215.92	212.09
Total	16,758.68	17,717.19	21,335.16	20,246.87



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Item - Recycled Water	2022	2023	2024	2025
Process Recycled Water				
Cement and Environmental Protection Business (Asia)	98,004.00	72,264.00	6,622.00	3,198.21
Cement and Environmental Protection Business (Europe-Africa)	109.51	165.90	127.09	166.16
Energy for Social Transformation Business	167.00	167.00	201.00	208.00
Other Business Groups	-	-	-	-
Total	98,280.51	72,596.90	6,950.09	3,572.37
Other Recycled Water				
Cement and Environmental Protection Business (Asia)	-	54.00	467.00	108.98
Cement and Environmental Protection Business (Europe-Africa)	324.55	295.85	353.60	1,217.83
Energy for Social Transformation Business	63.00	53.00	61.00	50.00
Other Business Groups	-	-	-	-
Total	387.55	402.85	881.60	1,376.81
Discharged Recycled Water				
Cement and Environmental Protection Business (Asia)	113.00	73.00	89.00	119.73
Cement and Environmental Protection Business (Europe-Africa)	-	-	9.00	-
Energy for Social Transformation Business	230.00	194.00	139.00	150.00
Other Business Groups	-	-	-	-
Total	343.00	267.00	237.00	269.73

Note 1: Water discharged to third parties in Mainland China refers to third-party water supplied for use by other organizations.

Note 2: In 2023, the TCC Hoping Cement Plant in Taiwan estimated water withdrawal based on estimated rainfall runoff; in 2024, it installed a rainwater meter to record actual rainwater withdrawal. The differences between the two years are due to these different calculation methods.

Note 3: Water discharge is disclosed starting from 2024.

Note 4: The Cement and Environmental Protection Business includes Taiwan and Mainland China, and will add Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025. Other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 5: The newly added disclosure scope in 2024 includes the Longshan, Huaihua, and Liaoning cement plants; the Fuzhou and Liuzhou grinding stations; Feng Sheng, 123 Environmental Protection, Beijing Environmental Protection, TCC Guangdong Renewable Resources Technology Co., Ltd., CIMPOR (excluding the Cape Verde aggregate plant), and OYAK Cement. The newly added disclosure scope in 2025 will include the CIMPOR Cape Verde aggregate plant, Mining Companies in Taiwan and Mainland China, Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 6: Surface water withdrawal includes rivers, mines, lakes, and rainwater/spring water.

7.1.2.8 Water Consumption in Water-Stressed Areas in 4 Years Unit: Million Liters

Item	2022	2023	2024	2025
Water Withdrawal				
Cement and Environmental Protection Business (Asia)	1,471	1,932	1,718	714
Cement and Environmental Protection Business (Europe-Africa)	2,232	1,976	2,383	17,962
Total	3,703	3,908	4,101	18,676
Water Discharge				
Cement and Environmental Protection Business (Asia)	-	-	-	-
Cement and Environmental Protection Business (Europe-Africa)	157	158	109	15,249
Total	157	158	109	15,249

Item	2022	2023	2024	2025
Water Consumption				
Cement and Environmental Protection Business (Asia)	1,471	1,932	1,718	714
Cement and Environmental Protection Business (Europe-Africa)	2,075	1,818	2,274	2,713
Total	3,546	3,750	3,992	3,427
Recycled Water				
Cement and Environmental Protection Business (Asia)	-	-	69	-
Cement and Environmental Protection Business (Europe-Africa)	333	363	399	1,246
Total	333	363	468	1,246

Note 1: Prioritizing Cement and Environmental Protection Business, TCC utilized WRI Aqueduct Water Risk Atlas to assess water stress levels across operating sites in Taiwan, Mainland China, Europe, Türkiye, and Africa, identifying a total of 108 sites located in high water-stressed areas.

7.1.2.9 2025 Water Conservation Plans

Water Conservation Plan	Operating Sites	Water Saved
Rainwater Recovery and Reuse and Related Equipment Upgrades	Zhongli Plant, Taichung Plant, Shanhua Branch, Tucheng Branch, Anping Branch, Xiaogang Branch, Hsinchu Branch, Shengang Branch, Caotun Branch, Luzhu Branch, Kaohsiung Plant, Guishan Branch, Hoping EcoPort, Ho-Ping Power Plant, Manufacturing Plant	Water Saved 404,633 m³
Installation, Upgrade, or Digitalization of Water Metering Systems	Huaying Plant, Guangan Plant, Aslan Plant	Water Saved 269,616 m³
Wastewater Collection and Reuse Treatment Project	Yingde Plant	Water Saved 2,163,802 m³
Recycling and Reuse of Water Resources from Shafts 3A, 1B, and 3B	Hoping Plant	Water Saved 40,295 m³
Driver Water Usage Control System	Taipei Plant	Water Saved 102 m³
Cooling Tower Conductivity Adjustment for Water Conservation	E-One Moli Corporation	Water Saved 3,424 m³
Installation of UV Sterilization Lamps in the Process to Reduce Cleaning Water	E-One Moli Corporation	Water Saved 8,027 m³
Waste Heat Power Generation Water Production Workshop Replacement of Ball Valves and Pipelines	Huaying Plant	Water Saved 2,370 m³
Underground In-Kiln Water Pipeline Network Renovation	Huaying Plant	Water Saved 106,192 m³
Fish Pond Water Recovery	Yingde Plant	Water Saved 200,848 m³
Secondary Water Intake Pipeline Leak Detection and Repair	Chongqing Plant	Water Saved 164,838 m³



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Water Conservation Plan	Operating Sites	Water Saved
Domestic Water Pipeline Network Renovation	Longshan Plant	Water Saved 199,174 m³
Refurbished Water Treatment Plant (P-P103-24-019), Constructed Quarry Catchment Basin Water Treatment Plant (P-P103-24-036)	Loulé Plant	Water Saved 13,660 m³
Total Water Saved		3,576,982 m³
Capital Investment		NT\$ 199,686,000
Operating Expenses		NT\$824,000
Cost Savings		NT\$3,374,000

7.1.2.10 Waste Treatment in 4 Years Unit: tons

Total Waste	2022	2023	2024	2025
On-site Waste Reuse				
Non-Hazardous Waste				
Cement and Environmental Protection Business (Asia)	9,673.86	7,811.95	11,181.09	19,659.74
Cement and Environmental Protection Business (Europe-Africa)	29,140.12	23,705.75	33,009.04	37,420.06
Energy for Social Transformation Business	-	-	-	96.63
Other Business Groups	-	-	-	6.51
Total	38,813.98	31,517.70	44,190.13	57,182.94
Hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	0	10.09
Cement and Environmental Protection Business (Europe-Africa)	-	-	-	176.56
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	142.04
Total	-	-	-	328.69

Total Waste	2022	2023	2024	2025
Outsourced Waste Disposal				
Off-site Landfill Disposal				
Non-hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	131.24	101.94
Cement and Environmental Protection Business (Europe-Africa)	914.30	790.20	976.02	1,094.12
Energy for Social Transformation Business	311.82	40.32	-	19.33
Other Business Groups	-	-	-	81.36
Total	1,226.12	830.52	1,107.26	1,296.75
Hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	1.24	-
Cement and Environmental Protection Business (Europe-Africa)	24.50	13.10	41.23	116.80
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	3.67	2.95
Total	24.50	13.10	46.13	119.75

Total Waste	2022	2023	2024	2025
Outsourced Disposal of In-house Waste				
Off-site Incineration (with Energy Recovery)				
Non-hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	841.60	611.22
Cement and Environmental Protection Business (Europe-Africa)	155.38	122.38	89.71	16.89
Energy for Social Transformation Business	-	34.58	116.19	15.83
Other Business Groups	-	-	-	339.56
Total	155.38	156.96	1,047.50	983.51

Hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	4.54	36.47
Cement and Environmental Protection Business (Europe-Africa)	568.89	262.45	338.35	451.18
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	13.11
Total	568.89	262.45	342.89	500.76

Outsourced Disposal of In-house Waste				
Off-site Incineration (No Energy Recovery)				
Non-hazardous Waste				
Cement and Environmental Protection Business (Asia)	212.71	1,686.68	278.97	300.77
Cement and Environmental Protection Business (Europe-Africa)	-	-	-	0.02
Energy for Social Transformation Business	-	-	-	65.09
Other Business Groups	-	-	239.42	418.01
Total	212.71	1,686.68	518.39	783.89

Hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	49.06	11.40
Cement and Environmental Protection Business (Europe-Africa)	57.75	98.52	53.76	41.01
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	7.70	332.67
Total	57.75	98.52	110.52	385.08

Outsourced Disposal of In-house Waste				
Off-site Recycling and Reuse				
Non-hazardous Waste				
Cement and Environmental Protection Business (Asia)	11,352.67	7,710.54	21,939.22	18,941.90
Cement and Environmental Protection Business (Europe-Africa)	42,881.32	46,924.93	47,375.57	105,629.77
Energy for Social Transformation Business	3,948.64	724.98	2,145.83	65.85
Other Business Groups	-	-	444.89	1,280.78
Total	58,182.63	55,360.45	71,905.50	125,918.30

Hazardous Waste				
Cement and Environmental Protection Business (Asia)	-	-	502.74	407.88
Cement and Environmental Protection Business (Europe-Africa)	1,701.09	1,030.00	498.99	2,888.96
Energy for Social Transformation Business	-	-	-	-
Other Business Groups	-	-	-	6.45
Total	1,701.09	1,030.00	1,001.73	3,303.29



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Total Waste	2022	2023	2024	2025	
Total (In-House + Outsourced)					
Non-hazardous Waste					
Cement and Environmental Protection Business (Asia)	30,913.10	25,021.12	45,553.20	39,615.58	
Cement and Environmental Protection Business (Europe-Africa)	73,091.12	71,543.26	81,450.33	144,160.84	
Energy for Social Transformation Business	4,260.46	799.88	2,262.02	262.73	
Other Business Groups	-	-	684.30	2,126.23	
Total	108,264.68	97,364.26	129,949.85	186,165.38	
Hazardous Waste					
Cement and Environmental Protection Business (Asia)	-	-	557.58	465.84	
Cement and Environmental Protection Business (Europe-Africa)	2,352.24	1,404.08	932.33	3,674.51	
Energy for Social Transformation Business	-	-	-	-	
Other Business Groups	-	-	11.37	497.22	
Total	2,352.24	1,404.08	1,501.28	4,637.57	
Grand Total Waste	All Business Groups	110,616.92	98,768.33	131,451.13	190,802.94
(Non-hazardous Waste + Hazardous Waste)					

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and the disclosure scope added Mining Companies in Taiwan and Mainland China in 2025; other business groups include Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 2: The disclosure scope added in 2024 includes Longshan, Huaihua, and Liaoning cement plants; Fuzhou and Liuzhou grinding stations; Feng Sheng, 123 Environmental Protection, Beijing Environmental Protection, and TCC Guangdong Renewable Resources Technology Co., Ltd.; the disclosure scope added in 2025 includes Mining Companies in Taiwan and Mainland China, Cement and Environmental Protection Business (Europe-Africa), Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Note 3: Waste volumes for 2022–2024 were not separated by region/Business Group, so only subtotals and totals are disclosed.

7.1.2.11 Raw Material Use in 2025 Unit: tons

Category	Cement and Environmental Protection Business (Asia) — Taiwan	Cement and Environmental Protection Business (Asia) — Mainland China	Cement and Environmental Protection Business (Europe-Africa)
Recycled Materials	1,498,936	7,113,364	1,467,636
Non-Renewable Materials	6,161,501	37,020,540	18,544,383
Total Amount of Recycled Materials Used (A)			10,079,936
Total Amount of Non-recycled Materials Used			61,726,423
Total Amount of Materials Used (B)			71,806,359
Proportion of Recycled Materials Used (A/B; %)			14.04%

Note 1: The calculation of raw material usage in Taiwan only covers cement plants.

7.1.2.12 2025 Alternative Raw Materials and Alternative Fuels Usage Unit: tons

Cement and Environmental Protection Business (Asia) — Taiwan		
Resource Reused	Alternative Type	Usage amount
Clay	Alternative Raw Materials	355,023
Coal Ash	Alternative Raw Materials	254,827
Gypsum	Alternative Supplementary Materials	179,413
Imported Low-Alkali Sand	Alternative Raw Materials	125,582
Imported Iron Slag	Alternative Raw Materials	85,900
Bottom Ash	Alternative Raw Materials	84,663
Gypsum	Alternative Supplementary Materials	62,579
Iron Slag (Mineral Sludge)	Alternative Raw Materials	45,532
Recycled Resources	Alternative Fuel	41,552
Coal Ash (Treated)	Alternative Raw Materials	40,694
Others	Alternative Fuel/Alternative Raw Materials/Alternative Clinker/Alternative Supplementary Materials	223,170
Subtotal		1,498,936
Cement and Environmental Protection Business (Asia) — Mainland China		
Desulfurization Gypsum	Alternative Raw Materials/ Alternative Clinker/ Alternative Supplementary Materials	861,844
Fly Ash	Alternative Raw Materials/ Alternative Clinker/ Alternative Supplementary Materials	722,212
Coal Slag	Alternative Raw Materials/ Alternative Clinker/ Alternative Supplementary Materials	715,250
Coal Gangue	Alternative Raw Materials / Alternative Clinker	418,040
Mixed Coal Slag	Alternative Raw Materials / Alternative Clinker	359,776
Steel Slag	Alternative Raw Materials / Alternative Clinker / Alternative Supplementary Materials	337,338
Granulated Blast Furnace Slag	Alternative Raw Materials	310,273
Silica Slag	Alternative Raw Materials / Alternative Clinker	283,855
Waste Textiles (Crushed Materials)	Alternative Fuel	263,171
Copper Slag (Waste Slag)	Alternative Raw Materials	250,628
Others	Alternative Fuel/Alternative Raw Materials/Alternative Clinker/Alternative Supplementary Materials	2,590,978
Subtotal		7,113,364
Cement and Environmental Protection Business (Europe-Africa)		
RDF	Alternative Fuel	242,940
SLAG	Alternative Raw Materials	214,708
Refuse Derived Fuel	Alternative Fuel	164,959
Biomass	Alternative Fuel	151,440
Construction Waste Soils (EWC 170504)	Alternative Raw Materials	116,984
Granulated Blast Furnace Slag	Alternative Raw Materials	107,478
Tyre-Derived Fuel	Alternative Fuel	50,628
Iron Slag	Alternative Raw Materials	43,069
Reduction Slag	Alternative Raw Materials	36,717



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Cement and Environmental Protection Business (Europe-Africa)		
Resource Reused	Alternative Type	Usage amount
Concrete Waste	Alternative Raw Materials	31,465
Others	Alternative Fuel/Alternative Raw Materials/Alternative Clinker/Alternative Supplementary Materials	307,250
Subtotal		1,467,636

Resource Reused Alternative Items	Cement and Environmental Protection Business (Asia) — Taiwan	Cement and Environmental Protection Business (Asia) — Mainland China	Cement and Environmental Protection Business (Europe-Africa)
Alternative Raw Materials	7,145,766	39,897,556	20,219,609
Alternative Fuel	122,987	751,827	880,277
Alternative Clinker	149,692	2,578,968	32,986
Alternative Supplementary Materials	241,992	905,553	353,531
Total			73,280,744



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7.1.3 TCC Key Indicators — Social

7.1.3.1 2025 Employee Diversity Composition Unit: people

Employee Headcount Statistics

Employment Relationship		Female	Male
Permanent Employees	Cement and Environmental Protection Business (Asia)	1,275	5,019
	Cement and Environmental Protection Business (Europe-Africa)	309	3,544
	Energy for Social Transformation Business	27	268
	Other Business Groups	625	1,324
	Total	2,236	10,155
TOTAL		12,391	
Temporary Employees	Cement and Environmental Protection Business (Asia)	105	582
	Cement and Environmental Protection Business (Europe-Africa)	35	590
	Energy for Social Transformation Business	0	0
	Other Business Groups	8	12
	Total	148	1,184
TOTAL		1,332	
Non-guaranteed Hours Em-ployees	Cement and Environmental Protection Business (Asia)	0	0
	Cement and Environmental Protection Business (Europe-Africa)	0	0
	Energy for Social Transformation Business	0	0
	Other Business Groups	6	10
	Total	6	10
TOTAL		16	
Full-time Employees	Cement and Environmental Protection Business (Asia)	1,375	5,586
	Cement and Environmental Protection Business (Europe-Africa)	344	4,134
	Energy for Social Transformation Business	27	268
	Other Business Groups	629	1,330
	Total	2,375	11,318
TOTAL		13,693	
Part-time Employees	Cement and Environmental Protection Business (Asia)	5	15
	Cement and Environmental Protection Business (Europe-Africa)	0	0
	Energy for Social Transformation Business	0	0
	Other Business Groups	10	16
	Total	15	31
TOTAL		46	
Total	Cement and Environmental Protection Business (Asia)	1,380	5,601
	Cement and Environmental Protection Business (Europe-Africa)	344	4,134
	Energy for Social Transformation Business	27	268
	Other Business Groups	639	1,346
	Total	2,390	11,349
TOTAL		13,739	

Note 1: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added the Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

Full-time Employee Headcount Statistics

Item / Breakdown by Type		Female	Male
Age			
Under 30 (exclusive)	Cement and Environmental Protection Business (Asia)	106	334
	Cement and Environmental Protection Business (Europe-Africa)	68	692
	Energy for Social Transformation Business	5	24
	Other Business Groups	102	219
	Total	281	1,269
TOTAL		1,550	
30-50 years old	Cement and Environmental Protection Business (Asia)	1,181	3,835
	Cement and Environmental Protection Business (Europe-Africa)	198	2,634
	Energy for Social Transformation Business	14	164
	Other Business Groups	481	920
	Total	1,874	7,553
TOTAL		9,427	
Over 50 (exclusive)	Cement and Environmental Protection Business (Asia)	88	1,417
	Cement and Environmental Protection Business (Europe-Africa)	78	808
	Energy for Social Transformation Business	8	80
	Other Business Groups	55	182
	Total	229	2,487
TOTAL		2,716	
Education			
Ph.D.	Cement and Environmental Protection Business (Asia)	0	5
	Cement and Environmental Protection Business (Europe-Africa)	3	3
	Energy for Social Transformation Business	0	0
	Other Business Groups	11	33
	Total	14	41
TOTAL		55	
Master's Degree	Cement and Environmental Protection Business (Asia)	69	124
	Cement and Environmental Protection Business (Europe-Africa)	57	182
	Energy for Social Transformation Business	4	17
	Other Business Groups	148	288
	Total	278	611
TOTAL		889	
Bachelor's Degree	Cement and Environmental Protection Business (Asia)	362	841
	Cement and Environmental Protection Business (Europe-Africa)	165	529
	Energy for Social Transformation Business	17	93
	Other Business Groups	285	641
	Total	829	2,104
TOTAL		2,933	



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Item / Breakdown by Type		Female	Male
Education			
Associate Degree	Cement and Environmental Protection Business (Asia)	289	897
	Cement and Environmental Protection Business (Europe-Africa)	20	466
	Energy for Social Transformation Business	5	71
	Other Business Groups	165	297
	Total	479	1,731
TOTAL			2,210
High School and Below	Cement and Environmental Protection Business (Asia)	655	3,719
	Cement and Environmental Protection Business (Europe-Africa)	100	2,952
	Energy for Social Transformation Business	1	87
	Other Business Groups	50	102
	Total	806	6,860
TOTAL			7,666
Job Category		7	110
Executive Managers	Cement and Environmental Protection Business (Asia)	11	43
	Cement and Environmental Protection Business (Europe-Africa)	0	2
	Energy for Social Transformation Business	12	39
	Other Business Groups	30	194
	Total		224
TOTAL			
Mid-level Managers	Cement and Environmental Protection Business (Asia)	83	358
	Cement and Environmental Protection Business (Europe-Africa)	19	107
	Energy for Social Transformation Business	4	42
	Other Business Groups	70	215
	Total	176	722
TOTAL			898
Junior Managers	Cement and Environmental Protection Business (Asia)	133	709
	Cement and Environmental Protection Business (Europe-Africa)	34	274
	Energy for Social Transformation Business	1	2
	Other Business Groups	87	222
	Total	255	1,207
TOTAL			1,462
Professionals	Cement and Environmental Protection Business (Asia)	348	923
	Cement and Environmental Protection Business (Europe-Africa)	224	558
	Energy for Social Transformation Business	12	93
	Other Business Groups	239	377
	Total	823	1,951
TOTAL			2,774
Direct Personnel	Cement and Environmental Protection Business (Asia)	804	3,486
	Cement and Environmental Protection Business (Europe-Africa)	56	3,152
	Energy for Social Transformation Business	10	129
	Other Business Groups	223	477
	Total	1,093	7,244
TOTAL			8,337

Item / Breakdown by Type		Female	Male
Number of Employees			
Non-employee Workers	Cement and Environmental Protection Business (Asia)	327	494
	Cement and Environmental Protection Business (Europe-Africa)	148	2,270
	Energy for Social Transformation Business	21	129
	Other Business Groups	1	3
	Total	497	2,896
TOTAL			3,393

Note 1: Definition of managers in Taiwan: Executive managers are directors and assistant vice presidents (inclusive) and above; mid-level managers are managers and assistant managers; junior managers are supervisors; professionals are engineers, administrators, researchers, and management associates; and direct personnel are other positions, e.g., mixer operators, machine operators, clerks, etc.

Note 2: Definition of managers in Mainland China: Executive Managers are vice presidents (inclusive) and above; mid-level managers are mid-level managers; junior managers are level 1-3 operators; professionals are level 4-5 operators; and direct personnel are level 6-10 operators.

Note 3: Non-employee workers such as personnel dispatched by external companies: cleaners, security guards, chefs/kitchen staff, water pump operators, and landscaping personnel.

Note 4: The definition of part-time employees includes rehired elderly personnel.

Note 5: Employees with disabilities: The number of employees with disabilities in the Cement and Environmental Protection Business (Asia) (including Wanching, Ho Sheng Mining Company, mining companies, environmental technology companies, and Hong Kong Cement) is 4 females and 33 males.

Note 6: The above information is based on the number of employees as of December 31, 2025. The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated financial reporting subsidiaries.

Note 7: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China and added the Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.2 2025 Employee Diversity by Nationality Unit: people

Item/Breakdown by Type		
Nationality/Region	Number of Full-time Employees	Number of Management Positions
Taiwan		
Cement and Environmental Protection Business (Asia)	1,694	297
Cement and Environmental Protection Business (Europe-Africa)	0	0
Energy for Social Transformation Business	295	51
Other Business Groups	1,282	22
Total	3,271	370
Percentage of Total Workforce	23.91%	20.01%
Mainland China		
Cement and Environmental Protection Business (Asia)	5,240	960
Cement and Environmental Protection Business (Europe-Africa)	0	0
Energy for Social Transformation Business	0	0
Other Business Groups	39	12
Total	5279	972
Percentage of Total Workforce	38.59%	52.57%



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Item/Breakdown by Type

Nationality/Region	Number of Full-time Employees	Number of Management Positions
Türkiye		
Cement and Environmental Protection Business (Asia)	0	0
Cement and Environmental Protection Business (Europe-Africa)	2,873	201
Energy for Social Transformation Business	0	0
Other Business Groups	0	0
Total	2873	201
Percentage of Total Workforce	21.00%	10.87%
Portugal		
Cement and Environmental Protection Business (Asia)	0	0
Cement and Environmental Protection Business (Europe-Africa)	1,155	200
Energy for Social Transformation Business	0	0
Other Business Groups	11	2
Total	1166	202
Percentage of Total Workforce	8.52%	10.92%
Other		
Cement and Environmental Protection Business (Asia)	27	6
Cement and Environmental Protection Business (Europe-Africa)	437	35
Energy for Social Transformation Business	0	0
Other Business Groups	625	63
Total	1089	104
Percentage of Total Workforce	7.96%	5.62%
TOTAL		
Cement and Environmental Protection Business (Asia)	6961	1,263
Cement and Environmental Protection Business (Europe-Africa)	4,465	436
Energy for Social Transformation Business	295	51
Other Business Groups	1957	99
Total	13678	1849
Percentage of Total Workforce	100.00%	100.00%

Note 1: Other countries include: Angola, Australia, Benin, Brazil, United Kingdom, Burkina Faso, Cameroon, Canada, Cape Verde, Congo, France, Gabon, Ghana, Guinea-Bissau, Guinea, Iran, Italy, Ivory Coast, Kazakhstan, Kosovo, Mali, Moldova, Morocco, Mozambique, Peru, Romania, Senegal, Spain, Sri Lanka, Togo, Tunisia, United States, Ukraine, Venezuela, Indonesia, and Central African Republic.

Note 2: The above information is based on the number of employees as of December 31, 2025. The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated financial reporting subsidiaries.

Note 3: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added the Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.3 2025 Employee Diversity Composition

	Number of Full-time Employees				Number of Management Roles			
				Percentage of Total Workforce				Percentage of Total Workforce
Ethnicity	Taiwan	Mainland China	Total		Taiwan	Mainland China	Total	
Asia	2,595	4,044	6,639	89%	301	850	1,151	89%
Indigenous and Minorities	251	585	836	11%	19	127	146	11%
Total	2,846	4,629	7,475	100%	320	977	1,297	100%

7.1.3.4 2025 New Hires and Turnover

New Hires	Cement and Environmental Protection Business (Asia)		Cement and Environmental Protection Business (Europe-Africa)		Energy for Social Transformation Business		Other Business Groups		Total	
Gender	Number	%	Number	%	Number	%	Number	%	Number	%
Female	95	1.36%	66	1.47%	1	0.34%	140	7.05%	302	2.20%
Male	215	3.08%	669	14.94%	29	9.83%	301	15.16%	1,214	8.84%
Age										
Under 30	75	1.07%	242	5.40%	13	4.41%	143	7.2%	473	3.44%
30-50	213	3.05%	419	9.36%	13	4.41%	276	13.90%	921	6.70%
Over 50	22	0.32%	74	1.65%	4	1.36%	22	1.11%	122	0.89%
Total	310	4.44%	735	16.41%	30	10.17%	441	22.22%	1,516	11.03%

Departing Employees	Cement and Environmental Protection Business (Asia)		Cement and Environmental Protection Business (Europe-Africa)		Energy for Social Transformation Business		Other Business Groups		Total	
Gender	Number	%	Number	%	Number	%	Number	%	Number	%
Female	429	6.15%	37	0.83%	4	1.36%	235	11.84%	705	5.13%
Male	1,280	18.34%	616	13.67%	28	9.49%	563	28.36%	2,487	18.10%
Age										
Under 30	126	1.80%	149	3.33%	13	4.41%	171	8.61%	459	3.34%
30-50	1,143	16.37%	385	8.60%	13	4.41%	588	29.62%	2,129	15.50%
Over 50	440	6.30%	119	2.66%	6	2.03%	39	1.96%	604	4.40%
Total	1709	24.48%	653	14.58%	32	10.85%	798	40.20%	3,192	23.23%



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Voluntary Resignations	Cement and Environmental Protection Business (Asia)		Cement and Environmental Protection Business (Europe-Africa)		Energy for Social Transformation Business		Other Business Groups		Total	
Gender	Number	%	Number	%	Number	%	Number	%	Number	%
Female	70	1.00%	24	0.54%	4	1.36%	225	11.34%	323	2.35%
Male	231	3.31%	342	7.64%	27	9.15%	553	27.86%	1,153	8.39%
Age										
Under 30	64	0.92%	98	2.19%	13	4.41%	168	8.46%	343	2.50%
30-50	192	2.75%	221	4.94%	12	4.07%	570	28.72%	995	7.24%
Over 50	45	0.64%	47	1.05%	6	2.03%	40	2.02%	138	1.00%
Total	301	4.31%	366	8.17%	31	10.51%	778	39.19%	1,476	10.74%

Note 1: Voluntary turnover excludes retirees.
Note 2: New hire and turnover rates are calculated based on the total number of employees in the cement business entities (including mining) in each region.
Note 3: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and the disclosure scope added Mining Companies in Taiwan and Mainland China in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.
Note 4: Taiwan had a total of 621 new hires (accounting for 17.55% of the total employees in Taiwan) and 973 turnovers (accounting for 27.49% of the total employees in Taiwan); Mainland China had a total of 36 new hires (accounting for 0.78% of the total employees in Mainland China) and 1,490 turnovers (accounting for 32.44% of the total employees in Mainland China); EMEA had a total of 859 new hires (accounting for 17.39% of the total employees in EMEA) and 707 turnovers (accounting for 14.31% of the total employees in EMEA).

7.1.3.5 Number of New Hires in the Past Five Years and Internal Vacancy Fill Rate Statistics

Number of New Hires	2021	2022	2023	2024	2025
Cement and Environmental Protection Business (Asia)	145	114	213	218	310
Cement and Environmental Protection Business (Europe-Africa)	435	467	888	913	735
Energy for Social Transformation Business	-	-	-	21	30
Other Business Groups	-	-	-	-	441
Total	580	581	1,101	1,152	1,516
Internal Vacancy Fill Rate	48.00%	44.00%	44.00%	82.00%	67.00%

Note 1: The disclosure scope of the Cement and Environmental Protection Business covers cement plants, RMC plants, and grinding stations.
Note 2: The disclosure scope for the number of new hires added the Energy for Social Transformation Business in 2024; in 2025, it added Mining Companies in Taiwan and Mainland China, Charging and Storage Business (Asia), Charging and Storage Business (Europe) (NHOA Energy and Atlante), Battery Energy Business, Asset Management Business, and Investment Business.
Note 3: The disclosure scope of internal vacancy fill rate covered the Cement and Environmental Protection Business (Asia) from 2021 to 2024. From 2025, the disclosure scope was expanded to the entire Group, including the Cement and Environmental Protection Business (Asia), Cement and Environmental Protection Business (Europe-Africa), Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.6 Employee Turnover Rate in the Past Two Years

Resigned Employees	Female	Male	Under 30 (Exclusive)	30-50 Years Old	Over 50 (Exclusive)	Total
2024						
Cement and Environmental Protection Business (Asia)	2.80%	8.24%	2.06%	7.22%	1.76%	11.04%
Cement and Environmental Protection Business (Europe-Africa)	0.96%	10.90%	5.37%	2.98%	3.51%	11.86%
Energy for Social Transformation Business	3.06%	27.21%	6.12%	17.69%	6.46%	30.27%
Other Business Groups	-	-	-	-	-	-
Total	2.12%	9.67%	3.38%	5.89%	2.52%	11.79%
2025						
Cement and Environmental Protection Business (Asia)	6.79%	20.00%	1.90%	18.06%	6.84%	26.80%
Cement and Environmental Protection Business (Europe-Africa)	0.83%	13.67%	3.33%	8.55%	2.61%	14.49%
Energy for Social Transformation Business	1.36%	9.49%	4.41%	4.41%	2.03%	10.85%
Other Business Groups	12.09%	28.06%	8.92%	29.42%	1.81%	40.15%
Total	5.43%	18.82%	3.51%	16.22%	4.52%	24.25%
Voluntarily Resigned Employees						
2024						
Cement and Environmental Protection Business (Asia)	1.48%	5.74%	1.48%	4.85%	0.89%	7.22%
Cement and Environmental Protection Business (Europe-Africa)	0.96%	10.90%	5.37%	2.98%	3.51%	11.86%
Energy for Social Transformation Business	1.02%	2.72%	1.70%	1.70%	0.34%	3.74%
Other Business Groups	-	-	-	-	-	-
Total	1.28%	7.57%	2.93%	4.07%	1.85%	8.84%
2025						
Cement and Environmental Protection Business (Asia)	1.11%	3.56%	0.93%	3.03%	0.71%	4.67%
Cement and Environmental Protection Business (Europe-Africa)	0.54%	7.73%	2.19%	4.98%	1.09%	8.26%
Energy for Social Transformation Business	1.36%	9.49%	4.41%	4.41%	2.03%	10.85%
Other Business Groups	10.73%	27.25%	7.81%	28.21%	1.96%	37.98%
Total	2.38%	8.72%	2.49%	7.55%	1.06%	11.10%

Note 1: Voluntary turnover excludes retirees.
Note 2: The turnover rate is calculated based on the total number of employees in the respective business entity.
Note 3: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and the disclosure scope added Mining Companies in Taiwan and Mainland China in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.7 Scope of Engagement Survey in the Past Five Years

Item	2021	2022	2023	2024	2025
Historical Engagement Survey Scores	96.10%	90.00%	92.96%	87.00%	82.00%
Response Rate	96.71%	97.60%	95.00%	98.00%	94.00%



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7.1.3.8 2025 Training Hours (Unit: Hours) and Investment

Item		Age			Job Level						Average Hours
		<30	30-50	>50	Executive Managers	Mid-level Managers	Junior Managers	Professional Staff	Direct Staff	Total Hours	
Cement and Environmental Protection Business (Asia)	♀	17,995	21,357	1,904	60	2,407	3,526	12,701	22,607	41,301	30.00
Cement and Environmental Protection Business (Europe-Africa)	♂	69,856	73,720	40,556	2,287	10,736	21,474	28,036	121,556	184,088	33.00
Energy for Social Transformation Business	♀	1,393	4,134	1,364	298	1,297	598	3,721	984	6,898	20.10
Other Business Groups	♂	13,628	28,394	6,590	446	1,346	4,617	5,400	37,379	49,188	11.90
	♀	303	731	362	0	154	117	614	510	1,395	51.70
	♂	1,065	7,111	4,332	67	2,027	118	4,814	5,482	12,508	46.70
	♀	2,044	12,787	1,281	129	1,978	776	4,701	8,528	16,113	25.60
	♂	5,318	23,256	4,920	811	6,950	2,771	9,391	13,572	33,496	25.20
Total Hours		111,602	171,489	61,308	4,099	26,894	33,998	69,378	210,617	344,986	-
Average Hours		72	18	23	18	30	23	25	25	-	25.20
Average Training and Development Cost per Full-time Employee											NT\$ 3,962

Note 1: The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated subsidiaries.

Note 2: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and added Mining Companies in Taiwan and Mainland China to the disclosure scope in 2025; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.9 Return on Human Capital Investment over the Past Five Years

	2021	2022	2023	2024	2025
Human Capital ROI	12.7	11.7	10.3	8.7	7.77

Note 1: Return on human capital investment = (operating revenue - (operating expenses - employee benefit expenses)) / employee benefit expenses.

Note 2: The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated subsidiaries.

7.1.3.10 Parental Leave Usage over the Past Three Years

Item	2023		2024		2025	
	Female	Male	Female	Male	Female	Male
Number of Employees Entitled to Parental Leave in the Year (A)	22	72	6	36	18	119
Number of Employees Applying for Parental Leave in the Year (B)	4	1	4	2	6	15
Expected Number of Employees Returning to Work in the Year (C)	3	3	2	1	6	9
Actual Number of Employees Returning to Work (D)	1	2	2	1	5	8
Number of Employees Still Employed 12 Months After Return (E)	4	1	0	0	6	5
Return to Work Rate After Leave (D/C)	33.00%	67.00%	100.00%	100.00%	83.00%	89.00%
Retention Rate One Year After Return (E/D of Previous Year)	100.00%	100.00%	0.00%	0.00%	100.00%	71.00%

Note 1: The number of employees eligible for unpaid parental leave in the year refers to Full-time employees who have been employed for at least six months.

Note 2: The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated subsidiaries.

7.1.3.11 2025 Occupational Injury Statistics

Employee Occupational Injuries					
Site	Cement and Environmental Protection Business (Asia)	Cement and Environmental Protection Business (Europe)	Energy for Social Transformation Business	Other Business Groups	Total
Occupational Injuries					
Number of Fatalities	0	0	0	0	0
Number of High-consequence Work-related Injuries	0	7	0	0	7
Number of Recordable Work-related Injuries	22	123	1	19	165
Fatality Rate	0.00	0.00	0.00	0.00	0.00
High-consequence Work-related Injury Rate	0.00	0.61	0.00	0.00	0.21
Total Recordable Injury Frequency Rate (TRIFR)	1.34	10.71	1.72	4.24	5.00
Lost Time Injury Frequency Rate (LTIFR)	1.34	10.71	1.72	4.24	5.00
Actual Working Hours	16,435,219	11,484,969	580,560	4,483,158	32,983,906
Occupational Diseases (Number of Cases)	0	2	0	0	2
Silicosis (Number of Cases)	0	0	0	0	0



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Contractor Occupational Injuries					
Site	Cement and Environmental Protection Business (Asia)	Cement and Environmental Protection Business (Europe)	Energy for Social Transformat on Business	Other Business Groups	Total
Occupational Injuries					
Number of Fatalities	0	0	0	0	0
Number of High-consequence Work-related Injuries	0	1	0	0	1
Number of Recordable Work-related Injuries	5	71	1	6	83
Fatality Rate	0.00	0.00	0.00	0.00	0.00
High-consequence Work-related Injury Rate	0.00	0.10	0.00	0.00	0.06
Total Recordable Injury Frequency Rate (TRIFR)	0.83	7.41	2.10	5.74	4.84
Lost Time Injury Frequency Rate (LTIFR)	0.83	7.41	2.10	5.74	4.84
Actual Working Hours	6,042,162	9,585,304	476,540	1,044,915	17,148,921
Occupational Diseases (Number of Cases)	0	0	0	0	0
Silicosis (Number of Cases)	0	0	0	0	0

Note 1: Occupational injury data is primarily based on monthly occupational disaster statistics reported by each plant.

Note 2: The main types of occupational injuries are caught-in/between, struck-by, falls, and cuts.

Note 3: Fatality rate = (Number of fatalities / Total actual working hours) x 1,000,000

Note 4: Severe occupational injury rate = (Number of severe occupational injuries / Total actual working hours) x 1,000,000

Note 5: Total recordable incident frequency rate (TRIFR) = (Number of recordable injuries / Total actual working hours) x 1,000,000

Note 6: Lost time injury frequency rate (LTIFR) = ((Number of recordable injuries - Number of fatalities) / Total actual working hours) x 1,000,000

Note 7: Some actual working hours are estimated by multiplying the number of plant entries by 8 hours.

Note 8: The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated subsidiaries.

Note 9: The Cement and Environmental Protection Business (Asia) includes Taiwan and Mainland China, and the disclosure scope was expanded in 2025 to include Mining Companies in Taiwan and Mainland China; other business groups include the Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.

7.1.3.12 Occupational Injury Statistics for the Past Five Years

	Employees	Contractors
2021		
Number of fatalities	0	1
Lost-Time Injury Frequency Rate (LTIFR)	0.55	0
Total Recordable Injury Frequency Rate (TRIFR)	0.32	0
2022		
Number of fatalities	0	0
Lost-Time Injury Frequency Rate (LTIFR)	1.00	0.75
Total Recordable Injury Frequency Rate (TRIFR)	1.59	2.20
2023		
Number of fatalities	0	2
Lost-Time Injury Frequency Rate (LTIFR)	0.80	0.60
Total Recordable Injury Frequency Rate (TRIFR)	1.70	1.70
2024		
Number of fatalities	0	4
Lost-Time Injury Frequency Rate (LTIFR)	1.94	3.25
Total Recordable Injury Frequency Rate (TRIFR)	1.94	3.66
2025		
Number of fatalities	0	0
Lost-Time Injury Frequency Rate (LTIFR)	5.00	4.84
Total Recordable Injury Frequency Rate (TRIFR)	5.00	4.84

Note 1: The disclosure scope covers cement plants, RMC plants, grinding stations, and consolidated subsidiaries.

7.1.3.13 Total Injury Index in Taiwan for the Past Four Years

			Taiwan ¹
	Category	Employees	Contractors
2022			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	1.65	1.72
Lost Time Injury Severity Rate per Million Working Hours	(SR)	81.00	14.00
Total Injury Index	(FSI)	0.36	0.15
2023			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.81	1.70
Lost Time Injury Severity Rate per Million Working Hours	(SR)	25.00	6,810.00
Total Injury Index	(FSI)	0.14	3.40
2024			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.17	0.61
Lost Time Injury Severity Rate per Million Working Hours	(SR)	47.70	1,855.00
Total Injury Index	(FSI)	0.09	1.07
2025			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	1.91	1.46
Lost Time Injury Severity Rate per Million Working Hours	(SR)	10.70	13.10
Total Injury Index	(FSI)	0.14	0.14



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Ho Sheng Mining Company

2022	Category	Employees	Contractors
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.00	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	0.00	0.00
Total Injury Index	(FSI)	0.00	0.00
2023			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.00	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	0.00	0.00
Total Injury Index	(FSI)	0.00	0.00
2024			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.00	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	0.00	0.00
Total Injury Index	(FSI)	0.00	0.00
2025			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.00	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	0.00	0.00
Total Injury Index	(FSI)	0.00	0.00

Ho-Ping Power Company

2022	Category	Employees	Contractors
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	1.81	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	54.00	0.00
Total Injury Index	(FSI)	0.31	0.00
2023			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	1.75	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	52.00	0.00
Total Injury Index	(FSI)	0.30	0.00
2024			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	0.00	0.00
Lost Time Injury Severity Rate per Million Working Hours	(SR)	0.00	0.00
Total Injury Index	(FSI)	0.00	0.00
2025			
Lost Time Injury Frequency Rate per Million Working Hours	(FR)	1.72	2.10
Lost Time Injury Severity Rate per Million Working Hours	(SR)	18.90	65.10
Total Injury Index	(FSI)	0.18	0.37

Note 1: The disclosure scope covers the Cement and Environmental Protection Business in Taiwan (including Wanching), Battery Energy Business (Molice), NHOA.TCC, Ta-Ho Maritime, Taiwan Transport & Storage, TCC Green Energy, Kuan-Ho Refractories Industry, TCC Information Systems, Hoping EcoPort, and Feng Sheng.

7.1.3.14 Union and Collective Agreement Participation for the Past Four Years

	2022	2023	2024	2025
Percentage of Employees Covered by Collective Bargaining Agreements (%)	96%	64%	91%	49%

Note 1: From 2024, the disclosure scope was expanded to include the Cement and Environmental Protection Business (Asia) and Energy for Social Transformation Business; from 2025, the disclosure scope was expanded to the entire Group, including the Cement and Environmental Protection Business (Asia), Cement and Environmental Protection Business (Europe-Africa), Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business.



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7.1.4 TCC Key Indicators — Mining Companies in Taiwan and Mainland China GRI 14: Mining Sector 2024

The disclosure scope includes Ho Sheng Mining Company and Jiangsu Mining Industrial Company.

7.1.4.1 2025 Energy Consumption

Site	Energy Type	Energy Consumption (GJ)
Mining Companies in Taiwan and Mainland China	Diesel	78,098.76
	Gasoline	214.88
	Purchased Electricity	1,085.98

7.1.4.2 2025 Greenhouse Gas Emissions

Site	Item	Emissions (tCO ₂ e)
Mining Companies in Taiwan and Mainland China	Scope 1	3,428
	Scope 2 (Location-based)	339
	Scope 2 (Market-based)	339
	Scope 1 and Scope 2 (Market-based) Total	3,767
	Scope 3	-

7.1.4.3 2025 Waste Treatment

Site	Category	Item	Waste Treated (tons)
Mining Companies in Taiwan and Mainland China	Total Waste	Non-Hazardous Waste	11.71
	Generated On-site	Hazardous Waste	8.42

Site	Category	Disposal Method	Hazardousness	Waste Disposed (tons)
Mining Companies in Taiwan and Mainland China	Outsourced Waste Dis-posal	Off-site Landfill	Non-hazardous Waste	-
			Hazardous Waste	-
		Off-site Incineration (with Energy Recovery)	Non-hazardous Waste	-
			Hazardous Waste	-
		Off-site Incineration (without Energy Recovery)	Non-hazardous Waste	-
			Hazardous Waste	-
		Off-site Recycling and Reuse	Non-hazardous Waste	1.37
			Hazardous Waste	8.42

7.1.4.4 2025 Training Hours

Site	Category	Item/Breakdown by Type	Female	Male
Mining Companies in Taiwan and Mainland China	Age	Under 30	0	106
	Age	30–50 Years Old	124	1,508
	Age	Over 50	47	1,359
	Job Level	Executive Managers	0	0
	Job Level	Mid-level Managers	0	39
	Job Level	Junior Managers	0	202
	Job Level	Professionals	161	135
	Job Level	Direct Workers	11	2,597
	Total Hours	Total Hours	172	2,973
	Average Hours	Average Hours	34.40	30.00

7.1.4.5 2025 Employee Diversity

Employee Statistics

Site	Category	Item/By Type	Female	Male	Total
Mining Companies in Taiwan and Mainland China	Employment Relationship	Permanent Employees	5	99	104
	Employment Relationship	Temporary Employees	0	0	0
	Employment Relationship	Non-guaranteed Hours Employees	0	0	0
	Contract Type	Full-time Employees	5	99	104
	Contract Type	Part-time Employees	0	0	0
	Total	-	5	99	104

Full-time Employee Statistics

Site	Category	Item/By Type	Female	Male	Total
Mining Companies in Taiwan and Mainland China	Age	Under 30 (Exclusive)	0	4	4
	Age	30–50 Years Old	4	54	58
	Age	Over 50 (Exclusive)	1	41	42
	Education	Ph.D.	0	0	0
	Education	Master's Degree	0	0	0
	Education	Bachelor's Degree	2	17	19
	Education	Associate Degree	2	6	8
	Education	High School or Below	1	76	77
	Job Category	Executive Managers	0	0	0
	Job Category	Mid-level Managers	0	2	2
	Job Category	Junior Managers	0	6	6
	Job Category	Professionals	2	5	7
	Job Category	Direct Labor	3	86	89

Note 1: Taiwan supervisor definitions: Senior management includes directors and assistant vice presidents (and above); middle management includes managers and assistant managers; junior management includes supervisors; professionals include engineers, administrators, researchers, and management associates; direct personnel include other roles, such as mixer operators, machine operators, and clerks.

Note 2: Mainland China supervisor definitions: Senior management includes vice presidents (and above); middle management includes mid-level supervisors; junior management includes post workers levels 1–3; professionals include post workers levels 4–5; direct personnel include post workers levels 6–10.



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7.1.4.6 2025 Occupational Injury Statistics

Site	Occupational Injuries	Employee Occupational Injuries	Contractor Occupational Injuries
Mining Companies in Taiwan and Mainland China	Number of Fatalities	0	0
	Number of High-consequence Work-related Injuries	0	0
	Number of Recordable Injuries	1.00	0
	Fatality Rate	0	0
	High-consequence Work-related Injury Rate	0	0
	Total Recordable Injury Frequency Rate (TRIFR)	4.36	0
	Lost Time Injury Frequency Rate (LTIFR)	4.36	0
	Actual Working Hours	229,462.00	0
	Occupational Diseases (Cases)	0	0

Note 1: Occupational injury data is primarily based on monthly occupational disaster statistics reported by each plant.

Note 2: The main types of occupational injuries are caught-in/between, struck-by, falls, and cuts.

Note 3: Fatality rate = (number of fatalities / total actual working hours) x 1,000,000.

Note 4: High-consequence work-related injury rate = (number of high-consequence work-related injuries) / total actual working hours x 1,000,000.

Note 5: Total Recordable Injury Frequency Rate = (number of recordable work-related injuries) / total actual working hours x 1,000,000.

Note 6: Occupational injury rate = ((number of recordable injuries - number of fatalities) / total actual working hours) x 1,000,000.

Note 7: Some actual working hours are estimated by multiplying the number of plant entries by 8 hours.



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7.2 Sustainability Disclosure for the Listed Cement Companies

Cement Industry Sustainability Disclosure Indicators

The calculation scope of indicators 1 to 4 includes Cement and Environmental Protection Business (Asia), Cement and Environmental Protection Business (Europe-Africa), Energy for Social Transformation Business, Charging and Storage Business (Asia), Charging and Storage Business (Europe), Battery Energy Business, Asset Management Business, and Investment Business. For detailed energy consumption information, please refer to 7.1.2 TCC Key Indicators – Environmental.

No.	Indicator	Indicator Type	2025 Disclosure Status	Unit	Remarks
1	Total energy consumption, percentage of purchased electricity, and utilization rate	Quantitative	Total energy consumption: 234,430,519 GJ Percentage of purchased electricity: 5.64% Renewable energy usage rate: 6.55%	Gigajoules (GJ), Percentage (%)	1.The percentage of purchased electricity represents the ratio of purchased electricity consumption to total energy consumption. 2.The renewable energy usage rate represents the ratio of renewable energy consumption to total energy consumption.
2	Total Water Withdrawal and Total Water Consumption	Quantitative	Total water withdrawal: 1,279,814.36 thousand cubic meters Total water consumption: 20,246.87 thousand cubic meters	Thousand cubic meters (1,000m³)	
3	Weight of waste generated, percentage of hazardous waste, and percentage of recycling	Quantitative	Weight of waste generated: 190,802.94 tons Percentage of hazardous waste: 2.43% Percentage of waste recycling: 97.87%	Tons (t), Percentage (%) Number, Rate (%) tons (t), cubic meters (m³)	1.The percentage of hazardous waste represents the percentage of hazardous waste weight over total waste weight. 2.The percentage of waste recycling represents the percentage of total weight of waste recycled both on-site and off-site (excluding waste incinerated for power generation) over total waste weight.

No.	Indicator	Indicator Type	2025 Disclosure Status	Unit	Remarks
4	Number of employees in and rate of occupational accidents	Quantitative	For TCC employee and contractor occupational injury numbers and rates, please refer to 7.1.3.11 TCC Key Indicators Social – 2025 Occupational Injury Statistics	Number, Rate (%)	
5	Production by product category	Quantitative		tons (t), cubic meters (m³)	
Product Category			Cement and Environmental Protection Business (Asia)	Cement and Environmental Protection Business (Europe-Africa)	Total
Clinker (tons)			29,353,566.20	12,607,407.27	41,960,973.47
Cement (tons)			31,511,995.55	16,820,936.84	48,332,932.39
Cementitious Materials (tons)			36,800,228.88	17,208,596.94	54,008,825.81
280 Specification Concrete (m³)			2,983,553.50		
350 Specification Concrete (m³)			654,686.50		
420 Specification Concrete (m³)			467,035.50		
Total Concrete Production (m³)			5,999,772.00	12,593,706.31	18,593,478.31



Climate-related Information for TWSE/TPEX Listed Companies - Climate Change Risks and Opportunities for the Company and Related Response Measures Taken

Item	Corresponding Sections	Page Number
1. Describe the board of directors' and management's oversight and governance of climate-related risks and opportunities.	Please refer to the 2025 Annual Report.	88
2. Describe how the identified climate risks and opportunities affect the business, strategy, and finances of the business (short, medium, and long term).	Please refer to the 2025 Annual Report.	88-91
3. Describe the financial impact of extreme weather events and transformative actions.	Please refer to the 2025 Annual Report.	88-91
4. Describe how climate risk identification, assessment, and management processes are integrated into the overall risk management system.	Please refer to the 2025 Annual Report.	91
5. If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be described.	Please refer to the 2025 Annual Report.	92
6. If there is a transition plan for managing climate-related risks, describe the content of the plan, and the indicators and targets used to identify and manage physical risks and transition risks.	Please refer to the 2025 Annual Report.	94
7. If internal carbon pricing is used as a planning tool, the basis for setting the price should be stated.	Please refer to the 2025 Annual Report.	95
8. If climate-related targets have been set, the activities covered, the scope of greenhouse gas emissions, the planning horizon, and the progress achieved each year should be specified. If carbon credits or renewable energy certificates (RECs) are used to achieve relevant targets, the source and quantity of carbon credits or RECs to be offset should be specified.	Please refer to the 2025 Annual Report.	95
9. GHG inventory and assurance status, reduction targets, strategies, and specific action plans.	Please refer to GHG Inventory Information.	

GHG Inventory Information

Basic Company Information:

- Companies with a capital of over NT\$10 billion, steel industry, and cement industry.
- According to the Sustainable Development Roadmap for Listed Companies: the parent company entity started its inventory in 2023, and subsidiaries in the consolidated financial statements started in 2025.

TCC established a GHG inventory mechanism in accordance with the ISO 14064-1 standard published by the International Organization for Standardization (ISO). Since 2016, TCC has regularly conducted annual inventories for the parent company entity, and since 2005, it has successively initiated greenhouse gas emissions inventories for subsidiaries in the consolidated financial statements to fully grasp the status of greenhouse gas usage and emissions, and verify the effectiveness of carbon reduction actions.

In addition, the GHG inventory data for the most recent two years summarizes the greenhouse gas emissions of TCC and all subsidiaries in the consolidated financial statements based on the operational control approach, detailed as follows:

Item	2024 Emissions (tCO ₂ e)	Intensity (tCO ₂ e/million NTD revenue)	2025 Emissions (tCO ₂ e)	Intensity (tCO ₂ e/million NTD revenue)
Parent company				
Scope 1 Direct greenhouse gas emissions	3,303,179		3,393,267	
Scope 2 Indirect greenhouse gas emissions	206,001		211,774	
Subsidiaries in Consolidated Financial Statements				
Scope 1 Direct greenhouse gas emissions	38,010,464		38,290,605	
Scope 2 Indirect greenhouse gas emissions	1,404,341		1,373,412	
Total	42,923,985	277.6	43,269,058	288.8

Note 1: TCC's direct emissions (Scope 1) and energy indirect emissions (Scope 2 — location-based) data cover all entities in the consolidated financial statements. The energy intensity of the parent and subsidiary companies in the 2025 and 2024 consolidated financial statements is calculated based on net revenues of NTD 149,804,135 thousand and NTD 154,606,511 thousand, respectively.

Note 2: TCC's direct emissions (Scope 1) and energy indirect emissions (Scope 2) data for 2025 and 2024 were verified by third-party organizations, including British Standards Institution (BSI) Taiwan Branch and SGS Taiwan Limited. Related certificates can be viewed on the sustainability certification page of TCC's official website.



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Greenhouse Gas Assurance Information

TCC's minimum assurance coverage requirements as specified in the Sustainable Development Roadmap for TWSE/TPEX Listed Companies:

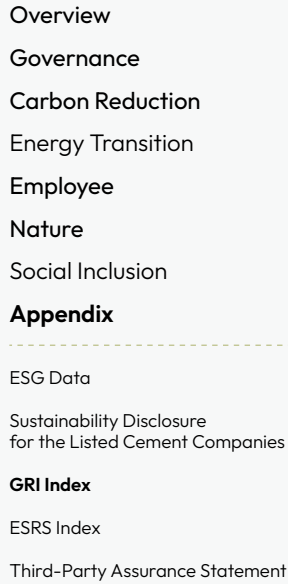
- The parent company's standalone entity should begin assurance implementation starting in 2024.
- Subsidiaries in consolidated financial statements should begin assurance implementation starting in 2027.

TCC's greenhouse gas inventory assurance status for the past two years is described below:

Item	2024	2025
Parent company	Emissions (tCO ₂ e)	Emissions (tCO ₂ e)
Scope 1	3,303,179	3,393,267
Direct greenhouse gas emissions		
Scope 2	206,001	211,774
Indirect greenhouse gas emissions		
Total	3,509,180	3,605,041
Percentage of disclosed inventory data	100%	100%
Assurance Agency	British Standards Institution (BSI) Taiwan Branch	British Standards Institution (BSI) Taiwan Branch
Assurance Description	Assurance Standard ISO 14064-3: 2019	Assurance Standard ISO 14064-3:2019
Assurance Opinion and Conclusion	Unqualified Opinion	Unqualified Opinion

Greenhouse Gas Reduction Targets, Strategies, and Specific Action Plans

Please refer to the [Pillar V ESG Advantages](#) chapter

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Statement of Use GRI 1 Adopted	TCC Group Holdings CO., LTD. has reported in accordance with the GRI Standards
Applicable GRI Sector Standards	for the period from January 1, 2025, to December 31, 2025.
	GRI 1: Foundation 2021
	GRI 14: Mining Sector

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
2-6 Activities, value chain and other business relationships	Appendix ISSA 5000 Assurance Statement Product and Service Value Chain	232	TCC Group Holdings produces and manages cement, ready-mixed concrete, power, and energy solutions, serving construction, industrial, utility, and retail customers across Taiwan, Mainland China, Europe, and global markets.	
	1.7 Supply Chain Management	84	Cement and Environmental Protection Business supplies core construction materials, while Charging and Storage Business & Battery Energy Business provide power generation, storage systems, lithium batteries, and charging services to support energy transition. TCC actively collaborates with suppliers, clients, governments, and industry bodies to advance low-carbon materials and clean energy. Compared to the previous period, there were no significant changes to TCC's value chain, products, services, or key partnerships.	
2-7 Employees	7.1.3 TCC Key Indicators Social	209		
2-8 Workers who are not employees	7.1.3 TCC Key Indicators Social	209		
2-9 Governance structure and composition	1.1 Governance Structure	58		
2-10 Nomination and selection of the highest governance body	1.1 Governance Structure	58		



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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
2-11 Chair of the highest governance body	1.1 Governance Structure	58		
2-12 Role of the highest governance body in overseeing impact management	1.1 Governance Structure	58		
	Stakeholder and Material Topic Analysis	45		
2-13 Delegation of responsibility for managing impacts	1.1 Governance Structure	58		
2-14 Role of the highest governance body in sustainability reporting	More About the Report	55		
2-15 Conflicts of interest	1.1 Governance Structure	58	For important Board resolutions and directors' recusal due to conflicts of interest, please refer to the Board of Directors Section on TCC's official website	
2-16 Communication of critical concerns	1.1 Governance Structure	58	For related communication matters, please refer to the Board of Directors and Sustainability Committee meeting minutes in the Investor Relations - Committees section on TCC's official website	
	1.3 Risk Management Framework	63		
2-17 Collective knowledge of the highest governance body	1.1 Governance Structure	58		
2-18 Evaluation of the performance of the highest governance body	1.1 Governance Structure	58		
2-19 Remuneration policies	1.1 Governance Structure	58	Please refer to TCC Group Holdings CO., LTD.'s Annual Report for details on the remuneration paid to directors, supervisors, President and Vice Presidents. Currently, TCC does not have a clawback mechanism for remuneration	

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
2-20 Process to determine remuneration	1.1 Governance Structure	58	Please refer to TCC Group Holdings CO., LTD.'s Remuneration Committee Charter.	
2-21 Annual total compensation ratio			In 2025, the median ratio of the total annual remuneration of the highest-paid internal manager to the total annual remuneration of general employees was 74:1 (remuneration includes: salary, year-end bonus, and variable bonus) The total remuneration change rate for 2025 was 89 % (The above ratios were calculated based on the remuneration of the President of TCC, Mr. Roman Cheng. The boundary includes Cement and Environmental Protection Businesses (Asia), as well as subsidiaries in Taiwan and Mainland China.)	
2-22 Statement on sustainable development strategy	Letter to Our Stakeholders	04		
2-23 Policy commitments	Shaping the Future Civilization	08		
2-24 Embedding policy commitments	4.5 Human Rights Protection	151		
2-25 Processes to remediate negative impacts	Stakeholder and Material Topic Analysis	45		
	4.5 Human Rights Protection	151		
2-26 Mechanisms for seeking advice and raising concerns	1.5 Ethical Management	76		



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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
2-27 Compliance with laws and regulations	1.5 Ethical Management	76	All fines paid in the year 2025 were incurred due to violations of regulations that occurred within the current reporting period. There were no fines paid for violations that occurred in previous reporting periods.	
2-28 Membership associations	-		Please refer to the ESG section on the TCC website for details on TCC's membership in associations.	
2-29 Approach to stakeholder engagement	Stakeholder and Material Topic Analysis	45		
2-30 Collective bargaining agreements	4.5 Human Rights Protection	151		
Material Topics				
GRI 3: Material Topics 2021				
3-1 Process to determine material topics	Stakeholder and Material Topic Analysis	45		
3-2 List of material topics	Stakeholder and Material Topic Analysis	45		
Material Topic Climate Action and Net-Zero Emissions				
GRI 3: Material Topics 2021				
3-3 Management of material topics	Stakeholder and Material Topic Analysis	45		14.1.1 、 14.2.1
GRI 201: Economic Performance 2016				
201-2 Financial implications and other risks and opportunities due to climate change	1.4 TCFD	67		14.2.2

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
GRI 302: Energy 2016				
302-1 Energy consumption within the organization	7.1.2 TCC Key Indicators Environmental	200	In 2025, the energy consumption by global operational sites was 234,430,519 GJ, comprising 219,074,113 GJ of non-renewable energy and 15,356,406GJ of renewable energy. Renewable energy fuel types include coal, diesel, gasoline, natural gas, purchased electricity, waste heat power generation, and non-renewable alternative fuels, of which non-renewable alternative fuels totaled 13,829,036GJ. Renewable energy sources include renewable biofuels and self-generated solar power for internal use. Renewable biofuels equivalent to approximately 14,528,346GJ. Self-generated solar power for internal use is converted at a rate of 3.6GJ per thousand kWh, equivalent to approximately 828,059GJ	14.1.2
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
302-3 Energy intensity	7.1.2 TCC Key Indicators Environmental	200		14.1.4
302-4 Reduction of energy consumption	7.1.2 TCC Key Indicators Environmental	200	In 2025, the plant's energy-saving projects saved 853,459GJ. Please refer to 7.1.2.5 TCC Key Indicators 2025 Energy Conservation Programs.	



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GRI 305: Emissions 2016				
305-1 Direct (Scope 1) GHG emissions	7.1.2 TCC Key Indicators Environmental	200	Greenhouse gases include CO ₂ , CH ₄ , N ₂ O, HFCs and SF ₆ , with no emissions of PFCs, or NF ₃	14.1.5
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
	7.2 Sustainability Disclosure for the Listed Cement Companies	218		
305-2 Energy indirect (Scope 2) GHG emissions	7.1.2 TCC Key Indicators Environmental	200		14.1.6
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
	7.2 Sustainability Disclosure for the Listed Cement Companies	218		
305-3 Other indirect (Scope 3) GHG emissions	7.1.2 TCC Key Indicators Environmental	200		14.1.7
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
	7.2 Sustainability Disclosure for the Listed Cement Companies	218		
305-4 GHG emissions intensity	7.1.2 TCC Key Indicators Environmental	200		14.1.8
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
	7.2 Sustainability Disclosure for the Listed Cement Companies	218		

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
305-5 Reduction of GHG emissions	7.1.2 TCC Key Indicators Environmental	200		14.1.9
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		
	7.2 Sustainability Disclosure for the Listed Cement Companies	218		
	Material Topic Resource Co-processing and Circular Economy			
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		14.5.1
Material Topic Low-Carbon Products and Services				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
GRI 301: Materials 2016				
301-2 Recycled input materials used	7.1.2 TCC Key Indicators Environmental	200		
Material Topic Green Energy and Energy Storage Business				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
Material Topic AI Process and Information Management				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
Material Topic R&D Innovation				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
Material Topic Biodiversity				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		14.4.1
GRI 101 Biodiversity 2024				
101-1 Policies to halt and reverse biodiversity loss	5.1 TCC Nature Action: TNFD	157		14.4.2



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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
101-2 Management of biodiversity impacts	5.1 TCC Nature Action: TNFD	157		14.4.3
	5.2 Forest & Soil Restoration	166		
	5.3 Marine Restoration	174		
	5.4 Nature-based Solutions (NbS)	180		
101-3 Access and benefit-sharing	5.5 Natural Benefit Sharing	182		
101-4 Identification of biodiversity impacts	5.1 TCC Nature Action: TNFD	157	In 2025, the TNFD LEAP methodology was applied to analyze Cement and Environmental Protection Business (Asia) and its suppliers. In 2026, the evaluation is expanded to all global owned operation sites across all business groups, as well as suppliers of Cement and Environmental Protection Business (Asia). The 2026 LOCATE analysis results and site area data are expected to be published in the ESG section on TCC's official website in September 2026.	14.4.4
101-5 Locations with biodiversity impacts	5.1 TCC Nature Action: TNFD	157		14.4.5
101-6 Direct drivers of biodiversity loss	5.1 TCC Nature Action: TNFD	157		14.4.6
101-7 Changes to the state of biodiversity	5.1 TCC Nature Action: TNFD 5.2 Forest & Soil Restoration	157 166		14.4.7
101-8 Ecosystem services	5.1 TCC Nature Action: TNFD	157		14.4.8

Material Topic | Operational Performances

GRI 3: Material Topics 2021

3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45
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Material Topic | Stakeholder Engagement and Just Transition

GRI 3: Material Topics 2021

3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45
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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
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Material Topic | Talent Cultivation and Development

GRI 3: Material Topics 2021

3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		14.17.1
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GRI 404: Training and Education 2016

404-1 Average hours of training per year per employee	7.1.3 TCC Key Indicators Social 7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	209 216		14.17.7
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404-2 Programs for upgrading employee skills and transition assistance programs	4.2 Employee Development	135		14.17.8
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404-3 Percentage of employees receiving regular performance and career development reviews	4.3 Employee Remuneration and Benefits	140		
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Material Topic | Workplace Inclusion

GRI 3: Material Topics 2021

3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		14.21.1
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GRI 405: Diversity and Equal Opportunity 2016

405-1 Diversity of governance bodies and employees	1.1 Governance Structure 4.2 Employee Development 7.1.3 TCC Key Indicators Social	58 135 209		14.21.5
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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards												
405-2 Ratio of basic salary and remuneration of women to men	7.1.3 TCC Key Indicators Social	209	2025 TCC salary ratio: female to male employees (Female : Male) Sites in Taiwan and Mainland China (Cross-Business Groups) <table><thead><tr><th>Employee Level</th><th>Base Salary</th><th>Base Salary + Other Cash Incentives</th></tr></thead><tbody><tr><td>Executive level</td><td>107:100</td><td>131:100</td></tr><tr><td>Management level</td><td>116:100</td><td>116:100</td></tr><tr><td>Non-management level</td><td>96:100</td><td>92:100</td></tr></tbody></table> Note 1: Fixed remuneration refers to monthly base salary (including year-end bonus); total annual remuneration includes fixed remuneration and variable bonuses. Note 2: TCC's significant locations of operation include sites in Taiwan and Mainland China (covering Cement and Environmental Protection (Asia) as well as other business groups and subsidiaries). Due to data availability constraints, the boundary for this indicator excludes the Longshan Plant and the subsidiary Feng Sheng Enterprise Company. Note 3: Executive management includes Assistant Vice Presidents and above; junior and mid-level management includes Supervisors to Senior Managers; non-management roles include direct operators, specialists, engineers, and researchers.	Employee Level	Base Salary	Base Salary + Other Cash Incentives	Executive level	107:100	131:100	Management level	116:100	116:100	Non-management level	96:100	92:100	14.21.6
Employee Level	Base Salary	Base Salary + Other Cash Incentives														
Executive level	107:100	131:100														
Management level	116:100	116:100														
Non-management level	96:100	92:100														

Material Topic Corporate Governance				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
GRI 205: Anti-corruption 2016				
205-3 Confirmed corruption incidents and actions taken	1.5 Ethical Management	76		

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
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GRI 206: Anti-competitive Behavior 2016				
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1.5 Ethical Management	76	TCC had no incidents of anti-competitive behavior, anti-trust, and monopoly practices in 2025.	

Material Topic Workplace Health and Safety				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		14.16.1
GRI 403: Occupational Health and Safety 2018				
403-1 Occupational health and safety management system	4.4 Occupational Health and Safety	145		14.16.2
403-2 Hazard identification, risk assessment, and incident investigation	4.4 Occupational Health and Safety	145	In accordance with Article 18 of the Occupational Safety and Health Act, workers who identify potential hazards may leave work conditions they believe could cause injury or illness and must immediately report the situation to their direct supervisor without facing disciplinary action.	14.16.3
403-3 Occupational health services	4.4 Occupational Health and Safety	145		14.16.4
403-4 Worker participation, consultation, and communication on occupational health and safety	4.4 Occupational Health and Safety	145		14.16.5
403-5 Worker training on occupational health and safety	4.4 Occupational Health and Safety	145		14.16.6
403-6 Promotion of worker health	4.4 Occupational Health and Safety	145		14.16.7



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403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.4 Occupational Health and Safety	145		14.16.8
403-8 Workers covered by occupational health and safety management system	4.4 Occupational Health and Safety	145		14.16.9
403-9 Work-related injuries	7.1.3 TCC Key Indicators Social	209		14.16.10
403-10 Work-related ill health	4.4 Occupational Health and Safety	145	In 2025, TCC had zero occupational disease cases in Taiwan and Mainland China, and one reported case at the Portugal office (affecting two employees diagnosed with hearing loss). Following labor-management consultations, the cases were processed per work injury procedures. As equipment limitations prevented direct noise mitigation, TCC adjusted operational workflows, enforced mandatory protective equipment, and restricted on-site working hours to minimize occupational injuries.	14.16.11
	7.1.3 TCC Key Indicators Social	209		
Material Topic Disaster Risk Control				
GRI 3: Material Topics 2021				
3-3 Management of Material Topics	Stakeholder and Material Topic Analysis	45		
Topic-specific Disclosures				
GRI 204: Procurement Practices 2016				
204-1 Proportion of spending on local suppliers	1.7 Supply Chain Management	84		

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
GRI 303: Water 2018				
303-1 Interactions with water as a shared resource	2.3 Low-Carbon Production Management	109		
303-2 Management of water discharge-related impacts	2.3 Low-Carbon Production Management	109		
303-3 Water withdrawal	7.1.2 TCC Key Indicators Environmental	200	Water withdrawal at operational sites in Taiwan and Mainland China includes both freshwater and seawater.	
303-4 Water discharge	7.1.2 TCC Key Indicators Environmental	200		
303-5 Water consumption	7.1.2 TCC Key Indicators Environmental	200		
GRI 305: Emissions 2016				
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant emissions	7.1.2 TCC Key Indicators Environmental	200		
GRI 306: Waste 2020				
306-1 Waste generation and significant waste-related impacts	2.2 Resource Recycling—City Mining	102		14.5.2
	2.3 Low-Carbon Production Management	109		14.5.3
306-2 Management of significant waste-related impacts	2.3 Low-Carbon Production Management	109		
	7.1.2 TCC Key Indicators Environmental	200		14.5.4
306-3 Waste generated	7.1.2 TCC Key Indicators Environmental	200		
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		14.5.5
306-4 Waste diverted from disposal	7.1.2 TCC Key Indicators Environmental	200		
	7.1.4 TCC Key Indicators GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China	216		14.5.6
306-5 Waste directed to disposal	7.1.2 TCC Key Indicators Environmental	200		



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GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
GRI 401: Employment 2016				
401-1 New employee hires and employee turnover	7.1.3 TCC Key Indicators Social	209		
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.3 Employee Remuneration and Benefits	140	In 2025, TCC also employed part-time personnel whose benefit coverage differed from that of full-time employees, such as being excluded from Employee Welfare Committee benefits.	
401-3 Parental leave	7.1.3 TCC Key Indicators Social	209		
GRI 413: Local Communities 2016				
413-1 Operations with local community engagement, impact assessments, and development programs	6.1 Social Engagement	187		
413-2 Operations with significant actual and potential negative impacts on local communities	4.5 Human Rights Protection 6.1 Social Engagement	187 187	■ The Hoping Plant has completed comprehensive local community communication and impact assessments, accounting for 50% of cement plant operating sites in Taiwan. TCC launched the Ho-Ping Carbon Reduction Parent-Child Bankbook Program in 2023, disclosing its Social Impact Assessment in 2025. See CH6.1 and the report for details. ■ In 2025, the Hoping Sustainability Charity Foundation approved a total subsidy amount of NTD 4,059,416. In addition, Ho-Ping Power Maritime Emergency Relief approved a total subsidy amount of NTD 2,250,000.	

GRI Standards/Disclosures	Corresponding Sections	Page Number	Notes/Omission Justification	Reference number of disclosures in GRI Sector Standards
			■ TCC regularly conducts human rights and environmental due diligence to assess impacts on stakeholders (including local communities), implementing preventive, mitigating, and grievance measures accordingly. For details, refer to the "TCC Human Rights and Environmental Due Diligence Report". ■ TCC introduced Social Return On Investment (SROI) and received verification from Social Value International, UK, in December 2021, confirming that for every NTD 1 invested in the overall DAKA project, NTD 3.54 of social value is generated. Related Report Content Please refer to TCC's SROI Report and TCC Just Transition Report.	

Note 1: The disclosure topics without corresponding GRI Sector Standards are not of the material topics identified this year , including topics 14.2 to 14.3, 14.6 to 14.15, 14.18 to 14.20, and 14.23 to 14.25.

Note 2: The Material Topic “Talent Cultivation and Development” corresponds to the disclosure items in “Topic 14.17 Employment practices” of GRI 14; nevertheless, since items 14.17.2 to 14.17.6 and 14.17.9 to 14.17.10 have low relevance to talent cultivation and development, they are not applicable to the Material Topic.

Note 3: The Material Topic “Workplace Inclusion” corresponds to the disclosure items in “Topic 14.21 Non-discrimination and equal opportunity” of GRI 14; nevertheless, since items 14.21.2 to 14.21.4 and 14.21.7 have low relevance to Workplace Inclusion they are not applicable to the Material Topic.

Note 4: The disclosure scope of “405-2 Ratio of basic salary and remuneration of women to men” aligns with TCC’s significant operational sites and reporting boundary, including Mining Companies in Taiwan and Mainland China. Item 14.21.6 is not separately disclosed in “7.1.4 TCC Key Indicators | GRI 14: Mining Sector – Mining Companies in Taiwan and Mainland China.”



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7.4 European Sustainability Reporting Standards Index

ESRS Number	Disclosure Requirements	Corresponding Sections	Page Number
ESRS 2 General Disclosures			
ESRS 2 BP-1	Basis for preparation of the sustainability statement	More About the Report 1.9 Intellectual Property Management	55 92
ESRS 2 BP-2	Specific information if the undertaking uses phasing-in options	More About the Report 1.9 Intellectual Property Management	55 92
ESRS 2 GOV-1	The role of the administrative, management and supervisory bodies in relation to sustainability	1.1 Governance Structure	58
ESRS 2 GOV-2	Integration of sustainability-related performance in incentive schemes	1.2 Sustainability Management Framework	61
ESRS 2 GOV-3	Statement on due diligence	1.7 Supply Chain Management 4.5 Human Rights Protection	84 151
ESRS 2 GOV-4	Risk management and internal controls over sustainability reporting	1.3 Risk Management Framework 1.5 Ethical Management	63 76
ESRS 2 SBM-1	Strategy, business model and value chain	7.3 Global Reporting Initiative Index	221
ESRS 2 SBM-2	Interests and views of stakeholder	Stakeholder and Material Topic Analysis	45
ESRS 2 SBM-3	Interaction of material impacts risks and opportunities with strategy and business model, and financial effects	Stakeholder and Material Topic Analysis	45
ESRS 2 IRO-1	Description of the process to identify and assess material impacts, risks and opportunities and material information to be reported	Stakeholder and Material Topic Analysis	45
ESRS 2 IRO-2	Material impacts, risks and opportunities and disclosure requirements included in the sustainability statement	Stakeholder and Material Topic Analysis	45
ESRS 2 GDR-P	General Disclosure Requirement for policies	Stakeholder and Material Topic Analysis	45
ESRS 2 GDR-A	General Disclosure Requirement for actions and resources	Stakeholder and Material Topic Analysis	45
ESRS 2 GDR-M	General Disclosure Requirement for metrics	Sustainability Goals and Tracking	52
ESRS 2 GDR-T	General Disclosure Requirement for targets	Sustainability Goals and Tracking	52

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS E1- Climate Change Green Energy and Energy Storage Business			
DR E1-1	Transition plan for climate change mitigation	Pillar V ESG Advantages	31
DR E1-2	Identification of climate-related risks and scenario analysis	1.4 TCFD	67
DR E1-3	Resilience in relation to climate change	1.4 TCFD	67
DR E1-4	Policies related to climate change mitigation and adaptation	Pillar V ESG Advantages	31
DR E1-5	Actions and resources in relation to climate change mitigation and adaptation	Pillar V ESG Advantages	31
DR E1-6	Targets related to climate change	Pillar V ESG Advantages	31
DR E1-7	Energy consumption and mix	7.1.2 TCC Key Indicators Environmental	200
DR E1-8	Gross scope 1, 2, 3 GHG emissions	7.1.2 TCC Key Indicators Environmental	200
DR E1-9	GHG removals and GHG mitigation projects financed through carbon credits	7.1.2 TCC Key Indicators Environmental	200
DR E1-10	Internal carbon pricing	Pillar V ESG Advantages	31
DR E1-11	Anticipated financial effects from material physical and transition risks and potential climate-related opportunities	1.4 TCFD	67

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS E2- Pollution This matter is not considered material.			
DR E2-1	Policies related to pollution	2.3 Low-Carbon Production Management	109
DR E2-2	Actions and resources related to pollution	7.1.2 TCC Key Indicators Environmental	200
DR E2-3	Targets related to pollution	2.3 Low-Carbon Production Management	109
DR E2-4	Pollution of air, water and soil	7.1.2 TCC Key Indicators Environmental	200
DR E2-5	Substances of concern and substances of very high concern	-	



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ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS E3- Water	This matter is not considered material.		
DR E3-1	Policies related to water	5.3 Marine Restoration	174
DR E3-2	Actions and resources related to water	7.1.2 TCC Key Indicators Environmental	200
DR E3-3	Targets related to water	Sustainability Goals and Tracking	52
		2.3 Low-Carbon Production Management	109
DR E3-4	Water metrics	Sustainability Goals and Tracking	52

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS E4- Biodiversity and Ecosystems	Biodiversity		
DR E4-1	Biodiversity and ecosystems transition plan	5.1 TCC Nature Action: TNFD	157
DR E4-2	Policies related to biodiversity and ecosystems	5.1 TCC Nature Action: TNFD	157
DR E4-3	Actions and resources related to biodiversity and ecosystems	5.1 TCC Nature Action: TNFD	157
DR E4-4	Targets related to biodiversity and ecosystems	5.1 TCC Nature Action: TNFD	157
DR E4-5	Metrics related to biodiversity and ecosystems change	5.2 Forest & Soil Restoration	166

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS E5- Resource Use and Circular Economy	Resource Co-processing and Circular Economy Low-Carbon Products and Services		
DR E5-1	Policies related to resource use and circular economy	2.2 Resource Recycling—City Mining	102
DR E5-2	Actions and resources related to resource use and circular economy	2.2 Resource Recycling—City Mining	102
DR E5-3	Targets related to resource use and circular economy	2.2 Resource Recycling—City Mining	102
DR E5-4	Resource inflows	2.2 Resource Recycling—City Mining	102
DR E5-5	Resource outflows	2.2 Resource Recycling—City Mining	102

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS S1- Own Workforce	Workplace Health and Safety Workplace Inclusion Talent Cultivation and Development		
DR S1-1	Policies related to own workforce	4.2 Employee Development 4.4 Occupational Health and Safety	135 145
DR S1-2	Engagement with own workforce and workers' representatives, existence of channels for own workforce to raise concerns or needs and approaches to remedy	4.2 Employee Development 4.4 Occupational Health and Safety Stakeholder Engagement	135 145
DR S1-3	Actions and resources related to own workforce	Stakeholder Engagement	
DR S1-4	Targets related to own workforce	Stakeholder and Material Topic Analysis	45
DR S1-5	Characteristics of the undertaking's employees	Stakeholder and Material Topic Analysis	45
DR S1-6	Characteristics of non-employees in the undertaking's own workforce	7.1.3 TCC Key Indicators Social	209
DR S1-7	Collective bargaining coverage and social dialogue	4.5 Human Rights Protection	151
DR S1-8	Diversity metrics	4.2 Employee Development	135
DR S1-9	Adequate wages	4.3 Employee Remuneration and Benefits	140
DR S1-10	Social protection	4.5 Human Rights Protection	151
DR S1-11	Persons with disabilities	4.5 Human Rights Protection	151
DR S1-12	Training and skills development metrics	4.1 Climate Action Talents 7.1.3 TCC Key Indicators Social	133 209
DR S1-13	Health and safety metrics	4.4 Occupational Health and Safety	145
DR S1-14	Work-life balance metrics	4.3 Employee Remuneration and Benefits	140
DR S1-15	Remuneration metrics	4.3 Employee Remuneration and Benefits	140
DR S1-16	Incidents of discrimination and other human rights incidents	4.5 Human Rights Protection	151

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS S2- Workers in the Value Chain	This matter is not considered material.		
DR S2-1	Policies related to workers in the value chain	1.7 Supply Chain Management 2.3 Low-Carbon Production Management	84 109
DR S2-2	Engagement with workers in the value chain, existence of channels for workers in the value chain to raise concerns or needs and approaches to remedy	Stakeholder and Material Topic Analysis	45
DR S2-3	Actions and resources related to workers in the value chain	Stakeholder Engagement	
DR S2-4	Targets related to workers in the value chain	1.7 Supply Chain Management	84



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ESRS S3- Affected Communities	Stakeholder Engagement and Just Transition		
DR S3-1	Policies related to affected communities	Just Transition Plan	37
DR S3-2	Engagement with affected communities, existence of channels for affected communities to raise concerns or needs and approaches to remedy	Just Transition Plan Stakeholder Engagement	37
DR S3-3	Actions and resources related to affected communities	Stakeholder Engagement	
DR S3-4	Targets related to affected communities	Just Transition	37

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS S4- Consumers and End-users	This matter is not considered material.		
DR S4-1	Policies related to consumers and end-users	1.8 Customer Communication	88
DR S4-2	Engagement with consumers and end-users, existence of channels for consumers and end-users to raise concerns or needs and approaches to remedy	1.8 Customer Communication Stakeholder Engagement	88
DR S4-3	Actions and resources related to consumers and end-users	Stakeholder Engagement	
DR S4-4	Targets related to consumers and end-users	-	

ESRS Number	Disclosure Requirements Corresponding Material Topics	Corresponding Sections	Page Number
ESRS G1- Business Conduct	R&D Innovation Corporate Governance Operational Performances		
DR G1-1	Policies related to business conduct	1.5 Ethical Management	76
DR G1-2	Actions related to business conduct	1.7 Supply Chain Management 1.5 Ethical Management	84 76
DR G1-3	Targets related to business conduct	1.5 Ethical Management	76
DR G1-4	Metrics related to corruption or bribery	1.5 Ethical Management	76
DR G1-5	Metrics related to political influence, including lobbying activities	7.1.1 TCC Key Indicators Governance	198
DR G1-6	Metrics related to payment practices	-	



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Statement Appendices and related information please refer to the [ESG section of TCC's official website](#).



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會計師有限確信報告

臺灣水泥股份有限公司 公鑒：

本事務所受臺灣水泥股份有限公司（以下稱「貴公司」）之委任，就 貴公司選定 2025 年度永續報告書所報導之績效指標執行確信程序。本會計師業已確信竣事，並依據結果出具有限確信報告。

確信標的資訊與適用基準

有關 貴公司選定 2025 年度永續報告書所報導之績效指標（以下稱「確信標的資訊」）及其適用基準詳列於 貴公司 2025 年度永續報告書之「確信項目彙總表」。前述確信標的資訊之報導範圍業於永續報告書之「報告書邊界與範疇」段落述明。

上開適用基準係為臺灣證券交易所「上市公司編制與申報永續報告書作業辦法」與相關問答集及有關法令之規定，以及 貴公司依行業特性與其所選定之關鍵績效指標參採其他基準。

管理階層之責任

貴公司管理階層之責任係依據臺灣證券交易所「上市公司編制與申報永續報告書作業辦法」及依行業特性參採其他適用之準則編制永續報告書，且維持與編制永續報告書有關之必要內部控制，以確保績效指標未存有導因於舞弊或錯誤之重大不實表達。

會計師之責任

本會計師係依照確信準則 3000 號（TWSAE3000）「非屬歷史性財務資訊查核或核閱之確信案件」，對確信標的資訊執行確信工作，以發現前述資訊是否存在所有重大方面是否有未依適用基準編製而須作修正之情事，並出具有限確信報告。

本會計師依照上述準則所執行之有限確信工作，包括辨認確信標的資訊可能發生重大不實表達之領域，以及針對前述領域設計及執行程序。相較於合理確信案件，有限確信案件所執行程序之性質及時間不同，其範圍亦較小，故於有限確信案件所取得之確信程度亦明顯低於合理確信案件中取得者。因此，本會計師不對 貴公司所選定之關鍵績效指標在所有重大方面，是否依照適用基準編制，表示合理確信之意見。

本會計師係依據所評估之風險領域及重大性以決定實際執行確信工作之範圍，並依據本委任案件之特定情況設計及執行下列確信程序：

- 對參與編製確信標的資訊之相關人員進行訪談，以瞭解編製前述資訊之流程、所應用之資訊系統，以及攸關之內部控制，以辨認重大不實表達之領域。
- 自 貴公司或是其主要利害關係人的訊息管理系統或外部來源，以獲取用於編制非財務指標的原始定量或是定性佐證憑證。



青山永續聯合會計師事務所
台北：台北市中正區新開路 36 號 9 樓之 5
台南：台南市南區健康路 301 號 2 樓之 9
高雄：高雄市新興區民生一路 56 號 23 樓之 1
屏東：屏東縣屏東市公裕街 202 號 1 樓

- 基於對上述事項之瞭解及所辨認之領域，對確信標的資訊選取樣本進行查詢、觀察、檢查及重新執行測試，以取得有限確信之證據。
- 自 貴公司之管理階層獲得客戶聲明書。

此報告不對 2025 年度永續報告書整體及資訊收集之相關內部控制設計或執行之有效性提供任何確信。2025 年度永續報告書中屬 2023 年 12 月 31 日及更早其間之資訊未經本會計師確信。

會計師之獨立性及品質管理規範

本會計師及本事務所已遵循會計師職業道德規範中有關獨立性及其他道德規範之規定，該規範之基本原則為正直、公正客觀、專業能力及盡專業上應有之注意、保密及專業態度。

本事務所適用品質管理準則 1 號（TWSQM1）「會計師事務所之品質管理」，因此維持完備之品質管理制度，包含與遵循職業道德規範、專業準則及所適用法令相關之書面政策及程序。

先天限制

本案諸多確信項目涉及非財務資訊，相較於財務資訊之確信受有更多先天性之限制。對於資料之相關性、重大性及正確性等之質性解釋，則更取決於個別之假設與判斷。

有限確信結論

依據所執行之程序與所獲取之證據，本會計師並未發現確信標的資訊在所有重大方面有未依適用基準編製而須作修正之情事。

其它事項

貴公司網站之維護係 貴公司管理階層之責任，對於確信報告於 貴公司網站公告後任何確信標的資訊或適用基準之變更，本會計師將不負就該等資訊重新執行確信工作之責任。

青山永續聯合會計師事務所
會計師 杜育任
金融監督管理委員會核准文號
金管會證字第 7775 號



中華民國 114 年 6 月 30 日



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Alignment with SDGs

Greenhouse Gas Statement Assurance Opinion Statement

Statement Appendices and related information please refer to the [ESG section of TCC's official website](#).

Assurance opinion no.: 26UCSGPA14608-1/1

Greenhouse Gas Statement Assurance Opinion

The 2025 inventory of Greenhouse Gas emissions of TCC Group Holdings has been conducted in accordance with ISSA 5000 and ISO 14064-3:2019 and fund to be in compliance with the reporting criteria of:

Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004)

Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)

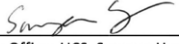
Summary of Corporate Greenhouse Gas Emissions (metric tons of CO₂e):

Scopes		
Scope 1: Direct GHG emissions (Note 1)		23,297,448.29
Scope 2: Electricity indirect GHG emissions (Note 1)	Location Based Method	930,672.51
	Market Based Method	896,035.21
Scope 3: Value chain GHG emissions (Note 2)	Category 1 Purchased Goods and Services	1,102,369.03
	Category 2 Capital Goods	182,272.04
	Category 3 Fuel and energy-related activities (not included in Scope 1 or Scope 2)	502,135.25
	Category 4 Upstream transportation and distribution	255,417.81
	Category 5 Waste generated in operations	931.73
	Category 6 Business Travel	709.19
	Category 7 Employee commuting	1,630.62
	Category 8 Upstream leased assets	507.82
	Category 9 Downstream transportation and distributions	263,616.58
	Category 10 Processing of sold products	64,403.86
	Category 11 Use of sold products	0.00
	Category 12 End-of-life treatment of sold product	77,890.03
	Category 13 Downstream leased assets	5,134.33
	Category 14 Franchises	0.00
	Category 15 Investment (Note 3)	N/A
Total Emissions		26,685,139.09 (Location Based Method)

Note 1: The physical emission boundaries for Scope 1 and Scope 2 are consistent with the assurance (verification) boundaries, which include the Asian Cement and Environmental Business Group (33 subsidiaries/branches and the headquarters office).

Note 2: Scope 3 Categories 1 to 14 only include the 30 companies that generally comply with the requirements of the GHG Protocol Corporate Value Chain Standard. The excluded subsidiaries are currently establishing their complete Scope 3 inventories.

Note 3: Scope 3 Category 15 is not included in the scope of this verification; therefore, the data disclosed by the company is not included in this table.

For and on behalf of UCS 

Chief Executive Officer UCS, Sangem Hsu

Date of issue: 06/30/2026

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Assurance opinion no.: 26UCSGPA14608-1/1

Data Integration Description

Scope 1 and Scope 2 encompass the following verification boundaries:	Scope 3 encompass the following verification boundaries:
台泥總處 (台泥大樓)	台泥總處 (台泥大樓)
低碳研發中心	低碳研發中心
台灣水泥股份有限公司和平分公司	台灣水泥股份有限公司和平分公司
台灣水泥股份有限公司蘇澳廠	台灣水泥股份有限公司蘇澳廠
台灣水泥股份有限公司花蓮廠	台灣水泥股份有限公司花蓮廠
台灣水泥製品廠 (含26個據點)	台灣水泥製品廠 (含26個據點)
金昌石礦股份有限公司	台泥 (貴港) 水泥有限公司
合盛礦業股份有限公司	Hong Kong Cement Company Limited (HKCCL)
萬青水泥股份有限公司	柳州台泥新型建材有限公司
鳳勝實業股份有限公司	福州台泥水泥有限公司
台泥 (貴港) 水泥有限公司	台泥 (英德) 水泥有限公司
Hong Kong Cement Company Limited (HKCCL)	句容台泥水泥有限公司
柳州台泥新型建材有限公司	台泥 (遼寧) 水泥有限公司
福州台泥水泥有限公司	台泥 (安順) 水泥有限公司
台泥 (英德) 水泥有限公司	台泥 (重慶) 水泥有限公司
句容台泥水泥有限公司	廣安昌興水泥有限公司
台泥 (遼寧) 水泥有限公司	台泥 (杭州) 企業運營管理有限公司
台泥 (安順) 水泥有限公司	貴州港安水泥有限公司
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貴港台泥東園環保科技有限公司	一二三 (廣東) 環保科技有限公司
北京台泥環保科技有限責任公司	英德龍山水泥有限責任公司
凱里台泥環保科技有限公司	
台泥 (杭州) 環保科技有限公司	
一二三 (廣東) 環保科技有限公司	
英德龍山水泥有限責任公司	

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Assurance opinion no.: 26UCSGPA14608-1/1

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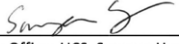
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For and on behalf of UCS 

Chief Executive Officer UCS, Sangem Hsu

Date of issue: 06/30/2026

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Assurance opinion no.: 26UCSGPA14608-1/1

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台灣水泥股份有限公司花蓮廠	台灣水泥股份有限公司花蓮廠
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凱里台泥環保科技有限公司	
台泥 (杭州) 環保科技有限公司	
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英德龍山水泥有限責任公司	

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AA1000 Assurance
Opinion Statement

Statement Appendices and related information please refer to the [ESG section of TCC's official website](#).



Assurance opinion no.: 26UCSAAA14608-1/1



ASSURANCE STATEMENT

Universal Certification Service Co., Ltd.

TCC Group Holdings 2025 Independent Assurance Opinion

Engagement Information

項目	內容
Assured Organization	TCC Group Holdings
Report Title	2025 TCC Group Holdings Sustainability Report
Reporting Period	January 1, 2025 to December 31, 2025
Assurance Period	June 2026
Reporting Boundary	The scope covers material sustainability data and information from the holding company's global operations. The reporting boundary is consistent with the 2025 Financial Report.
Assurance Boundary	Cement & Environmental Protection Business (Asia) – Taiwan & Mainland China

Subject Matter

The subject matter of this assurance engagement includes the sustainability information and related governance systems prepared by the Assured Organization, as well as the establishment, implementation, and management of the four principles of the AA1000 AccountAbility Principles (2018) (Inclusivity, Materiality, Responsiveness, and Impact) within the subject matter.

Scope of Assurance

The scope of assurance encompasses the sustainability governance framework, stakeholder engagement mechanism, material topic management process, sustainability issue response mechanism, material impact management system, sustainability information management system and disclosure process, as well as the data provided in Appendix 1.

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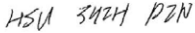


AA1000 Licensed Report

001-067/V3-4762U



環球國際驗證股份有限公司
UNIVERSAL CERTIFICATION SERVICE CO., LTD.

Item	Signatures
Lead Assurance Practitioner	
Technical Reviewer	
Date of Issue / Location	2026/06/29 4 F.-1, No. 21, Sec. 4, Nanjing E. Rd., Songshan Dist., Taipei City, TAIWAN, R.O.C.

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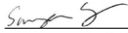


- Overview
- Governance
- Carbon Reduction
- Energy Transition
- Employee
- Nature
- Social Inclusion
- Appendix
- ESG Data
- Sustainability Disclosure
for the Listed Cement Companies
- GRI Index
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→ Third-Party Assurance Statement

Alignment with SDGs

ISSA 5000 Assurance Statement

Assurance opinion no.: 26UCSSRAA14608-1/1  ASSURANCE STATEMENT Universal Certification Service Co., Ltd. Independent Limited Assurance Statement I. Addressee TCC Group Holdings CO., LTD. II. Subject Matter Universal Certification Service Co. Ltd. (hereinafter referred to as the "UCS") has been engaged by TCC Group Holdings CO., LTD. to perform an independent limited assurance engagement on selected sustainability information prepared by management in its 2025 Sustainability Report. The assured information for this limited assurance engagement is restricted to the information listed in the "Summary of Assured Information" in Appendix I provided by management. This limited assurance engagement was performed in accordance with the assurance scope and applicable criteria described in this statement, aiming to enhance the degree of confidence of stakeholders in the assured information. This statement should be read in conjunction with the Appendix I to fully understand the scope and content of this limited assurance engagement. III. Assurance Scope and Reporting Boundary This assurance engagement solely covers the information listed in Appendix I. The reporting period is from January 1, 2025, to December 31, 2025. The organizational and reporting boundaries are strictly limited to the content specified in Appendix I. 1. This Statement is the property of Universal Certification Service Co., Ltd., 4F, 1, No. 21, Sec. 4, Nanjing E. Rd., Taipei, Taiwan. TEL: (02) 2715-5527. 2. The registration information and authenticity of this Statement can be confirmed at www.ucscert.com.tw 3. This Statement is not valid without the full verification scope, objectives, criteria and findings available on the Statement. Page: 1 of 4	Assurance opinion no.: 26UCSSRAA14608-1/1  ASSURANCE STATEMENT Universal Certification Service Co., Ltd. Independent Limited Assurance Statement IV. Applicable Criteria Assurance Standards: ISSA 5000, Limited Assurance level. Reporting Criteria: GRI Standards, SASB Standards, and the Organization developed criteria. V. Management's Responsibilities Management is responsible for the preparation of the assured information, maintaining internal controls, defining the reporting scope, and the preparation of Appendix I. VI. UCS's Responsibilities UCS performs this limited assurance engagement in accordance with ISSA 5000 and complies with all relevant independence, ethical, and quality management requirements. VII. Key Assurance Procedures The assurance team of UCS performed the following procedures: - Developing an overall approach for the verification plan by combining strategic analysis, risk analysis, and benchmarking analysis at the organizational level. - Conducting document reviews of the Greenhouse Gas (GHG) statement and its supporting documents, systems, and methodologies, as well as collecting and aggregating information and data. - Performing risk assessments at the emission source level (specific facilities, emission categories, and emission sources) to develop the verification plan and evidence-gathering plan. - Executing the verification plan through on-site visits or remote audits to collect sufficient evidence to reach a conclusion. 1. This Statement is the property of Universal Certification Service Co., Ltd., 4F, 1, No. 21, Sec. 4, Nanjing E. Rd., Taipei, Taiwan. TEL: (02) 2715-5527. 2. The registration information and authenticity of this Statement can be confirmed at www.ucscert.com.tw 3. This Statement is not valid without the full verification scope, objectives, criteria and findings available on the Statement. Page: 2 of 4	Assurance opinion no.: 26UCSSRAA14608-1/1  ASSURANCE STATEMENT Universal Certification Service Co., Ltd. Independent Limited Assurance Statement - Reviewing and evaluating the corrective actions taken regarding non-conformities and material discrepancies during the execution phase. - Conducting an independent technical review. - VIII. Limited Assurance Conclusion Based on the limited assurance procedures performed and the limited assurance evidence obtained by UCS in accordance with ISSA 5000, nothing has come to our attention that causes us to believe that: The assured information prepared by management and presented in the "Summary of Assured Information" in Appendix I has not been prepared, in all material respects, in accordance with the applicable reporting criteria listed in Appendix I and the assurance standards described in this statement, or contains material misstatements, within the assurance scope, reporting period, and reporting boundary described in this statement. This limited assurance conclusion applies exclusively to the assured information listed in Appendix I. UCS has not performed assurance procedures on information outside of Appendix I, nor do we express any assurance conclusion on information not listed in Appendix I. IX. Other Matters This limited assurance engagement was performed based on the assured information defined by management and does not affect management's responsibility for the preparation of the overall content of the sustainability report. 1. This Statement is the property of Universal Certification Service Co., Ltd., 4F, 1, No. 21, Sec. 4, Nanjing E. Rd., Taipei, Taiwan. TEL: (02) 2715-5527. 2. The registration information and authenticity of this Statement can be confirmed at www.ucscert.com.tw 3. This Statement is not valid without the full verification scope, objectives, criteria and findings available on the Statement. Page: 3 of 4	Assurance opinion no.: 26UCSSRAA14608-1/1  ASSURANCE STATEMENT Universal Certification Service Co., Ltd. Independent Limited Assurance Statement X. Signatures Lead Assurance Practitioner:  Technical Reviewer:  Date of Issue / Location: 2026/06/29 4 F.-1, No. 21, Sec. 4, Nanjing E. Rd., Songshan Dist., Taipei City, TAIWAN, R.O.C. 1. This Statement is the property of Universal Certification Service Co., Ltd., 4F, 1, No. 21, Sec. 4, Nanjing E. Rd., Taipei, Taiwan. TEL: (02) 2715-5527. 2. The registration information and authenticity of this Statement can be confirmed at www.ucscert.com.tw 3. This Statement is not valid without the full verification scope, objectives, criteria and findings available on the Statement. Page: 4 of 4
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