

SD INDEX

Economic Performance

SD Index - Economic Performance					GRI Standards
Index	Unit	2024	2023	2022	
Sales					
Net sales	Million baht	39,549	42,218	50,126	GRI 201-1
Input factor (cost of all goods, materials and services)	Million baht	26,073	29,305	37,398	GRI 201-1
Depreciation and amortisation	Million baht	3,263	3,410	3,728	GRI 201-1
Value Creation					
Benefit to employees	Million baht	4,522	5,410	4,824	GRI 201-1
Benefit to government (taxes)	Million baht	941	559	712	GRI 201-1
Benefit to shareholders	Million baht	3,278	2,086	2,682	GRI 201-1
Benefit to creditors	Million baht	1,141	1,299	1,090	
Retained in business	Million baht	331	419	-308	
Suppliers					
% of new suppliers screened with environmental and social criteria	%	99	97	70	GRI 308-1/ GRI 414-1
Government Relations					
Political Contribution	Million baht	0	0	0	
Government subsidies recieved	Million baht	0	0	0	
Customer Relations					
Customer satisfaction surveys conducted		YES	YES	YES	

Remarks

The boundary of this report excluded LANNA and its subsidiaries from the ESG data consolidation

SD INDEX

Social Performance

SD Index - Social Performance					GRI Standards
Index	Unit	2024	2023	2022	
Number of employees	Person	4,298	4,485	4,956	GRI 102-8
Proportion of employees by level					
Top & senior management	%	6.97	6.13	5.56	
Middle level management	%	55.17	57.52	54.41	
Other employees	%	37.86	36.34	40.03	
Portion of female employees by level					
Top & senior management	%	22.40	20.39	15.79	GRI 102-8
Middle level management	%	23.03	23.30	20.82	GRI 102-8
Other employees	%	4.51	4.70	5.07	GRI 102-8
Ratio of female to male salary					
Top & senior management	%	0.35	0.28	0.15	GRI 405-2
Middle level management	%	0.30	0.32	0.27	GRI 405-2
Other employees	%	0.05	0.05	0.06	GRI 405-2
Portion of local employees	%	97.75	99.03	98.53	
Total Number of New Employees	Person	352	366	700	GRI 401-1
Employee turnover	%	10.80	19.94	12.13	
Employee satisfaction survey conducted %Target score per %Actual score		YES (80/79)	YES (80/75)	YES (N/A)	
Training					
Target training hours per employee	Hours	20.00	20.00	N/A	
Average hours of training per employee	Hours	32.73	35.95	33.03	GRI 403-2
Occupational Health and Safety					
Number of fatalities (employees, contractors and third-party)	Case	1	2	1	
Lost time injury frequency rate (employees and contractors per million man- hours)	Number	0.36	0.11	0.25	
Community Involvement					
Donations, CSR and community spending	Million baht	45.5	35.7	41.6	GRI 203-1/ GRI 413
Stakeholder Engagement					GRI 413-1
Needs assessments		YES	YES	YES	
Stakeholder Engagement in CSR planning		YES	YES	YES	
Stakeholder dialogues		YES	YES	YES	
Community advisory panels		YES	YES	YES	

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Environmental Performance

SD Index - Environmental Performance					GRI
Index	Unit	2024	2023	2022	Standards
Materials Used					
Non-renewable materials used	Million tonnes	23.7	23.4	23.2	GRI 301-1
Renewable materials used	Million tonnes	1.3	1	1.3	GRI 301-1
Environmental Investments and Compliance					
Total environmental protection expenditures and investments*	Million baht	109	60.6	67.0	GRI 307-1
Non-compliance cases	Number of case	0	0	0	GRI 307-1
Significant fines for non-compliance with environmental laws	Million baht	0	0	0	GRI 307-1
Energy					
Total energy consumption within the organization	MJ/tonne clinker	3,647	3,582	3,363	GRI 302-3
Total electricity consumption	kWh/tonne cement	86.28	88.80	89.38	GRI 302-3
Alternative fuel thermal substitution rate	%	28.55	21.10	15.93	
Total alternative fuel consumption	tonnes	744,619	522,970	429,502	
Renewable electricity consumption	%	22.43	22.60	22.05	
CO ₂ Emissions					
Gross direct (Scope 1) GHG emission	Million tonnes CO ₂	9.73	10.1	11.03	GRI 305-1
Specific net CO ₂ emissions	kg CO ₂ /tonne cementitious material	562	603	606.95	
Clinker factor	%	69.2	72.1	74.29	-
Other Atmospheric Emissions					
NO _x	grams/tonne cementitious material	590	676	842.43	GRI 305-7
SO ₂	grams/tonne cementitious material	263	74	74.11	GRI 305-7
Particulate matter	grams/tonne cementitious material	52	47	45.29	GRI 305-7
Water					
Total water withdrawal	Megaliters	4,586	4,771	5,128	GRI 303-3
Surface water withdrawal	Megaliters	1,724	1,829	2,071	GRI 303-3
Groundwater withdrawal	Megaliters	2,611	2,644	2,669	GRI 303-3
Third-party water withdrawal	Megaliters	251	298	388	GRI 303-3
Specific water consumption	litre/tonne cement product	246	260	238	

Remarks

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* Thailand cement business only

GCCA Index				
Index	Unit	2024	2023	2022
Production				
Cement production	Mt/yr	15,560,900	15,110,843	17,711,988
Cementitious products	Mt/yr	16,124,125	15,832,451	17,496,547
Clinker production	Mt/yr	11,333,746	11,621,924	12,943,451
Specific heat consumption for clinker production	MJ/tonne clinker	3,647	3,582	3,363
Alternative and biomass fuel thermal substitution rate	%	28.60	21.10	15.9
Alternative fuel rate (kiln fuels)	%	21.20	17.30	11.5
Biomass fuel rate (kiln fuels)	%	7.30	3.80	4.4
Clinker/cement factor	%	69.20	72.10	74.3
SEEC	kWh/tonne cement product	86.3	88.8	89.4
Material used				
Alternative fuel and biomass fuel	t/y	744,619	522,970	429,502
Alternative Raw Materials rate (% ARM)	%	7.55	6.20	7.0
Slag	t/y	535,938	403,469	637,088
Fly ash	t/y	415,770	379,937	428,894
Total mineral component for cement produced	t/y	4,790,378	4,210,471	4,553,096
CO₂ emission Scope 1				
Absolute CO ₂ emissions - gross	Mt/yr	9,734,992	10,111,354	11,029,884
Absolute CO ₂ emissions - net	Mt/yr	9,054,641	9,539,414	10,619,529
Specific CO ₂ emissions - gross	kg/tonne cementitious material	604	639	630
Specific CO ₂ emissions - net	kg/tonne cementitious material	562	603	607
CO₂ emission Scope 2				
Specific CO ₂ emissions - net	kg/tonne cementitious material	37	39	41
Specific CO ₂ emissions - net	kg/tonne cement product	38	40	40

GCCA Index				
Index	Unit	2024	2023	2022
Other atmospheric emissions				
Overall coverage rate	%	94	98	95
Coverage rate continuous measurement	%	98	97	99
PM emission	ton	844	742	792
NO _x emission	ton	9,514	10,696	14,740
SO ₂ emission	ton	4,249	1,165	1,297
VOC/THC emission	ton	1,354	458	390
Hg emission	kg	73	538	343
HM1 emission	kg	818	517	304
HM2 emission	kg	2,503	3,425	2,198
PCDD/F emission	mg	2,395	1,046	2,094
Specific emission of PM	g / ton clinker	74	64	61
Specific emission of NO _x	g / ton clinker	839	920	1,139
Specific emission of SO ₂	g / ton clinker	375	100	100
Specific emission of VOC/THC	g / ton clinker	119	39	30
Specific emission of Hg	mg / ton clinker	6	46	27
Specific emission of HM1	mg / ton clinker	72	44	24
Specific emission of HM2	mg / ton clinker	221	295	170
Specific emission of PCDD/F	ng / ton clinker	211	90	162
PM coverage rate	%	97	97	99
NO _x coverage rate	%	99	97	99
SO ₂ coverage rate	%	99	97	99
VOC/THC coverage rate	%	100	100	95
Hg coverage rate	%	100	100	95
HM1 coverage rate	%	95	95	95
HM2 coverage rate	%	100	100	95
PCDD/F coverage rate	%	100	100	95

GCCA Index				
Index	Unit	2024	2023	2022
Water				
Total water withdrawal	Megaliters	4,586	4,771	5,128
Surface water withdrawal	Megaliters	1,724	1,829	2,071
Groundwater withdrawal	Megaliters	2,611	2,644	2,669
Third-party water withdrawal	Megaliters	251	298	388
Water consumption	Megaliters	3,833	3,922	4,222
Amount of water consumption per unit of product	litre/tonne of cementitious product	246	248	241
Biodiversity				
Percentage (%) of quarries with high biodiversity value where biodiversity management plan is implemented	%	100	100	100
Percentage (%) of quarries where rehabilitation plan is implemented	%	83	100	100
Safety				
Fatality Rate (directly employed)	Number	0	0.09	0
Number of fatalities (directly employed, contractors, sub-contractors, third parties)	Number	1	2	1
LTI Frequency Rate (directly employed)	Number	0.18	0.09	0.23
LTI Frequency Rate (contractors and sub-contractors on site)	Number	0.48	0.12	0.26
LTI Severity Rate (directly employed)	Number	1.10	0.18	3.28

Remarks

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