VOTORANTIM cimentos

Financial Statements

Votorantim Cimentos International S.A.

Consolidated financial statements and audit report as of December 31, 2022

Votorantim Cimentos International S.A.
2022 Consolidated Management Report

This consolidated management report should be read in conjunction with the audited consolidated financial statements of Votorantim Cimentos International S.A. and the notes thereto for the year ended December 31, 2022.

1 General

(a) Votorantim Cimentos International S.A. (the "Company" or "VCI") was incorporated on 9 April 2018 and is organized under the laws of Luxembourg as a "Société anonyme" for an unlimited period (R.C.S. Luxembourg: B.224031).
(b) The registered office of the Company is established at 35 Avenue J-F Kennedy, 1st floor, A2, L-1855 Luxembourg.
(c) The financial year of the Group runs from the 1st January until the 31st December of each year.
(d) VCI is 100% owned by Votorantim Cimentos S.A. ("VCSA").
(e) As at December 31, 2022 the Company's fully subscribed and paid-up capital is USD 99,915 (December 31, 2021 – USD 99,915), consisting of 99,915,432 common shares (December 31, 2021 – 99,915,432 common shares).
(f) As at December 31, 2022, the amount of share premium is USD 1,621,891 (December 31, 2021 – USD 1,314,041).
(g) The Company, its subsidiaries, and its equity accounted investees (together referred as the "Group" or "VCI Group") have investments in three clusters, which are the operating segments of the Group:
  i. North America (VCNA) that includes Canada and USA,
  ii. Europe, Asia and Africa (VCEAA) that is composed by Spain, Tunisia, Turkey and Morocco, and
  iii. Latin America (VCLatam) that includes Uruguay, Bolivia and Argentina (the later an associate).
(h) We invest in our product portfolio made up of cement, concrete, aggregates, mortars, grouts, plasticizers and agricultural inputs, but we also look beyond and continue to invest to offer new high-value services and innovative products in these segments.

2 Financial performance

(a) For the year ended December 31, 2022, the Group's net revenue amounts to USD 2,585,444 compared to USD 2,281,597 for the previous year.
(b) The Group's total assets on December 31, 2022 is USD 5,076,372 versus USD 5,235,925 as of December 31, 2021.
(c) On December 31, 2022, the Group's cash at bank and cash equivalents amounts to USD 401,567 compared to USD 505,593 as of December 31, 2021.
(d) Total net equity amounts to USD 2,680,008 as of December 31, 2022 compared to USD 2,364,916 as of December 31, 2021.
(e) Key indicators of financial performance: the Group defined its key indicators of financial performance as net revenue and EBITDA. Below the analysis of those key indicators for each operating segment:

Group's cost of goods sold and services rendered reached USD 2,217,260 compared to USD 1,822,477 in the prior year, an increase of 21.7%.

VCNA's net revenue increased by 9% reaching USD 1,446,234 in 2022, mainly due to a price increase effect.

VCNA's adjusted EBITDA decreased by 13.6% reaching USD 305,998 in 2022, as a result of costs pressure, particularly the variable costs, that were not fully absorbed by the sales price increases.

VCEAA's net revenue increased by 27% reaching USD 981,885, due mainly to a price increase effect, and the full year contribution of the business acquired in October 2021.

VCEAA's adjusted EBITDA increased by 24.9% reaching USD 139,276 due to sales increase mentioned before and solid prices, partially offset variable costs increase in the region, particularly energy and fuel.

VCLatam's net revenue decreased by 13.3% reaching USD 157,325, due to lower volumes in Uruguay, whereas sales in Bolivia were stable.

VCLatam's adjusted EBITDA decreased by 41.9% reaching USD 36,026, mainly due to the decrease in Uruguay's performance, and lower dividends distributed by an associate company located in Argentina.

3 Non-financial performance

Sustainable practice is one of the pillars of our business and one of the key elements of our Group's vision on which our plans and choices are founded. We are committed to sustainability in our activities and operations, to condense our environmental footprint, while also optimizing manufacturing costs, improving our product offerings according to the needs of our customers and maintaining our high-quality standards, in accordance with applicable laws and regulations.

Safety and Health are non-negotiable values for VCI Group, which constantly seeks to promote healthy and safe working conditions for employees and contractors.

Ethics and integrity are values that we do not compromise. To further strengthen this aspect of our culture, we have a solid corporate governance structure that matches the standards and best practices adopted by publicly traded companies, ensuring compliance, transparency and integrity in all our operations.

For more information refer to Note 33.

4 Other important events of the year

The below main events are also described in Note 3 of the consolidated financial statements, as well as supported by quantified and detailed information presented in the accompanying notes.

1.1 Impacts of Russian invasion of Ukraine and sanctions

The Company and the Group continues to monitor the developments of the current military conflict between Ukraine and Russia, as well as the sanctions applied to Russia and Belarus, and its potential implications in the Group's business, including adverse effect in the financial and foreign exchange markets.

None of the Group's subsidiaries conduct business in Russia, Ukraine or Belarus, and we are not aware of business transactions carried directly with any sanctioned person, corporation, or financial institution. Nevertheless, the pervasive economic impact of the conflict exposes the Group to global inflationary pressure, particularly in the energy and fuels sectors, with an impact on the Group's purchases and supply base.

So far, the Group has not identified any other consequences affecting the business caused by this conflict and will continue to closely monitor potential additional adverse impacts resulting from it, including the risk that conflict expands to other countries and the rise of geopolitical tensions.

1.2 Capital contributions to the Company

During the year 2022, the Company received cash contributions from its sole shareholder VCSA amounting to USD 307,851. The full amount was accounted for as an increase in share premium account, with no shares being issued by the Company. These funds were used to settle some financial liabilities of the Group, including the tender offer described in Note 3.4.

1.3 Turkey hyperinflation impact

The International Monetary Fund ("IMF") declared in its April 2022 World Economic Outlook ('WEO") report that entities with the currency of Turkey as their functional currency should start to apply IAS 29 - "Financial Reporting in Hyperinflationary Economies" from June 2022 onwards.

The Group has business in Turkey, the Turkish Lira being the functional currency of the Turkish legal entities. Therefore, IAS 29 was adopted for these entities, as explained in detail in Note 6.3.

1.4 Tender offer for bond VOTO 41

On May 13, 2022, the Company announced to the market a tender offer to purchase for cash its 7.25% Senior Notes due in 2041. The settlement of this tender offer occurred on June 1st, 2022, resulting in a total disbursement of USD 223,992, out of which USD 195,335 of principal.

As at the end of December 2022, the outstanding principal amount of bond VOTO 41 is USD 334,229 (December 31, 2021 – USD 571,902).

1.5 Business acquisition

The Group continued to invest in the expansion of its business and operations, and in November 2nd, 2022, completed the acquisition of a cement, aggregates and ready-mix concrete business in Spain.

The financial and accounting effects of this business acquisition were recognized in these financial statements, with the operating results and assets and liabilities of the acquired business being consolidated as from the acquisition date. All required details are presented in Note 31.

5 Expected evolution of Groups's business

In the US GDP is projected to fall from 2.0% in 2022 to 1.4% in 2023 (according to IMF – International Monetary Fund, latest report), in comparison to a GDP growth of 5.9% in 2021. In 2022, in addition to continuing supply chain issues caused by the pandemic, international political instability created higher volatility in fuel and power costs, with general inflation impacting all other cost lines because of mismatch between supply and demand. Cement growth was expected to be flat in the US in 2022, according to the Portland Cement Association's (PCA) latest forecast. As infrastructure packages will be deployed in coming years, it may offset a potential downturn in the residential segment expected in 2023 due to macroeconomic headwinds, including higher interest rate in both countries, Canada and US. It is anticipated that the infrastructure spending will impact demand from late 2023 onwards.

For Europe, Asia and Africa, the region was greatly affected by the cost inflation, mainly in energy, as a consequence of Russia's invasion of Ukraine. All the countries where VCI Group operates were negatively affected by the macroeconomic scenario on account of global situation. Due to the challenging scenario, cement consumption dropped in 2022. For 2023 we expect a continuous macroeconomic recovery scenario considering a stable cost inflation and a better stabilized cement consumption in all countries of this region. For Spain, the Spanish cement association, Oficemen, released a minor decrease of 0.8% in cement demand in 2022 compared to 2021. For 2023, the cement association expects a start of the year with negative values, as a consequence of comparing with the good start occurred 2022. Nevertheless, it is projected a slight recovery during the year, particularly in second semester. In this context, Oficemen estimates a range between 0% and -3% for the consumption in Spain in 2023, compared with 2022.

For Latin America, Uruguay’s results were impacted during 2022, mainly due to a change in market dynamics that were already expected. In the Bolivian market the cement demand was impacted by social strikes and protests in the last quarter.

6 Risk factors

Additional details regarding each of the financial risks identified below are disclosed in Notes 9, 23 and 33 of the consolidated financial statements.

6.1 Social and environmental risk management

The Group operates in various countries and consequently, its activities are subject to local, state, national and international environmental laws and regulations, treaties and conventions regulating the activities, establishing measures for mitigation, compensation, management and risk monitoring, including those that regulate the obligations of the owner of the venture and/or activity relating to environmental protection. Violations of the environmental regulations can lead to fines and penalties and may require the implementation of technical measures to ensure the compliance with the mandatory environmental standards.

The Group reviews periodically its environmental risk assessment and addresses the risks identified either through mitigation actions or provision of future costs.

6.2 Financial risk management

The Company's activities expose it to a number of financial risks: (a) market risk (including currency and interest rate risk); (b) credit risk; and (c) liquidity risk.

The products and services offered by the Group are denominated in several currencies due to its global positioning, and potential risks of currency mismatches between income and costs can arise.

The Group has loans linked to different indices and denominated in foreign currencies, which may have an impact on its cash flows.

To mitigate the adverse effects of each of these risk factors, the Company prepared a financial policy approved by VCSA’s Board of Directors, in order to establish governance and macro guidelines in the financial risk management process, as well as metrics for measurement and monitoring. The purpose of this process is to protect the cash flows against adverse financial market events, such as fluctuations in exchange rates and interest rates, and against adverse credit events of financial counterparties. In addition, this process aims to manage leverage and other financial or operating exposure in line with the criteria of ratings agencies for investment grade companies. The financial policy of the Company aims preserving the liquidity of the Group, diversifying the financing sources, providing unrestricted access to capital markets at competitive costs, and generating value for stockholders.

The following derivative instruments may be used to hedge and manage risks: swaps, call options, put options, collars, futures contracts (currencies, interest rates or commodities) and forward contracts known as Non-Deliverable Forwards (currencies, interest rates or commodities). The main guideline for the Company’s hedging strategy follows transactions that do not involve financial instruments for speculative purposes or transactions that can be characterized as leverage (that is, that the exposure to the risk factor via derivative is greater than the hedged item), and any other instrument requires the approval of VCSA’s Board of Directors.

7 Research and development (R&D)

The R&D activities are not directly managed by VCI. To address the main challenges of the cement industry we count on the support of our global Research & Development and Quality area at VCSA on two important levels: 1) clinker factor reduction, through the use of other materials with hydraulic properties (called cementitious), such as blast-furnace slag, fly ash, natural pozzolans and calcined clay, among others; and 2) replacement of fossil fuels with alternative lower-CO_2 emissions fuels, which reduces the use of non-renewable resources and contributes to mitigating the burden of industrial and urban waste.

All amounts in thousands of US dollars, unless otherwise stated

8 Branches

As at December 31, 2022 the Company does not have any branch in its organization.

9 Acquisition of own shares

The Group did not carry any acquisition of its own shares during the year ended on December 31, 2022. Moreover, the Group does not hold any amount related to its own shares.

10 Management Board

The Management Board is composed by Carlos Eduardo Boggio and Nuno Alexandre Fernandes Alves.

Luxembourg, February 27, 2023.
The Management Board

DocuSigned by:	DocuSigned by:
Nuno Alves	Carlos Eduardo Boggio
9D82DEB72A2E423...	FEB92EB32D98404...
Nuno Alves	Carlos Boggio
Management Board Member	Management Board Member

Audit report

To the Shareholder of
Votorantim Cimentos International S.A

Report on the audit of the consolidated financial statements

Our opinion

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of Votorantim Cimentos International S.A (the "Company") and its subsidiaries (the "Group") as at 31 December 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.

What we have audited

The Group's consolidated financial statements comprise:

- the consolidated balance sheet as at 31 December 2022;
- the consolidated statement of income for the year then ended;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with the Law of 23 July 2016 on the audit profession (Law of 23 July 2016) and with International Standards on Auditing (ISAs) as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier" (CSSF). Our responsibilities under the Law of 23 July 2016 and ISAs as adopted for Luxembourg by the CSSF are further described in the "Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the consolidated financial statements" section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants, including International Independence Standards, issued by the International Ethics Standards Board for Accountants (IESBA Code) as adopted for Luxembourg by the CSSF together with the ethical requirements that are relevant to our audit of the consolidated financial statements. We have fulfilled our other ethical responsibilities under those ethical requirements.

Other information

The Management Board is responsible for the other information. The other information comprises the information stated in the consolidated management report but does not include the consolidated financial statements and our audit report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Management Board and those charged with governance for the consolidated financial statements

The Management Board is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs as adopted by the European Union, and for such internal control as the Management Board determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Management Board is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Management Board either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Responsibilities of the "Réviseur d'entreprises agréé" for the audit of the consolidated financial statements

The objectives of our audit are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the Law of 23 July 2016 and with ISAs as adopted for Luxembourg by the CSSF, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Management Board;

- conclude on the appropriateness of the Management Board's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit report. However, future events or conditions may cause the Group to cease to continue as a going concern;

- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation;

- obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

The consolidated management report is consistent with the consolidated financial statements and has been prepared in accordance with applicable legal requirements.

PricewaterhouseCoopers, Société coopérative
Represented by

Luxembourg, 28 February 2023

Electronically signed by:
Fabrice Goffin

Fabrice Goffin

Votorantim Cimentos International S.A.

2022 Consolidated Financial Statements

Votorantim Cimentos International S.A.

Consolidated balance sheet

All amounts in thousands of US Dollars, unless otherwise stated

Assets	Note	2022	2021
Current assets			
Cash and cash equivalents	11(b)	401,567	505,593
Financial investments	12(b)	17,327	17,102
Trade receivables	13(b)	144,674	144,356
Inventory	14(b)	357,109	290,112
Taxes recoverable		26,900	75,796
Royalties		1,463	1,449
Other assets		33,146	30,664
		982,186	1,065,072
Assets classified as held for sale			1
		982,186	1,065,073
Non-current assets			
Taxes recoverable		3,469	3,976
Deferred tax assets	22(c)	80,605	154,943
Securitization of receivables	13(e)	41,731	37,741
Royalties		5,963	5,847
Pension plan	24	23,804	38,206
Other assets		17,541	21,222
		173,113	261,935
Investments in associates and joint ventures	16(b)	240,088	216,190
Investment property		14,349	
Property, plant and equipment	17(b)	2,027,330	1,966,355
Intangible assets	18(b)	1,434,861	1,500,000
Right-of-use assets	19(b)	204,444	226,372
		3,921,072	3,908,917
Total assets		5,076,371	5,235,925

Liabilities and stockholders' equity	Note	2022	2021
Current liabilities			
Borrowing	20(b)	30,216	37,471
Lease liabilities	19(c)	26,182	33,276
Confirming payables	21	283,113	219,647
Trade payables		388,351	349,011
Salaries and payroll charges		54,936	63,189
Taxes payable		26,826	35,046
Advances from customers		4,202	2,899
Dividends payable	15(b)	436	251
Other liabilities		33,456	87,560
		847,718	828,350
Liabilities related to assets held for sale			244
		847,718	828,594
Non-current liabilities			
Borrowing	20(b)	1,055,802	1,442,705
Lease liabilities	19(c)	192,329	195,515
Deferred tax liabilities	22(c)	133,754	220,867
Provision	23(b)	65,994	67,749
Pension plan	24	52,707	71,531
Securitization of receivables	13(e)	21,928	16,820
Other liabilities		26,132	27,228
		1,548,646	2,042,415
Total liabilities		2,396,364	2,871,009
Shareholders' equity	25(c)		
Share capital		99,915	99,915
Share premium		1,621,892	1,314,041
Consolidated reserves		1,454,082	1,389,683
Other comprehensive income		(878,713)	(842,277)
Total equity attributable to the Company owners		2,297,176	1,961,362
Non-controlling interests		382,831	403,554
Total equity		2,680,007	2,364,916
Total liabilities and shareholders' equity		5,076,371	5,235,925

The accompanying notes are an integral part of these audited consolidated financial statements.

Votorantim Cimentos International S.A.

Consolidated statement of income
Year ended December 31
All amounts in thousands of US Dollars, unless otherwise stated

	Note	2022	2021
Continuing operations			
Revenue from contracts with customers	26	2,585,444	2,281,597
Cost of goods sold and services rendered	27	(2,217,260)	(1,822,477)
Gross profit		368,184	459,120
Operating income (expenses)			
Selling expenses	27	(54,976)	(44,490)
General and administrative expenses	27	(117,283)	(121,597)
Other operating income, net	29	27,495	56,761
		(144,764)	(109,326)
Operating profit before equity interest and financial results		223,420	349,794
Results of investees			
Share of net profit of associates and joint ventures	16(b)	12,593	10,706
Financial income (expenses)	30(b)		
Financial income		27,042	17,804
Financial expenses		(161,542)	(143,674)
Exchange variations and hyperinflation effects, net		(1,784)	(46,520)
		(136,284)	(172,390)
Profit before income tax		99,729	188,110
Income tax	22(b)	(22,144)	(75,274)
Profit for the year		77,585	112,836
Attributable to the			
Company owners		52,705	58,249
Non-controlling interests		24,880	54,587
Profit for the year		77,585	112,836

The accompanying notes are an integral part of these audited consolidated financial statements.

Votorantim Cimentos International S.A.

Consolidated statement of comprehensive income
Year ended December 31
All amounts in thousands of US Dollars, unless otherwise stated

	Note	2022	2021
Profit for the year		77,585	112,836
Components of other comprehensive income (expenses) for subsequent reclassification to the statement of income			
Attributable to the owners of the Company			
Currency exchange differences on translation of foreign operations	25(c)	(25,012)	(6,184)
Currency translation in hedge accounting for net investments in foreign operations	25(c)	(26,406)	5,177
Share of other comprehensive income of associates and joint ventures		(52)	909
Other components of comprehensive income		3,548	3,079
Attributable to non-controlling shareholders			
Currency exchange differences on translation of foreign operations		(4,642)	(14,423)
Currency translation in hedge accounting for net investments in foreign operations		(5,409)	(2,343)
Other components of comprehensive income		(259)	723
		(58,231)	(13,062)
Components of other comprehensive income not for subsequent reclassification to the statement of income			
Attributable to the owners of the Company			
Remeasurement of retirement benefits	25(c)	5,202	7,811
Attributable to non-controlling shareholders			
Remeasurement of retirement benefits		1,034	1,665
		6,236	9,476
Total comprehensive expenses for the year		25,590	109,250
Comprehensive expenses from			
Continuing operations		25,590	109,250
Discontinued operations			
		25,590	109,250
Comprehensive income attributable to			
Company owners		9,985	69,041
Non-controlling interests		15,605	40,209
		25,590	109,250

In this consolidated statement of comprehensive income, the items are presented net of tax effects. The tax effects are presented in Note 22(c).

Votorantim Cimentos International S.A.

Consolidated statement of changes in equity
Year ended December 31
All amounts in thousands of US Dollars, unless otherwise stated

	Attributable to the Company owners						
	Share capital	Share premium	Consolidated reserves	Other comprehensive income	Total	Non-controlling interests	Total stockholder's equity
At January 1, 2021	99,915	1,134,094	1,046,262	(853,069)	1,427,202	145,720	1,572,922
Comprehensive income (loss) for the year							
Profit for the year			58,249		58,249	54,587	112,836
Other comprehensive income (loss)				10,792	10,792	(14,378)	(3,586)
			58,249	10,792	69,041	40,209	109,250
Contributions by and distributions to stockholders							
Companies included in the consolidation			280,034		280,034	243,166	523,200
Decrease in non-controlling interests						261	261
Capital increase		173,911			173,911		173,911
Transfer of the preference shares from VCSA to VCI		6,036	5,138		11,174	(6,036)	5,138
Allocation of profit for the year							
Dividends paid						(19,766)	(19,766)
		179,947	285,172		465,119	217,625	682,744
At December 31, 2021	99,915	1,314,041	1,389,683	(842,277)	1,961,362	403,554	2,364,916
At January 1, 2022, before opening balance adjustments	99,915	1,314,041	1,389,683	(842,277)	1,961,362	403,554	2,364,916
Effect of initial hyperinflation accounting adjustment - subsidiary (Note 6.3 (d) (i))			17,978		17,978	406	18,384
Currency translation adjustment related to hyperinflationary economies			(6,284)	6,284			
At January 1, 2022, after opening balance adjustments	99,915	1,314,041	1,401,377	(835,993)	1,979,340	403,960	2,383,300
Comprehensive income (loss) for the year							
Profit for the year			52,705		52,705	24,880	77,585
Other comprehensive income (loss)				(42,720)	(42,720)	(9,275)	(51,995)
			52,705	(42,720)	9,985	15,605	25,590
Contributions by stockholders							
Capital increase (Note 3.2)		307,851			307,851		307,851
Decrease in non-controlling interests						(346)	(346)
Capital reduction - subsidiary (i)						(22,296)	(22,296)
Allocation of profit for the year							
Dividends approved						(14,092)	(14,092)
		307,851			307,851	(36,734)	271,117
At December 31, 2022	99,915	1,621,892	1,454,082	(878,713)	2,297,176	382,831	2,680,007

(i) In June 2022 the subsidiary St Marys reduced its capital by USD 131,154, carried as a capital return to the shareholders and settled in cash. The amount paid to the minority shareholder amounted to USD 22,296.

The accompanying notes are an integral part of these audited consolidated financial statements.

Votorantim Cimentos International S.A.

Consolidated statement of cash flows
Year ended December 31
All amounts in thousands of US dollars, unless otherwise stated

	Note	2022	2021
Profit before income tax		99,729	188,110
Adjustments of items that do not represent changes in cash and cash equivalents			
Depreciation, amortization and depletion	27	242,612	200,657
Share in the net profit of associates and joint ventures	16(d)	(12,593)	(10,706)
Provision of impairment of PP&E and intangible assets and right-of-use assets, net of reversals	29		(6,975)
Gain on the sale of PP&E and intangible assets	29	(8,015)	(15,200)
Allowance for doubtful accounts, net of reversals	13(c)	370	(170)
Provision for obsolete inventories, net of reversals	14(c)	(2,606)	2,529
Provision for legal claims and ARO, net of reversals	23(b)	1,802	4,091
Accrued interest	30(b)	73,394	87,751
Gain on investment acquisition	29	(1,320)	(46,588)
Fair value gain resulting from remeasurement of previously owned interest	29		(24,124)
Premium on repurchase of bonds	30(b)	34,422	12,600
Gain generated with the settlement of a short-term CO2 emission rights loan	30(b)	(10,265)	
Provision for CO2 emission rights, net of reversals	29	(6,270)	15,902
Other components of net financial results		16,820	13,911
Other		(4,190)	5,204
		423,890	426,992
Cash flow from operating activities			
Decrease (increase) in assets			
Trade and other receivables		(4,626)	33,253
Inventory		(53,853)	(13,079)
Taxes recoverable		4,251	(54,619)
Other assets (i)		2,698	(9,763)
Increase (decrease) in liabilities			
Trade payables		25,097	(23,591)
Confirming payables		63,466	96,288
Salaries and social charges		(8,253)	5,166
Taxes payable		(22,275)	53,712
Other accounts payable and other liabilities		(26,127)	47,088
		404,269	561,447
Interest paid	20(d)	(77,818)	(87,105)
Premium paid on repurchase of bonds	30(b)	(34,422)	(12,600)
Income tax (paid) refunded, net		20,468	(43,259)
Net cash provided by operating activities		312,497	418,482
Cash flow from investing activities			
Financial investments		(225)	8,160
Proceeds from disposals of PP&E and intangible assets		18,013	19,107
Dividends received from associates and joint ventures		13,610	39,665
Acquisitions of PP&E and intangible assets	17 and 18	(217,933)	(183,129)
Payment for acquisition of subsidiary, net of cash received	31(a)	(88,886)	(242,639)
Interest received		11,527	13,651
Capital reduction – subsidiary		(22,296)	
Cash effect of capital decrease in equity accounted investees	16(d)	1,000	
Net cash used in investing activities		(285,190)	(345,185)
Cash flow from financing activities			
Proceeds from borrowing	20(d)	375,343	336,585
Payments of borrowing	20(d)	(751,566)	(448,373)
Derivative financial instruments		952	26
Capital increase	3.2	307,851	173,911
Dividends paid to non-controlling interests		(14,092)	(19,904)
Decrease in non-controlling interests			261
Lease liability payments	19(c)	(44,601)	(31,381)
Net cash provided by (used in) financing activities		(126,113)	11,125
Increase (decrease) in cash and cash equivalents		(98,805)	84,422
Effect of exchange rate changes on cash and cash equivalents		(5,220)	(6,541)
Cash and cash equivalents at the beginning of the year		505,593	427,712
Cash and cash equivalents at the end of the year		401,567	505,593
Main non-cash transaction			
McInnis business acquisition			523,200
Deferred settlement of acquisitions		917	6,364
Use of intangible asset for liability settlement	18(b)	35,910	

(i) The comparative balance was changed in the amount of USD 6,541 to rectify a misrepresentation and allow comparability with 2022.

The accompanying notes are an integral part of these audited consolidated financial statements.

1 General information

Votorantim Cimentos International S.A. (the "Company" or "VCI") was incorporated on April 9, 2018 and is organized under the laws of Luxembourg as a "Société anonyme" for an unlimited period (R.C.S. Luxembourg: B.224031). The registered office of the Company is established at 35 Avenue J-F Kennedy, 1st floor, A2, L-1855 Luxembourg.

The Company, its subsidiaries and equity accounted investees (together referred as "VCI Group" or the "Group") are mainly engaged in the following activities: production and sale of a portfolio of heavy building materials, which includes cement, aggregates, mortar, and others, as well ready-mix concrete services, transportation, and holding investments in other companies. VCI Group operates in North America, South America (excluding Brazil), Europe, Asia and Africa.

The Company is directly and fully controlled by Votorantim Cimentos S.A. ("VCSA"), a privately held company headquartered in the city and State of São Paulo, Brazil, that is the holding company of Votorantim Cimentos Group ("VC Group"), which is ultimately family owned.

2 Approval of the consolidated financial statements

The issue of these consolidated financial statements (hereinafter referred to as "financial statements") was authorized by the Management Board on February 27, 2023.

3 Main events occurred in the year ended on December 31, 2022

3.1 Impacts of Russian invasion of Ukraine and sanctions

The Company and the Group continue to monitor the developments of the current military conflict between Ukraine and Russia, as well as the sanctions applied to Russia and Belarus, and its potential implications in the Group's business, including adverse effect in the financial and foreign exchange markets.

None of the Group's subsidiaries conduct business in Russia, Ukraine or Belarus, and we are not aware of business transactions carried directly with any sanctioned person, corporation, or financial institution. Nevertheless, the pervasive economic impact of the conflict exposes the Group to global inflationary pressure, particularly in the energy and fuels sectors, with an impact on the Group's purchases and supply base.

So far, the Group has not identified any other consequences affecting the business caused by this conflict and will continue to closely monitor potential additional adverse impacts resulting from it, including the risk that conflict expands to other countries and the rise of geopolitical tensions.

3.2 Capital contributions to the Company

During the year 2022, the Company received cash contributions from its sole shareholder VCSA amounting to USD 307,851. The full amount was accounted for as an increase in share premium account, with no shares being issued by the Company. These funds were used to settle some financial liabilities of the Group, including the tender offer described in Note 3.4.

3.3 Turkey hyperinflation impact

The International Monetary Fund ("IMF") declared in its April 2022 World Economic Outlook ('WEO") report that entities with the currency of Turkey as their functional currency should start to apply IAS 29 - "Financial Reporting in Hyperinflationary Economies" from June 2022 onwards.

The Group has business in Turkey, the Turkish Lira being the functional currency of the Turkish legal entities. Therefore, IAS 29 was adopted for these entities, as explained in detail in Note 6.3.

All amounts in thousands of US dollars, unless otherwise stated

3.4 Tender offer for bond VOTO 41

On May 13, 2022, the Company announced to the market a tender offer to purchase for cash its 7.25% Senior Notes due in 2041. The settlement of this tender offer occurred on June 1st, 2022, resulting in a total disbursement of USD 223,992, out of which USD 195,335 of principal.

As at the end of December 2022, the outstanding principal amount of bond VOTO 41 is USD 334,229 (December 31, 2021 – USD 571,902).

3.5 Business acquisition

The Group continued to invest in the expansion of its business and operations, and in November 2nd, 2022, completed the acquisition of a cement, aggregates and ready-mix concrete business in Spain.

The financial and accounting effects of this business acquisition were recognized in these financial statements, with the operating results and assets and liabilities of the acquired business being consolidated as from the acquisition date. All required details are presented in Note 31.

4 Supplementary information

4.1 Information by operating segment

IFRS 8 - “Operating Segments” requires reportable segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the Chief Operating Decision Maker (CODM) to allocate resources to the segments and to assess their performance. The Company defined the Management Board to be the CODM.

For management purposes, VCI Group is organized by geographical areas, with three reportable segments based on the assets’ locations, as follows: (1) North America (operations in Canada and United States); (2) Europe, Asia and Africa (operations in Spain, Turkey, Morocco and Tunisia); (3) Latin America (operations in Bolivia and Uruguay).

The reportable segments' key financial performance metric for management is the Adjusted EBITDA, which is reported on a monthly basis for each of the geographical reportable segments. Adjusted EBITDA is defined as profit for the year less financial results, income tax and social contribution, equity in results of investees and plus depreciation, amortization and depletion, plus dividends received from investees and less certain items considered by the CODM as unusual.

					2022
	North America	Europe, Asia and Africa	Latin America	Holding and eliminations	Total
Revenue from contracts with customers	1,446,234	981,885	157,325		2,585,444
Cost of goods sold and services rendered	(1,237,105)	(849,646)	(130,509)		(2,217,260)
Gross profit	209,129	132,239	26,816		368,184
Operating expenses	(78,897)	(51,125)	(12,436)	(2,306)	(144,764)
Operating profit (loss) before equity interest and financial results	130,232	81,114	14,380	(2,306)	223,420
Results of investees					
Share of net profit (loss) of associates and joint ventures	3,026	3,801	5,766		12,593
Financial results, net					
Interest payable on borrowing and other	(39,395)	(3,622)	(5,824)	(31,259)	(80,100)
Financial results, net, except interest payable on borrowing and other	(27,264)	7,383	(970)	(35,333)	(56,184)
	(66,659)	3,761	(6,794)	(66,592)	(136,284)
Profit (loss) before income tax	66,599	88,676	13,352	(68,898)	99,729
Income tax	(11,485)	(9,315)	(1,344)		(22,144)

All amounts in thousands of US dollars, unless otherwise stated

Profit (loss) for the year	55,114	79,361	12,008	(68,898)	77,585
Depreciation, amortization and depletion	172,885	54,370	15,340	17	242,612
Dividends received	2,881	3,394	6,306		12,581
Business combination		398			398
	2,881	3,792	6,306		12,979
Adjusted EBITDA	305,998	139,276	36,026	(2,289)	479,011
PP&E and intangible assets additions	133,627	57,981	26,326		217,933
Total assets	2,645,571	1,324,339	563,752	542,710	5,076,372
Total liabilities	1,149,026	723,572	181,367	342,399	2,396,364
Net debts	631,394	(163,012)	78,086	339,507	885,975

					2021
	North America	**Europe, Asia and Africa**	**Latin America**	**Holding and eliminations**	**Total**
Net revenue from goods sold and services rendered	1,326,801	773,294	181,502		2,281,597
Cost of goods sold and services rendered	(1,031,930)	(653,433)	(137,114)		(1,822,477)
Gross profit	294,871	119,861	44,388		459,120
Operating expenses	(29,232)	(70,780)	(7,838)	(1,474)	(109,326)
Operating profit (loss) before equity interest and financial results	265,637	49,081	36,550	(1,474)	349,794
Results of investees					
Share of net profit of associates and joint ventures	6,578	3,933	196	(1)	10,706
Financial results, net					
Interest payable on borrowing and other	(42,974)	(5,267)	(6,457)	(43,797)	(98,495)
Financial results, net, except interest payable on borrowing and other	(3,408)	(55,932)	1,610	(16,165)	(73,895)
	(46,382)	(61,199)	(4,847)	(59,962)	(172,390)
Profit (loss) before income tax	225,833	(8,185)	31,899	(61,437)	188,110
Income tax	(54,408)	(18,438)	(2,428)		(75,274)
Profit (loss) for the year from continuing operations	171,425	(26,623)	29,471	(61,437)	112,836
Profit (loss) for the year	171,425	(26,623)	29,471	(61,437)	112,836
Depreciation, amortization and depletion	135,465	49,557	15,620	15	200,657
Dividends received	7,859	3,544	20,084		31,487
Dissolution of the investment		3,079			3,079
Business combination	(55,482)	2,177			(53,305)
Impairment		3,122	(10,096)		(6,975)
COVID	805	250	51		1,107
Other unusual items		666	(174)		492
	(46,818)	12,837	9,865		(24,115)
Adjusted EBITDA	354,284	111,475	62,035	(1,459)	526,336
PP&E and intangible assets additions	130,323	72,235	21,850		224,408
Total assets	2,946,868	1,187,200	534,738	562,395	5,231,201
Total liabilities	1,322,222	775,731	188,288	582,927	2,869,168
Net debts	633,822	(92,031)	64,471	579,630	1,185,892

All amounts in thousands of US dollars, unless otherwise stated

4.2 Capital management

The Company's main objectives when managing its capital are to safeguard the ability to continue as a going concern in order to provide returns, and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure the Company can make adjustments to the amount of dividends or capital return paid to stockholders, issue new shares, or sell assets to reduce debt, for example.

Consistent with others in the industry, the Company monitors capital on the basis of the financial leverage ratio, which corresponds to the net debt divided by Adjusted EBITDA. Net debt is calculated as total borrowings and lease liabilities less cash and cash equivalents, financial investments and derivative financial instruments.

The leverage ratios as at December 31, 2022 and 2021 are summarized as follows:

	Note	2022	2021
Borrowing	20(b)	1,086,018	1,480,176
Lease liabilities	19(c)	218,511	228,791
Cash and cash equivalents	11(b)	(401,567)	(505,593)
Financial investments	12(b)	(17,327)	(17,102)
Derivative financial instruments		340	(380)
Net debt - (A)		885,975	1,185,892
Adjusted EBITDA for the last 12 months - (B)		479,011	526,336
Financial leverage ratio - (A/B)		1.85	2.25

5 Changes in accounting policies and disclosures

5.1 New and amended accounting standards adopted by the Group

A number of amended standards became applicable for the current reporting period. The Group did not have to change its accounting policies or make retrospective adjustments as a result of adopting these amended standards.

5.2 New and amendments to accounting standards not yet adopted by the Group

The Group analyzed the new accounting standards, amendments to the accounting standards and interpretations issued by International Accounting Standards Board ("IASB") and endorsed by the European Union ("EU") which are applicable for periods commencing on or after January 1st, 2023. Impacts were identified for the amendments to IAS 12 – "Income Taxes", that requires companies to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. It is expected that additional deferred tax assets and deferred tax liabilities will be recognized on January 1st, 2023, amounting approximately to USD 3 million and USD 3.5 million, respectively, and related to lease agreements and decommissioning and restoration obligations.

The other standards, amendments or interpretations not mandatory for December 31, 2022 reporting periods have not been early adopted by the Group, and are not expected to have a material impact in the current or future reporting periods.

6 Basis of preparation

6.1 Financial statements

These financial statements were prepared and are being presented in accordance with IFRS (International Financial Reporting Standards), as issued by the IASB that are adopted by the EU.

The financial statements were prepared and are being presented under the historical costs convention, except for some financial assets and financial liabilities (including derivative instruments) and investment properties which are measured at fair value at the end of each reporting period.

The main accounting policies applied in the preparation of these financial statements have been consistently applied in all years presented, unless otherwise stated. The accounting policies of subsidiaries, associates and joint ventures are adjusted, if necessary, to ensure consistency with the policies adopted by the Company.

The significant accounting policies for the understanding of the financial statements were included in the respective notes, with a summary of the basis of recognition and measurement used by the Company.

The preparation of financial statements requires the use of certain accounting estimates. It also requires Management to exercise its judgment in the process of applying the Company's accounting policies. Those areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 7.

6.2 Principles of consolidation and equity accounting

The Company consolidates all the entities which it controls. The companies included in this consolidation are listed in Note 6.2 (g).

(a) Subsidiaries

The Company controls an entity when it is exposed to, or has the right to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated in these financial statements from the date on which the Company obtains control, until the date that control ceases. The acquisition method of accounting is used by the Company to account for business combinations, as explained in Note 6.2 (e).

Intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the statement of income, statement of comprehensive income, statement of changes in equity and balance sheet respectively.

(b) Transactions with non-controlling interests

The Company treats transactions with non-controlling interests that do not result in loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognized in a separate reserve within equity attributable to the Company owners.

(c) Associates and joint arrangements

(i) Associates

Associates are all entities over which the Company, directly or indirectly, has significant influence on financial and operating activities, but not control or joint control. Investments in associates are accounted for using the equity method of accounting, after initially being recognized at cost.

(ii) Joint arrangements

Investments in joint arrangements are classified as either joint ventures or joint operations. In a joint venture the Company shares the control of the entity and has the right to the net assets of the joint venture, and not to its specific assets and liabilities. Interests in joint ventures are accounted for using the equity accounting method, after initially being recognized at cost in the balance sheet.

In a joint operation the Company recognizes individually its direct right to the assets, liabilities, revenues and expenses, and its share of any jointly held or incurred assets, liabilities, revenues and expenses.

(iii) Equity method

Under the equity method of accounting, the investments are initially recognized at cost, which includes transaction costs, and adjusted thereafter to recognize the Company's share of the post-acquisition profits or losses of the investee in the statement of income, and the Company's share of movements in other comprehensive income of the investee in the statement of comprehensive income, until the date when significant influence or joint control ceases to exist. Dividends received or receivable from associates and joint ventures are recognized as a reduction of the carrying amount of the investment.
The Company's investments in associates and joint ventures include goodwill identified upon acquisition, net of any accumulated impairment losses.

When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognize further losses, unless it has incurred obligations or made payments on behalf of the other entity.

Unrealized gains arising from transactions with investees recognized under the equity method are eliminated against the investment in the proportion of the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Dilution gains and losses arising on investments in associates and joint ventures are recognized in the statement of income. The Group classifies dividends received from associates and joint ventures as cash flows from investing activities.

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in Note 7.2.

(d) Loss of control of subsidiaries, associates or joint ventures

When the Company ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognized in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

If the ownership interest in a joint venture or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognized in other comprehensive income are reclassified to profit or loss where appropriate.

(e) Business combinations

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the Company
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

The excess of the:

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets acquired is recorded as goodwill.

If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognized directly in statement of income as a bargain purchase. If non-controlling interests are born as part of the business combination, the gain resulting from the bargain purchase is fully allocated to the Group as controlling shareholder.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Contingent consideration is classified either as equity or as financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value, with changes in fair value recognized in the statement of income.

If the business combination is achieved in stages, the acquisition date carrying value of the Company's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in the statement of income.

(f) Discontinued operation

A discontinued operation is a component of a business of the Group which comprises operations and cash flows that can be clearly separated from the Group, that either has been disposed of or is classified as held for sale, and:

(i) represents either a separate major line of business or a geographical area of operations;

All amounts in thousands of US dollars, unless otherwise stated

(ii) is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or

(iii) is a subsidiary acquired exclusively with a view to resale.

The classification as a discontinued operation occurs on its disposal, or when the operation meets the criteria to be classified as held for sale, if this occurs earlier.

When an operation is classified as a discontinued operation, the comparative statements of income and other comprehensive income are restated as if the operation had been discontinued since the beginning of the comparative period.

(g) Companies included in the financial statements

	Percentage of total and voting capital				
	2022	2021	Place of operation	Functional currency	Main activity
Votorantim Cement International S.A and subsidiaries					
St. Marys e subsidiaries					
St. Marys Cement Inc. (Canada)	83.00	83.00	Canada	CAD	Cement, ready mix, aggregates
McInnis Cement ULC (i)		83.00	Canada	CAD	Cement
7918 Québec Inc. (aka GP Co)	83.00	83.00	Canada	CAD	Cement
Superior Materials Holdings LLC	83.00	83.00	USA	USD	Ready mix
St. Marys Cement U.S. LLC	83.00	83.00	USA	USD	Cement
McInnis Marine USA, LLC	83.00	83.00	USA	USD	Cement
2377962 Ontario Inc.	83.00	83.00	Canada	CAD	Holding
2377482 Ontario Inc.	83.00	83.00	Canada	CAD	Holding
2339097 Ontario Limited	83.00	83.00	Canada	CAD	Holding
Rosedale Securities Limited	83.00	83.00	Canada	CAD	Holding
VCNA Prairie Aggregate Holdings Illinois Inc.	83.00	83.00	USA	USD	Aggregates
VCNA US Inc.	83.00	83.00	USA	USD	Holding
Votorantim Cimentos North America, Inc.	83.00	83.00	USA	USD	Holding
McInnis USA LLC	83.00	83.00	USA	USD	Cement
VCNA Praire LLC	83.00	83.00	USA	USD	Ready mix, aggregates
VCNA United Materials LLC	83.00	83.00	USA	USD	Concrete
VCNA United Materials Builders LLC	83.00	83.00	USA	USD	Retail
313 Ready Mix LLC	83.00	83.00	USA	USD	Ready mix, aggregates
Votorantim Cement EAA Inversiones S.L and subsidiaries					
Votorantim Cement EAA Inversiones S.L. "VCEAA"	100.00	100.00	Spain	EUR	Holding
Societe Les Ciments de Jbel Oust - CJO	99.99	99.99	Tunisia	TND	Cement
Societe Granulats Jbel Oust	99.99	99.99	Tunisia	TND	Aggregates
Votorantim Cimento Sanayive Ticaret A.S	99.95	99.90	Turkey	TRY	Cement
Ybitas Yozgat Isci Birligi Insaat Malzemeleri Ticaret ve Sanayi A.S.	82.91	82.87	Turkey	TRY	Cement
Votorantim Cement Trading S.L.	100.00	100.00	Spain	USD	Trading
Votorantim Macau – Investment Company, Limited (ii)		100.00	China	MOP	Holding
Cementos Asment EAA	100.00	100.00	Spain	EUR	Holding
Grabemaro S.A.R.L.	99.99	99.99	Morocco	MAD	Aggregates
Asment de Temara S.A.	62.62	62.62	Morocco	MAD	Cement
Asment Du Centre S.A.	62.62	62.62	Morocco	MAD	No activity
Société Marocainee SMBRM (ix)		62.62	Morocco	MAD	Grinding
Votorantim Cementos España, S.A. (v)	99.77	99.68	Spain	EUR	Holding
Prebetong Hormigones S.A. (v)	99.75	99.66	Spain	EUR	Ready mix
Prebetong Lugo S.A. (v)	82.69	82.61	Spain	EUR	Aggregates
Prebetong Lugo Hormigones S.A (v)	82.69	82.61	Spain	EUR	Ready mix
Comercial Cosmos SUR S.L. (v)	99.77	99.68	Spain	EUR	Cement
Morteros de Galicia S.L. (v)	99.77	99.68	Spain	EUR	Mortars
Comercializadora de Cenizas S.L. (v)	49.89	49.84	Spain	EUR	Ashes trader
A. G. Cementos Balboa S.A. (vi)		99.68	Spain	EUR	Cement
Comercializadora de Calizas S.L. (v)	49.89	49.84	Spain	EUR	Limestone trader
Prebetong Áridos S.L. (v)	99.77	99.68	Spain	EUR	Aggregates
Sociedad Financiera y Minera Sur, S.L. (vii)	99.77		Spain	EUR	Cement
Compañía General de Canteras, S.A. (viii)	99.18		Spain	EUR	Aggregates
VC Latam and subsidiaries					
Votorantim Cimentos LATAM S.A.	100.00	100.00	Luxemburgo	USD	Holding
Cementos Artigas S.A.	51.00	51.00	Uruguay	UYU	Cement
Eromar S.A.	51.00	51.00	Uruguay	UYU	Aggregates
Mondello S.A.	51.00	51.00	Uruguay	UYU	Cement
Cementos Artigas Zona Franca S.A.	51.00	51.00	Uruguay	UYU	Concrete

All amounts in thousands of US dollars, unless otherwise stated

Colina Justa S.A	51.00	51.00	Uruguay	UYU	Aggregates
Yacuces S.L	51.00	51.00	Spain	EUR	Holding
GB Minerales Y Agregados S.A.	51.00	51.00	Bolivia	EUR	Cement
Itacamba Cementos S.A.	34.00	34.00	Bolivia	BOB	Cement
Associates and jointly-controlled entities					
Hutton Transport Ltda.	20.75	20.75	Canada	CAD	Transportation
Pond Technologies Inc.	5.89	5.89	Canada	CAD	Technology
Canteira do Penedo S.A. (v)	41.33	41.29	Spain	EUR	Aggregates
Cementos del Marquesado S.A. (v)	23.15	23.13	Spain	EUR	Cement
Cementos Avellaneda S.A.	49.00	49.00	Argentina	ARS	Cement
Midway Group LLC	41.50	41.50	USA	USD	Ready mix
RMC Leasing	41.50	41.50	USA	USD	Holding
Cementos Granadilla S.L. (v)	54.87	54.83	Spain	EUR	Cement
Hormigones y Aridos La Barca S.A. (v)	49.89	49.84	Spain	EUR	Ready mix
Aridos de la Coruña S.A. (v)	49.89	49.84	Spain	EUR	Aggregates
Cementos Especiales de las Islas S.A. (v)	49.89	49.84	Spain	EUR	Cement
Compañia Canaria de Mat. Primas S.A. (v)	46.21	46.17	Spain	EUR	Services/Logistics
Horinsa Graneles S.L. (v)	49.89	49.84	Spain	EUR	Logistics
Hormisol Canarias S.A. (v)	49.89	49.84	Spain	EUR	Concrete
Morteros Especiales de Canarias S.L. (v)	24.94	24.92	Spain	EUR	Ready mix
Morteros Insulares Canarios S.A. (v)	39.91	39.87	Spain	EUR	Ready mix
Áridos Classificados de Fuerteventura S.A. (v)	37.41	37.38	Spain	EUR	Quarry
Ceisa Comercial de Cemento S.L.U. (v)	49.89	49.84	Spain	EUR	Cement
Aplicaciones Minerales S.A. (v)	11.97	11.96	Spain	EUR	Aggregates
Fortia Energia S.L. (v)	4.52	3.15	Spain	EUR	Energy
Société Marocainee SMBRM (ix)	30.68		Morocco	MAD	Grinding
Joint operations					
Ute Balasto Rionegro (iii)		49.84	Spain	EUR	Aggregates
Ute Balasto Cernadilla (iv)		49.84	Spain	EUR	Aggregates
Great Lakes Slag Inc.	41.50	41.50	Canada	CAD	Slag production

(i) Amalgamation of the company McInnis Cement ULC by St Marys Cement Inc (SMCI or St Marys) in January 2022.

(ii) Liquidation of the company Votorantim Macau – Investment Company, Limited in February 2022. It was a dormant company and its liquidation resulted only in the recycling of the corresponding currency translation adjustment to the statement of income for an amount of USD 52.

(iii) Dissolution of the company Ute Balasto Rionegro in July 2022.

(iv) Dissolution of the company Ute Balasto Cernadilla in July 2022.

(v) Increase in the equity interest of Votorantim Cement EAA Inversiones S.L. "VCEAA" in Votorantim Cementos España, S.A. in July 2022.

(vi) Almagation of the company A.G Cementos Balboa S.A. by Votorantim Cementos España, S.A. in September 2022.

(vii) Acquisition of Sociedad Financiera y Minera Sur, S.L in November 2022.

(viii) Acquisition of Compañía General de Canteras, S.A. in November 2022.

(ix) Reduction participation of the company Asment de Temara in Société Marocainee SMBRM by diluation the share capital.

6.3 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). These financial statements are presented in US Dollars ("USD"), which is the Company's functional and presentation currency.

Management has applied the guidance in IAS 21 – "The Effects of Changes in Foreign Exchange Rates" in assessing the functional currency of the Company and has determined USD as being the most appropriate functional currency, considering the economic substance and activities of the Company. Management's judgement was based on the following relevant facts:

- The Company acts as the holding entity of the international subsidiaries, being the head of Votorantim Cimentos Group's international operations. It carries out some operating activities, consisting of holding and managing the subsidiaries of the sub-group, through its dedicated management team and staff. These activities are carried autonomously and involve the delivery of management services to the subsidiaries, such as legal, compliance, accounting expertise and financing related.

- The Company has also external financial debt, raised on behalf of the subsidiaries, that is mostly denominated in USD.
- The Company's key cash inflows are the dividends and intercompany balances from its subsidiaries. The latter can relate to interest income, as well as remuneration for the management services delivered. These inflows are denominated in USD.

- The majority of the Company's costs relate to services engaged in the context of holding and financing activities that are mostly denominated in USD. Some of these costs are incurred on behalf of the subsidiaries and are subsequently recharged and reimbursed in USD.

Based on the facts above, Management has concluded that USD is the most appropriate functional currency for the Company.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency USD using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at the end of each reporting period are generally recognized in the income statement. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

All other foreign exchange gains and losses are presented in the statement of income on a net basis within Exchange variations, net (Note 30).

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss.

(c) Subsidiaries with a different functional currency

The results and financial position of all subsidiaries that have a functional currency different from the Company's presentation currency are translated into the presentation currency as follows:

(i) Assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;

(ii) Income and expenses for each statement of income and statement of comprehensive income are translated at average foreign exchange rates, which is a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates; and;

(iii) All resulting exchange differences are recognized in other comprehensive income and accumulated in a separate component of shareholder's equity.

The amounts presented in the statement of cash flow are extracted from the translated movements of the assets, liabilities, income and expenses, as detailed above.

Upon consolidation, foreign exchange differences arising from the translation of the net investment in foreign operations, and of borrowing and other financial instruments designated as hedge instruments of such investments, are recognized in other comprehensive income. When a foreign operation is partially disposed of or sold, foreign exchange differences equivalent to the disposed investment and the designated hedging instrument that were recorded in other comprehensive income are recognized in the statement of income as part of the gain or loss on the disposal.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. The effect of such translation is recorded in other comprehensive income.
The functional currencies for the foreign subsidiaries are presented in Note 6.2 (g).

(d) Financial reporting in hyperinflationary economies

IAS 29 requires that the financial statements of entities whose functional currency is that of a hyperinflationary economy to be adjusted for the effects of changes in a suitable general price index and to be expressed in terms of the current unit of measurement at the closing date of the reporting period. In order to conclude on whether an economy is categorized as hyperinflationary under the terms of IAS 29, the standard details a series of factors to be considered, including the existence of a cumulative inflation rate in three years that approximates or exceeds 100%.

IAS 29 should be applied as if the economy had always ben hyperinflationary. The financial statements of an entity that reports in the currency of a hyperinflationary economy should be stated in terms of the measuring unit current on the date of the financial statements. All balance sheet amounts that are not stated in terms of the measuring unit current on the date of the financial statements must be restated by applying a general price index. Accordingly, the inflation produced from the date of acquisition or from the revaluation date, as applicable, must be computed in the non-monetary items. All income statement components must be stated in terms of the measuring unit current on the date of the financial statements, applying the change in the general price index that occurred since the date when revenues and expenses were originally recognized in the financial statements.

The main procedures for the above-mentioned adjustment are as follows:

- Monetary assets and liabilities which are carried at amounts current at the balance sheet date are not restated because they are already expressed in terms of the monetary unit current at the balance sheet date;
- Non-monetary assets and liabilities which are not carried at amounts current at the balance sheet date, and components of shareholders' equity are adjusted by applying the relevant conversion factors;
- All items in the statement of income are restated by applying the relevant conversion factors;
- The effect of inflation on the net monetary position is included in the statement of income in the caption “Exchange variations and hyperinflation effects, net”; and
- All amounts (assets, liabilities, equity items, income and expenses) are translated at the closing rate at the date of the most recent statement of financial position.

The comparative figures in these financial statements presented in a stable currency are not adjusted for subsequent changes in the price level or exchange rates. This resulted in an initial difference, arising on the adoption of hyperinflation accounting, between the closing equity of the previous year and the opening equity of the current year. The Group recognized this initial difference in equity.
The ongoing application of the re-translation of comparative amounts to closing exchanges rates under IAS 21 and the hyperinflation adjustments required by IAS 29 will lead to a difference in addition to the difference arising on the adoption of hyperinflation accounting. These additional differences are recognized in the statement of comprehensive income, under the caption “Currency exchange differences on translation of foreign operations”.

The balance of monetarily adjusted non-monetary assets is reduced whenever they exceed their recoverable amount, with the difference being recognized in the statement of income.

When the economy is no longer considered hyperinflationary and the investee discontinues the preparation and presentation of its financial information in accordance with IAS 29, the monetarily adjusted amounts become the base carrying amount for subsequent periods.

(i) Turkey

The inflation levels in Turkey have suffered a significant increase, particularly since late 2021, exceeding the 100% three-year cumulative inflation rate. Following the guidance issued by the IMF, the Group has considered that there was sufficient evidence to conclude that Turkey became an hyperinflationary economy under the terms of IAS 29 as from April 2022. Accordingly, the Group applied IAS 29 as from that date in the financial reporting of its subsidiaries with the Turkish Lira as functional currency.

The inflation adjustment was calculated by means of conversion factor derived from the Turkish consumer price indexes (2003=100) published by the Turkish Statistical Institute (“TUİK”). The annual index variance for the year 2022, was 1,64.

(ii) Argentina

In July 2018, the Argentine peso underwent a severe devaluation resulting in the three-year cumulative inflation of Argentina exceeding 100%, thereby triggering the requirement to transition to hyperinflation accounting as prescribed by IAS 29. It became applicable to our investment in Avellaneda, an associate whose functional currency is the Argentine peso.

6.4 Statement of cash flows

The cash flows present the changes in cash and cash equivalents during the year in the operating, investing and financing activities. Cash and cash equivalents include highly liquid short-term investments, that are, investments with maturities in the short-term as from the acquisition date. The cash flows from operating activities are presented based on the indirect method. The profit before taxes is adjusted for the effects of non-cash transactions, for the effects of any deferrals or for the recording on an accrual basis of past or future operating cash receipts or payments, and for the effects of income or expenses items associated with the cash flows from investing or financing activities. All income and expenses resulting from non-cash transactions, attributable to investing and financing activities, are excluded from the statement of cash flows. Interests received or paid are classified as operating cash flows.

7 Critical accounting estimates and judgments

Based on assumptions, the Company makes estimates concerning the future. Accounting estimates and judgments are periodically reviewed, based on historical experience and other factors, including expectations of future developments that are believed to be reasonable under the circumstances. Revisions to estimates are recognized prospectively.

The estimates and assumptions that carry a significant risk of causing material adjustments to the carrying amounts of assets and liabilities within the next financial year are addressed below:

7.1 Fair value estimates

The Company discloses fair value measurements based on the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

Level 3 – Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs, for which fair value is determined based on specific valuation techniques).

Specific valuation techniques used to measure assets and liabilities at fair value include:

(i) Quoted market prices or quotations from financial institutions or brokers for similar instruments;
(ii) The fair value of interest rate swaps calculated at the present value of the estimated future cash flows, based on the yield curves adopted by the market;
(iii) The fair value of future foreign exchange contracts determined based on future exchange rates at the balance sheet date, with the resulting amount discounted to present value; and
(iv) Analysis of discounted cash flows.

The Company uses its judgment to select among a variety of methods, and to make assumptions that are mainly based on the market conditions existing at the balance sheet date.

7.2 Impairment of goodwill and other long-term non-financial assets

(a) Accounting policy

Non-financial assets with indefinite useful lives, such as goodwill, are not subject to amortization and are tested for impairment at least annually. Assets that are subject to depreciation/amortization are reviewed for impairment annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less any selling costs and its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units – "CGU"). Non-financial assets other than goodwill that suffered impairment are subsequently reviewed for possible reversal of the impairment at each reporting date.

Where an impairment loss subsequently reverses, the carrying amount of the asset or CGU is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset or CGU in prior years. A reversal of an impairment loss is recognized as income immediately.

Goodwill arising on acquisitions is allocated to a CGU or group of CGUs, with each CGU or group of CGUs being the lowest level at which goodwill is monitored for internal management purposes and not being larger than an operating segment. The goodwill related to our operations in North America and in Europe, Asia and Africa was allocated to each corresponding operating segment, being that Europe, Asia and Africa comprises a group of four CGUs to which goodwill was allocated. For the Latin America operating segment, the goodwill was allocated per country of business. Refer to Note 16 (c) for the goodwill allocation details.

(b) Impairment testing for goodwill and non-current assets

An impairment test is carried at least annually for all CGUs to which goodwill has been allocated, as well as for other CGUs that do not contain goodwill but present impairment indicators. The recoverable amount as of December 31, 2022 has been determined from the value in use of each CGU, computed by applying the discounted cash flow model. The process of estimating these values involves the use of assumptions, judgments and estimates of future cash flows and represents the Company's best estimate.

All amounts in thousands of US dollars, unless otherwise stated

These calculations use post-tax cash flow projections based on financial budgets approved by the Company's Management covering a five or ten-year period. Cash flows beyond the five or ten-year period calculated under the value in use model are extrapolated using the last year projections (nil growth rate). The use of post-tax cash flows and rates does not result in any significant difference with respect to the use of pre-tax cash flows and rates.

Management considered as key assumptions to calculate the recoverable amount of the CGUs to be sales price and volume, and discount rate. Management determined budgeted sales price and volume based on past performance and its expectations of future market developments. The discount rates used are post-tax and reflect specific risks relating to the operating segment or the CGU being tested. The following table sets out the key assumptions for those CGUs or group of CGUs that have significant goodwill allocated to them, as well as other CGUs not having goodwill allocated but important for its significancy to the Group's operations:

Segment	Country	Currency	Discount rate 2022 post-tax	Discount rate 2021 post-tax
Latam	Bolivia	BOB	10%	9.7%
	Uruguay	UYU	7.6%	7.3%
	Argentina	ARS	14.9%	15.2%
North America	Canada/United States	CAD/USD	6.3%	5.8%
Europe, Asia and Africa	Turkey	TRY	11.2%	9.4%
	Tunisia	TND	15.1%	11.8%
	Morocco	MAD	7.2%	7.2%
	Spain	EUR	6.8%	6.7%

The impairment testing carried for the year ended December 31, 2022, did not result in any impairment charge.

As at year end 2022 only Turkey presents previous recognized impairment at CGU level (Europe, Asia and Africa operating segment). An impairment charge of USD (27,139) was initially recognized in the Turkish business during 2020 due to changes in local economic circumstances, largely resulting from the impact of COVID-19 pandemic. It impacted the CGU's fixed assets, with the goodwill allocated to the segment Europe, Asia and Africa not being affected.

During 2021 and 2022 the business presented a positive recovery, and Management's projections for the coming years have also been revised positively, resulting in sufficient headroom for an impairment reversal. Nevertheless, considering the uncertainty affecting the Turkish economy, that is currently suffering from hyperinflation phenomena, Management assessed as not appropriate to consider an eventual reversal of the impairment recognized in 2020. The net book value of the impairment previously recognized amounts to USD (22,997), the decrease resulting essentially from the devaluation of the local currency.

The Bolivian CGU (Latin America operating segment) also suffered an impairment in 2020 in the amount of USD 12 million, that was subsequently fully reversed during year end 2021 justified by the good recovery of the Bolivian operations. No further impairment was identified in this CGU in 2022.

(c) Sensitivity analysis

The Company performed a sensitivity analysis for the key assumptions used in determining the value in use of the Group's CGUs. Management concluded that there are no reasonably possible changes in key assumptions that would result in the carrying amount of the asset or CGU significantly exceed their estimated recoverable amount.

7.3 Asset retirement obligations (Note 23)

Expenditures related to mines decommissioning are recorded as asset retirement obligations. Obligations consist mainly of costs associated with termination of activities. The asset decommissioning cost equivalent to the present value of the obligation (liability) is capitalized as part of the book value of the underlying asset and depreciated over its useful life. The Company considers the use of accounting estimates related to the costs necessary to close the mining activities and recover the deteriorated areas as being a critical accounting estimate, since it involves various assumptions such as discount rates, inflation and the useful life of the asset. These estimates are annually reviewed by the Company. The discount rate applied in 2022 were in the range of 2,8% - 14,9% per year (December 31, 2021 – in the range of 1.51% - 11.50% per year). Further details in Note 23.

7.4 Recoverability of current and deferred income tax assets (Note 22)

The Company is subject to the payment of income taxes in all countries in which it operates. The provision for deferred taxes is calculated on a stand-alone basis for each entity based on the tax rates and tax laws enacted in each territory at the balance sheet date. The Company also recognizes provisions based on estimates of whether additional taxes will be due. Where the final tax outcome is different from the amounts initially recorded, such differences will impact the current and deferred tax assets and liabilities in the period in which such determination is made.

Deferred tax assets are periodically assessed to determine their recoverability, on the basis of estimated future taxable profits deriving from Management's best estimate of projected future results, which are prepared based on internal judgments and assumptions, and future economic scenarios which may change. The key assumptions considered in such projections are sales price and volume.

7.5 Post-employment obligations (Note 24)

The present value of the post-employment obligations or rights depends on a number of factors that are determined through an actuarial calculation using various assumptions. Among the assumptions used in determining the net cost of actuarial obligations or rights is the discount rate, computed based on interest rates of high-quality corporate or government bonds. The pension obligations are denominated in the currency in which the benefits will be paid, and have maturities approximating those of the respective healthcare and defined benefit plan obligations.

8 Environmental risk management

The Group operates in various countries and consequently, its activities are subject to local, state, national and international environmental laws and regulations, treaties and conventions regulating the activities, establishing measures for mitigation, compensation, management and risk monitoring, including those that regulate the obligations of the owner of the venture and/or activity relating to environmental protection. Violations of the environmental regulations can lead to fines and penalties and may require the implementation of technical measures to ensure the compliance with the mandatory environmental standards.

The Group reviews periodically its environmental risk assessment and addresses the risks identified either through mitigation actions or provision of future costs. Further details regarding asset retirement obligation are disclosed in Note 23.

Regarding climate change risks assessment, refer to Note 33.

9 Financial risk management

The Company's activities expose it to a number of financial risks: (a) market risk (including currency and interest rate risk); (b) credit risk; and (c) liquidity risk.

The products and services offered by the Group are denominated in several currencies due to its global positioning, and potential risks of currency mismatches between income and costs can arise.

The Group has loans linked to different indices and denominated in foreign currencies, which may have an impact on its cash flows.

To mitigate the adverse effects of each of these risk factors, the Company prepared a financial policy approved by VCSA's Board of Directors, in order to establish governance and macro guidelines in the financial risk management process, as well as metrics for measurement and monitoring. The purpose of this process is to protect the cash flows against adverse financial market events, such as fluctuations in exchange rates and interest rates, and against adverse credit events of financial counterparties. In addition, this process aims to manage leverage and other financial or operating exposure in line with the criteria of ratings agencies for investment grade companies. The financial policy of the Company aims preserving the liquidity of the Group, diversifying the financing sources, providing unrestricted access to capital markets at competitive costs, and generating value for stockholders.

The following derivative instruments may be used to hedge and manage risks: swaps, call options, put options, collars, futures contracts (currencies, interest rates or commodities) and forward contracts known as Non-Deliverable Forwards (currencies, interest rates or commodities). The main guideline for the Company's hedging strategy follows transactions that do not involve financial instruments for speculative purposes or transactions that can be characterized as leverage (that is, that the exposure to the risk factor via derivative is greater than the hedged item), and any other instrument requires the approval of VCSA's Board of Directors.

9.1 Market risk

The purpose of the market risk management process is to protect the Group's cash flow against adverse events, such as fluctuations in exchange rates, commodity prices and interest rates.

9.1.1 Foreign exchange risk

Foreign exchange risk is the exposure of the Group to significant fluctuations in currencies' exchange rates, that comprise commercial, operational and financial relationships and, consequently, have an impact on its cash flows or results. The group has assets and liabilities denominated in foreign currencies: Euro, Canadian dollar, Moroccan dirham, Turkish lira, Tunisian dinar, Bolivianos and Uruguayan pesos.

Moreover, the Company has investments in foreign operations, which net assets expose the Company to foreign exchange risk. The foreign exchange exposure arising from investments in foreign operations is partially hedged by loans in the same currency as the functional currency of the investees which are designated in some cases as hedge of net investment for accounting purposes. Refer to Note 9.1.3 below for additional details.

9.1.2 Cash flow and fair value associated with interest rate risk

The Company's interest rate risk arises mainly from long-term loans. Loans issued at variable rates expose the Company to cash flow interest rate risk. Loans issued at fixed rates expose the Company to fair value risk associated with interest rate. See Note 20 for the details of borrowings by interest rate, and Note 9.1.3 for details of derivative financial instruments held by the Company.

(a) Interbank Offered Rates (IBOR) reform

The Company has completed the transition process of the IBOR reform that implied the transition of LIBOR to alternative benchmark interest rates. The financial instruments impacted were some of the bank loans, for which either the initial contractual terms were amended, or an existing fallback clause included in the agreement was activated. The criteria to apply the practical expedient prescribed in the amendment to IFRS 9 – "Financial Instruments" was fulfilled, therefore the change in the basis for determining the contractual cash flows did not result in any recognition of gain or loss in the statement of income.

Apart from above, the Company did not identify other impacts resulting from the IBOR reform in its financial assets and liabilities, nor the need to change the current financial risk management process.

9.1.3 Hedging of net investments in foreign operations

(a) Accounting policies

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in equity in the account "Other comprehensive income". The gain or loss relating to the ineffective portion is recognized immediately in the statement of income. Gains and losses accumulated in equity are included in the statement of income when the foreign investment is realized or sold.

The Company designates transactions as hedges on an annual basis. Net investment hedge transactions are designated when the Company identifies an economic relationship between the hedged item and the hedging instrument, by determining a hedge ratio that represents the hedge relationship existing at the time of designation.

As required by IFRS 9 the Company prospectively evaluates the effectiveness of net investment hedge transactions on a quarterly basis. This is done using the US Dollar offsetting method - comparing the numerical effects of a change in the spot rate on the value of the hedging instrument, net of deferred income tax, with the value of the hedged item. The critical terms of the hedging instrument are identical to the terms of the hedged items, and therefore only one scenario is evaluated through projections of future rates available in the market.

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis

The subsidiary SMCI designated its debt denominated in US Dollars as a hedging instrument for the investment in its subsidiary VCNA US, Inc..

Investor		Hedged item					Instrument			2022 Loss
Entity	Currency	Investment	Currency	Percentage designated	Underlying investment USD	Net designated amount	Currency	Original amount	Amount in USD	Other comprehensive income
St. Marys Cement Inc. (Canada)	CAD	VCNA US, Inc.	USD	44.96%	1,112,057	500,000	USD	500,000	500,000	(31,815)

Investor		Hedged item					Instrument			2021 Gain
Entity	Currency	Investment	Currency	Percentage designated	Under lying investment USD	Net designated amount	Currency	Original amount	Amount in USD	Other comprehensive income
St. Marys Cement Inc. (Canada)	CAD	VCNA US, Inc.	USD	44.41%	1,112,057	500,000	USD	500,000	500,000	2,834

There was no ineffectiveness in the hedge relationships during the year ended on December 31, 2022; therefore, no translation gain or loss was recognized in the statement of income.

The gain or loss shown above is net of tax effects, which are presented in Note 25 (c).

All amounts in thousands of US dollars, unless otherwise stated

9.2 Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

The Company has a policy to select issuers that have, at least, a rating from one of the following rating agencies: Fitch Ratings, Moody's or Standard & Poor's, being a national rating equal to or better than AA- (or Aa3), or a global scale rating equal to or better than BBB- (or Baa3). For countries where issuers do not meet these minimum ratings, alternative criteria approved by the Board of Directors are applied.

The limits on the exposure of the Group to each financial counterparty is determined by the financial policy of the Company and are linked to the ratings and the balance sheet of each institution.

The pre-settlement risk methodology is used to assess counterparty risks on derivative transactions. This methodology consists of determining, through Monte Carlo simulations, the value at risk associated with non-compliance with the financial commitments defined in the contract for each counterparty.

9.2.1 Credit quality of trade receivables

The credit quality of trade receivables that are non-overdue and not impaired is as follows:

	2022	2021
High risk	17,593	5,719
Medium risk	19,943	16,422
Low risk	67,822	80,726
AAA	29,186	20,230
	134,544	123,097

High risk – Customers with high risk of default, and/or recurring delays in payments, and/or new customers without historical financial information.
Medium risk - Customers with a medium risk of default, and/or with some records of payments delays.
Low risk - Customers with solid commercial and payment records.
Customers AAA – Strategic or relevant customers, presenting a strong credit analysis.

The balances above refer to trade receivables which are not overdue and not impaired.

The quality of the credit risk is defined according to internal statistical models of risk scoring, according to the risk standards accepted by the Group.

9.3 Liquidity risk

Liquidity risk is managed based on the financial policy of the Company, which aims to ensure the availability of sufficient funds to honor the Company's short-term commitments. One of the main tools for measuring and monitoring liquidity is cash flows projections considering a period of 12 months.

The table below analyzes the Company's main financial liabilities by maturity, corresponding to the period remaining from the balance sheet date to the contractual maturity date. Derivative financial liabilities are considered in the analysis when their contractual maturities are essential to understanding the Company's cash flow in the short and medium term.

The amounts included in the table represent the undiscounted contractual future cash flows; these amounts may not reconcile directly with the amounts in the balance sheet.

All amounts in thousands of US dollars, unless otherwise stated

	Note	Less than one year	Between one and two years	Between two and five years	Between five and ten years	Over ten years	Total
At December 31, 2022							
Borrowing		73,459	75,037	829,018	161,714	544,183	1,683,411
Lease liabilities		28,191	16,195	30,498	24,780	127,296	226,961
Confirming payables	21	283,113					283,113
Trade payables		388,351					388,351
Dividends payable	15(b)	436					436
Pension plan		11,716	11,575	33,529	66,179	217,761	340,760
		785,266	102,807	893,045	252,673	889,240	2,923,032
At December 31, 2021							
Borrowing		96,428	95,075	463,079	856,511	965,799	2,476,894
Lease liabilities		41,058	31,218	53,659	132,517	6,438	264,891
Confirming payables	21	219,647					219,647
Trade payables		349,011					349,011
Dividends payable	15(b)	251					251
Pension plan		12,543	12,962	35,925	59,250	246,441	367,121
		718,939	139,255	552,664	1,048,279	1,218,678	3,677,815

The table above shows the outstanding principal and interest if applicable at the maturity dates. In the case of the fixed rate liabilities, interest expense was calculated based on the rate established in each debt contract. Interest expense on floating rate liabilities was calculated based on a market forecast for each period.

All amounts in thousands of US dollars, unless otherwise stated

9.4 Sensitivity analysis

The main risk factors with an impact on the pricing of cash and cash equivalents, financial investments, borrowings, related parties and derivative financial instruments are the exposure to the fluctuations of the currencies Euro, Moroccan Dirham, Tunisian Dinar, Boliviano, Turkish Lira, Uruguayan pesos and Canadian Dollar, as well as fluctuations of the interest rates LIBOR, SOFR, EURIBOR and the US Dollar coupon rate. The scenarios for these factors are prepared using market data and specialized sources, according to the Company's governance framework. The scenarios as at December 31, 2022 are described below:

Scenario I - Based on macro-economic assumptions that correspond to a scenario of likely occurrence in Management's view

Scenario II - considers a change of + or - 25% in the yield curves as at December 31, 2022.

Scenario III - considers a change of + or - 50% in the yield curves as at December 31, 2022.

										Impacts on P&L					Impacts on comprehensive income
						Scenario I				Scenarios II and III	Scenario I				Scenarios II and III
Risk factor	Cash and cash equivalents	Borrowing	Principal of derivative financial instruments	Currency	Changes from 12/31/2022	Results of scenario I	-25%	-50%	+25%	+50%	Results of scenario I	-25%	-50%	+25%	+50%
Foreing exchange rate															
EUR	95,869	114,088		EUR	-6.01%	(518)	(2,152)	(4,304)	2,152	4,304	1,614	6,707	13,414	(6,707)	(13,414)
MAD	34,091			MAD	-2.11%	(720)	(8,523)	(17,046)	8,523	17,046					
BOB	10,519	110,038		BOB	-0.74%						734	24,880	49,760	(24,880)	(49,760)
CAD	20,137	1,961		CAD	2.46%	448	(4,544)	(9,088)	4,544	9,088					
UYU	4,486	16,248		UYU	-6.92%						814	2,941	5,881	(2,941)	(5,881)
TRY	18,654	1,123	6,000	TRY	-16.58%	(1,852)	(6,511)	(15,151)	5,659	10,893					
ARS	322				-37.20%	(0)	(0)	(0)	0	0	(120)	(80)	(161)	80	161
TND	27,943				-4.76%	(1,330)	(6,986)	(13,971)	6,986	13,971					

The balances presented in this note do not reconcile with the notes on "Cash and cash equivalents", "Borrowings" and "Derivatives" since the analysis covers only foreign currencies.

10 Financial instruments by category

(a) Financial assets - Classification, recognition and measurement

The Group classifies their financial assets upon initial recognition according to the business model under which the financial assets was acquired, as follows:

(i) Financial assets at amortized cost

These are financial instruments that are held for the purpose of receiving contractual cash flows, with payments related exclusively to principal and interest. The instruments thus classified are measured at amortized cost.

(ii) Financial assets at fair value through other comprehensive income

Financial instruments where the contractual cash flow solely derives from payments of principal and interest, and the objective of the Company's business model is both the collection of contractual cash flow and the sale of financial assets. These instruments are measured at fair value through other comprehensive income.

(iii) Financial assets at fair value through profit or loss

All financial instruments that do not fall under the above definitions are classified in this category. The instruments under this classification are measured at fair value through profit or loss.

(b) Impairment of financial assets measured at amortized cost

The Company assesses at each balance sheet date whether there is objective evidence that a financial asset or group of financial assets is impaired.

Except for the impairment of trade receivables (Note 13), the amount of any impairment is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced, and the amount of the loss is recognized in the statement of income.

If, in a subsequent period, the amount of the impairment loss decreases and this decrease can be related objectively to an event occurring after the impairment was recognized (such as an improvement in the debtor's credit rating), the reversal of the previously recorded loss is recognized in the statement of income.

(c) Financial liabilities – Classification, recognition and measurement

The Company classifies its financial liabilities in the following categories: (i) measured at amortized cost and (ii) fair value through profit or loss. Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Fair value changes, including interest, is recognized in the statement of income. Changes in financial liabilities measured at amortized cost, including interest and exchange variation, are recognized in the statement of income under "Financial income (expenses), net" caption, except for the exchange variations that are recognized under "Foreign exchange gain (loss), net".

All amounts in thousands of US dollars, unless otherwise stated

Financial liabilities are derecognized when contractual obligations are withdrawn, canceled or expired. The difference between the extinguished book value and the consideration paid (including transferred assets or assumed liabilities) is recognized in the statement of income.

(d) Offsetting of financial instruments

Financial assets and liabilities are offset, and the net amount is presented in the balance sheet, when there is a legally enforceable right to offset the recognized amounts, and there is an intention to settle on a net basis or to realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business as well as in the event of default, insolvency or bankruptcy of the Company or the counterparty.

(e) Analysis

	Note			2022
		Amortized cost	Fair value through profit and loss	Total
Assets				
Trade receivables	13(b)	144,674		144,674
Notes and capital related to SPE	13(e)	41,731		41,731
		186,405		186,405
Cash and cash equivalents	11(b)		401,567	401,567
Financial investments	12(b)		17,327	17,327
Investment property			14,349	14,349
			433,243	433,243
Liabilities				
Borrowing	20(b)	1,086,018		1,086,018
Lease liabilities	19(c)	218,511		218,511
Confirming payables	21	283,113		283,113
Trade payables		388,351		388,351
Salaries and payroll charges		54,936		54,936
Notes and capital related to SPE	13(e)	21,929		21,929
		2,052,858		2,052,858
Derivative financial instruments			340	340

	Note			2021
		Amortized cost	Fair value through profit and loss	Total
Assets				
Trade receivables	13(b)	144,356		144,356
Notes and capital related to SPE	13(e)	37,741		37,741
		182,097		182,097
Cash and cash equivalents	11(b)		505,593	505,593
Financial investments	12(b)		17,102	17,102
Derivative financial instruments			496	496
			523,191	523,191
Liabilities				
Amortized cost				
Borrowing	20(b)	1,480,176		1,480,176

All amounts in thousands of US dollars, unless otherwise stated

Lease liabilities	19(c)	228,791		228,791
Confirming payables	21	219,647		219,647
Trade payables		349,011		349,011
Salaries and payroll charges		63,189		63,189
		2,340,814		2,340,814
Derivative financial instruments			116	116

(f) Fair value of financial instruments

The Group discloses fair value measurements based on the hierarchy level of the main assets and liabilities, as shown below:

	Note			Fair value measured based on	2022
		Price quoted in an active market	Valuation technique supported by observable prices	Valuation technique not supported by observable prices	
		Level 1	Level 2	Level 3	Fair value
Assets					
Cash and cash equivalents	11(b)	312,975	88,592		401,567
Financial investments	12(b)		17,327		17,327
Investment property				14,349	14,349
		312,975	105,919	14,349	433,243
Liabilities					
Borrowing	20(b)	876,649	208,255		1,084,904
Derivative financial instruments			340		340
		876,649	208,595		1,085,244

	Note		Fair value measured based on	2021
		Price quoted in an active market	Valuation technique supported by observable prices	
		Level 1	Level 2	Fair value
Assets				
Cash and cash equivalents	11(b)	463,717	41,876	505,593
Financial investments	12(b)		17,102	17,102
Derivative financial instruments			496	496
		463,717	59,474	523,191
Liabilities				
Borrowing	20(b)		1,710,648	1,710,649
Derivative financial instruments			116	116
			1,710,764	1,710,765

All the financial instruments not included in the table above are measured at amortized cost and the Group believes their carrying amount and their fair value are materially the same. The fair value of these financial instruments is determined by observable price (Level 2) in arms-length transactions or equivalent, in the case of intercompany transactions. There was no transfer between the levels during the periods.

All amounts in thousands of US dollars, unless otherwise stated

11 Cash and cash equivalents

(a) Accounting policies

Cash and cash equivalents include cash, deposits with banks and other highly liquid short-term investments, generally with an original maturities of three months or less, but in all cases being readily convertible into a known amount of cash and with immaterial risk of changes in value.

(b) Analysis

	2022	2021
Cash and bank	312,975	463,717
Time deposits (i)	88,592	41,876
	401,567	505,593

(i) Time deposits classified as cash and cash equivalents are highly liquid financial assets used to maintain the Group's operating activities.

12 Financial investments

(a) Accounting policies

Financial investments are mainly short-term investments that do not meet the definition of cash and cash equivalents. The financial investments are used as part of the cash-management strategy of the Group and are measured at fair value through profit or loss.

(b) Analysis

	2022	2021
Time deposits	17,327	17,102

13 Trade receivables

(a) Accounting policies

(i) Trade receivables

Trade receivables are amounts receivable from customers for goods sold or services rendered in the ordinary course of the Group’s business. It is initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method, less allowance for doubtful accounts.

The allowance for doubtful accounts is recognized at an amount considered sufficient to cover expected losses on the realization of trade receivables. The Company applied the simplified approach of IFRS 9 to calculate the estimated credit losses. Based on the customers’ profile of payment, the Company classifies them based on their risk. For each class of risk, a provision matrix was developed considering the past history of uncollectable accounts and any relevant prospective data.
The matrix developed has different loss rates for different time buckets of receivables and is applied in all receivables, including the ones that are not overdue.
Further details on the calculation of the allowance for doubtful accounts are disclosed in Note 10 (b).

All amounts in thousands of US dollars, unless otherwise stated

The risk matrix based on the average provision performed by each country as at December 31, 2022 is as follows:

Segment	Not due	Overdue up to 30 days	Overdue from 31 to 60 days	Overdue from 61 to 90 days	Overdue from 91 to 120 days	Overdue above 120 days
Guaranteed / Credit insurance	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AAA	0.0%	0.0%	0.2%	6.0%	11.0%	80.0%
Low risk	0.0%	0.3%	1.9%	8.2%	16.2%	64.6%
Medium risk	0.1%	1.3%	4.5%	14.1%	26.5%	68.3%
High risk	0.2%	3.0%	10.8%	27.1%	47.4%	87.6%
Under judicial measures (i)	33.0%	43.0%	55.0%	46.7%	54.7%	66.7%

(i) Some regions do not have specific provisions for trade receivables under judicial measures. They are impaired based on the general risk criteria described above and may be further impaired, according to the evaluation of legal and credit departments, in case additional uncertainty on their recoverability arises.

(ii) Securitization of receivables

In March 2016, SMCI entered into a revolving receivables securitization transaction with financial institutions for the sale of trade receivables to a Special Purpose Entity – "SPE". The SPE was established for this purpose, and it is not controlled by the Group. The SPE finances the initial acquisition of the receivables and classifies it by the grade of the receivable based on its transaction history, by means of: (i) senior notes, (ii) senior subordinated note, (iii) intermediate subordinated certificates, and (iv) junior subordinated certificates. This receivables securitization transaction was in the meanwhile renewed, with the current maturity date being March 2024 and the facility amount USD 225 million.

SMCI holds the junior subordinated certificates whereby it retains approximately 60% of the SPE variability, with the remaining variability being retained by a third party which has removal rights related to the service provider. As so, SMCI's maximum exposure to loss from its continuing involvement in the derecognized financial assets would correspond to its share in the junior subordinated certificates.

SMCI sells receivables to the SPE on a daily and revolving basis. When the receivables are transferred to the SPE, SMCI derecognizes them in exchange for cash and notes receivable from the SPE. No variable conditions apply to the cash outflow (such as option agreements or other instruments). The SPE deducts from the amount transferred the receivables acquisition cost, which is recorded as a financial expense by SMCI (Note 30).

SMCI manages the collection of receivables included in this transaction through the provision of services to the SPE. Fees incurred with the collection service are recorded as financial income (Note 29).

In 2022 and 2021, the financial income and expenses also considered the lines of securitization commissions, reversal of guarantee on securitization, net of provisions, and securitization charges, as presented in Note 30.

Considering the analysis performed on SMCI's power and rights regarding the SPE and the sufficient exposure to variable returns, and based on significant judgement, SMCI is acting as an agent. In accordance with IFRS 10 - "Consolidated financial statements" the SPE is not controlled by SMCI or the Group and therefore is not consolidated in these financial statements. Balances transacted with the SPE are presented as balances with related parties (Note 15).

The Group has neither transferred nor retained substantially all the risks and rewards of the transferred assets however has retained control of the transferred assets as the SPE does not have the practical ability to sell the transferred assets. Receivables are recognized by SMCI to the extent of the continuing involvement thereof and associated liabilities are also recognized. The extent of the continuing involvement in the transferred assets is the extent to which it is exposed to changes in the value of the transferred assets. The net carrying amount of the partially transferred assets and associated liabilities reflects the rights and obligations that SMCI has retained, which is not materially different from its fair value, given the nature of the receivables.

All amounts in thousands of US dollars, unless otherwise stated

The Group recognizes part of the transferred assets to the extent of its continuing involvement, considering:

(a) Its continuing involvement related to the junior subordinated tranche; and
(b) Its continuing involvement regarding a guarantee that represents the subordination - as SMCI detains the first loss exposure within the subordination of tranches.

The receivables continue to be recognized and due within three months. However, the assets and liabilities are recognized as non-current in the balance sheet based on the maturity of the securitization contract with the SPE, and will be classified as current assets and current liabilities when the maturity of the contract will reach less than twelve months and the Group will not have the intention to renew the transaction.

(b) Analysis

	2022	2021
Trade accounts receivables	151,613	141,226
Related parties	2,600	12,735
Allowance for doubtful accounts	(9,539)	(9,605)
	144,674	144,356

The fair value of trade receivables approximates their carrying amount, due to their short-term nature.

(c) Changes in the allowance for doubtful accounts

	2022	2021
Balance at the beginning of the year	(9,605)	(8,531)
Additions	(1,488)	(735)
Reversals	1,118	905
Receivables written off as uncollectible	1,165	66
Exchange rate variations	534	1,329
Companies included in the consolidation	(1,263)	(2,639)
Balance at the end of the year	(9,539)	(9,605)

The additions and reversals of allowance for doubtful accounts have been included in "Selling expenses" in the statement of income. Subsequent recoveries of amounts previously written off are credited against the same line item. Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash.

All amounts in thousands of US dollars, unless otherwise stated

(d) Aging of trade receivables

The aging of the balances below does not consider the allowance for doubtful accounts.

	2022	2021
Current	137,144	136,975
Up to 3 months past due	9,734	9,577
From 3 to 6 months past due	273	926
Over 6 months past due	7,062	6,483
	154,213	153,961
Allowance for doubtful accounts	(9,539)	(9,605)
	144,674	144,356

(e) Securitization of receivables

The amounts of trade accounts receivables involved in the securitization transaction are presented below:

	2022	2021
Notes recognized	33,886	29,908
Capital contribution in the SPE	7,845	7,833
Notes and capital related to the SPE	41,731	37,741
Security guarantee	(17,515)	(14,030)
Junior note guarantee losses	(4,413)	(2,791)
Junior subordinated note	(21,928)	(16,820)
Net carrying amount of the continuing involvement	19,803	20,921

The fair value of the assets and liabilities that represent the Group's continuing involvement in the derecognized financial assets is not significantly different from its carrying amount.

14 Inventory

(a) Accounting policies

Inventories are stated at the lower of cost and net realizable value. Inventories cost is determined using the weighted average method. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct and indirect costs and related production overheads, the latter based on normal operating capacity.

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of conclusion and the estimated selling expenses. Imports in transit are stated at the accumulated cost of each import.

At least once a year, each of the Group's operating subsidiaries carries out a physical inventory. Inventory adjustments are recorded under "Cost of goods sold and services rendered".

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis

	2022	2021
Finished products	29,505	38,527
Semi-finished products	110,035	81,158
Raw materials	59,437	30,814
Fuels	84,523	44,463
Auxiliary materials and consumables	102,559	123,290
Other	3,514	4,502
Provision for losses	(32,464)	(32,642)
	357,109	290,112

(c) Changes in the provision for inventory losses

	2022	2021
Balance at the beginning of the year	(32,642)	(27,922)
Addition	(6,943)	(8,353)
Reversals and write off	9,549	5,824
Exchange rate variations	1,721	883
Companies included in the consolidation	(4,149)	(3,074)
Balance at the end of the year	(32,464)	(32,642)

The provision for inventory losses is recognized based on a slow moving methodology. The additions and reversals of provision for slow moving materials are included in “Cost of goods sold and services rendered” in the statement of income. Subsequent recoveries of amounts previously written off are credited against the same line item.

15 Related parties

(a) Accounting policies

Related party transactions are carried out by the Group under similar conditions to other transactions, considering the usual market prices and conditions and, therefore, do not generate any undue benefit to its counterparties or losses to the Group. In the normal course of operations, the Group enters into agreements with related parties, related to the purchase and sale of products, loans, lease of assets, sale of raw materials and services.

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis

	Trade receivables and other assets		Trade payables and other liabilities		Dividends payable	
	2022	2021	2022	2021	2022	2021
Parent company						
Votorantim Cimentos S.A.	10		1,708	30		
Sister companies, associates or joint ventures						
Canteira do Penedo, S.A.	4	4	88	57		
Cementos Avellaneda S.A.	506	506	1,014	47		
Cementos Granadilla	395	454	348	353		
CEISA Comercial Del Cemento,SL	281	83				
Cementos Especiales de las Islas, S.A.	17		49	26		
Compania Canaria de Materias Primas S.A.	6	1	287	197		
Hormig. Y Áridos La Barca, S.A.	64	21	176	125		
Midway Group LLC	1,240	541	1,054	966		
Votorantim Cimentos N/NE S.A.		11,087	373			
VCNA SPE, LLC	41,731	37,741	21,928	16,820		
Other	77	38	71			
Total controlling	44,331	50,476	27,096	18,621	-	-
Total non-controlling					436	251
Current	2,600	12,735	5,168	1,801	436	251
Non-current	41,731	37,741	21,928	16,820		
	44,331	50,476	27,096	18,621	436	251

	Sales		Purchases		Other incomes(expenses)	
	2022	2021	2022	2021	2022	2021
Parent company						
Votorantim Cimentos S.A.						
Sister companies, associates or joint ventures						
Canteira do Penedo, S.A.	12	12	171	194		
CEISA Comercial Del Cemento,SL	2,227	-				2,293
Cementos Especiales de las Islas, S.A.	6,842	7,300	195	156		6
Cementos Granadilla	4,470	4,879	433			
Compania Canaria de Materias Primas S.A.	8	4	501	392	3	
Hormig. Y Áridos La Barca, S.A.	62	39	559	293		26
Midway Group LLC	9,181	8,503				
Superior Materials Holdings, LLC (i)		14,816				
Votorantim Cimentos N/NE S.A.	49,380	55,202				
VCNA SPE, LLC					(12,236)	29
Other		-				
	72,182	90,755	1,859	1,035	(12,233)	2,354

(i) Superior Materials became a subsidiary in July 2021, therefore fully consolidated since that date. The transactions presented above occurred up to the date it became a subsidiary.

(c) Group's debts guaranteed by related parties

Instrument	Guarantor and % of debt guaranteed	2022	2021
Commited credit facility	VCSA (100%) / SMCI (100%)		45,803
Eurobonds - USD (Voto 41)	VSA (100%) / VCSA (100%)	340,085	581,807
Eurobonds - USD (Voto 27)	VCSA (100%) / SMCI (100%)	512,139	512,139
Bilateral loan - VCEAA	VCSA (100%) / VCEAA (100%)	112,722	210,387
		964,946	1,350,136

Funding costs are not considered in these amounts.

All amounts in thousands of US dollars, unless otherwise stated

(d) Debts issued by related parties guaranteed by the Group

Instrument	Debtor	Guarantor	Percentage guaranteed by the Company	Amount guaranteed 2022	2021
4131 - USD 50 MM	VCNNE	VCI, VCSA	100%	50,305	50,109
4131 - USD 100 MM	VCSA	VCI	100%	100,609	100,137
4131 - USD 50 MM	VCSA	SMCI	100%	50,025	50,025
				200,939	200,271

The amounts above represent the total amount guaranteed by the Group and may differ from the carrying value of the debts in the debtors' financial statements due to market value adjustments and credit risks impacts.

(e) Key management compensation

The Company's Management includes the Management Board. The expenses for key management compensation, including all benefits, are summarized as follows:

	2022	2021
Short-term benefits for administrators	8,406	8,355
Post-employment benefits	339	348
Other long-term benefits for managers	6,857	6,387
	15,602	15,090

Short-term benefits to key management above include fixed compensation (salaries and fees, paid vacations and others), social charges and the short-term variable compensation program. Post-employment benefits refer to pension plans and post-retirement healthcare benefits. "Other long-term benefits" relate to the variable compensation program.

All amounts in thousands of US dollars, unless otherwise stated

16 Investments in associates and joint ventures

(a) Accounting policies

The accounting policies for investments are disclosed in Note 6.2.

(b) Analysis

		Information as at December 31,2022			Share of net profit of associates and joint ventures		Balance	
	Country	Net equity	Net income for the year	Percentage of voting and total capital (%)	2022	2021	2022	2021
Investments accounted for using the equity method								
Associates								
Cementos Especiales de las Islas S.A.	Spain	40,366	7,244	50	3,622	4,989	20,183	21,435
Cementos Avellaneda S.A. (i)	Argentina	284,520	22,525	49	5,766	195	139,415	121,202
Joint ventures								
Superior Materials Holdings, LLC (ii)	United States					3,061		
Hutton Transport Limited	Canada	12,114	5,816	25	1,454	1,357	3,028	3,158
Midway Group, LLC	United States	15,070	2,874	50	1,437	2,072	7,535	7,597
RMC Leasing LLC	United States	7,440	268	50	134	88	3,720	4,586
Other investments					180	(1,056)	11,842	10,089
					12,593	10,706	185,723	168,067
Goodwill								
Cementos Avellaneda S.A.	Argentina						52,168	45,785
Hutton Transport Limited	Canada						2,197	2,338
					12,593	10,706	240,088	216,190

(i) Dividends received from its associate Avellaneda had financial costs of onleading in the amount of USD 5,271 which were assumed by the Group. These were accounted for in the statement of income, under "Share of net profit of associates and joint ventures". This financial cost is also considered in the reconciliation presented in Note 16 (d).

(ii) Superior Materials became a subsidiary in July 2021, therefore fully consolidated since that date.

(c) Information on equity accounted investees

Below is a summary of the selected financial information of the Group's main associates and joint ventures:

(i) Balance sheet accounts

					2022
	Cementos Especiales de las Islas S.A.	Cementos Avellaneda S.A.(i)	Hutton Transport Limited	Midway Group,LLC	RMC Leasing
Percentage of voting and total capital (%)	50.00	49.00	25.00	50.00	50.00
Current assets	32,541	143,892	11,629	12,116	1,000
Cash and equivalents	12,707	10,317		4,179	996
Non-current assets	18,340	391,423	8,682	6,173	6,440
Current liabilities	8,682	131,431	3,646	3,219	
Current financial liabilities	132	19,672			
Non-current liabilities	1,833	119,364	4,551		
Non-current financial liabilities		38,625			
Equity	40,366	284,520	12,114	15,070	7,440
Other comprehensive income		(145)	(3,159)	(1,036)	(563)

All amounts in thousands of US dollars, unless otherwise stated

					2021
	Cementos Especiales de las Islas S.A.	Cementos Avellaneda S.A. (i)	Hutton Transport Limited	Midway Group, LLC	RMC Leasing
Percentage of voting and total capital (%)	50.00	49.00	25.00	50.00	50.00
Current assets	33,004	124,641	12,942	9,778	1,458
Cash and equivalents	14,693	4,411		4,046	1,386
Non-current assets	20,600	325,158	6,434	7,126	7,714
Current liabilities	8,788	116,721	3,398	1,710	
Current financial liabilities	301	94,846		1,556	
Non-current liabilities	1,946	85,727	3,345		
Non-current financial liabilities		30,966			
Equity	42,870	247,351	12,633	15,194	9,172
Other comprehensive income		24,393	1.519	1,198	625

(ii) Profit or loss accounts

					2022
	Cementos Especiales de las Islas S.A.	Cementos Avellaneda S.A.(i)	Hutton Transport Limited	Midway Group, LLC	RMC Leasing
Net revenue	74,173	489,492	26,323	34,464	1,543
Cost	(63,466)	(366,771)	(19,891)	(31,222)	(1,275)
Gross profit (loss)	10,707	122,721	6,432	3,242	268
Operating income (expenses)	(1,402)	(35,567)	(714)	(370)	
Depreciation and amortization	(1,402)				
Result of equity interests					
Financial result	137	(9,424)	98	2	
Interest income			98	2	
Income tax	(2,198)	(55,205)			
Net income for the year	7,244	22,525	5,816	2,874	268

						2021
	Cementos Especiales de las Islas S.A.	Cementos Avellaneda S.A.(i)	Superior Materials Holdings, LLC (ii)	Hutton Transport Limited	Midway Group, LLC	RMC Leasing
Net revenue	72,964	453,691	66,534	24,285	34,813	
Cost	(59,320)	(305,990)	(57,549)	(18,301)	(30,678)	(1,207)
Gross profit (loss)	13,644	147,701	8,985	5,984	4,136	(1,207)
Operating income (expenses)	(1,572)	(31,031)	(2,863)	(672)	8	1,382
Depreciation and amortization	(1,572)		(1,418)		(1,592)	
Result of equity interests						
Financial result	369	(16,126)		116		
Interest income				116		
Income tax	(2,463)	(64,131)				
Net income for the year	9,978	36,413	6,122	5,428	4,144	176

(i) Includes the Purchase Price Allocation adjustments.

(ii) Superior Materials became a subsidiary in July 2021, therefore the figures presented above include its results up until its acquisition. The assets and liabilities were fully consolidated by the Company at year end 2022 and 2021.

All amounts in thousands of US dollars, unless otherwise stated

(d) Changes

	2022	2021
Balance at the beginning of the year	216,190	221,931
Share of net profit of associates and joint ventures	12,593	10,706
Currency exchange differences on translation of foreign operations	25,456	31,436
Approved dividends	(18,370)	(51,975)
Capital reduction - RMC Leasing LLC	(1,000)	
Effect of acquisition of additional interest - Superior		(14,227)
Issue costs with dividends Avellaneda (Note 16 (b) (i))	5,271	17,647
Other comprehensive results of the investees	(52)	672
Balance at the end of the year	240,088	216,190

17 Property, plant, and equipment

(a) Accounting policies

(i) Measurement and recognition

Property, plant and equipment, including land and buildings, are stated at historical cost of acquisition or construction less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition or construction of qualifying assets, including borrowing costs.

Subsequent costs are included in the assets carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced items or parts is derecognized.

All other repairs and maintenance are charged to the statement of income during the financial period in which they are incurred. The cost of major refurbishments is included in the carrying value of the asset when the future economic benefits exceed the performance initially expected for the existing asset. Refurbishment expenses are depreciated over the remaining useful life of the related asset.

Except for land that is not depreciated, the depreciation of assets is calculated using the straight-line method to reduce their cost to their residual values over their estimated useful lives. The assets' residual values and useful lives are reviewed annually and adjusted if appropriate.

An asset's carrying amount is written down immediately to its recoverable amount when it is greater than its estimated recoverable amount, in accordance with the accounting policy described in Note 7.2. Gains or losses on disposals are determined by comparing the proceeds with the carrying amount of the assets disposed and are recognized within “Other operating income (expenses), net” in the statement of income (Note 29).

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis and changes

								2022
	Land	Buildings	Machinery, equipment and facilities	Lease hold improvements	Vehicles	Furniture and fixtures	Construction in progress	Total
Balance at the beginning of the year								
Cost	178,297	1,052,397	3,183,761	136,931	258,686	34,117	149,630	4,993,819
Accumulated depreciation		(560,489)	(2,183,506)	(91,119)	(163,381)	(28,969)		(3,027,464)
Net balance	178,297	491,908	1,000,255	45,812	95,305	5,148	149,630	1,966,355
Effect of initial hyperinflation accounting adjustment	878	7,242	13,274		298		751	22,443
Acquisitions	154	1,236	4,758		155	703	197,399	204,405
Companies included in the consolidation	7,362	4,663	46,078			78	6,797	64,978
Disposals	(2,676)	(581)	(3,293)		(177)	(13)	(6)	(6,746)
Depreciation		(22,118)	(116,748)	(6,382)	(21,565)	(1,596)		(168,409)
Exchange variations	(7,566)	(13,427)	(24,210)	(2,309)	(1,422)	(231)	2,303	(46,862)
Transfer to intangible assets	(466)	1					(8,369)	(8,834)
Transfers	4,233	2,704	85,680	628	22,187	950	(116,382)	
Balance at the end of the year	180,216	471,628	1,005,794	37,749	94,781	5,039	232,123	2,027,330
Cost	180,216	1,026,889	3,194,272	135,250	279,031	29,063	232,123	5,076,844
Accumulated depreciation		(555,261)	(2,188,478)	(97,501)	(184,250)	(24,024)		(3,049,514)
Balance at the end of the year	180,216	471,628	1,005,794	37,749	94,781	5,039	232,123	2,027,330
Average annual depreciation rates - %		3	6	10	15	13		

All amounts in thousands of US dollars, unless otherwise stated

2021

	Land	Buildings	Machinery, equipment and facilities	Lease hold improvements	Vehicles	Furniture and fixtures	Construction in progress	Total
Balance at the beginning of the year								
Cost	168,105	451,538	2,375,011	129,358	221,097	27,270	99,654	3,472,033
Accumulated depreciation		(268,284)	(1,648,617)	(82,125)	(150,818)	(21,573)		(2,171,417)
Net balance	168,105	183,254	726,394	47,233	70,279	5,697	99,654	1,300,616
Acquisitions	491	1,182	8,574		16	170	171,177	181,610
Companies included in the consolidation	16,115	350,862	331,634	578	15,225	886	236	715,536
Disposals	(1,315)	(1,252)	(1,146)		(113)	(17)		(3,843)
Depreciation		(21,265)	(99,369)	(5,571)	(14,825)	(1,317)		(142,347)
Exchange variations	(6,373)	(20,012)	(55,592)	(711)	(758)	(350)	(4,101)	(87,897)
Reversal (provision) of impairment	(71)	(4,394)	11,440					6,975
Transfer to the intangible							(4,295)	(4,295)
Transfers	1,345	3,533	78,320	4,283	25,481	79	(113,041)	
	178,297	491,908	1,000,255	45,812	95,305	5,148	149,630	1,966,355
Cost	178,297	1,052,397	3,183,761	136,931	258,686	34,117	149,630	4,993,819
Accumulated depreciation		(560,489)	(2,183,506)	(91,119)	(163,381)	(28,969)		(3,027,464)
Balance at the end of the year	178,297	491,908	1,000,255	45,812	95,305	5,148	149,630	1,966,355
Average annual depreciation rates - %		3	6	10	15	13		

All amounts in thousands of US dollars, unless otherwise stated

(c) Construction in progress

	2022	2021
Sustaining (i)	107,390	76,563
Industrial modernization (ii)	82,166	50,681
Environment and security	17,903	6,594
Expansion of cement production capacity (iii)	10,330	235
Other	14,334	15,557
	232,123	149,630

(i) Investments in sustaining made for the acquisition or replacement of industrial machinery and equipment linked to the operation of factories and mines, with the purpose of guaranteeing the continuity of the parks with the application of the same or new technologies.

(ii) Investments in industrial modernization, mainly for the generation of financial benefits through the use of new technologies or the optimization of equipment and processes leading to reductions in costs and/or the leveraging of revenue.

(iii) Investments in expansion are mainly related to the construction, growth, or improvement of the Group's assets, aiming the increase of the installed capacity, launch of new products and enter new markets.

18 Intangible assets

(a) Accounting policies

(i) Goodwill

The goodwill is based on expected future profitability arising from business acquisitions. Its initial recognition and subsequent measurement is described in Note 6.2.

Goodwill on business acquisitions is recorded as "Intangible assets" in the balance sheet. The goodwill of associates and joint ventures is recorded as part of "Investments in associates and joint ventures". Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses, in accordance with the accounting policy described in Note 7.2.

Gains or losses on the disposal of a subsidiary or business include the carrying amount of goodwill relating to it.

(ii) Rights over natural resources

When the economic feasibility of the mineral reserves is proven, the consideration paid to acquire the mining exploration rights is capitalized.

In the mining operations related to our cement business it is necessary to remove overburden and other waste materials to access ore. The process of mining overburden and waste materials is referred to as stripping. During the development phase of a mine, before production commences, stripping costs are capitalized as intangible assets. During the production phase, and to access new deposits, stripping cost are also capitalized as intangible assets; in all other situations these costs are recognized as part of the inventory.

When the mine becomes operational the cumulative costs capitalized in relation to exploration rights are amortized over the useful life of the mine using units of production or the straight-line method. The capitalized construction costs relating to the plant are recognized in “Machinery, equipment and facilities” under the Property, plant and equipment line item.

(iii) Software

The costs of acquiring software are capitalized and amortized using the straight-line method over their useful lives. Costs associated with maintenance are recognized as expenses as incurred. Currently, the Group does not have internal software development projects.

(iv) Contractual customer relationships and non-compete agreements

Contractual customer relationships and non-compete agreements acquired in a business combination are recognized at fair value at their acquisition date. They have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method over the estimated useful life, being 15 years for "customer relationships" and 5 years for "non-compete agreements".

(v) Asset retirement obligation (ARO)

The Group has decommissioning obligations as a result of its natural resources extraction activities. The accounting policies related to the liability side of the asset retirement obligation are disclosed in Note 23.

The decommissioning costs, equivalent to the present value of the obligation (liability), are capitalized as part of the carrying amount of the mining asset. The asset is amortized on a straight-line basis over the remaining useful life of the mine. The Group periodically reviews the useful lives of its mines and the estimated future value necessary for the recovery of the explored area.

(vi) Emission rights

Some companies of the Group are subject to cap-and-trade schemes regarding greenhouse gas emissions. The emission rights granted free of charge are initially measured at a nominal value of zero. Emission rights acquired for consideration are accounted for at cost as intangible asset, and are subject to write-down in the event of impairment.

Provisions for the obligation to return emission rights are recognized if the actual Co2 emissions up to the reporting date are not covered by emission rights granted free of charge. The provision of such shortfall is measured at the market value as at the reporting date and presented as “Other liabilities” in the balance sheet.

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis and changes

	Rights over natural resources	Goodwill	Asset retirement obligation	Customer contracts and agreements	Software	Intangible in progress	Other(i)	Total
								2022
Balance at the beginning of the year								
Cost	645,983	933,544	84,780	124,400	44,944		45,844	1,879,495
Accumulated depreciation and depletion	(229,350)		(33,424)	(72,599)	(37,573)		(6,549)	(379,495)
Net balance	416,633	933,544	51,356	51,801	7,371		39,295	1,500,000
Effect of initial hyperinflation accounting adjustment	49				65			114
Acquisitions			2,569		262	10,589	108	13,528
Companies included in the consolidation	4,870		2,365		5		3,637	10,877
Disposals and write offs	(2,295)	(842)	(27)	(88)			(35,910)	(39,162)
Amortization and depletion	(8,690)		(5,123)	(8,108)	(4,564)		(116)	(26,601)
Exchange variations	(3,170)	(22,993)	(5,751)	(114)	(492)	150	(1,951)	(34,321)
Remeasurement of estimates			1,591					1,591
Transfers from property, plant and equipment			465			8,300	69	8,834
Transfers	(348)		2,143	(691)	6,954	(8,217)	159	
Balance at the end of the year	407,049	909,709	49,588	42,800	9,601	10,822	5,291	1,434,860
Cost	643,450	909,709	83,685	123,803	52,222	10,822	12,429	1,836,120
Accumulated amortization and depletion	(236,401)		(34,097)	(81,003)	(42,621)		(7,138)	(401,260)
Balance at the end of the year	407,049	909,709	49,588	42,800	9,601	10,822	5,291	1,434,860
Average annual amortization and depletion rates - %	7		9	7	22		20	

(i) The write down of USD 35,910 presented in "Others" relates to Co2 emissions rights asset that was used to settle the year 2021 Co2 obligations with the corresponding government authorities. Consequently, the provision recognized for this effect, presented previously in "Other liabilities" - current, was reversed for the same amount.

All amounts in thousands of US dollars, unless otherwise stated

								2021
	Rights over natural resources	Goodwill	Asset retirement obligation	Customer contracts and agreements	Software	Intangible in progress	Other(i)	Total
Balance at the beginning of the year								
Cost	496,639	919,867	72,492	74,152	40,546		7,637	1,611,333
Accumulated depreciation and depletion	(129,012)		(31,208)	(61,886)	(32,728)		(6,460)	(261,294)
Net balance	367,627	919,867	41,284	12,266	7,818		1,177	1,350,039
Acquisitions			764		712		43	1,519
Companies included in the consolidation	51,683	41,279	17,437	46,246	315		38,180	195,140
Disposals and write offs	(1)				(19)		(44)	(64)
Amortization and depletion	(9,964)		(3,480)	(6,658)	(3,762)		(125)	(23,989)
Exchange variations	5,827	(27,602)	(1,666)	(53)	(445)		(18)	(23,957)
Remeasurement of estimates			(2,983)					(2,983)
Transfers from property, plant and equipment						4,295		4,295
Transfers	1,461				2,752	(4,295)	82	
	416,633	933,544	51,356	51,801	7,371		39,295	1,500,000
Cost	645,983	933,544	84,780	124,400	44,944		45,844	1,879,495
Accumulated amortization and depletion	(229,350)		(33,424)	(72,599)	(37,573)		(6,549)	(379,495)
Balance at the end of the year	416,633	933,544	51,356	51,801	7,371		39,295	1,500,000
Average annual amortization and depletion rates - %	5		8	8	22		20	

All amounts in thousands of US dollars, unless otherwise stated

(c) Goodwill arising on acquisitions

	2022	2021
North America	577,323	581,250
Europe, Asia and Africa	329,809	349,985
Latin America	2,577	2,309
	909,709	933,544

19 Right-of-use assets and lease agreements

(a) Accounting policies

The Company maintains controls for the identification of lease agreements that allow for the assessment of the applicability of the leasing accounting standard for each contract signed. As permitted by the standard, the following are disregarded from the scope: (i) short-term leases (less than 12 months); and (ii) contracts with values lower than USD 5 thousand. When identifying right-of-use assets within the scope of identified contracts, the following are also disregarded: (i) the variable portion of payments; (ii) contracts in which the lease asset was considered to be non-identifiable; (iii) contracts in which the Company is not entitled to obtain substantially all the economic benefits arising from the use of the asset; and (iv) contracts in which the Company does not have substantial control over the definition of the use of the asset. For leases considered to be out of scope, accounting takes place on a monthly basis according to the lease term and directly expensed in the income statement. These expenses are disclosed in Note 27 “Expenses by Nature” under the line item “Rents and leases”.

For contracts considered within the scope of the leasing accounting standard, at the starting date of the contract the Company recognizes a lease liability that reflects the future agreed payments, against a right-of-use asset. The asset is amortized monthly according to the lease term, which is defined based on the combination of the non-cancellable term, term covered by the extension option, term covered by the termination option and, mainly, Management's intention regarding the term permanence in each contract. The liability is adjusted to the present value of the obligation based on the internal rate of the contract or the incremental rate, which should reflect the cost of acquisition by the Company of debt with characteristics similar to those determined by the lease contract, with regard to term, value, guarantee and economic environment. The liability is settled according to the flow of payments made to the lessor.

The amortization expense for the right-of-use is recorded as part of the cost of the product sold or as an operating expense, depending on the characteristics of use of the leased asset, and the interest expense for updating the present value of the lease liability is recorded in the financial results.

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis and changes of right-of-use assets

	Land and improvements	Machinery and equipment	Buildings	Vehicles	IT equipment	Barges	Total
							2022
Balance at the beginning of the year							
Cost (i)	104,279	30,740	5,499	39,530	197	151,017	331,262
Accumulated depreciation and depletion	(12,027)	(17,082)	(2,171)	(25,910)	(53)	(47,647)	(104,890)
Net balance	92,252	13,658	3,328	13,620	144	103,370	226,372
Effect of initial hyperinflation accounting adjustment	89	77	49	126			341
Additions	5,821	7,611	143	2,123	73	15,384	31,155
Companies included in the consolidation	916	856		112			1,884
Amortization	(5,334)	(10,657)	(824)	(5,803)	(45)	(24,939)	(47,602)
Disposals				(20)			(20)
Exchange variations	(2,578)	(264)	(157)	1,070	(4)	(5,753)	(7,686)
Balance at the end of the year	91,166	11,281	2,539	11,228	168	88,062	204,444
Cost	108,347	35,899	5,573	41,467	223	160,647	352,156
Accumulated amortization	(17,181)	(24,618)	(3,034)	(30,239)	(55)	(72,585)	(147,712)
Balance at the end of the year	91,166	11,281	2,539	11,228	168	88,062	204,444
Average annual depreciation rates - %	10	30	14	24	26	9	

(i) The opening balances as at December 31, 2021 have been reclassified within classes of assets as a result of the initial accounting process of the businesses acquired in 2021. However, these reclassifications do not change the total balance of cost or accumulated depreciation and depletion; therefore, it does not impact the balance presented in the balance sheet.

All amounts in thousands of US dollars, unless otherwise stated

							2021
	Land and improvements	Machinery and equipment	Buildings	Vehicles	IT equipment	Barges	Total
Balance at the beginning of the year							
Cost	23,343	8,523	4,918	29,870	48	61,759	128,461
Accumulated depreciation and depletion	(5,578)	(7,314)	(1,443)	(16,904)	(32)	(14,434)	(45,705)
Net balance	17,765	1,209	3,475	12,966	16	47,325	82,756
Additions	2,327	10,754	1,027	3,458	25	9,042	26,633
Companies included in the consolidation	39,386	6,274		10,084	129	99,468	155,341
Amortization	(2,781)	(7,574)	(909)	(8,701)	(24)	(14,332)	(34,321)
Disposals				(905)			(905)
Exchange variations	(1,309)	(512)	(265)	(102)	(2)	(942)	(3,132)
Balance at the end of the year	55,388	10,151	3,328	16,800	144	140,561	226,372
Cost	67,415	27,233	5,499	42,710	197	188,208	331,262
Accumulated amortization	(12,027)	(17,082)	(2,171)	(25,910)	(53)	(47,647)	(104,890)
Balance at the end of the year	55,388	10,151	3,328	16,800	144	140,561	226,372
Average annual depreciation rates - %	3	39	6	23	35	10	

All amounts in thousands of US dollars, unless otherwise stated

(c) Analysis and changes of lease liabilities

	2022	2021
Balance at the beginning of the year	228,791	85,666
Additions	31,155	26,633
Companies included in the consolidation	1,985	155,341
Payments	(44,601)	(31,381)
Present value adjustment	8,172	712
Disposals	(20)	(905)
Exchange variations	(6,971)	(7,275)
Balance at the end of the year	218,511	228,791
Current	26,182	33,276
Non-current	192,329	195,515
	218,511	228,791

20 Borrowing

(a) Accounting policies

Borrowings are recognized initially at fair value, net of transaction costs incurred, and subsequently carried at amortized cost. Any difference between the proceeds (net of transaction costs) and the total amount payable is recognized in the statement of income over the period of the borrowing using the effective interest rate method. Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a prepayment for liquidity services and amortized over the period of the facility to which it relates.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in statement of income as a financial income or expense.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

Borrowing costs directly related to the acquisition, construction or production of a qualifying asset that requires a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of that asset when it is probable that future economic benefits associated with the item will flow to the Group and costs can be measured reliably. The other borrowing costs are recognized as finance expenses in the period in which they are incurred.

All amounts in thousands of US dollars, unless otherwise stated

(b) Analysis and fair value

		Current		Non-current		Total		Fair value	
Type	**Average annual cost**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Eurobonds - USD	6.35%FixedUSD	16,554	20,689	829,201	1,065,433	845,755	1,086,122	876,649	1,328,461
Syndicated loans / Bilateral agreements	3.95%FixedBOB/9.50%Fixed UYU/14.65%FixedTRY/ 1.62%FixedEUR/ EURIBOR+1.61%	9,886	14,549	150,343	296,463	160,229	311,012	144,832	315,757
Local issuance in Bolivia	5.38%FixedBOB	2,712	187	75,362	78,349	78,074	78,536	61,466	61,974
Other		1,064	2,046	896	2,460	1,960	4,506	1,957	4,457
		30,216	37,471	1,055,802	1,442,705	1,086,018	1,480,176	1,084,904	1,710,649
Accrued interest		20,503	24,407						
Current portion of long-term borrowing (principal)		9,713	10,860						
Short-term borrowing (principal)			2,204						
		30,216	37,471						

CDOR – Canadian Dollar Offered Rate
BOB – Bolivianos
LIBOR – London Interbank Offered Rate
EUR – Euro
TRY – Turkish Lira
UYU – Uruguayan pesos
USD – United States Dollar
EURIBOR – Euro InterBank Offered Rate
SOFR – Secured Overnight Financing Rate

The fair value of non-current borrowings is based on discounted cash flows using a current market borrowing rate.

(c) Maturity profile

	2023	2024	2025	2026	2027	2028	2029	2030	2031 onwards	Total
Eurobonds - USD	17,995				500,000				334,229	852,224
Syndicated loans/Bilateral agreements	10,424	8,507	8,507	56,502	61,857	2,712	2,712	2,712	9,491	163,424
Local issuance in Bolivia	2,712	6,735	10,629	12,210	21,368	12,210	12,210			78,074
Other	1,064	428	469							1,961
	32,195	15,670	19,605	68,712	583,225	14,922	14,922	2,712	343,720	1,095,683
% amortized per year	2.94%	1.43%	1.79%	6.27%	53.23%	1.36%	1.36%	0.25%	31.37%	100.00%

The balances presented in this note do not reconcile with the Note 20 (b) since it excludes the upfront fees.

All amounts in thousands of US dollars, unless otherwise stated

(d) Changes

	2022	2021
Balance at the beginning of the year	1,480,176	1,479,598
New borrowing	375,343	336,585
Accrued interest (Note 30)	73,394	87,751
Amortization of borrowing fees, net of additions	1,534	1,390
Interest paid	(77,818)	(87,105)
Companies included in the consolidation	1,387	135,607
Debt renegotiation gain or loss	1,283	(4,802)
Payments	(751,566)	(448,373)
Exchange variation	(17,715)	(20,475)
Balance at the end of the year	1,086,018	1,480,176

The main movements occurred in borrowings during the year ended on December 31, 2022, are described below:

(i) Bonds repurchase

During the year 2022 the Company repurchased and cancelled a total amount of USD 238 million of principal related to its Eurobonds due in 2041. This includes the tender offer occurred in the 2nd quarter of 2022, that resulted in a total principal amount paid of USD 195,335. Refer to Note 3.4 for further details. At the end of 2022 the remaining principal balance was approximately USD 334 million.

(ii) Loan agreement renegotiation

On June 2022, the Bolivian subsidiary renegotiated its bilateral loan agreement originally issued in May 2019 and maturing in 2028. The outstanding amount as at the date of renegotiation was approximately BOB 205 million (USD 39,056), with the maturity having been postponed to 2034, along with a decrease in the debt cost.

(iii) New Committed Credit Facility agreement (“CCF”)

In June 2022, VCI and its main subsidiaries entered into a new USD 300 million CCF agreement, maturing in June 2027, and replacing the previous one which amounted to USD 290 million and maturing in 2024. Borrowings can be made in Canadian and U.S. funds and are repaid and reborrowed at the borrower’s discretion. As a consequence of this replacement, a repayment and derecognition of the balance under the previous CCF was made, with a subsequent withdraw of the new CCF for the same outstanding amount at that date. At the end of 2022 there was no balance due, and the whole amount of USD 300 million was available to the Group for new withdrawals, as necessary.

(iv) Debt reimbursement

During the 3rd quarter of 2022 the Spanish subsidiaries made an early reimbursement of EUR 80 million of its financial debts contracted in 2020. At the end of 2022 the total outstanding balance of these loans was EUR 105 million.

(v) CCF withdrawals and repayments

The remainder payments and new borrowing relate to the withdrawals and repayments made during the year under the CCF credit line.

All amounts in thousands of US dollars, unless otherwise stated

(e) Analysis by currency

	Current		Non-current		Total	
	2022	2021	2022	2021	2022	2021
US Dollar	16,555	20,688	829,201	1,095,432	845,756	1,116,120
Euro	528	473	112,176	204,797	112,704	205,270
Boliviano	5,450	6,288	102,779	107,510	108,229	113,798
Canadian dollar	1,064	1,285	896	19,007	1,960	20,292
Uruguayan peso	5,498	7,188	10,750	14,442	16,248	21,630
Turkish Lira	1,121	1,549		1,517	1,121	3,066
	30,216	37,471	1,055,802	1,442,705	1,086,018	1,480,176

(f) Guarantees

As of December 31, 2022, USD 964,946 (December 31, 2021 – USD 1,350,136) of the borrowings balance of the Group and its subsidiaries was guaranteed by sureties from related parties, as shown in Note 15 (c), while USD 50,729 (December 31, 2021 – USD 49,682) was collateralized by liens on property, plant and equipment items and mortgage, and there are no bank guarantees.

(g) Credit line

Credit line	Company	Date	Maturity	Credit limit	Withdrawn amount	Remainder amount
Global Revolving Credit Facility	VCSA/VCI/VCEAA/SMCI	Sept/21	Sept/26	250.000		250.000
Committed Credit Facility	VCI/VCEAA/SMCI	June/22	June/27	300.000		300.000
				550.000		550.000

21 Confirming payables

The Group entered into agreements with financial institutions to allow suppliers to advance their receivables. As part of these transactions, suppliers transferred to financial institutions the right to receive the trade receivables related to sales of goods.

Deadline	2022	2021
Up to 180 days	202,962	115,382
Up to 360 days	80,151	104,265
	283,113	219,647

22 Current and deferred income taxes

(a) Accounting policies

The current and deferred taxes on income are calculated based on the tax laws enacted or substantively enacted up to balance sheet date in the countries where the entities operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which the applicable tax regulations are subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

The current income tax is presented net, separated by taxpaying entity, in liabilities when there are amounts payable, or in assets when the amounts prepaid exceed the total amount due at the reporting date.

Deferred tax assets and liabilities are offset when there is a legally enforceable right and an intention to offset them in the calculation of current taxes, generally when they are related to the same legal entity and the same taxation authority. Accordingly, deferred tax assets and liabilities in different entities or in different countries are generally presented separately, and not on a net basis.
Deferred tax liabilities are recognized on temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. The deferred taxes are determined

All amounts in thousands of US dollars, unless otherwise stated

based on the rates in effect at the reporting date and that should be applied when they are realized or settled.

The Company also recognizes deferred income tax assets on recoverable balances of tax losses. Deferred tax assets are periodically analyzed to check their recoverability, as described in Note 7.4.

(b) Reconciliation of income taxes expenses

The income tax amounts presented in the statement of income for the year ended December 31, 2022 are reconciled as follows:

	2022	2021
Profit (loss) before taxes	99,729	188,110
Standard rate	24.94%	24.94%
Income tax at standard rates	(24,872)	(46,915)
Adjustments for the calculation of income tax at effective rate		
Gain on investment acquisition		17,855
Investment acquisition costs		(3,846)
Share of net profit of associates and joint ventures	3,141	2,670
Minimum income tax expense	(6,769)	
State income tax expense	(3,878)	
Recognition of deferred tax asset on unused tax losses (i)	36,103	
Rate differences of foreign companies	696	(29)
Tax losses without recognition of deferred tax assets	(25,887)	(19,170)
Deductible temporary differences without recognition of deferred tax assets	1,848	(8,517)
Reversal of deferred tax assets on unused tax losses		(7,521)
Other non taxable / (deductible) items	(2,525)	(9,802)
Income tax	(22,144)	(75,274)
Current	(38,738)	7,667
Deferred	16,594	(82,941)
Income tax in the income statement	(22,144)	(75,274)

(i) The Company reassessed the projections of future taxable profits supporting the recognition of deferred income tax assets during the period and as a result recognized an additional USD 36 million related to unused accumulated tax losses.

(c) Analysis of deferred tax balances

	2022	2021
Tax credits on tax losses	186,581	167,878
Tax credits on temporary differences		
Provision for social security obligations	7,224	7,744
Provision for inventory losses	7,007	7,141
Deductions - Moroccan and Spain law (Government benefit)	6,698	6,257
Market value adjustment	4,218	5,484
Provision for staff bonus and profit sharing	4,057	7,106
Provision for Co2	1,144	3,582
Provision for legal claims	377	1,234
Allowance for doubtful accounts	661	1,209
Asset retirement obligation	737	932
Provision for indemnities	192	1,409
Asset impairment provision		22
Provision for taxes under litigation	17	18
Pension plan	606	573
Other credits	4,477	2,559
Tax debts on temporary differences		
Adjustment to useful life of property, plant and equipment (depreciation)	(206,435)	(203,232)
Fair value uplift on property, plant and equipment	(69,880)	(72,821)
Other debts	(830)	(3,019)
Net	(53,149)	(65,924)
Net deferred tax assets of the same legal entity	80,605	154,943
Net deferred tax liabilities of the same legal entity	(133,754)	(220,867)

All amounts in thousands of US dollars, unless otherwise stated

(d) Effects of deferred income taxes on the statement of income and other comprehensive income

	2022	2021
Balance at the beginning of the year	(65,924)	(61,222)
Effect on income	16,594	(82,941)
Effect on other comprehensive income - hedge accounting	2,240	(407)
Effect of exchange variations on other components of comprehensive income	264	(3,655)
Effect of initial hyperinflation accounting adjustment	(4,707)	
Deferred taxes recognized on business combination	(3,011)	83,346
Other	1,395	(1,045)
Balance at the end of the year	(53,149)	(65,924)

(e) Realization of deferred income tax on tax losses

As at December 31, 2022, the Company had income tax losses in various countries where it has activities, and for which deferred tax assets was recognized, in the consolidated amount of USD 755,610 (December 31, 2021 – USD 665,497).

The income tax losses basis related to deferred tax assets recognized at balance sheet date are as follows – per operating segment:

Year	North America	Europe, Asia and Africa	Total
2022	632,643	122,968	755,610
2021	601,413	64,084	665,497

The recoverability of the deferred tax assets recognized is evaluated annually, based on the expectation of future taxable profits. Assets are recognized only for the portion of the tax losses for which there are projections of utilization within a term consistent with Management's operational projections. The utilization of the currently recorded deferred tax assets is expected to occur as follows:

	2022
Next 12 months	2,968
After 12 months	183,613
	186,581

(f) Tax losses

	2022	2021
Unused tax losses for which no deferred tax asset has been recognized	1,138,708	1,315,049
Potential tax benefit 24,94%	283,994	327,973

From the total amount of unused tax losses above, USD 337 million have an expiration limit of 17 years, and USD 4 million of 5 years. The remainder balance of USD 798 million can be carried forward indefinitely.

23 Provision

(a) Accounting policies

(i) Provision for legal claims relating to tax, civil, labor and environmental claims

Provision for legal claims is recognized when: (i) the Company or any of its subsidiaries has a present legal or constructive obligation as a result of past events; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) the amount can be reliably estimated.

All amounts in thousands of US dollars, unless otherwise stated

The losses classified as possible are not recorded in the balance sheet, but are disclosed in the explanatory notes. The contingencies for which losses are classified as remote are not provisioned nor disclosed, except when the Company considers its disclosure justified, due to the visibility of the process. The classification of losses as possible, probable or remote is supported by the advice of the Company's legal advisors.
Provision is measured at the present value of the expenditures expected to be required to settle the obligation that reflects current market assessments of the time value of money and the risks specific to the obligation, and these variations are recognized in the statement of income. Provision does not include future operating losses.

(ii) Asset retirement obligations (ARO)

The measurement of asset retirement obligations involves the use of judgment to make various assumptions. From an environmental point of view, this relates to future obligations to restore/recover the environment to conditions ecologically similar to those existing at the moment when the project was initiated, or to take compensatory measures in agreement with government agencies due to the impossibility of return to these pre-existing conditions. These obligations arise from the environmental deterioration of the occupied area, subject to the operations, or from formal commitments assumed with the environmental agencies, under which the deterioration must be compensated. The retirement of an asset occurs when it is permanently retired, through stoppage, sale or disposal.

Obligations consist mainly of costs associated with the termination of activities. As asset retirement obligations are long-term obligations, they are adjusted to present value by using a discount rate. The asset retirement cost, equivalent to the present value of the obligation (liability), is capitalized as part of the carrying amount of the asset, which is depreciated over its useful life. The accounting policies related to the asset counterpart of the asset retirement obligation is disclosed in Note 18.

The interest rate used to discount the asset retirement obligation to its present value is estimated through the American market free risk rate (Treasury USA 30y Yield) adding the country risk and inflation differential. The liability recorded is periodically updated based on these discount rates, which are annually reviewed by the Company.

(b) Analysis and changes

					2022
			Legal claims		
	ARO(i)	Tax	Civil	Labor	Total
Balance at the beginning of the year	61,052	5,095	1,538	64	67,749
Additions	2,569	21	16		2,606
Reversals		(94)	(710)		(804)
Settlements	(7,440)	(85)			(7,525)
Disposals					
Exchange variation	(2,243)	(280)	(127)		(2,650)
Companies included in the consolidation	6,676	108	8		6,792
Remeasurement of estimate					
Estimate remeasurement charged to intangible assets	1,591				1,591
Estimate remeasurement charged/(credited) to income statement	(3,302)				(3,302)
Present value adjustment	1,537				1,537
Balance at the end of the year	60,440	4,765	725	64	65,994

All amounts in thousands of US dollars, unless otherwise stated

					2021
			Legal claims		
	ARO(i)	Tax	Civil	Labor	Total
Balance at the beginning of the year	49,469	1,216	395		51,080
Additions	1,187	4,018		64	5,269
Reversals	(961)	(3)	(214)		(1,178)
Settlements	(8,455)	(32)			(8,487)
Exchange variation	(2,840)	(104)	(117)		(3,061)
Companies included in the consolidation	20,285		1,474		21,759
Remeasurement of estimate	(2,983)				(2,983)
Present value adjustment	5,350				5,350
Balance at the end of the year	61,052	5,095	1,538	64	67,749

(i) Asset Retirement Obligation.

(c) Lawsuits with likelihood of loss considered possible

	2022	2021
Civil	2,933	5,113
Tax	4,140	9,025
Other	828	587
	7,901	14,725

The Group is party to lawsuits with expectation of loss classified as less than 51% likelihood, and for which the recognition of a provision is not considered necessary by the Management Board, based on legal advice.

24 Post-employment obligations

The Group operates various post-employment schemes, including both defined benefit and defined contribution and post-employment medical plans.

(a) Accounting policies

(i) Pension obligations

The liability or asset recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate or government bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation.

The net interest cost is calculated by applying the discount rate to the net balance of the defined benefit obligation and the fair value of plan assets. This cost is included in employee benefit expense in the statement of income.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in the statement of income as past service costs.

Past service costs are recognized immediately in the statement of income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, past service costs are amortized on a straight-line basis over the vesting period.

All amounts in thousands of US dollars, unless otherwise stated

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

(ii) Other post-employment obligations

Some Group companies provide post-retirement healthcare benefits to their retirees. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. These obligations are valued annually by independent qualified actuaries.

(b) Analysis – defined benefit pension plans and other obligations

The table below shows how the balances and activities related to post-employment defined benefits are allocated in the Company's financial statements. The obligation of each plan is offset with its respective plan assets, so that the balances are presented as a net asset for the plans presenting a surplus, and as a net liability for those in deficit.

	2022	2021
Rights recorded in the balance sheet		
Defined pension benefits	23,804	38,206
Assets recorded in the balance sheet	23,804	38,206
Obligations recorded in the balance sheet		
Defined pension liabilities	15,275	19,320
Post-employment healthcare benefits	37,432	52,211
Liabilities recorded in the balance sheet	52,707	71,531
Income statement charge included in operating profit		
Defined pension liabilities	931	1,272
Post-employment healthcare benefits	3,191	2,906
	4,122	4,178
Remeasurement		
Defined benefits - gross balance	(6,660)	(11,632)
Deferred income tax and social contribution	424	2,156
Defined pension liabilities - net balance	(6,236)	(9,476)

The Group operates defined benefit pension plan in the operating segments of North America, Latin America and Europe, Asia and Africa, based on employee pensionable remuneration and length of service. The majority of the plans are externally funded, with the plan assets being held in trusts, foundations or similar entities, governed by local regulations and practice in each country.

The Group also operates post-employment medical benefits. The method of accounting, assumptions and frequency of valuations are similar to those used for the defined benefit pension plans. Most of these plans are not funded.

All amounts in thousands of US dollars, unless otherwise stated

The following table presents the funded and unfunded obligations at balance sheet date:

	2022	2021
Present value of funded obligations	105,526	145,818
Fair value of plan assets	(126,753)	(181,163)
Funded plans surplus	(21,227)	(35,345)
Present value of non-funded obligations	50,026	68,670
Total deficit of defined benefit pension plans	28,799	33,325
Impact of the minimum funding requirement/assets ceiling	104	
Liabilities in the balance sheet	28,903	33,325

The amounts recognized in the balance sheet and the movements in the net defined benefit obligation over the year are as follows:

	Present value of obligation	Fair value of plan assets	Total	Impact of minimum funding requirement/ asset ceiling	Total
As at January 1, 2022	214,487	(181,162)	33,325		33,325
Current service cost	2,314		2,314		2,314
Financial expense (income)	6,556	(4,817)	1,739		1,739
Past service cost and curtailments	69		69		69
	8,939	(4,817)	4,122		4,122
Remeasurements					
Return on plan assets, excluding amounts included in interest income		37,663	37,663		37,663
Gain arising from changes in demographic assumptions	(1,762)		(1,762)		(1,762)
Gains arising from changes in financial assumptions	(43,199)		(43,199)		(43,199)
Experience gains	92		92		92
Change in asset ceiling, excluding amounts included in interest expenses	442		442	104	546
	(44,427)	37,663	(6,764)	104	(6,660)
Exchange differences	(11,580)	9,201	(2,379)		(2,379)
Contributions					
Employers		2,770	2,770		2,770
Plan payments					
Benefit payments	(11,868)	9,593	(2,275)		(2,275)
As at December 31, 2022	155,551	(126,752)	28,799	104	28,903

	Present value of obligation	Fair value of plan assets	Total
As at January 1, 2021	237,467	(193,517)	43,950
Current service cost	2,091		2,091
Financial expense (income)	6,269	(4,354)	1,915
Past service cost and curtailments	172		172
	8,532	(4,354)	4,178
Remeasurements			
Return on plan assets, excluding amounts included in interest income		4,171	4,171
Loss arising from changes in demographic assumptions	55		55
Gain arising from changes in financial assumptions	(15,984)		(15,984)
Experience gains	126		126
	(15,803)	4,171	(11,632)
Exchange differences	520	(1,383)	(863)
Contributions			
Employers		1,010	1,010
Plan payments			
Benefit payments	(16,230)	12,911	(3,319)
As at December 31, 2021	214,487	(181,162)	33,325

All amounts in thousands of US dollars, unless otherwise stated

The categories of plan assets are as follows:

	2022	2021
Stock		
Canadian market	14,830	21,196
Global market	17,619	25,182
Emerging markets	11,154	15,942
Public securities		
Bonds	83,150	118,842
	126,753	181,162

The following table shows a breakdown of the defined benefit obligation and plan assets by operating segment:

2022	Europe, Asia and Africa	North America	Latin America	Total
Present value of obligations	2,682	102,844		105,526
Fair value of plan assets		(126,753)		(126,753)
Funded plans surplus	2,682	(23,909)		(21,227)
Present value of non-funded obligations	12,584	36,637	805	50,026
Total deficit of defined benefit pension plans	15,266	12,728	805	28,799
Impact of the minimum funding requirement/assets ceiling	-	104		104
Liabilities in the balance sheet	15,266	12,832	805	28,903

2021	Europe, Asia and Africa	North America	Latin America	Total
Present value of obligations	2,861	142,957		145,818
Fair value of plan assets		(181,163)		(181,163)
Funded plans obligation	2,861	(38,206)		(35,345)
Present value of non-funded obligations	13,939	54,093	638	68,670
Total deficit of defined benefit pension plans	16,800	15,887	638	33,325
Liabilities in the balance sheet	16,800	15,887	638	33,325

The main actuarial assumptions used were as follows:

2022	Europe, Asia and Africa	North America	Latin America	Total
Discount rate	10.67%	5.22%	8.43%	6.70%
Inflation rate	9.82%	2.00%	8.19%	6.67%
Expected return on plan assets		5.09%		
Salary growth rate	7.50%	2.50%	4.43%	4.81%

2021	Europe, Asia and Africa	North America	Latin America	Total
Discount rate	12.55%	2.71%	10.02%	8.43%
Inflation rate	9.93%	2.00%	7.96%	5.97%
Expected return on plan assets				
Salary growth rate	8.00%	2.50%	6.02%	5.51%

The assumptions relating to mortality experience are set based on the advice of actuaries in accordance with published statistics and experience in each territory. The mortality assumptions are based on the following tables of post-retirement mortality:

- Uruguay: GAM 1983;
- Morocco: TPG93;
- Tunisia: Man – TVTun -H-99; Woman – TVTun-F-99;
- Turkey: TUIK 2015; and
- North America: CPM-B.

All amounts in thousands of US dollars, unless otherwise stated

Considering that the post-employment benefits (pension and medical) of the North American segment is the most relevant, a sensitivity analysis was performed for this operating segment only. The results are as follows:

	Change in assumptions	Increase in assumptions	Decrease in assumptions
Discount rate	0.50%	Decrease of 4.27%	Increase of 6.24%
Salary growth rate	0.50%	Increase of 0.74%	Decrease of 0.70%

	Increase in assumption by one year	Decrease in assumption by one year
Life expectancy	Increase of 7.66%	Increase of 1.26%

The above sensitivity analysis is based on changes in individual assumptions while keeping all other assumptions unchanged. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligations to significant actuarial assumptions the same method (present value of the defined benefit obligations calculated using the projected unit credit method at the end of the reporting period) has been applied similarly to the calculation of the pension liability recognized in the balance sheet.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous year.

(c) Analysis – defined contribution plans

During the year 2022 the Group incurred a total expense of USD 22,732 with defined contribution plans (December 31, 2021 USD 22,300), recognised as employee benefit expense (Note 28).

25 Shareholders' equity

(a) Accounting policies

(i) Share capital and share premium

Common shares are classified in shareholder's equity. Each time a share premium is paid to the Company for an issued share, the respective share premium is allocated to the share premium reserve account. Each time the repayment of a share premium is decided, such repayment shall be done pro-rata to the existing shareholders. Shareholder's contributions can also be made without the issuance of shares.

(ii) Distribution of dividends

The distribution of dividends to the Company's shareholder is recognized as a liability in the Company's financial statements in the period in which the dividends are approved by the Company's shareholders.

(iii) Other comprehensive income

Other comprehensive income includes:

(i) The effective portion of the cumulative net change in the fair value of the hedging instruments used in the cash flow hedge until the recognition of the hedged cash flows;

(ii) Cumulative translation adjustments on exchange differences arising from the translation of financial statements of foreign operations, which includes the adjustments resulting from hyperinflation accounting;

(iii) The effective portion of exchange differences on the Company's net investment hedge in a foreign operation;

All amounts in thousands of US dollars, unless otherwise stated

(iv) Actuarial losses (gains) and measurement of retirement benefits according to Note 24.

(v) The share of the Group in the other comprehensive income (loss) of the associates and joint ventures entities.

(iv) Consolidated reserves

Consolidated reserves include an equity reserve that resulted from the application of the predecessor accounting principles, as described in the notes A3.2 and C2.1 to the consolidated financial statements for the year ended December 31, 2019.

(b) Share capital and share premium

As of December 31, 2022, the Company's fully subscribed and paid-up capital is USD 99,915 (December 31, 2021 – USD 99,915), consisting of 99,915,432 common shares (December 31, 2021 – 99,915,432 common shares).

As of December 31, 2022, the amount of share premium is USD 1,621,892 (December 31, 2021– USD 1,314,041), after the share premium increase indicated in the statement of changes in equity. The movements in the period are described in Note 3.2.

(c) Other comprehensive income attributable to the owners of the Company

	Currency exchange differences on translation of foreign operations	Hedge of net investments	Remeasurement of retirement benefits	Other comprehensive income	Total
At January 1, 2021	(819,096)	(26,431)	(3,058)	(4,484)	(853,069)
Currency translation adjustment	(65,930)				(65,930)
Hedge accounting of net investment in foreign operations		5,584			5,584
Interest in other comprehensive income of investees				909	909
Ongoing inflation adjustment for hyperinflationary economies - associates	59,746				59,746
Recycling of other components of comprehensive income	3,079				3,079
Remeasurement of retirement benefits			9,967		9,967
Deferred taxes (Note 20 (b))		(407)	(2,156)		(2,563)
At December 31, 2021	(822,201)	(21,254)	4,753	(3,575)	(842,277)
At January 1, 2022	(822,201)	(21,254)	4,753	(3,575)	(842,277)
Ongoing inflation adjustment for hyperinflationary economies - subsidiary	(1,200)				(1,200)
Ongoing inflation adjustment for hyperinflationary economies - associates	115,807				123,800
Currency translation adjustment	(139,619)				(147,612)
Hedge accounting of net investment in foreign operations		(28,646)			(28,646)
Interest in other comprehensive income of investees				3,548	3,548
Remeasurement of retirement benefits			5,807		5,807
Currency translation adjustment related to hyperinflationary economies	6,284				6,284
Other components of comprehensive income				(52)	(52)
Deferred taxes (Note 20 (b))		2,240	(605)		1,635
At December 31, 2022	(840,929)	(47,660)	9,955	(79)	(878,713)

26 Net revenue from products sold and services rendered

(a) Accounting policies

Revenue is determined based on the amount that the Group expects to receive from the sale of products and services rendered in the normal course of the entity's business, less expected losses, and less any events that may impact the measurement of the transaction amount. Revenue is shown net of value added tax, returns, rebates and discounts and after eliminating sales among consolidated companies.
The Group recognize revenue when: (i) there is a contract and/or any agreement for the Group to satisfy a performance obligation; (ii) the contract performance obligation is identifiable; (iii) the amount of revenue can be reliably measured and it can be allocated to each performance obligation; (iv) it is probable that future economic benefits will result from the transaction; (v) the performance obligations

All amounts in thousands of US dollars, unless otherwise stated

agreed with the counterparty are fulfilled and control over the goods or services is transferred to the counterparty; and (vi) specific criteria have been met for each of the activities of the Group.
The general practice of the Group is to recognize the revenue, and the associated costs, upon delivery of the products or rendering of services to its customers, or when the control is transferred to the customer:

(i) Contracts with customers related to the sale of cement, aggregates, mortar and other include the performance obligation to deliver products to the customer. Thus, revenue is recognized when the performance obligation is fulfilled, i.e., at a point of time when the product is delivered to the customer.

(ii) Concrete pouring services include the performance obligation to deliver ready-mix concrete according to specifications in relation to concrete resistance levels specified in the contract. Revenue is recognized when the performance obligation is fulfilled over time upon actual delivery of ready-mix concrete to the customer.

A contract liability is recognized when the Group has an obligation to transfer products or services to a customer from whom the aforementioned consideration has already been received. The recognition of the contractual liability occurs at the time when the consideration is received and settled, and when the entity complies with the performance obligation, against Revenue. Such contract liabilities are presented as advances from customers.

For some contracts with customers, the Group provides retrospective volume rebates, which are settled in the form of cash or products to be delivered free of charge to said customers when certain established purchase volumes are reached. The Group applies the expected value method to estimate the variable consideration in the contract. The Group then applies the requirements on constraining estimates of variable consideration to determine the amount of variable consideration that can be included in the transaction price and recognized as revenue. A refund liability is recognized for the expected future rebates (i.e., the amount not included in the transaction price), according to the amount that the entity estimates to deliver to the customer. The Group bases its estimates on past history, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement. The Group updates its estimates of refund liabilities (and the corresponding change in the transaction price) at the end of each reporting period.

(b) Net revenue by product line

	2022	2021
Revenue from product sales	2,582,139	2,276,994
Revenue from services	6,265	7,676
	2,588,404	2,284,670
Taxes on sales and services	(2,960)	(3,073)
Net revenue	2,585,444	2,281,597

Refer to Note 4.1 for net revenue segregation by operating segment.

(c) Analysis

	2022	2021
Cement	1,698,733	1,371,757
Ready-mix	721,102	760,447
Aggregates	130,626	118,058
Other	34,983	31,335
	2,585,444	2,281,597

All amounts in thousands of US dollars, unless otherwise stated

27 Expenses by nature

Expenses by nature	Note	2022	2021
Raw materials and consumables used		333,907	261,275
Employee benefit expenses	28	405,394	396,799
Fuel costs (i)		438,989	310,037
Freight costs		355,708	308,296
Depreciation, amortization and depletion	17, 18 and 19	242,612	200,657
Maintenance and upkeep		149,533	132,253
Electric power		168,669	131,425
Services, miscellaneous		135,038	126,609
Taxes, fees and contributions		31,043	31,612
Packaging materials		21,474	18,087
Rents and leases	19(a)	12,379	18,988
Insurance		13,770	10,038
Technology and communication		13,394	2,123
Other expenses		67,607	40,365
		2,389,519	1,988,564

Reconciliation	2022	2021
Cost of sales and services	2,217,260	1,822,477
Selling	54,976	44,490
General and administrative	117,283	121,597
	2,389,519	1,988,564

(i) The cost amount presented under Fuel costs was subject to a reclassification from the line-item Raw materials and consumables used and Other expenses, correcting a misrepresentation identified. This is a disclosure change, that has no impact in the expenses recognized in the statement of income.

28 Employee benefit expenses

(a) Accounting policies

Provision is recognized for the expenses related to employee profit sharing. This provision is calculated based on qualitative and quantitative targets established by Management and is recorded as "Employee benefits", in the statement of income.

(b) Analysis

	2022	2021
Direct remuneration	301,772	296,961
Social changes	73,288	69,765
Benefits	3,480	3,595
Pension plans, defined contribution	22,732	22,300
Pension plans, defined benefit	4,122	4,178
	405,394	396,799

(c) Staff number by category:

	2022	2021
Management	200	206
Technical personnel and middle management	756	703
Administrative personnel	483	409
Factory workers	3,401	3,147
	4,839	4,464

All amounts in thousands of US dollars, unless otherwise stated

29 Other operating income (expenses), net

	2022	2021
Investment acquisition costs	(1,622)	(17,408)
Fair value gain resulting from remeasurement of previously owned interest		24,124
Gain on sales of PP&E and intangible assets, net	8,015	15,200
Income from rents and leases	1,627	1,334
Impairment (provision)/reversal for PP&E, intangible and RoU assets		6,975
Great Lake slag settlement	2,812	(924)
Reversal/(provision) of liabilities	2,462	(170)
Exploration costs	(2,913)	(3,136)
Inventory obsolescence	(617)	(4,127)
Gain on investment acquisition	1,320	46,588
Co2 emission rights (provision)/reversal (i)	6,270	(15,902)
ARO estimate remeasurement	3,302	960
Other operating income (expenses)	6,839	3,246
	27,495	56,761

(i) The amounts presented in the line item “CO2 emission rights (provision)/reversal” relate to a provision initially recognized in 2021 for the amount of USD 15,902, and primarily resulting from CO2 emission rights deficit due to CO2 actual emissions exceeding the emission rights granted for free, under the cap and trade scheme regulations applied in the European Union market. At year end 2022 the majority of this provision was reversed, resulting in a gain of USD 10 million.

30 Financial income (expense)

(a) Accounting policies

The Company’s finance income and expense comprise:

(i) Interest income;
(ii) Interest expenses;
(iii) Net gains/losses on the disposal of available for sale financial assets;
(iv) Net gains/losses on financial assets at fair value through profit or loss;
(v) Net gains/losses on foreign exchange variations on financial assets and liabilities;
(vi) Fair value losses on contingent consideration classified as financial liability;
(vii) Impairment of financial assets (other than trade receivables);
(viii) Net gains/losses on hedge instruments which are recognized in profit or loss;
(ix) Certain reclassifications of net gains/losses previously recognized in other comprehensive income; and
(x) Costs to repurchase/prepay borrowings;

Interest income and expense are recognized in profit or loss using the effective interest rate.

(b) Analysis

	Note	2022	2021
Financial income			
A/R securitization fees income		5,739	5,511
Income from financial investments		3,299	2,984
Interest on financial assets		2,489	1,819
Derivative financial instruments		1,193	577
Cross guarantee revenue		916	
Gain on renegotiation of debts, net of amortization			3,576
Discounts obtained			447
Other financial income (i)		13,406	2,890
		27,042	17,804

All amounts in thousands of US dollars, unless otherwise stated

Financial expenses			
Interest payable on borrowing	20(d)	(73,394)	(87,751)
Premium paid on repurchase of bonds		(34,422)	(12,600)
Commissions on financial transactions		(19,779)	(7,721)
A/R Securitizations fees expenses		(17,975)	(5,482)
Cross guarantee expenses		(2,317)	
Amortization of prepaid financial results		(1,514)	(1,372)
Derivative financial instruments		(961)	(36)
Inflation adjustment charges on provision and other liabilities		(818)	(986)
Present value adjustment		(588)	(1,758)
Fair value of loans and financing			(11,112)
Other financial expenses		(9,774)	(14,856)
		(161,542)	(143,674)
Exchange rate variations		(47,134)	(46,520)
Net monetary gain on hyperinflationary subsidiary		45,350	
		(136,284)	(172,390)

(i) Other financial income includes USD 10,265 related to a gain generated with the settlement of a short-term Co2 emission rights loan, that amounted to USD 44,626 and was settled in January 2022. This loan was entered into in 2021 and valued at market price, which resulted in a fair value loss of USD 11,112 as a result of its remeasurement at year end 2021.

31 Business combinations

(a) Acquisition of cement, aggregated and ready-mix business in Spain

In November 2022, the Group acquired a business in the South of Spain which includes a modern integrated cement plant, three aggregates quarries and eleven ready-mix plants. The cement plant is located in the city of Málaga and has an installed production capacity of 1.4 million tons of cement per year. This acquisition is aligned with the growth and positioning strategy of the Group and will reinforce its presence in Spain and in the Iberian Peninsula in general. It will also create significant synergies with the existing assets and represents a step forward in the decarbonization journey of the Group.

With this business acquisition the installed production capacity in Spain increases to approximately 6 million tons of cement per year, via the operation of now six integrated cement plants.

Details of the purchase consideration and the provisional fair values of the assets and liabilities recognized as a result of the acquisition are as follows:

	2022
Purchase consideration	
Cash paid - Fixed price	92,222
Cash to be paid - Price adjustment (working capital and net-debt)	917
Total purchase consideration	93,139

	Provisional fair values
Cash	3,337
Accounts receivable	12,385
Inventories	12,066
Property, plant and equipment	64,978
Intangible assets - CO2 emission rights	3,637
Intangible assets - others	7,240
Right-of-use assets	1,884
Investment property	13,290
Other assets	2,142
Deferred taxes - net	(3,011)
Borrowings	(1,387)
Lease liabilities	(1,985)
Accounts payable and accrued liabilities	(13,300)
Non-current provisions	(6,792)

All amounts in thousands of US dollars, unless otherwise stated

Net identifiable assets acquired	94,485
Minority interests	(26)
Gain on business acquisition	(1,320)
Total assets and liabilities	93,139

The price adjustment will be paid in cash in early 2023.

The gain arising on this business acquisition is attributable to the valuation of the investment properties to its market valued.

The investment properties acquired as part of this business combination refer to land (USD 9 million) and buildings (USD 4 million). These are subsequently measured at fair value, with changes in fair values presented in the consolidated statement of income as part of " Other operating income, net". As at year end 2022 there is no change in its fair value.

As allowed by IFRS 3 – Business Combinations, the Group has 12 months to fulfill the purchase price allocation of the acquired assets and liabilities and complete the initial acquisition accounting. The fair value balances above are presented as provisional until this exercise is finalized.

(i) Acquired receivables

The fair value of acquired trade receivables is USD 12,385. The gross contractual amount for trade receivables due is USD 13,772, with a loss allowance of USD 1,386 recognized on acquisition.

(ii) Costs related to the acquisition

Total acquisition-related costs amounts to USD 2,187, out of which USD 1,622 are included in the statement of income under Other operating income (expense), net (Note 29). The remainder USD 565 was already incurred and recognized in the previous year 2021.

(iii) Revenue and profit contribution

The acquired businesses contributed revenues of USD 11,294 and a net loss of USD 6,431 to the Group for the period from November 1st to December 31, 2022.

(b) Business combinations completed in 2021

During the year 2021 the Group completed the acquisition of four new businesses: (i) McInnis Cement Inc. ("McInnis"), a Canadian cement producer, (ii) Superior Materials, a ready-mix concrete company located in Detroit, United States of America ("USA"), and for which the Group already held a stake of 50% as joint venture, (iii) the aggregates business of Valley View Industries located in Chicago, USA, and (iv) Cementos Balboa, a cement producer located in the South of Spain. Details of these business combinations, as well as the provisional fair value balances for the assets and liabilities acquired, were disclosed in Note 21 of the Group's annual consolidated financial statements for the year ended December 31, 2021.

The purchase price allocation exercise has been completed, with the final fair values not suffering any change compared to the provisional fair values disclosed in the annual consolidated financial statements as of December 31, 2021. Therefore, no impacts were accounted for in these financial statements as a result of these business combinations.

32 Auditors remuneration

The total fees expensed by the Group and due for the current financial year to the auditor are presented as follows:

All amounts in thousands of US dollars, unless otherwise stated

	2022	2021
Audit	2,132	1,965
Other assurance services	1,260	1,375
Tax advisory services		144
Other non-audit services	10	144
	3,402	3,628

33 Environmental, Social and Governance (ESG)

Sustainability is one of the key strategic pillars of VC Group as a whole. The 2021 Integrated Report was released in March 2022, where it is described the Group's progress in terms of Environmental, Social and Governance ("ESG") matters. This report was prepared on the basis of the guidelines of the International Integrated Reporting Council (IIRC), the GRI Sustainability Reporting Standards – Core option, the Global Cement and Concrete Association (GCCA) and the Sustainability Accounting Standards Board (SASB) standards for the Building Materials industry. The report also includes the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) regarding the disclosure of climate risks and opportunities.

Due to the nature of our business, the management of climate risks is critical, including the risks connected with the greenhouse gas emissions and the potential costs increase in countries that have a more restrictive legislation in this area, such as Canada and Spain. This also includes technological risks due to a potential dependence of the industry on CO2 capture and sequestration technologies. At the same time, the transition to a low-carbon economy offers business opportunities to our cement and concrete operations, as products are characterized by durability, resilience and adaptability in their use in the construction of low-carbon energy generation, buildings and transportation infrastructure.

The Group continues its ESG journey towards the fulfillment of the 2030 sustainability commitments assumed in 2020. These are based in seven pillars: (i) integrity and transparency, (ii) safety, health and well-being; (iii) innovation, (iv) diverse and inclusive environment, (v) reducing the environmental footprint; (vi) promoting circular business environment, and (vii) generating shared value. In 2022 VCSA's Board of Directors approved the creation of the Sustainability and Innovation Committee, replacing the existing Decarbonization and ESG Working Group. The new Committee will be in place in 2023 with the main objectives of identifying and address the risks and opportunities related to ESG and Innovation, review and prioritize projects, and make recommendations to VCSA's Board of Directors.

Contributing to address the negative effects of climate change is at the core of the Group's current strategy. During 2021, the Group joined forces with the world's leading cement and concrete manufacturers to accelerate the shift to a net zero concrete by 2050, through the Concrete Net Zero Road Map prepared by the GCCA. This road map is based on the International Energy Agency ("IEA") 2050 scenario, and is the base used by the Group for the decarbonization and transition strategy. Furthermore, on August 2021 VCSA's Board of Directors approved the Group's enrollment in the Business Ambition for 1.5 C Call to Action campaign, committing the Group to advance towards a low-carbon economy. The Group also joined the United Nations' Race to Zero campaign, which rallies and encourages companies, governments, and financial institutions to work for a healthier planet with neutral carbon emissions.

On December 2022 VCSA approved a new decarbonization target aligned with the Science Based Target initiative (SBTi). The new commitment was defined for the whole VC Group, to which VCI Group belongs to, and envisages achieving 475 kg of CO2 per cementitious ton until 2030. This new goal represents a reduction of 24.8% comparing to VC Group's emissions in 2018 (base year), and it is 8.7% lower than the goal announced in VC Group's Sustainability Commitments for 2030, which was of 520 kg of CO2 per cementitious ton. With this new commitment VC Group is aligning its CO2 emissions reduction target with the ambition of Paris Agreement, which aims to limit global warming below two degrees Celsius compared to pre-industrial levels, while also pursuing efforts to limit the increase to 1.5 degrees Celsius.

All amounts in thousands of US dollars, unless otherwise stated

The decarbonization strategy is based on four main pillars, that are the drivers for ESG projects and enhance the development of circular economy:

- Alternative fuels: replace fossil fuels used for clinker production with alternative fuels, particularly biomass and different sources of waste.
- Cementitious: replace clinker with by-products from other industries, including blast-furnace slag and flyash from thermoelectric plants, in addition to other cementitious materials, such as calcined clay, natural pozzolans and other materials.
- Energy efficiency: optimization of production processes, use of renewable energy and investing in plants' efficiency.
- New technologies / CCUS: use innovative processes and new materials, dematerialization of the value chain, carbon capture, utilization and storage (CCUS), and seek partnerships with entities that will help improving resources optimization and reduce carbon intensity.

The Group's ability to address environmental, social and governance risks is evaluated by rating agencies specialized in non-financial topics, as well as by CDP, which is an organization that gathers, analyses and publishes information on air emissions, climate and water. For the fifth consecutive year, in 2022 VC Group was rated by CDP as one of the best groups in the Climate Change Program, with a A- score.

34 Events after the reporting period

(a) Committed credit facility withdraws

During January and February 2023 the Group withdrew a total amount of USD 89 million (CAD 80 million and USD 30 million) of its committed credit facility. The remaining available for use under this credit facility and after these withdraws amounts to USD 211 million.

These financial statements were approved for issue by the Management Board on February 27, 2023 and were signed on behalf by:

DocuSigned by: Nuno Alves 9D82DEB72A2E423...	DocuSigned by: Carlos Eduardo Boggio FEB92EB32D98404...
Nuno Alves	Carlos Boggio
Management Board Member	Management Board Member

VOTORANTIM
cimentos