

ARGOS • INTEGRATED REPORT 2022
ENVIRONMENTAL MANAGEMENT
WATER

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL	COMMENTS
WITHDRAWAL BY SOURCE											
CEMENT											
Water withdrawal by source in all areas											
Water withdrawal from surface sources (m3/year)						3.661.583	2.709.839	3.005.841	3.318.121		
Groundwater withdrawal (m3/year)						5.277.888	4.205.991	5.595.108	4.736.145		
Water withdrawal - Rainwater (m3/year)			303-3			141.756	74.064	116.612	87.475		
Municipal water supply or from other water companies (m3/year)						514.633	492.301	569.824	851.117		
Total water withdrawal in cement production (m3/year)						9.454.104	7.408.131	9.170.773	8.992.859		
Water withdrawal by source in water-stressed areas											
Water withdrawal from surface sources (m3/year)						-	-	-	-		
Groundwater withdrawal (m3/year)						-	-	-	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						-	-	-	-		
Water withdrawal in water stress areas (m3/year)						-	-	-	-		
Water withdrawal by source in water-stressed areas in cement production (%)						-	-	-	-		
CONCRETE											
Water withdrawal by source in all areas											
Water withdrawal from surface sources (m3/year)						81.869	79.267	109.895	88.396		
Groundwater withdrawal (m3/year)						827.106	814.159	1.390.784	439.426		
Water withdrawal - Rainwater (m3/year)			303-3			32.857	24.738	32.637	44.255		
Municipal water supply or from other water companies (m3/year)						1.163.293	996.012	566.505	1.322.563		
Total water withdrawal in cement production (m3/year)						2.072.268	1.889.438	2.099.821	1.894.639		
Water withdrawal by source in water-stressed areas											
Water withdrawal from surface sources (m3/year)						-	-	-	-		
Groundwater withdrawal (m3/year)						200.183	147.304	126.889	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						251.491	260.006	100.752	378.367		
Water withdrawal in water stress areas (m3/year)						451.674	407.310	227.641	378.367		
Water withdrawal by source in water-stressed areas in concrete production (%)						21,8%	21,6%	11,0%	20,0%		
Water withdrawal by source in all areas											
Water withdrawal from surface sources (m3/year)						230.402	202.216	186.633	223.435		
Groundwater withdrawal (m3/year)						399	375	340	376		
Water withdrawal - Rainwater (m3/year)			303-3			15	15	271	2.385		
Municipal water supply or from other water companies (m3/year)						1.125	464	788	2.727		
Total water withdrawal in aggregates production (m3/year)						231.926	203.055	187.761	228.923		
Water withdrawal by source in water-stressed areas											
Water withdrawal from surface sources (m3/year)						-	-	-	-		
Groundwater withdrawal (m3/year)						-	-	-	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						-	-	-	-		
Water withdrawal in water stress areas (m3/year)						-	-	-	-		
Water withdrawal by source in water-stressed areas in aggregates production (%)						-	-	-	-		

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ELECTRICITY GENERATION											
Water withdrawal by source in all areas											
Water withdrawal from surface sources (m3/year)						679.010	556.982	545.273	768.671		
Groundwater withdrawal (m3/year)						-	757	-	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						-	-	-	-		
Total water withdrawal in electricity generation (m3/year)						679.010	557.739	545.273	768.671		
Water withdrawal by source in water-stressed areas											
Water withdrawal from surface sources (m3/year)						-	-	-	-		
Groundwater withdrawal (m3/year)						-	-	-	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						-	-	-	-		
Water withdrawal in water stress areas (m3/year)						-	-	-	-		
Water withdrawal by source in water-stressed areas in electricity generation (%)						-	-	-	-		
COMPANY											
Water withdrawal by source in all areas											
Water withdrawal from surface sources (m3/year)						4.652.865	3.548.304	3.847.642	4.398.623		
Groundwater withdrawal (m3/year)						6.105.393	5.021.282	6.986.232	5.175.947		
Water withdrawal - Rainwater (m3/year)			303-3			174.627	98.817	149.520	134.115		
Municipal water supply or from other water companies (m3/year)						1.679.051	1.488.777	1.137.117	2.176.407		
Total water withdrawn (m3/year)		GCCA				12.437.309	10.058.363	11.970.991	11.885.093		
Total water withdrawn in 1000 m ³					EM-CM-140a.1	12.437	10.058	11.971	11.885		
Water withdrawal by source in water-stressed areas											
Water withdrawal from surface sources (m3/year)						-	-	-	-		
Groundwater withdrawal (m3/year)						200.183	147.304	126.889	-		
Water withdrawal - Rainwater (m3/year)			303-3			-	-	-	-		
Municipal water supply or from other water companies (m3/year)						251.491	260.006	100.752	378.367		
Water withdrawal in water stress areas (m3/year)						451.674	407.310	227.641	378.367		
Water withdrawal by source in water-stressed areas (%)					EM-CM-140a.1	3,6%	4,0%	1,9%	3,2%		
STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN CALCULATION: All data reported was obtained by direct measurements, calculations based on measurements, or ultimately by estimation. Water stress was defined as the ratio between total water withdrawal and the annual availability of accessible water calculated with AQUEDUCT.											
RECYCLED OR REUSED WATER											
CEMENT											
Water recycled or reused in cement (m3/year)	A-A2			EM-CM-140a.1		11.307.781	10.636.059	10.252.516	10.297.245		
Water recycled or reused in cement (%)						120,0%	143,6%	111,8%	114,5%		
CONCRETE											
Recycled or reused water in concrete (m3/year)	A-A2					387.738	366.169	398.354	429.166		
Water recycled or reused in concrete (%)						19,0%	19,4%	19,3%	22,7%		
AGGREGATES											
Recycled or reused water in aggregates (m3/year)	A-A2					626.605	12.502	274.827	383.629		
recycled or reused in aggregates (%)						270,0%	6,2%	146,4%	167,6%		
ELECTRICITY GENERATION											
Recycled or reused water in electricity generation (m3/year)	A-A2					29.065.608	29.386.186	26.039.306	23.417.891		
Recycled or reused water in electricity generation (%)						4281,0%	5268,8%	4775,5%	3046,5%		

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RECYCLED OR REUSED WATER											
COMPANY											
Recycled or reused water company (m3/year)						41.387.731	40.400.916	36.964.646	34.527.931		
Recycled or reused water company (%)	A-A2			EM-CM-140a.1		99,0%	109,5%	91,3%	93,5%		

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WATER CONSUMPTION											
Water consumption in all areas											
Water consumption in cement (m3/year)						3.578.111	2.830.992	3.249.963	3.302.882		
Water consumption in concrete (m3/year)						2.030.853	1.879.596	1.972.454	1.878.412		
Water consumption in electricity generation (m3/year)		GCCA	GRI 303-5			231.595	202.824	184.117	228.479		
Water consumption in aggregates (m3/year)						679.010	557.739	545.273	768.229		
Water consumption company (m3/year)					2.5.1	6.519.570	5.471.151	5.951.808	6.178.003		
Water consumption in water-stressed areas											
Water consumption in water-stressed areas in cement (m3/year)						-	-	-	-		
Water consumption in water-stressed areas in concrete (m3/year)						443.154	387.825	216.123	378.367		
Water consumption in water-stressed areas in aggregates (m3/year)						-	-	-	-		
Water consumption in water-stressed areas in electricity generation (m3/year)						-	-	-	-		
Water consumption in water-stressed areas Company (m3/year)					2.5.2	443.154	387.825	216.123	378.367		
Water consumption in water-stressed areas in cement (%)						-	-	-	-		
Water consumption in water-stressed areas in concrete (%)						21,8%	20,6%	11,0%	20,1%		
Water consumption in water-stressed areas in aggregates (%)						-	-	-	-		
Water consumption in water-stressed areas in electricity generation (%)						-	-	-	-		
Water consumption in water-stressed areas Company (%)						6,8%	7,1%	3,6%	6,1%		

STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN CALCULATION: All data reported was obtained by direct measurements, calculations based on measurements, or ultimately by estimation. Water stress was defined as the ratio between total water withdrawal and the annual availability of accessible water calculated with AQUEDUCT.

SPECIFIC WATER CONSUMPTION											
Specific water consumption in cement (L/t)						264	235	236	240	245	
Specific water consumption in concrete (L/m3)		A-A1				215	237	259	239	216	
Specific consumption of water in aggregates (L/t)						100	109	95	112	94	

STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN CALCULATION: All reported data were obtained through direct measurements, measurement-based calculations or ultimately through estimates.  

WATER DISCHARGES											
CEMENT											
Water discharge by destination in all areas											
Discharges to surface water (m3/year)						5.731.298	4.419.705	5.886.565	5.513.803		
Groundwater discharges (m3/year)						235.768	198.613	47.434	49.487		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						50.683	32.885	103.422	126.687		
Total water discharge in cement (m3/year)						6.017.749	4.651.203	6.037.422	5.689.977		
Water discharge by destination in water-stressed areas											
Discharges to surface water (m3/year)						-	-	-	-		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						-	-	-	-		
Total water discharge in cement (m3/year)						-	-	-	-		

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WATER DISCHARGES											
CONCRETE											
Water discharge by destination in all areas											
Discharges to surface water (m3/year)						34.284	1.485	2.034	3.456		
Groundwater discharges (m3/year)						5.179	2.857	4.714	2.752		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						34.809	30.237	120.618	10.019		
Total water discharge in concrete (m3/year)						74.272	34.579	127.367	16.227		
Water discharge by destination in water-stressed areas											
Discharges to surface water (m3/year)						7.479	-	-	-		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						1.042	19.484	11.518	-		
Total water discharge in cement (m3/year)						8.521	19.484	11.518	-		
AGGREGATES											
Water discharge by destination in all areas											
Discharges to surface water (m3/year)						232	189	2.077	412		
Groundwater discharges (m3/year)						114	57	1.839	16		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						-	-	-	16		
Total water discharge in aggregates (m3/year)						346	246	3.916	444		
Water discharge by destination in water-stressed areas											
Discharges to surface water (m3/year)						-	-	-	-		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						-	-	-	-		
Total water discharge in aggregates (m3/year)						-	-	-	-		
ELECTRICITY GENERATION											
Water discharge by destination in all areas											
Discharges to surface water (m3/year)						-	-	-	442		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						-	-	-	-		
Total water discharge in electricity generation (m3/year)						-	-	-	442		
Water discharge by destination in water-stressed areas											
Discharges to surface water (m3/year)						-	-	-	-		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						-	-	-	-		
Total water discharge in electricity generation (m3/year)						-	-	-	-		
COMPANY											
Water discharge by destination in all areas											
Discharges to surface water (m3/year)						5.765.814	4.421.379	5.890.676	5.518.112		
Groundwater discharges (m3/year)						241.061	201.527	53.987	52.255		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						85.492	63.122	224.041	136.723		
Total water discharge (m3/year)		GCCA				6.092.367	4.686.028	6.168.704	5.707.090		

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL	COMMENTS
COMPANY											
Water discharge by destination in water-stressed areas											
Discharges to surface water (m3/year)						-	-	-	-		
Groundwater discharges (m3/year)						-	-	-	-		
Discharges to the sea (m3/year)			303-4			-	-	-	-		
Discharges to third-party treatment systems (m3/year)						1.042	19.484	11.518	-		
Total water discharge (m3/year)		GCCA				1.042	19.484	11.518	-		

Quality - Water discharge by destination CEMENT	Quality: pH	Quality: TTS
Discharges to surface waters	15	-
Discharges to groundwater	17	0
Discharges to the sea	-	-
Discharges to third-party treatment systems	8	-
Total water discharge	7,17	0,49
Quality - Water discharge by destination CONCRETE	Quality: pH	Quality: TTS
Discharges to surface waters	8,17	0,021
Discharges to groundwater	ND	-
Discharges to the sea	ND	-
Discharges to third-party treatment systems	10,74	-
Total water discharge	8,39	0,050
Quality - Water discharge by destination AGGREGATES	Quality: pH	Quality: TTS
Discharges to surface waters	ND	-
Discharges to groundwater	8,09	0,0002
Discharges to the sea	ND	-
Discharges to third-party treatment systems	ND	-
Total water discharge	8,09	0,0002
Quality - Water discharge by destination ELECTRICITY GENERATION	Quality: pH	Quality: TTS
Discharges to surface waters	8,50	-
Discharges to groundwater	ND	-
Discharges to the sea	ND	-
Discharges to third-party treatment systems	ND	-
Total water discharge	8,50	-
Quality - Water discharge by destination COMPANY	Quality: pH	Quality: TTS
Discharges to surface waters	ND	-
Discharges to groundwater	ND	-
Discharges to the sea	ND	-
Discharges to third-party treatment systems	ND	-
Total water discharge	7,28	0,54

"**DESCRIPTION OF THE PROCEDURE USED TO ESTIMATE THE DISCHARGE:** It is estimated from the average flow rate of the effluent (L/s) (normally obtained from the characterization of the discharge), the duration of the activity generated by the effluent (h/d) Likewise, in some farms the discharge is obtained from the withdrawal of water for domestic use and is multiplied by a consumption factor of 80%.Hydric stress was defined by the relationship between the total withdrawal of water and the annual availability of available water calculated with AQUEDUCT."

DESCRIPTION OF THE PROCEDURE USED TO CHOOSE THE REPORTED QUALITY PARAMETERS AND SET THE DISCHARGE LIMITS FOR THESE PARAMETERS: GCCA (Global Cement & Concrete Association) Water Reporting Protocol for Cement, Aggregate and Concrete Plant Operations. Water stress was defined by the relationship between total water withdrawal and the annual availability of available water calculated with AQUEDUCT. Available water calculated with AQUEDUCT.

BIODIVERSITY

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL
% of active and inactive quarries located within, adjacent to, or containing protected or high biodiversity value areas that have a biodiversity management plan	A-BI1					68%	77%	74%	76%	85%
% of liberated areas rehabilitated in active and inactive quarries	A-BI2			EM-CM160a.2		87%	81%	77%	77%	90%
Total area affected (ha)							2.897	2.534	2.411	
Active Facilities (#)								248	268	
Colombia					2.7.4			56	59	
Central America & Caribbean								21	30	
US								171	179	
Area - Active Facilities (ha)								2327	2557	
Colombia					2.7.4			1167	1308	
Central America & Caribbean								331	417	
US								829	831	
Number of active facilities located within, adjacent to or containing protected areas or areas of HBV								29	26	
Colombia					2.7.4			19	15	
Central America & Caribbean								8	9	
US								2	2	
Area - Active facilities located within, adjacent to or containing protected areas or areas of HBV (ha)								631	706	
Colombia					2.7.4			420	448	
Central America & Caribbean								148	162	
US								63	96	
% of active facilities located within, adjacent to, or containing protected areas or areas of high biodiversity value	A-BI3					66%	68%	12%	10%	
Colombia					2.7.4			34%	25%	
Central America & Caribbean								38%	30%	
US								1%	1%	
Number of active facilities located within, adjacent to or containing protected areas or areas of HBV with BMP								15	20	
Colombia					2.7.4			10	13	
Central America & Caribbean								3	5	
US								2	2	
% of active facilities located within, adjacent to or containing protected areas or areas of HBV with BMP								52%	77%	
Colombia					2.7.4			53%	87%	
Central America & Caribbean								38%	56%	
US								100%	100%	
Area - Active facilities located within, adjacent to or containing protected areas or areas of HBV with BMP (ha)								534	575	
Colombia					2.7.4			370	388	
Central America & Caribbean								101	91	
US								63	96	
% of active and inactive quarries that have an established closure plan	A-BI4					78%	88%	89%	86%	
% of active quarries that have an established closure plan		GCCA				93%	95%	97%	94%	
% of active quarries located within, adjacent to, or containing protected areas or areas of high biodiversity value						41%	33%	31%	36%	
% of active quarries located within, adjacent to, or containing protected areas or areas of high biodiversity value that have a biodiversity management plan						78%	85%	82%	77%	
Species on the IUCN red list and species on the national conservation lists that inhabit areas affected by operations										
Total species						1,6	170	165	130	
Critically endangered						15	15	13	2	
Endangered						21	20	20	11	
Vulnerable				304-4		55	60	58	17	
Near threatened						11	12	12	3	
Least concern						58	63	62	62	

OTHER EMISSIONS

All emissions were quantified through continuous monitoring systems as well as isokinetic monitoring.

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL	COMMENTS
CEMENT											
PARTICULATE MATTER											
Absolute Particulate Matter Emissions (t/year)			305-7	EM-CM120a.1		863	617	854	980		The report corresponds to emissions of particulate matter measured according to EPA method #5 "Determinants of emissions of particulate matter from stationary sources"
Absolute Particulate Matter Emissions (t/year) ONLY FURNACES		GCCA - KPI 3				589	315	500	701		
Specific emissions of particulate matter (g PM/t clinker)	A-OE1					62	37	53	76	45	
Coverage with monitoring for particulate matter (percentage of clinker produced in kilns covered with monitoring systems for particulate matter) (%)		GCCA - KPI 4				100,0%	99,0%	100,0%	100,0%		
NOX											
Absolute NOx Emissions (t NOx/year)			305-7	EM-CM120a.1		10.726	11.106	12.054	12.808		
Absolute NOx Emissions (t NOx/year) ONLY FURNACES		GCCA - KPI 3				10.726	11.101	12.020	12.773		
Specific NOx Emissions (g NOx/t clinker)	A-OE1					1.128	1.319	1.274	1.386	1.205	
NOx monitoring coverage (percentage of clinker produced in kilns covered with NOx monitoring systems) (%)		GCCA - KPI 4				100,0%	99,0%	100,0%	100,0%		
SOX											
Absolute SO2 Emissions (t SO2/year)			305-7	EM-CM120a.1		1.880,00	1.579,00	2.816,00	3.671,41		
Absolute SO2 Emissions (t SO2 /year) ONLY FURNACES		GCCA - KPI 3				1.880,00	1.482,00	2.654,00	3.289,67		
Specific SO2 Emissions (g SO2 /t clinker)	A-OE1					198,00	176,00	281,00	356,93	205	
SO2 monitoring coverage (percentage of clinker produced in kilns covered with SO2 monitoring systems) (%)		GCCA - KPI 4				100,0%	99,0%	100,0%	100,0%		
Total coverage (percentage of clinker produced in kilns covered with continuous or discontinuous monitoring systems for particulate matter, NOx, SO2 , VOC/THC, heavy metals) (%)		GCCA - KPI 1				82,6%	60,8%	42,0%	42,9%		
Coverage with continuous monitoring of emissions (percentage of clinker produced in kilns covered with continuous monitoring systems for particulate matter, NOx, SO2) (%)		GCCA - KPI 2				88,1%	91,2%	89,0%	90,1%		
Absolute VOC/THC emissions (t VOC/year)		GCCA - KPI 3				355	214	268	543		
Specific VOC/THC emissions (g VOC/t clinker)				EM-CM120a.1		45	47	54	96		
VOC/THC Coverage Rate (%)		GCCA - KPI 4				82,6%	54,5%	76,0%	61,1%		
Absolute PCDD/F emissions (mg PCDD/year)		GCCA - KPI 3				149	55	67	539		
Specific emissions of PCDD/F (mg PCDD/t clinker)						19	8	9	89		
PCDD/F coverage rate (%)		GCCA - KPI 4				82,6%	79,8%	54,0%	65,9%		
Absolute Hg emissions (kg Hg/year)		GCCA - KPI 3			2.2.6	283	226	142	180		
Specific Hg emissions (mg Hg/t clinker)						34	30	20	23		
Hg coverage rate (%)		GCCA - KPI 4				87,7%	90,1%	76,0%	83,6%		

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL	COMMENTS
CEMENT											
SOX											
Absolute emissions of HM1 (Cd + Tl) (kg HM1/year)		GCCA - KPI 3				31	18	26		49	Sum of cadmium and thallium their compounds expressed as cadmium (Cd) and thallium (Tl)
Specific emissions of HM1 (Cd + Tl) (mg HM1/t clinker)		GCCA - KPI 3				4	3	4		6	
HM1 coverage rate (Cd + Tl) (%)		GCCA - KPI 4				82,6%	79,8%	65,0%		77,8%	
Absolute emissions of HM2 (Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V) (kg HM2/year)		GCCA - KPI 3				1.204	2.907	1.672		1.944	Sum of antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel and vanadium and their compounds expressed as antimony (Sb), arsenic (As), lead (Pb), chromium (Cr), cobalt (Co), copper (Cu), manganese (Mn), nickel
Specific emissions of HM2 (Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V) (mg HM2/t clinker)		GCCA - KPI 3				153	433	272		252	
HM2 coverage rate (Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V) (%)		GCCA - KPI 4				82,6%	79,8%	65,0%		83,6%	
CONCRETE											
Absolute Particulate Matter Emissions (t/year)			305-7			117	97	107		103	
ELECTRICITY GENERATION											
Absolute Particulate Matter Emissions (t/year)			305-7			11	37	30		54	
Absolute NOx Emissions (t NOx/year)						464	466	1.715		299	
Absolute SO2 Emissions (t SO2 /year)						2.120	1.740	826		1.563	
COMPANY											
Absolute Particulate Matter Emissions (t/year)			305-7		2.2.6	991	751	991		1.137	
Absolute NOx Emissions (t NOx/year)					2.2.4	11.190	11.572	13.769		13.107	
Absolute SO2 Emissions (t SO2 /year)					2.2.5	4.000	3.319	3.642		5.235	

CIRCULAR ECONOMY

	ARGOS	GCCA	GRI	SASB	DJSI	2019	2020	2021	2022	GOAL	COMMENTS
WASTE											
Total Waste						265.068	143.816	188.824	267.575		
Hazardous waste (t/year)				EM-CM150a.1		847	418	687	982		
Reuse / Recycling / Recovery, including waste recovery / Other post-consumer programs						335	144	428	204		
Coprocessing						12	2	13	23		
Incineration						181	149	159	141		
Secure Landfill						320	123	86	615		
Non-Hazardous waste (t/year)			306-2			264.220	143.398	188.137	266.593		
Reuse / Recycling / Recovery, including waste recovery / Other post-consumer programs						106.492	84.491	75.741	142.622		
Coprocessing						58	88	7	22		
Incineration						2	2	99	3		
Landfill						13.709	5.256	4.663	11.713		
Authorized site for disposal of debris						143.960	53.562	107.626	112.234		
Recovered, recycled and reused				EM-CM150a.1		106.896	84.725	76.190	142.825		
Hazardous waste						346	146	428	204		
Non-hazardous waste						106.550	84.579	75.741	142.622		
Percentage of total recycled waste (%)				EM-CM150a.1				40%	53%		
Disposed of through landfill or incineration						158.172	59.091	112.654	124.606		
Total recycled/reused waste						0	0	76.170	142.825		
Total waste disposed of through landfill						0	0	112.376	124.561		
Waste incinerated with energy recovery					2.4.1	0	0	20	45		
Waste incinerated without energy recovery						0	0	258	143		
Total waste disposed						0	0	112.654	124.749		
MATERIALS											
CEMENT											
Raw Materials						17.838.357	15.327.796	17.723.971	18.310.354		
Auxiliary materials			301-1			10.840.546	8.317.068	10.599.696	10.225.968		
Semi-finished						3.506.215	3.652.037	4.341.836	2.627.350		
Packaging						17.080	22.906	36.232	61.739		
CONCRETE											
Raw Materials						17.294.278	16.007.268	14.426.787	14.407.043		
Auxiliary materials			301-1			1.320.506	673.430	1.533.046	1.899.705		
Semi-finished						4.169.891	3.925.733	3.429.111	3.244.073		
AGGREGATES											
Raw Materials						2.302.807	1.657.764	1.599.632	2.152.198		
Auxiliary materials			301-1			1.271	52.645	189.394	232.640		
Semi-finished						0	0	4.018	3.156		
ELECTRICITY GENERATION											
Raw Materials			301-1			0	0	0	0		
Auxiliary materials						862.234	742.312	727.809	960.961		
COMPANY											
Raw Materials						37.435.442	32.992.829	33.750.391	34.869.595		
Auxiliary materials			301-1			13.024.558	9.785.455	13.049.946	13.319.274		
Semi-finished						7.676.107	7.577.771	7.774.964	5.874.579		
Packaging						17.080	22.906	36.232	61.739		
Total material consumption (t/year)						58.153.187	50.378.961	54.611.533	54.125.187		
% Alternative Raw Materials (Cement)	A-EC2	GCCA			2.3.2	10,7%	12,0%	10,8%	10,0%	15,0%	
% Supplementary Cementitious Material (Concrete)	A-EC3				2.3.2	16,8%	17,8%	34,0%	13,1%	18,0%	
Volume of recycled aggregates used (accumulated t)	A-EC4					15.277	17.034	1.370	1.828		
Clinker/Cement Factor		GCCA			2.3.2	77%	78%	77%	74%		

ENVIRONMENTAL INVESTMENTS

	DJSI	COP	USD
Capital investments		\$ 57.854.008.434	\$ 13.589.941
Operating expenses	2.1.4	\$ 57.963.504.885	\$ 13.615.662
Total expenses (Capex + operating expenses)		\$ 115.817.513.319	\$ 27.205.602
Savings, avoided costs, income, tax incentives, etc.		\$ 34.213.835.511	\$ 8.036.850