

**WATER MANAGEMENT**

	ARGOS	GCCA	GRI	SASB	DJSI	2018	2019	2020	2021	META 2030
<b>WATER WITHDRAWAL BY SOURCE</b>										
<b>CEMENT</b>										
<b>Water withdrawal by source in all areas</b>										
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)						3.552.909	3.661.583	2.709.839	3.005.841	
Groundwater (m <sup>3</sup> /year)						4.047.012	5.277.888	4.205.991	5.595.108	
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)			303-3			38.389	141.756	74.064	116.612	
Municipal water supply or from other water companies (m <sup>3</sup> /year)						444.501	514.633	492.301	569.824	
Total withdrawal in all areas in the production of cement (m <sup>3</sup> /year)						8.044.422	9.454.104	7.408.131	9.170.773	
<b>Water withdrawal by source in Areas of Water Stress</b>										
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)						-	-	-	-	
Groundwater (m <sup>3</sup> /year)						78.315	-	-	-	
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)			303-3			34.448	-	-	-	
Municipal water supply or from other water companies (m <sup>3</sup> /year)						169.942	-	-	-	
Total withdrawal Areas of Water Stress in the production of cement (m <sup>3</sup> /year)						248.257	-	-	-	
Water withdrawal in Areas of Water Stress in the production of cement %						3,08	-	-	-	
<b>CONCRETE</b>										
<b>Water withdrawal by source in all areas</b>										
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)						62.043	81.869	79.267	109.895	
Groundwater (m <sup>3</sup> /year)						787.565	827.106	814.159	1.390.784	
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)			303-3			50.814	32.857	24.738	32.637	
Municipal water supply or from other water companies (m <sup>3</sup> /year)						1.360.737	1.163.293	996.012	566.505	
Total withdrawal in all areas in the production of concrete (m <sup>3</sup> /year)						2.210.344	2.072.268	1.889.438	2.099.821	

<b>Water withdrawal by source in Areas of Water Stress</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		12.010	-	-	-
Groundwater (m <sup>3</sup> /year)		193.420	200.183	147.304	126.889
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	963	-	-	-
Municipal water supply or from other water companies (m <sup>3</sup> /year)		154.794	251.491	260.006	100.752
Total withdrawal Areas of Water Stress in the production of concrete (m <sup>3</sup> /year)		360.225	451.674	407.310	227.641
Water withdrawal in Areas of Water Stress in the production of concrete %		16,29	21,79	21,56	11,01
<b>AGGREGATES</b>					
<b>Water withdrawal by source in all areas</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		299.885	230.402	202.216	186.633
Groundwater (m <sup>3</sup> /year)		249	399	375	340
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	5.572	15	15	271
Municipal water supply or from other water companies (m <sup>3</sup> /year)		1.170	1.125	464	788
Total withdrawal in all areas in the production of aggregates (m <sup>3</sup> /year)		301.304	231.926	203.055	187.761
<b>Water withdrawal by source in Areas of Water Stress</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		-	-	-	-
Groundwater (m <sup>3</sup> /year)		-	-	-	-
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	-	-	-	-
Municipal water supply or from other water companies (m <sup>3</sup> /year)		101	-	-	-
Total withdrawal Areas of Water Stress in the production of aggregates (m <sup>3</sup> /year)		101	-	-	-
Water withdrawal in Areas of Water Stress in the production of aggregates %		0,03	-	-	-

<b>ELECTRICITY GENERATION</b>					
<b>Water withdrawal by source in all areas</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		97.165.248	679.010	556.982	545.273
Groundwater (m <sup>3</sup> /year)		-	-	757	-
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	-	-	-	-
Municipal water supply or from other water companies (m <sup>3</sup> /year)		-	-	-	-
Total withdrawal in all areas in electricity generation (m <sup>3</sup> /year)		97.165.248	679.010	557.739	545.273
<b>Water withdrawal by source in areas of water stress</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		-	-	-	-
Groundwater (m <sup>3</sup> /year)		-	-	-	-
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	-	-	-	-
Municipal water supply or from other water companies (m <sup>3</sup> /year)		-	-	-	-
Water withdrawal by source in Areas of Water Stress (m <sup>3</sup> /year)		-	-	-	-
Water withdrawal in Areas of Water Stress in the electricity generation %		-	-	-	-
<b>COMPANY</b>					
<b>Water withdrawal by source in all areas</b>					
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)		101.080.084	4.652.865	3.548.304	3.847.642
Groundwater (m <sup>3</sup> /year)		4.834.826	6.105.393	5.021.282	6.986.232
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3	94.774	174.627	98.817	149.565
Municipal water supply or from other water companies (m <sup>3</sup> /year)		1.806.408	1.679.051	1.488.777	1.137.072
TOTAL Water withdrawal In all Areas (m <sup>3</sup> /year)	GCCA	11.458.117	12.437.309	10.058.363	11.970.991
TOTAL Water withdrawal In all Areas in 1000 m <sup>3</sup>	EM-CM-140a.1	11.458	12.437	10.058	12.120

Water withdrawal by source in areas of water stress						
Fresh water withdrawn by surface source including water from wetlands, rivers, lakes (m <sup>3</sup> /year)			12.010	-	-	-
Groundwater (m <sup>3</sup> /year)			271.735	200.183	147.304	126.889
Rainwater withdrawn directly by Cementos Argos and/or its subsidiaries (m <sup>3</sup> /year)	303-3		35.411	-	-	-
Municipal water supply or from other water companies (m <sup>3</sup> /year)			324.837	251.491	260.006	100.752
Total withdrawal Areas of Water Stress (m <sup>3</sup> /year)			643.993	451.674	407.310	227.641
Water withdrawal in Areas of Water Stress %		EM-CM-140a.1	5,62	3,63	4,05	1,90

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

#### WATER RECYCLED AND REUSED

##### CEMENT

Water reused and/or recycled for cement (m <sup>3</sup> /year)	A-A2	EM-CM-140a.1	9.654.904	11.307.781	10.636.059	10.252.516
Reused and/or recycled water for cement %			120,00	120,00	143,57	111,80

##### CONCRETE

Water reused and/or recycled for concrete (m <sup>3</sup> /year)	A-A2		356.183	387.738	366.169	398.354
Reused and/or recycled water for concrete %			16,00	19,00	19,38	19,27

##### AGGREGATES

Water reused and/or recycled for aggregates (m <sup>3</sup> /year)	A-A2		350.054	626.605	12.502	274.827
Reused and/or recycled water for aggregates %			116,00	270,00	6,16	146,37

##### ELECTRICITY GENERATION

Water reused and/or recycled for electricity generation (m <sup>3</sup> /year)	A-A2		22.579.554	29.065.608	29.386.186	26.039.306
Reused and/or recycled water for electricity generation %			23	4.281	5.269	4.775

##### COMPANY

Total water reused and/or recycled (m <sup>3</sup> /year)	A-A2	EM-CM-140a.1	32.940.695	41.387.731	40.400.916	36.964.646
Total of reused and/or recycled water %			90,00	99,00	109,51	91,27

**STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN THE CALCULATION:** All reported data was obtained by direct measurements, calculations based on measurements or, ultimately, by estimates. Water stress was defined by the relationship between total capture of water

<b>WATER CONSUMPTION</b>						
<b>Water consumption in All Areas</b>						
Water consumption in All Areas in the production of CEMENT (m <sup>3</sup> /year)						
				3.729.233	3.578.111	2.830.992 3.249.963
Water consumption in All Areas in the production of CONCRETE (m <sup>3</sup> /year)				2.165.037	2.030.853	1.879.596 1.972.454
Water consumption in All Areas in the production of AGGREGATES (m <sup>3</sup> /year)	A-A1	GCCA	GRI 303-5	280.641	231.595	202.824 184.117
Water consumption in All Areas in the ELECTRICITY GENERATION (m <sup>3</sup> /year)				897.844	679.010	557.739 545.273
Total water consumption in All Areas (m <sup>3</sup> /year)			2.3.4	7.072.756	6.519.570	5.471.151 5.951.808
<b>Water consumption in Areas of Water Stress</b>						
Water consumption in Areas of Water Stress in the production of CEMENT (m <sup>3</sup> /year)				275.435	-	- -
Water consumption in Areas of Water Stress in the production of CONCRETE (m <sup>3</sup> /year)				357.042	443.154	387.825 216.123
Water consumption in Areas of Water Stress in the production of AGGREGATES (m <sup>3</sup> /year)				101	-	- -
Water consumption in Areas of Water Stress in the ELECTRICITY GENERATION (m <sup>3</sup> /year)				-	-	- -
Total water consumption in Areas of Water Stress (m <sup>3</sup> /year)	A-A1			633	443.154	387.825 216.123
Water consumption in Areas of Water Stress in the production of CEMENT %				7	-	- -
Water consumption in Areas of Water Stress in the production of CONCRETE %				16	22	21 11
Water consumption in Areas of Water Stress in the production of AGGREGATES %				0	-	- -
Water consumption in Areas of Water Stress in the ELECTRICITY GENERATION %				-	-	- -
Total water consumption in Areas of Water Stress %				-	6,79	7,09 3,63
<b>STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN THE CALCULATION:</b> GRI 303 Standard - Water and Effluents. Water stress was defined by the relationship between total capture of water and the annual availability of accessible renewable water calculated with AQUEDUCT.						
<b>SPECIFIC WATER CONSUMPTION</b>						
<b>Specific water consumption</b>						
Specific consumption of water in liters per tonne of cement L/t				279	264	235 236 245
Specific consumption of water in liters per cubic meter of concrete L/m <sup>3</sup>	A-A1			228	215	237 259 216
Specific consumption of water in liters per tonne of aggregates L/t				109	100	109 95 94
<b>STANDARDS, METHODOLOGIES AND ASSUMPTIONS IN THE CALCULATION:</b> All reported data was obtained by direct measurements, calculations based on measurements or, ultimately, by estimates						

<b>WATER DISCHARGE BY DESTINATION</b>						
<b>CEMENT</b>						
<b>Water discharge by destination in All Areas</b>						
Water discharge to surface water (m <sup>3</sup> /year)			4.021.544	5.731.298	4.419.705	5.886.565
Water discharge to groundwater (m <sup>3</sup> /year)			181.956	235.768	198.613	47.434
Water discharge to seawater (m <sup>3</sup> /year)	GRI 303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			36.149	50.683	32.885	103.422
Water discharge In all Areas in the production of cement (m <sup>3</sup> /year)			4.239.649	6.017.749	4.651.203	6.037.422
<b>Water discharge by destination in Areas of Water Stress</b>						
Water discharge to surface water (m <sup>3</sup> /year)			-	-	-	-
Water discharge to groundwater (m <sup>3</sup> /year)			-	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			-	-	-	-
Water discharge In Areas of Water Stress in the production of cement (m <sup>3</sup> /year)			-	-	-	-
<b>CONCRETE</b>						
<b>Water discharge by destination in All Areas</b>						
Water discharge to surface water (m <sup>3</sup> /year)			75.487	34.284	1.485	2.034
Water discharge to groundwater (m <sup>3</sup> /year)			6.072	5.179	2.857	4.714
Water discharge to seawater (m <sup>3</sup> /year)	303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			14.562	34.809	30.237	120.618
Water discharge In all Areas in the production of concrete (m <sup>3</sup> /year)			96.121	74.272	34.579	127.367
<b>Water discharge by destination in Areas of Water Stress</b>						
Water discharge to surface water (m <sup>3</sup> /year)			-	7.479	-	-
Water discharge to groundwater (m <sup>3</sup> /year)			-	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			4.146	1.042	19.484	11.518
Water discharge In Areas of Water Stress in the production of concrete (m <sup>3</sup> /year)			4.146	8.521	19.484	11.518

<b>AGGREGATES</b>					
<b>Water discharge by destination in All Areas</b>					
Water discharge to surface water (m <sup>3</sup> /year)		26.111	232	189	2.077
Water discharge to groundwater (m <sup>3</sup> /year)		123	114	57	1.839
Water discharge to seawater (m <sup>3</sup> /year)	303-4	-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)		-	-	-	-
Water discharge In all Areas in the production of aggregates (m <sup>3</sup> /year)		26.234	346	246	3.916
<b>Water discharge by destination in Areas of Water Stress</b>					
Water discharge to surface water (m <sup>3</sup> /year)		-	-	-	-
Water discharge to groundwater (m <sup>3</sup> /year)		-	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4	-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)		-	-	-	-
Water discharge In Areas of Water Stress in the production of aggregates (m <sup>3</sup> /year)		-	-	-	-
<b>ELECTRICITY GENERATION</b>					
<b>Water discharge by destination in All Areas (m<sup>3</sup>/year)</b>					
Water discharge to surface water (m <sup>3</sup> /year)		4.202	-	-	-
Water discharge to groundwater (m <sup>3</sup> /year)		-	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4	-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)		-	-	-	-
Water discharge In all Areas in the electricity generation (m <sup>3</sup> /year)		4.202	-	-	-
<b>Water discharge by destination in Areas of Water Stress</b>					
Water discharge to surface water (m <sup>3</sup> /year)		-	-	-	-
Water discharge to groundwater (m <sup>3</sup> /year)		-	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4	-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)		-	-	-	-
Water discharge In Areas of Water Stress in the electricity generation (m <sup>3</sup> /year)		-	-	-	-

COMPANY						
<b>Water discharge by destination in All Areas</b>						
Water discharge to surface water (m <sup>3</sup> /year)			4.127.344	5.765.814	4.421.379	5.890.676
Water discharge to groundwater (m <sup>3</sup> /year)			188.151	241.061	201.527	53.987
Water discharge to seawater (m <sup>3</sup> /year)	303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			50.712	85.492	63.122	224.041
TOTAL water discharge In all Areas of the company (m <sup>3</sup> /year)	GCCA		4.366.207	6.092.367	4.686.028	6.168.704
<b>Water discharge by destination in Areas of Water Stress</b>						
Water discharge to surface water (m <sup>3</sup> /year)			-	-	-	-
Water discharge to groundwater (m <sup>3</sup> /year)			2.501	-	-	-
Water discharge to seawater (m <sup>3</sup> /year)	303-4		-	-	-	-
Water discharge to third-party systems (m <sup>3</sup> /year)			8.914	1.042	19.484	11.518
TOTAL water discharge In Areas of Water Stress of the company (m <sup>3</sup> /year)			11.416	1.042	19.484	11.518



Quality - Water discharge by destination CEMENT 2021	Quality: pH	Quality: TTS
Water discharge to surface water	ND	-
Water discharge to groundwater	ND	-
Water discharge to seawater	ND	-
Water discharge to third-party systems	ND	-
Water discharge in the production of cement	0,90	1,32
Quality - Water discharge by destination CONCRETE 2021	Quality: pH	Quality: TTS
Water discharge to surface water	ND	-
Water discharge to groundwater	ND	-
Water discharge to seawater	ND	-
Water discharge to third-party systems	ND	-
Water discharge in the production of concrete		0,10
Quality - Water discharge by destination AGGREGATES 2021	Quality: pH	Quality: TTS
Water discharge to surface water	ND	-
Water discharge to groundwater	ND	-
Water discharge to seawater	ND	-
Water discharge to third-party systems	ND	-
Water discharge in the production of aggregates	8,00	10,27
Quality - Water discharge by destination ELECTRICTY 2021	Quality: pH	Quality: TTS
Water discharge to surface water	ND	-
Water discharge to groundwater	ND	-
Water discharge to seawater	ND	-
Water discharge to third-party systems	ND	-
Water discharge in the electricity generation	ND	-

Quality - Water discharge by destination COMPANY 2021	Quality: pH	Quality: TTS
Water discharge to surface water	ND	-
Water discharge to groundwater	ND	-
Water discharge to seawater	ND	-
Water discharge to third-party systems	ND	-
Water discharge in the company	ND	11,69

**DESCRIPTION OF THE PROCEDURE USED TO ESTIMATE THE DISCHARGE:** Estimated based on the mean flow 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 operations the discharge is obtained from the collection of water for domestic use and is multiplied by a consumption factor of 80%. Water stress was defined by the relationship between the total water catchment and the annual availability of available water calculated with AQUEDUCT.

**DESCRIPTION OF THE PROCEDURE USED TO CHOOSE THE REPORTED QUALITY PARAMETERS AND SET 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 the total water catchment and the annual availability of available water calculated with AQUEDUCT.available water calculated with AQUEDUCT.