

GCCA Key Performance Indicators

The Taiheiyo Cement Group's key performance indicators (KPIs) for FY2024 have been subjected to independent limited assurance by KPMG AZSA Sustainability Co., Ltd.

FY2024 Key Performance Indicators (KPI)\*1 \*2

CO <sub>2</sub> and climate protection (CO <sub>2</sub> emissions and energy consumption)		FY2022	FY2023	FY2024
Number of facilities using the GCCA "The Cement CO <sub>2</sub> and Energy Protocol" guidelines for emissions inventory		17	16	16*3
Ratio of facilities using the GCCA "The Cement CO <sub>2</sub> and Energy Protocol" guidelines for emissions inventory (%)		100	100	100
Total CO <sub>2</sub> emissions (thousand tonnes)	Scope 1 emissions*4	23,679	20,065	19,007
	Gross emissions*5	22,525	19,017	18,277
	Net emissions*6	21,629	17,997	17,228
CO <sub>2</sub> emissions per tonne of cementitious product*7 (kg-CO <sub>2</sub> /t-cementitious)	Specific gross emissions	703	698	705
	Specific net emissions	675	661	664
Emissions from electricity purchased (thousand tonnes) (Scope 2 emissions)		983	868	853
Indirect emissions other than Scope 1 and 2 (emissions of other companies related to the activities of the calculation entity) (thousand tonnes) (Scope 3 emissions)*8		1,596	1,700	1,578
Category 1 (Purchased goods and services)*9		592*10	827*10	880
Category 3 (fuel- and energy-related activities not included in Scope 1 and 2)*11		1,004	873	698*12
Specific heat consumption for clinker production (MJ/t-clinker)		3,291	3,375	3,443
Alternative fuel rate: ratio of alternative fuels used by kilns (%)		13.3	17.6	18.5
Biomass fuel rate: ratio of biomass fuel used by kilns (%)		2.0	2.3	2.2
Clinker/cement (equivalent) factor: ratio of the total clinker consumption and cement produced, calculated according to the GCCA Cement CO <sub>2</sub> and Energy Protocol guidelines		83.0	83.0	83.3
Emissions monitoring and reporting		FY2022	FY2023	FY2024
Percentage of clinker produced by kilns covered by a monitoring system, either continuous or discontinuous, for the main and other pollutants (%)		100	100	100
Percentage of clinker produced by kilns which have adopted continuous measurement for the main pollutants (%)	NOx	97.6	97.5	97.6
	SOx	96.2	95.7	95.5
	Dust	100	100	100
Total emissions (t)	NOx	34,330	32,425	32,126
	SOx	1,091	930	1,014
	Dust	439	423	367
Specific emissions (g/t-clinker)	NOx	1,277	1,434	1,485
	SOx	41	41	47
	Dust	16.0	19	17
Water		FY2022	FY2023	FY2024
Withdrawal (thousand m <sup>3</sup> )	Fresh water	26,341	24,649	23,403
	Seawater	146,894	145,476	145,758
Discharge (thousand m <sup>3</sup> )	Fresh water	13,246	12,792	13,021
	Seawater	147,062	145,639	145,927
Health and Safety		FY2022	FY2023	FY2024
Fatalities				
Number of fatalities for directly employed personnel		0	0	1
Fatality rate per 10,000 directly employed personnel		0	0	1.97
Number of fatalities for indirectly employed personnel (contractors and subcontractors)		0	1	2
Number of fatalities involving third parties (not employed)		0	0	0
Lost-time injuries				
Number of lost-time injuries for directly employed personnel		15	23	21
Injury frequency rate of directly employed personnel (per million working hours)		1.33	2.13	1.98
Number of lost-time injuries for indirectly employed personnel (contractors and subcontractors)		19	12	25

\*1 CO<sub>2</sub> and climate protection, emissions monitoring and reporting, and water for FY2024 are in accordance with "GCCA Sustainability Guidelines for the monitoring and reporting of CO<sub>2</sub> emissions from cement manufacturing Ver. 0.1," "GCCA Sustainability Guidelines for the monitoring and reporting of emissions from cement manufacturing Ver. 0.1," "GCCA Sustainability Guidelines for co-processing fuels and raw materials in cement manufacturing Ver. 0.1" and "GCCA Sustainability Guidelines for the monitoring and reporting of water in cement manufacturing Ver. 0.1". The data includes cement plants (9 domestic plants, 7 overseas plants) and quarries owned by group companies that own cement plants.

\*2 Health and safety for FY2024 is in accordance with "GCCA Sustainability Guidelines for the monitoring and reporting of safety in cement manufacturing Ver. 1.0". We have aggregated data from the cement businesses of Taiheiyo Cement and 16 domestic and overseas group companies, and from the construction materials, aggregates and ready-mixed concrete businesses of 45 companies out of the affiliated companies that are considered to be business sites required to submit accident reports under our health and safety management regulations.

\*3 Plants that were not included due to suspension of operations during the period: 1 plant; Plants that were consolidated and newly included from this period: 1 plant

\*4 CO<sub>2</sub> emissions that are not included in the items for disclosure mandated by the GCCA but are derived from raw materials and fuels in the cement manufacturing process (including from on-site power generation) and fall under Scope 1.

\*5 CO<sub>2</sub> emissions derived from raw materials and fuels in the cement manufacturing process (excluding CO<sub>2</sub> emissions generated from on-site power generation).

\*6 CO<sub>2</sub> emissions derived from raw materials and fuels in the cement manufacturing process (excluding CO<sub>2</sub> emissions generated from alternative fuels and on-site power generation).

\*7 Cementitious product: Sum total of clinker and supplementary cementitious materials

\*8 For Scope 3, refer to the "Emissions Unit Values for Accounting of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain (Ver. 3.2), Ministry of the Environment" and "LCI database AIST-IDEA Ver.3.4 Research Laboratory for IDEA, RISS, AIST"

\*9 Calculated by multiplying the input volume (physical data) of raw materials purchased by the business site subject to the data collection of environmental performance in the GCCA KPI (hereinafter referred to as "business site") from outside the business site by the emission intensity of each raw material.

\*10 The specific emissions that apply to each purchased raw material were reviewed and retroactively revised.

\*11 Calculated by multiplying the amount of electricity, fuel, etc. procured by the business site by each specific emissions unit.

\*12 Emissions have decreased as a result of reviewing specific emissions applied to each procured fuel and energy-related activity.

GCCA Independent Assurance Report

Independent Assurance Report

To the President and Representative Director of Taiheiyo Cement Corporation

We were engaged by Taiheiyo Cement Corporation (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators (the "Indicators") included under the following headings in the GCCA Key Performance Indicators section of its Taiheiyo Cement Report 2024 (the "Report") for the fiscal year ended March 31, 2024.

- CO<sub>2</sub> and climate protection (CO<sub>2</sub> emissions and energy consumption) <sup>1</sup>
- Emissions monitoring and reporting <sup>1</sup>
- Water <sup>1</sup>
- Health and safety <sup>2</sup>

<sup>1</sup> Periodic accounting is based on the fiscal year 2023 for domestic plants and the calendar year 2023 for overseas plants.  
<sup>2</sup> Periodic accounting is based on the calendar year 2023 for domestic and overseas plants.

The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Visiting the following four plants out of a total of 16 plants of the Taiheiyo Cement Group, selected on the basis of a risk analysis. (Scopes 1 and 2 CO<sub>2</sub> emissions covered by these four plants correspond to 23% \* of the combined total of the Group's Scopes 1 and 2 CO<sub>2</sub> emissions.)

\* Based on the amount of absolute gross CO<sub>2</sub> for the fiscal year 2023 for domestic plants and the calendar year 2023 for overseas plants.

Overseas plants	Domestic plants
- CalPortland Company : Oro Grande Plant	- Taiheiyo Cement Corporation : Ofunato Plant
- CalPortland Company : Redding Plant	- Taiheiyo Cement Corporation : Saitama Plant

- Evaluating the overall presentation of the Indicators.

Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

Our Independence and Quality Management

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Management 1, we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

/s/ Kazuhiko Saito  
Kazuhiko Saito, Partner, Representative Director  
KPMG AZSA Sustainability Co., Ltd.  
Tokyo, Japan  
November 27, 2024

Notes to the Reader of Independent Assurance Report:  
This is a copy of the Independent Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.