Financial Statements

St. Marys Cement Inc. (Canada)
Consolidated Financial Statements at December 31, 2022 and 2021 (in thousands of U.S. dollars) and report of independent auditor

Independent auditor's report

To the Shareholders and Board of Directors of St. Marys Cement Inc. (Canada)

Our opinion

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of St. Marys Cement Inc. (Canada) and its subsidiaries (together, the Company) as at December 31, 2022 and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

What we have audited

The Company's consolidated financial statements comprise:

- the consolidated balance sheet as at December 31, 2022;
- the consolidated statement of income and comprehensive income for the year then ended;
- the consolidated statement of changes in shareholders' 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 significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities 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.

Independence

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada. We have fulfilled our other ethical responsibilities in accordance with these requirements.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is

PricewaterhouseCoopers LLP
PwC Tower, 18 York Street, Suite 2600, Toronto, Ontario, Canada M5J 0B2
T: +1 416 863 1133, F: +1 416 365 8215

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, management is responsible for assessing the Company'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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

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

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives 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 auditor's 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 Canadian generally accepted auditing standards 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 Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management'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 Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's 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 auditor's report. However, future events or conditions may cause the Company 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 or business activities within the Company 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.

PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Ontario
February 22, 2023

St. Marys Cement Inc. (Canada)

Consolidated balance sheets
December 31, 2022 and 2021
In thousands of U.S. dollars

Assets	**Note**	**31-Dec-2022**	**31-Dec-2021**
Current assets			
Cash and cash equivalents	E1	80,284	133,327
Trade receivables	E2	2,442	21,992
Inventories	E4	205,895	186,178
Income taxes recoverable		-	54,101
Prepaid expenses	E5	14,862	13,052
Other assets		3,337	10,509
		306,820	419,159
Non-current assets			
Notes and capital related to SPE	E3	41,731	37,741
Prepaid expenses		9,271	9,368
Advance to suppliers		182	182
Pension assets	E13(b)	23,804	38,206
Financial assets at fair value through other comprehensive income		190	637
Deferred income tax asset	E14(c)	18,554	100,757
Other assets		4,151	5,019
Investments accounted for using the equity method	E7	16,480	17,680
Property, plant and equipment	E8	1,286,882	1,327,553
Intangible assets and goodwill	E9	667,523	693,251
Right-of-use assets	E10	189,314	210,397
		2,258,082	2,440,791
Total assets		2,564,902	2,859,950

Liabilities and shareholders' equity	**Note**	**31-Dec-2022**	**31-Dec-2021**
Current liabilities			
Accounts payable and accrued liabilities		225,127	224,217
Salaries and benefits		26,650	38,801
Indirect taxes payable		8,841	11,915
Income taxes payable		331	-
Borrowing	E11(b)	11,762	12,068
Lease liabilities	E10(c)	19,844	27,618
		292,555	314,619
Non-current liabilities			
Borrowing	E11(b)	495,868	542,537
Lease liabilities	E10(c)	184,204	184,925
Post-employment benefit obligations	E13(b)	36,637	54,093
Deferred income tax liability	E14(c)	63,011	150,161
Provisions	E12	57,720	54,664
Other liabilities		12,877	12,123
		850,317	998,503
Total liabilities		1,142,872	1,313,122
Shareholders' equity	E15		
Share capital		457,140	644,318
Retained earnings		695,737	656,528
Accumulated other comprehensive income	E15(c)	269,153	245,982
Total shareholders' equity		1,422,030	1,546,828
Total liabilities and shareholders' equity		2,564,902	2,859,950

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

Consolidated statements of income and comprehensive income
For the years ended December 31, 2022 and 2021
In thousands of U.S. dollars

	Note	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Revenue from goods sold	E16	1,446,234	1,326,801
Cost of goods sold	E17	(1,229,077)	(1,024,250)
Gross income		217,157	302,551
Operating expense			
Selling	E17	(30,241)	(23,964)
General and administrative	E17	(63,609)	(65,130)
Other operating income, (expense) net	E19	8,648	54,501
		(85,202)	(34,593)
Operating income before equity results and net financing expense		131,955	267,958
Investment results from equity share in joint ventures	E7	3,026	6,578
Financing results, net	E20	(66,658)	(46,383)
Income before income tax expense		68,323	228,153
Provision for income tax (expense) recovery	E14(b)	(11,941)	(55,010)
Net income for the period		56,382	173,143
Other comprehensive (loss) income:			
Items that will not be reclassified to profit or loss			
Remeasurements of post-employment pension benefit obligations	E13(b)	6,906	9,797
Items that may be subsequent reclassified to profit or loss			
Accumulated foreign currency translation adjustment	E15(c)	55,376	994
Changes in fair value of financial assets at fair value through other comprehensive income	E15(c)	(390)	(83)
Unrealized gain (loss) on net investment hedge, net of tax	D3.1(b)	(31,815)	2,833
Other comprehensive income for the period		30,077	13,541
Total comprehensive income for the period		86,459	186,684

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

Consolidated statements of changes in shareholders' equity
For the years ended December 31, 2022 and 2021
In thousands of U.S. dollars

	Note	Share capital	Retained earnings	Accumulated other comprehensive income (Note 15(c))	Total equity
Balance - December 31, 2020		48,859	476,800	242,238	767,897
Net income for the period		-	173,143	-	173,143
Other comprehensive income		-		13,541	13,541
Comprehensive income for the period		-	173,143	13,541	186,684
Foreign currency translation		4,887	(4,646)	-	241
Capital increase	E15(b)	61,490	-	-	61,490
Capital reduction	E15(b)	(3,344)	(514)		(3,858)
McInnis acquisition		523,200	-	-	523,200
Conversion of preferred shares into common shares		9,226	1,948	-	11,174
Transfer of remeasurements of post-employment pension benefit obligations	E13(b)	-	9,797	(9,797)	-
Balance - December 31, 2021		644,318	656,528	245,982	1,546,828
Net income for the period		-	56,382	-	56,382
Other comprehensive income		-	-	30,077	30,077
Comprehensive income for the period		-	56,382	30,077	86,459
Foreign currency translation		(56,024)	(24,079)	-	(80,103)
Capital reduction	E15(b)	(131,154)	-	-	(131,154)
Transfer of remeasurements of post-employment pension benefit obligations	E13(b)	-	6,906	(6,906)	-
Balance - December 31, 2022		457,140	695,737	269,153	1,422,030

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

St. Marys Cement Inc. (Canada)

VOTORANTIM cimentos

Consolidated statements of cash flows
For the years ended December 31, 2022 and 2021
In thousands of U.S. dollars

	Note	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Cash flows from operating activities			
Income before tax expense		68,323	228,153
Adjustments of items that do not represent changes in cash and cash equivalents:			
Depreciation and amortization	E17	171,163	133,193
Investment results from equity share in joint ventures	E7	(3,026)	(6,578)
Gain on sale of property, plant and equipment	E19	(6,493)	(1,048)
Gain on investment acquisition	E19	-	(70,712)
Allowance for expected credit loss	E2	(413)	91
Financing results, net	E20	66,658	46,383
		296,212	329,482
Decrease (increase) in current assets			
Trade and other receivables		8,509	34,804
Inventories		(28,645)	112
Related parties		(694)	612
Other current assets		4,433	(841)
Increase (decrease) in current liabilities			
Accounts payable and accrued liabilities		(12,210)	(20,889)
Salaries and social charges		6,499	2,580
Related parties		3,675	(1,184)
Taxes payable		(1,912)	3,588
Change in non-current assets and liabilities			
Post-employment benefit obligations		(6,911)	(9,339)
Other		(1,534)	(6,559)
Cash provided by operating activities before interest and income tax		267,422	332,366
Interest paid debt	E11(d)	(31,291)	(30,197)
Interest paid on lease liabilities	E10(c)	(7,420)	(8,138)
Income tax (paid) received		46,489	(17,277)
Total cash provided by operating activities		275,200	276,754
Cash flows from investing activities			
Proceeds from disposals of property, plant and equipment and intangible assets		14,871	2,269
Dividends received		2,881	7,859
Payment for acquisition of McInnis Cement Inc., net of cash received		-	(17,821)
Payment for acquisition of the net assets of Valley View Industries		-	(45,787)
Payment for acquisition of remaining 50% of Superior Materials LLC, net of cash received		-	(34,651)
Proceeds from disposals of assets		4,400	-
Return of capital	E7(c)	1,000	-
Acquisition of property, plant and equipment	E8	(128,455)	(111,497)
Acquisition of intangible assets	E9	(5,173)	(1,622)
Total cash used in investing activities		(110,476)	(201,250)
Cash flows from financing activities			
New borrowings	E11(d)	375,478	187,086
Payment borrowings	E11(d)	(421,709)	(290,485)
Payment of lease liabilities	E10(c)	(37,304)	(24,058)
Capital (decrease) increase	E15(b)	(131,154)	61,490
Return of Capital	E15(b)	-	(3,858)
Financial costs, except interest		(1,440)	(1,089)
Total cash (used in) provided by financing activities		(216,129)	(70,914)
(Decrease) increase in cash and cash equivalents		(51,405)	4,590
Effect of foreign exchange on cash		(1,638)	(25)
Cash and cash equivalents at the beginning of the period		133,327	128,762
Cash and cash equivalents at the end of the period		80,284	133,327

Section A – General information

1 Operational context

St. Marys Cement Inc. (Canada) ("the Company" or "SMCI") is a subsidiary controlled by Votorantim Cimentos International S.A.("VCI") which holds 83% of the capital of SMCI and is in turn directly controlled by Votorantim Cimentos S.A. ("VCSA"). McInnis Holding Limited Partnership ("McInnis Holding") owns 17% of the Company's capital. McInnis Holding Limited Partnership is indirectly controlled by Caisse Dépôt et Placement du Québec ("CDPQ").

St. Marys Cement Inc. (Canada) and its subsidiaries (together "the Group") manufactures and distributes heavy building materials, which includes cement, aggregates, ready- mix concrete and construction related materials. The Group has facilities in Canada and the United States. The address of its registered office is 55 Industrial St, Toronto, Ontario, Canada.

2 Approval of the consolidated financial statements

These consolidated financial statements for the year ended December 31, 2022 were approved by the Board of Directors of the Company on February 22, 2023.

3 Main events that occurred in the year

3.1 Capital reduction

On June 28, 2022 the Company returned capital in the amount of $108.9 million to VCI. and $22.3 million to McInnis Holding Limited Partnership, with no reduction in the number of outstanding Class A Common shares of the Company.

3.2 Change in debt issued by related parties guaranteed by the Company

During April 2022, the Company's related parties VCSA and Votorantim Cimentos N/NE S.A. ("VCNNE") renegotiated their "4131 Loan" agreements for which the Company was one of the guarantors, as detailed in note E6(c). After this event, the Company is no longer the guarantor for these contracts.

3.3 Committed credit facility

In replacement of the revolving credit line (Committed Credit Facility), contracted in August 2019 in the amount of USD 290 million with maturity in 2024, VCI and its main subsidiaries, which includes the Company, contracted in June 2022 a new revolving credit line with a syndicate of banks in the amount of USD 300 million. The new line matures in June 2027 and is characterized as Sustainability-Linked, in accordance with the long-term sustainability commitments of VCI and its subsidiaries. At the end of 2022, the total amount of USD 300 million was available to VCI and its subsidiaries for new withdrawals, if necessary.

3.4 Impacts of military conflict between Russian and 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 on the Group's business as a whole, including adverse effects 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.

In thousands of U.S. dollars, unless otherwise stated

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.

Section B – Supplementary information

1 Adjusted EBITDA

The operating and reportable segments used for decision-making, and regularly reviewed by the "Chief Operating Decision Maker" (CODM) defined as the CEO, are organized by geographical area, with one reportable segment based on the locations of the Company's assets located in North America.

The main source of information for the assessment of the financial performance of the reportable segments is adjusted EBITDA, which is reported on a monthly basis). Adjusted EBITDA is calculated on the basis of net income, plus/minus financial income and expenses, plus/minus income tax, plus depreciation, amortization and depletion, plus/less equity in the results of investees, plus dividends received from investees and less unusual non-cash items. Non-cash items considered by Management as unusual are excluded from the adjusted EBITDA measurement. The supplementary information included in this Note is not intended to be in accordance with and is not required by the accounting practices adopted in Canada or by IFRS.

The following table reconciles the twelve months adjusted EBITDA from the profit for the period:

	Last twelve months ended 31-Dec-2022	**Last twelve months ended 31-Dec-2021**
Revenue from goods sold	1,446,234	1,326,801
Net income for the period	56,382	173,143
Income before income tax expense	68,323	228,153
Depreciation and amortization	171,163	133,193
Financial results, net	66,658	46,383
EBITDA	306,144	407,729
Investment results from equity share in joint ventures	(3,026)	(6,578)
Dividends received	2,881	7,859
Adjusted EBITDA items		-
COVID-19 costs	400	805
Investment acquisition costs	-	15,231
Fair value gain resulting from remeasurement of previously owned interest	-	(24,124)
Gain on investment acquisition	-	(46,588)
Adjusted EBITDA	306,399	354,334

2 Capital management

The company's objective when managing capital is to safeguard its ability to continue as a going concern in order to provide returns for shareholders, benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

In thousands of U.S. dollars, unless otherwise stated

In order to maintain or adjust the capital structure, the company may amend or may propose to shareholders to amend when their approval is required, the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The company monitors capital on the basis of the leverage ratio (which corresponds to net debt divided by Adjusted EBITDA for the last 12 months). Net debt is calculated as total borrowings (including 'bank indebtedness' and 'long-term debt' as shown in the consolidated balance sheets) less cash and cash equivalents. The ratios at December 31, 2022 and December 31 2021 were as follows:

	31-Dec-2022	31-Dec-2021
Borrowing	507,630	554,605
Lease liabilities	204,048	212,543
Cash and cash equivalents	(80,284)	(133,327)
Net debt - (A)	631,394	633,821
Adjusted EBITDA - (B)	306,399	354,334
Financial leverage ratio - (A/B)	2.06	1.79

Section C – Presentation of Financial Statements

1 Changes in accounting policies and disclosures

1.1 Amendments to accounting standards adopted by the Company

Standards and amendments became effective for annual periods commencing on or after January 1, 2022. The adoption of these new standards did not have a significant impact on the Company's financial statements.

The Company has completed the transition process of the IBOR reform that implied the transition to alternative benchmark interest rates. The Company did not identify any impacts resulting from the IBOR reform in its financial assets and liabilities, nor the need to change the current financial risk management process.

1.2 Amendments to accounting standards not yet adopted by the Company

New standards and amendments to existing standards and interpretations have been issued but are not yet in force. The Company intends to adopt these new standards, changes and interpretations, if applicable, when they come into force.

The Company concluded its analysis regarding amendment to IAS 12 – "Income Taxes" which requires companies to recognize deferred taxes on transactions that give rise to the initial recognition of an asset or liability, resulting in equal amounts of taxable and deductible temporary differences, such as for lease agreements or asset retirement obligations. The amendment is effective for periods beginning on January 1, 2023, and no impacts were identified on any of the Company's balances or procedures regarding this amendment, since the Company is already compliant with its requirements.

2 Basis of presentation

2.1 Consolidated financial statements

The consolidated financial statements of the Group have been prepared and are being presented in accordance with IFRS and International Financial Reporting Interpretation Committee ("IFRIC") interpretations as issued by the IASB and detailed in Part I of the Chartered Professional Accountants Canada Handbook. These consolidated financial statements disclose all (and only) the applicable significant information related to the financial statements, which is consistent with the information used by management in the performance of its duties.

The consolidated financial statements have been prepared under the historical cost convention except for the revaluation of certain financial assets and financial liabilities at fair value.

The accounting policies applied to the consolidated financial statements are consistent with those adopted and disclosed in the consolidated financial statements of the prior year, as per information presented in Note C1. Accounting policies of subsidiaries and joint ventures are changed where necessary to ensure consistency with the policies adopted by the Group.

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

The preparation of consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note C3.

2.2 Functional and presentation currency of the consolidated financial statements

Management, after analysis of operations and business, concluded that the functional currency of the entities within the Group is either Canadian ("$CDN") or U.S. ("$US") dollars and is determined as the currency of the primary economic environment in which each entity operates, based on analysis of the following indicators:

a. the currency that has significant influence over prices of products and services;

b. the currency of the country where competition and regulations have a significant influence in the determination of prices of products and services;

c. the currency that has a significant influence over labour, material and other costs of products or services;

d. the currency which supports most of the financial activities; and

e. the currency which supports most of the operating activities.

The functional currency of the Company is the Canadian dollar. All amounts in these financial statements are presented in thousands of U.S. dollars unless otherwise stated, since that is the common currency for the industry in North America.

2.3 Translation from foreign currency

Transactions in currencies other than the functional currency are translated to the functional currency at the exchange rates in effect at the transaction dates. The foreign exchange gains and losses resulting from the settlement of these transactions and from the conversion of monetary assets and liabilities denominated in foreign currency at the exchange rates in effect at the consolidated balance sheet dates are recognized in net income, except when deferred in other comprehensive income as qualifying net investment hedges.

2.4 Controlled entities with different functional currency from the Group

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

In thousands of U.S. dollars, unless otherwise stated

a. assets and liabilities for each consolidated balance sheet presented are translated at the closing rate at the date of that consolidated balance sheet;

b. income and expenses for each consolidated statement of income and comprehensive income are translated at average exchange rates (unless); and

c. all resulting exchange differences are recognized as a separate component of equity, in "Accumulated other comprehensive income".

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to equity. When a foreign operation is completely or partially disposed of or sold, exchange differences that were recorded in equity are recognized in the consolidated statements of income and comprehensive income as part of the gain or loss on sale.

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

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 exchange rate.

The functional currency of the subsidiaries included in consolidation are disclosed in note C2.5 below.

2.5 Consolidation

Companies included in the consolidated financial statements are as follows:

	Percentage of total and voting capital			
	31-Dec-2022	31-Dec-2021	Place of operation	Main activity
St. Marys Cement Inc. (Canada)	100.00	100.00	Canada	Cement, ready-mix concrete, aggregates
Ciment McInnis Inc.	-	100.00	Canada	Cement
Carrières McInnis Inc.	-	100.00	Canada	Cement
S.E.C. Ciment McInnis	100.00	100.00	Canada	Cement
Rosedale Securities, Ltd	100.00	100.00	Canada	Holding
2339097 Ontario Limited	100.00	100.00	Canada	Holding
2377482 Ontario Inc.	100.00	100.00	Canada	Holding
2377962 Ontario Inc.	100.00	100.00	Canada	Holding
St. Marys Cement U.S. LLC	100.00	100.00	USA	Cement
McInnis USA Inc.	-	100.00	USA	Cement
McInnis USA LLC	100.00	-	USA	Cement
9429-7948 Quebec Inc.	100.00	-	USA	Holding
VCNA Prairie LLC	100.00	100.00	USA	Ready-mix concrete and aggregates
VCNA Prairie Aggregate Holdings Illinois, Inc.	100.00	100.00	USA	Holding
VCNA US, Inc.	100.00	100.00	USA	Holding
Votorantim Cimentos North America, Inc.	100.00	100.00	USA	Head Office
313 Ready Mix, LLC	100.00	100.00	USA	Ready-mix concrete and aggregates
VCNA United Materials LLC	100.00	100.00	USA	Concrete
VCNA United Materials Builders LLC	-	100.00	USA	Retail
Superior Materials Holdings, LLC	100.00	100.00	USA	Ready-mix concrete

2.5.1 Subsidiaries

Subsidiaries are all entities over which the Company has control. The Company controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases.

Balances and transactions between related parties and any unrealized income or expenses derived from transactions between related parties are eliminated. Unrealized gains arising from transactions with investees recognized under the equity method are eliminated against the investment in the proportion of the Group's interest on 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.

The Company treats transactions with non-controlling interests as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the proportion acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded directly in equity.

When the Company ceases to have control, any retained interest is re-measured to its fair value, with the change in carrying amount recognized in profit or loss. The amounts previously recognized in other comprehensive income are reclassified to profit or loss.

2.5.2 Joint arrangements

Joint arrangements are classified as either joint ventures or joint operations, depending on the contractual rights and obligations of each investor.

Joint ventures (Note E7) are accounted for using the equity method, where the interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures (which includes any long-term interests that, in substance, form part of the Group's net investment in the joint ventures), the Group does not recognize further losses unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealized gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

Joint operations arise when a joint operator has rights to assets and obligations for the liabilities relating to the arrangement and therefore accounts for its interest in assets/liabilities, revenue and expenses.

Intercompany transactions and balances, as well as unrealized gains and losses, are eliminated on consolidation. The accounting policies of the joint operations were adjusted, when necessary, to ensure consistency with the accounting policies adopted by the Group.

3 Critical accounting estimates and assumptions

The preparation of consolidated financial statements requires management to make critical judgments, estimates and assumptions that affect the reported amount of certain assets and liabilities and the disclosure of the contingent assets and liabilities at the date of the consolidated financial statements and revenues and expenses for the period reported. The Group must also make estimates and judgments about future results of operations, related specific elements of the business and operations in assessing recoverability of assets and recorded value of liabilities. Significant areas of estimates, measurement uncertainty and judgments are summarized below. For each item, actual results could differ from estimates and judgments made by Group

3.1 Fair value of financial instruments (Note D4):

The following are the levels in a hierarchy that is based on significance of the inputs used in making the measurements of financial assets and liabilities that are recognized on the consolidated balance sheets at fair value:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets and liabilities; and

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:

a. quoted market prices or quotations from financial institutions or brokers for similar instruments;

b. 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;

c. the fair value of future foreign exchange contracts determined based on future exchange rates at the reporting date, with the resulting amount discounted to present value; and

d. analysis of discounted cash flow.

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.

3.2 Expected credit losses (Note E2):

The methodology for calculating expected credit losses on financial assets measured at amortized cost is based on a risk matrix, which was based on historical credit loss experience, the economic environment and the forecasts of future economic conditions for the all aging list, including the receivables still to fall due. In this sense, the Group's treasury department: (i) analyzes the average historical credit recovery of the last four years; and (ii) analyzes the prospective loss risk based on customer events established in statistical modeling (logistic regression) according to internal and external information. The result of this analysis establishes the annual risk matrix and, consequently, the financial amount to be accounted for as impairment by aging list.

3.3 Estimated useful lives of property, plant and equipment and intangible assets (Notes E8 and E9):

The useful lives of the assets that are used in the Group's activities are evaluated whenever events or changes indicate that the depreciation rates applied do not reflect the degree of natural deterioration of the asset due to use. In these circumstances, the useful life of an asset or group of assets is adjusted to reflect the new thresholds.

3.4 Impairment of goodwill and non-current 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 or 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 as expense in "Other operating income (expenses), net" (Note E19) 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 or 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 impairment reversal at each reporting date.

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.

Where an impairment loss is subsequently reversed, 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 in "Other operating income (expenses), net" (Note E19).

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

An impairment test is carried at least annually for CGU to which goodwill has been allocated. An impairment test is carried at least annually for CGU to which goodwill has been allocated. On December 31, 2021, the fair value less cost to sell approach was used. From 2022 and onwards, the recoverable amount is measured by the discounted cash flow model and determined from the value in use of the CGU. The process of estimating these values involves the use of assumptions, judgments and estimates of future cash flows representing the Company's best estimate.

These calculations use post-tax cash flow projections based on financial budgets approved by the Company's management covering a five-year period. A ten-year period can be considered in specific circumstances, such as economic crisis, to better reflect the business and the economic cycle of the CGU. Cash flows beyond the five or ten-year period calculated under the value in use model are extrapolated using the last year projections (with nil growth rate).

Management considered the key assumptions to calculate the recoverable amount (value in use) of the CGUs to be sales price and volume, and discount rate. Management projected 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 CGU being tested. The Company considered the following pre-tax real discount rates: 6.97% for 2022 and 6.05% for 2021.

(c) Impairment test results and sensitivity analysis

No impairment losses were recorded based on the impairment tests performed for the years ended on December 31, 2022 and 2021.

The Company also performed a sensitivity analysis for each of the key assumptions used in determining the value in use of its CGU. The sensitivity analysis has been performed for each key assumption individually and does not consider a combination of adverse changes in more than one key assumption. Based on the analysis performed, the Company's management concluded that there are no reasonably possible changes in key assumptions that would result in significant risk of material losses to impairment of non-financial assets, including goodwill.

3.5 Asset retirement obligation - ARO (Note E12):

When it is probable that cash outflows will be required, the Group recognizes obligations at fair value for asset retirements, against the respective intangible assets. The Group considers the use of accounting estimates related to the recovery of degraded areas and the costs to close a mine as critical accounting practices, since they involve significant provision amounts. These estimates involve various assumptions such as interest rates, inflation, regulatory requirements and the useful life of the asset, considering the current depletion stage, the costs involved, and the dates established for the depletion of each mine. These estimates are annually reviewed by the Group.

3.6 Provisions for tax, civil, labour and environmental contingencies (Note E12):

The Group is a party to ongoing tax, civil, labour and environment lawsuits arising in the normal course of business that are pending at the reporting date. The provision recognized to cover potential losses arising from ongoing lawsuits is established and updated based on management's evaluation, is supported by the opinions of external legal advisors and requires a high level of judgment.

3.7 Employee benefits (Note E13):

The present value of the pension obligations or rights depends on a number of factors that are determined on an actuarial basis using several assumptions. Among the assumptions used in determining the net cost for actuarial obligations or rights is the discount rate, computed based on the return rates offered by the government. The actuarial obligations are held in the currency in which the benefits will be paid and that has maturity approximating the maturities of the respective healthcare and defined benefit plan obligations.

3.8 Income taxes (Note E14):

The income tax benefit or expense for the year comprise the current and deferred taxes. These taxes are calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the entities operate and generate taxable income, and are recognized in the statement of income, except to the extent that they relate to items recognized directly in equity.

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 on the reporting date.

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 and contributions are determined 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 the recoverable balances of tax losses. Deferred tax assets are periodically analyzed to check their recoverability.

Section D – Risk management

1 Seasonality of cement operations

The demand for cement, ready-mix concrete, aggregates and other construction materials is seasonal, due to cyclical activity in the construction sector affected by climatic conditions. This has a direct impact in the Company's operating performance throughout the year.

The Company's market is located in North America, therefore the operating sales usually suffer a decrease during the first quarter of the year and the month of December as well, reflecting the negative winter effects, and an increase in the second and third quarters of the year, reflecting the positive effects of summer season. This seasonality can be particularly visible in severe winter seasons.

2 Environment risk management

The Group and its subsidiaries and associates operate in various segments and, consequently, their activities are subject to local, state, national and international environmental laws and regulations, treaties and conventions, regarding the regulation of activities, establishing measures of mitigation, compensation, management and monitoring, including those that regulate the obligations of the owner of the venture and/or activity relating to environmental protection. The violations of the environmental regulations in force expose the violator(s) to administrative assessments, such as significant fines and penalties, and may require technical measures or investment to ensure the compliance with the mandatory environmental standards.

The Group reviews periodically its environmental risk assessment and addresses the risks, either through risk mitigation actions or cost estimation actions, to clear the risks identified. These risks are usually recorded as asset retirement obligations (Note E12).

In thousands of U.S. dollars, unless otherwise stated

3 Financial risk management

The Company does not have relevant risk related to the gain or loss involving currency and interest rate risk, credit risk and liquidity risk apart from a debt held in US dollars.

3.1 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.

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 – “Financial instruments” 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 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.

(b) Analysis

									01/01/2022 to 12/31/2022
Investor		Hedged item				Instrument			
Entity	Currency	Investment	Currency	Percentage designated	Underlying investment USD	Currency	Original amount	Carrying amount (Note E11(b))	Change in carrying amount of USD borrowing as a result of foreign currency movements since 1 January used to determine hedge inefectiveness, recognised in OCI (Note E15(c))*
St. Marys Cement Inc. (Canada)	CAD	VCNA US, Inc.	USD	44.96%	1,112,057	USD	500,000	505,669	(31,815)
									(31,815)

									01/01/2021 to 12/31/2021
Investor		Hedged item				Instrument			
Entity	Currency	Investment	Currency	Percentage designated	Underlying investment USD	Currency	Original amount	Carrying amount (Note E11(b))	Change in carrying amount of USD borrowing as a result of foreign currency movements since 1 January used to determine hedge inefectiveness, recognised in OCI (Note E15(c))*
St. Marys Cement Inc. (Canada)	CAD	VCNA US, Inc.	USD	44.41%	1,125,990	USD	500,000	504,315	2,833
									2,833

*The designated hedge transaction was effective, and therefore no translation gain or loss was recognized in the current consolidated statement of income and comprehensive income. The balance reclassified to OCI as a result of the hedge effectiveness for the current period amounted to an expense of ($31,815) (December 31, 2021 – $2,833).

The gain or loss recognized in other comprehensive income presented above is net of income tax, as detailed in Note E14.

In thousands of U.S. dollars, unless otherwise stated

3.2 Liquidity risk

The amounts below represent the contractual undiscounted and future estimated cash flows, which include interest to be incurred and, accordingly, do not reconcile directly with the amounts presented in the balance sheet.

	Less than one year	Between one and three years	Between three and five years	Over 5 years	Total
At December 31, 2022					
Borrowing	28,010	27,292	561,559	-	616,861
Lease liabilities	21,767	23,789	16,280	149,391	211,227
Trade payables	225,127	-	-	-	225,127
Salaries and payroll charges	26,650	-	-	-	26,650
	301,554	51,081	577,839	149,391	1,079,865

	Less than one year	Between one and three years	Between three and five years	Over 5 years	Total
At December, 2021					
Borrowings	29,183	104,504	54,645	514,236	702,568
Lease liabilities	35,036	25,682	48,784	138,438	247,940
Trade payables	224,217	-	-	-	224,217
Salaries and payroll charges	38,801	-	-	-	38,801
	327,237	130,186	103,429	652,674	1,213,526

4 Financial instruments

4.1 Classification, recognition and measurement

The Group classifies its financial assets based on the business model for which the financial assets were acquired and determines their classification upon initial recognition, in the following categories:

(i) Financial instruments at amortized cost

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

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

Financial instruments where the contractual cash flows are solely payments of principal and interest and the objective of the Group’s business model is achieved both by collecting contractual cash flows and selling financial assets. The instruments in this classification are measured at fair value through other comprehensive income.

(iii) Financial instruments 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.

4.2 Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount presented in the consolidated balance sheets when there is a legally enforceable right to offset the recognized amounts and when there is an intention to settle on a net basis or 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 and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

In thousands of U.S. dollars, unless otherwise stated

4.3 Analysis

The financial instruments of the Group are classified as follows:

			31-Dec-2022	
	Note	Amortized cost	Fair value through other comprehensive income	Total
Current assets				
Cash and cash equivalents	E1	80,284	-	80,284
Trade receivables	E2	2,442	-	2,442
		82,726	-	82,726
Non-current assets				-
Notes and capital related to SPE	E3	41,731	-	41,731
Financial investments			190	190
		41,731	190	41,921
Current liabilities				
Borrowing	E11	11,762	-	11,762
Lease liabilities	E10(c)	19,844	-	19,844
Accounts payable and accrued liabilities		225,127	-	225,127
Salaries and benefits		26,650	-	26,650
		283,383	-	283,383
Non-current liabilities				
Borrowing	E11	495,868	-	495,868
Lease liabilities	E10(c)	184,204	-	184,204
		680,072	-	680,072

In thousands of U.S. dollars, unless otherwise stated

	Note	Amortized cost	Fair value through other comprehensive income	Total 31-Dec-2021
Current assets				
Cash and cash equivalents	E1	133,327	-	133,327
Trade receivables	E2	21,992	-	21,992
		155,319	-	155,319
Non-current assets				-
Notes and capital related to SPE	E3	37,741	-	37,741
Financial investments		-	637	637
		37,741	637	38,378
Current liabilities				
Borrowing	E11	12,068	-	12,068
Lease liabilities	E10(c)	27,618	-	27,618
Accounts payable and accrued liabilities		224,217	-	224,217
Salaries and benefits		38,801	-	38,801
		302,704	-	302,704
Non-current liabilities				
Borrowing	E11	542,537	-	542,537
Lease liabilities	E10(c)	184,925	-	184,925
		727,462	-	727,462

4.4 Fair value of financial instruments

	Note	Price quoted in an active market Level 1	Fair value 31-Dec-2022
Assets			
Financial investments		190	190
		190	190
Liabilities			
Borrowing	E11(b)	507,630	507,630
		507,630	507,630

In thousands of U.S. dollars, unless otherwise stated

	Note	31-Dec-2021	
		Price quoted in an active market	
		Level 1	Fair value
Assets			
Financial investments		637	637
		637	637
Liabilities			
Borrowing	E11(b)	554,605	554,605
		554,605	554,605

All the financial instruments not included in the table above are measured at amortized cost and the Company 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. The balance of borrowings related to bond Voto27 have been reclassed to Level 1, as it is listed on a secondary markets for which there have been recent active transactions.

Section E – Relevant notes

1 Cash and cash equivalents

(a) Accounting policies

Cash and cash equivalents include cash on hand, deposits held with banks and other highly liquid investments and which are readily convertible into a known amount of cash and subject to immaterial risk of change in value.

(b) Analysis

	31-Dec-2022	31-Dec-2021
$CDN Cash at bank and on hand	27,608	15,376
$US Equivalent	20,328	12,149
$US Cash at bank and on hand	59,956	121,178
	80,284	133,327

2 Trade receivables

(a) Accounting policies

Accounts receivable corresponds to the amounts receivable from sales made in the course of the Group's normal business. It is recognized at fair value and subsequently measured at amortized cost using the effective interest rate method, less allowance for expected credit loss.

In thousands of U.S. dollars, unless otherwise stated

(b) Analysis

	Note	31-Dec-2022	31-Dec-2021
Trade accounts receivable		84	22,512
Non-trade accounts receivable		3,227	1,512
Due from related parties	E6	1,307	613
		4,618	24,637
Provision for expected credit loss		(2,176)	(2,645)
		2,442	21,992

The fair value of current accounts receivable approximates their carrying amount due to their short-term nature.

(c) Changes in the allowance for expected credit loss

	31-Dec-2022	31-Dec-2021
Balance at the beginning of the period	2,645	603
Provision and reversals for receivables expected credit loss	(413)	91
Superior acquisition	-	801
McInnis acquisition	-	1,146
Currency translation adjustments	(56)	4
Balance at the end of the period	2,176	2,645

The creation and release of allowance for expected credit loss have been included in “Selling, general and administrative expenses” in the consolidated statements of income and comprehensive income.

Subsequent recoveries of amounts previously written off are credited against the same line item.

Amounts charged to the allowance for expected credit loss are generally written off when there is no expectation of recovering additional cash.

3 Securitization

(a) Accounting policies

In March 2016, the subsidiary St. Marys 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 Company. 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 securitization operation was renewed, with the current maturity date being March 2024, and the amount of the credit facility to USD 225 million (on December 31, 2020 – USD 150 million).

St. Mary´s 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, the Company´s maximum exposure to loss from its continuing involvement in the derecognized financial assets would correspond to its share in junior subordinated certificates.

St. Marys sells receivables to the SPE on a daily and revolving basis. When the receivables are transferred to the SPE, it derecognizes all of the receivables, 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 to St. Marys the acquisition cost of receivables, which is recorded as a financial expense by the Company.

In thousands of U.S. dollars, unless otherwise stated

St. Marys 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. The SPE deducts from the amount transferred to St. Marys the acquisition cost of receivables, which is recorded as a financial expense by the Company (Note 34). In 2021 and 2020, the Company´s gains and losses considered the lines of securitization commissions, reversal of guarantee on securitization, net of provisions, and securitization charges, as presented in Note 34.

Taking into consideration the analysis performed on the power and rights of VCNA regarding the SPE, as well as the sufficient exposure to variable returns, and based on significant judgement, VCNA is acting as an agent and in accordance with IFRS 10 “Consolidated financial statements”, the SPE is not controlled by the Company and therefore is not included in the consolidated financial statements, balances transacted with the SPE are presented as balances with related parties (Note 16).

The Company 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 the Company 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 the Company has retained, which is not materially different from its fair value, given the nature of the receivables.

St. Mary’s 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 St. Mary´s 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 asset and non-current liabilities 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 reaches less than twelve months and the Company does not have the intention to renew the transaction.

(b) Analysis

	Note	31-Dec-2022	31-Dec-2021
Notes continuing to be recognized		33,886	29,908
Capital contribuition in the SPE		7,845	7,833
Notes and capital related to the SPE	E3	41,731	37,741
Security guarantee		(17,516)	(14,029)
Junior note guarantee losses		(4,413)	(2,791)
Junior subordinated note	E12	(21,929)	(16,820)
Net carrying amount of the continuing involvement		19,802	20,921

In thousands of U.S. dollars, unless otherwise stated

4 Inventories

(a) Accounting policies

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

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

The Group and its investees, at least once a year, carry out a physical inventory count. Inventory adjustments are recorded under Cost of goods sold and services rendered.

(b) Analysis

	31-Dec-2022	31-Dec-2021
Raw materials	36,247	35,747
Fuels	44,442	21,799
Semi-finished product	71,183	53,074
Finshed product	20,316	36,931
Spare parts / maintenance materials	50,927	56,121
Less: Provision for obsolescence	(17,220)	(17,494)
	205,895	186,178

(c) Changes in the provision for inventory losses

	31-Dec-2022	31-Dec-2021
Balance at the beginning of the period	17,494	14,050
Addition	6,183	8,625
Reversals / write-off	(5,954)	(5,225)
Translation differences	(503)	44
Balance at the end of the period	17,220	17,494

5 Prepaid expenses

(a) Accounting policies

An asset is recognized in the consolidated balance sheets when future economic benefits are likely to be generated for the Group and its cost or value can be reliably measured. This is presented in the consolidated balance sheets based on the current and non-current classification.

An asset is classified as current when: (i) it is expected to be realized or consumed in the normal operating cycle; (ii) it is held mainly for trade; and (iii) it is expected to be realized within 12 months after the reporting period. All other assets are classified as non-current.

In thousands of U.S. dollars, unless otherwise stated

(b) Analysis

		31-Dec-22		31-Dec-21
Current assets				
Prepaid insurance	$	11,762	$	9,828
Licences, fees and dues		1,711		2,240
Prepaid - IT		622		327
Barge prepaid		767		576
Prepaid rent		-		81
		14,862		13,052
Non-current assets				
Prepaid royalties		5,963		5,847
Prepaid rent		728		799
Demolition cost		2,580		2,722
		9,271		9,368
	$	24,133	$	22,420

6 Related party transactions

(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 counterparties or losses to the Group. In the normal course of operations, the Group enters into agreements with related parties (associates, joint ventures and shareholders) related to the purchase and sale of products, loans, sale of raw materials and services.

(b) Analysis

		Receivables		Liabilities	
	Note	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021
Sister companies, associates or joint ventures					
Votorantim Cimentos EAA Inversiones, S.L.		38	41	-	-
VCNA SPE, LLC	E3	41,731	37,741	21,929	16,820
Hutton Transport Limited		29	31	-	-
Midway Group, LLC		1,240	541	1,054	966
		43,038	38,354	22,982	17,786
Current		1,307	613	22,982	966
Non-current		41,731	37,741	-	-
		43,038	38,354	22,982	966

	Sales		Purchases		Financial expense (income)	
	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021
Sister companies, associates or joint ventures						
VCNA SPE, LLC (Note E19b)	-	-	-	-	11,320	(29)
RMC Leasing, LLC	-	-	1,543	1,410	-	-
Hutton Transport Limited	-	-	40,216	33,517	-	-
Superior Materials Holdings, LLC (I)	-	14,816	-	-	-	-
Midway Group, LLC	9,181	8,503	-	-	-	-
	9,181	23,319	41,759	34,927	11,320	(29)

In thousands of U.S. dollars, unless otherwise stated

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

Instrument	Debtor	Guarantor	Percentage guaranteed by the Company	31-Dec-2022 Debt	31-Dec-2022 Amount guaranteed	31-Dec-2021 Debt	31-Dec-2021 Amount guaranteed
4131 Loan to February, 2025*	Votorantim Cimentos S.A.	St. Marys Cement Inc. (Canada)	0%	-	-	100,000	100,000
4131 Loan to March, 2025*	Votorantim Cimentos N/NE S.A.	St. Marys Cement Inc. (Canada) & Votorantim Cimentos S.A.	0%	-	-	50,000	50,000
4131 Loan to March, 2025*	Votorantim Cimentos S.A.	St. Marys Cement Inc. (Canada)	100%	50,023	50,023	50,000	50,000
Committed credit facility	Votorantim Cimentos Internacional S.A., Votorantim Cimentos EAA Inversiones, and St. Marys Cement Inc. (Canada)	St. Marys Cement Inc. (Canada) & Votorantim Cimentos S.A.	100%	-	-	45,803	45,803
				50,023	50,023	245,803	245,803

*These balances are not recorded in the Company's balance sheet.

(d) Debts issued by the Company and its subsidiaries guaranteed by related parties

Instrument	Guarantor	Percentage guaranteed by the Company	31-Dec-2022	31-Dec-2021
Voto 2027	Votorantim Cimentos S.A.	100%	512,139	512,139
Committed credit facility (Note A3.3)	Votorantim Cimentos S.A.	100%	-	45,803
			512,139	557,942

(e) Key management compensation

The Group's management includes the Board of Directors and the Board of Executive Officers. The expenses for key management compensation, including all benefits, are summarized as follows:

	31-Dec-22	31-Dec-21
Salaries and remuneration	$ 7,169	$ 5,769
Post-employment benefits	442	415
Statutory contributions	195	171
	$ 7,806	$ 6,355

7 Investments accounted for using the equity method

(a) Accounting policies

The accounting policies for investments are presented in Note C2.5.

(b) Analysis

	Information as at December 31, 2022			Income from investments		Investment balance	
	Net equity	Net income for the period	Percentage of voting and total capital (%)	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021
Joint ventures							
Hutton Transport Limited (i)	12,182	5,816	25.00	1,454	1,357	5,225	5,497
Superior Materials Holdings, LLC	-	-	50.00	-	3,057	-	-
Midway Group, LLC	15,070	2,875	50.00	1,437	2,076	7,535	7,597
RMC Leasing, LLC	7,440	271	50.00	135	88	3,720	4,586
				3,026	6,578	16,480	17,680

(i) The investment in Hutton Transport Limited considers, as at December 31, 2022, the amount of $2,179 (2021 - $2,179) relating to the goodwill recognized on the acquisition of the investment.

In thousands of U.S. dollars, unless otherwise stated

(c) Changes in the investments

	31-Dec-2022	31-Dec-2021
Balance at the beginning of the period	17,680	33,171
Income from investments	3,026	6,578
Approved dividends	(2,881)	(7,859)
Currency translation	(345)	166
Superior acquisition	-	(14,376)
Return of capital - RMC Leasing, LLC	(1,000)	-
Balance at the end of the period	16,480	17,680

(d) Information on investees

Below is a summary of the selected financial information of the Group's joint ventures for the years ended:

				31-Dec-22
		Hutton Transport Limited	Midway Group, LLC	RMC Leasing, LLC
Place of operation		Canada	USA	USA
Main activity		Transportation services	Ready-mix concrete	Lease holding
Ownership %		25%	50%	50%
Financial position				
Current assets		$ 12,047	$ 12,116	$ 1,000
Non-current assets		8,332	6,172	6,440
Current liabilities		3,646	3,219	-
Non-current liabilities		4,551	-	-
Shareholders' equity		12,182	15,070	7,440
Income				
Revenue		26,323	34,464	1,546
Cost of goods sold		(19,890)	(31,221)	(1,275)
Other income (expense)		(714)	(370)	-
Financial results, net		97	2	-
Current period profit		$ 5,816	$ 2,875	$ 271

				31-Dec-21
	Hutton Transport Limited	Superior Materials Holdings, LLC	Midway Group, LLC	RMC Leasing, LLC
Place of operation	Canada	USA	USA	USA
Main activity	Transportation services	Ready-mix concrete	Ready-mix concrete	Lease holding
Ownership %	25%	50%	50%	50%
Financial position				
Current assets	$ 12,962	$ -	$ 10,578	$ 1,454
Non-current assets	6,434	-	7,150	7,718
Current liabilities	3,398	-	2,533	-
Non-current liabilities	3,345	-	-	-
Shareholders' equity	12,653	-	15,195	9,172
Income				
Revenue	24,285	66,534	34,814	-
Cost of goods sold	(18,301)	(57,556)	(30,680)	(1,207)
Other income (expense)	(672)	(2,864)	18	1,383
Financial results, net	116	-	-	-
Current period profit	$ 5,428	$ 6,114	$ 4,152	$ 176

In thousands of U.S. dollars, unless otherwise stated

8 Property, plant and equipment

(a) Accounting policies

Property, plant and equipment are stated at historical cost of acquisition or construction less accumulated depreciation. Historical cost includes borrowing costs related to the acquisition or construction of qualifying assets.

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

All other repairs and maintenance are charged to the consolidated statements of income and comprehensive 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 criteria adopted by the Group in order to determine the recoverable amount (note C3.4).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognized within "Other operating income (expense), net" in the consolidated statements of income and comprehensive income (Note E18).

(b) Analysis

	Land	Land improvements & buildings	Equipment	Vehicles	Construction in progress	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Balance at the beginning of the period							
Cost	104,878	876,793	1,675,745	233,706	85,949	2,977,071	1,524,014
Accumulated depreciation	-	(450,170)	(1,058,170)	(141,178)	-	(1,649,518)	(830,485)
Net balance	104,878	426,623	617,575	92,528	85,949	1,327,553	693,529
Acquisitions	4,925	2,259	58,009	21,800	41,462	128,455	111,497
Business acquisitions	-	-	-	-	-	-	628,396
Disposals	(2,654)	(442)	(1,438)	(35)	-	(4,569)	(1,220)
Depreciation (i)	-	(21,302)	(68,908)	(20,825)	-	(111,035)	(86,752)
Translation differences	(4,140)	(17,784)	(27,971)	(1,285)	(2,342)	(53,522)	(17,897)
Balance at the end of the period	103,009	389,354	577,267	92,183	125,069	1,286,882	1,327,553
Cost	103,009	860,826	1,704,345	254,186	125,069	3,047,435	2,977,071
Accumulated depreciation	-	(471,472)	(1,127,078)	(162,003)	-	(1,760,553)	(1,649,518)
Net balance	103,009	389,354	577,267	92,183	125,069	1,286,882	1,327,553
Average annual depreciation rates %		18	15	7			

(i) Depreciation expense of $105.6M is included in "Cost of goods sold" and $5.4M is included in "General and administrative expenses".

In thousands of U.S. dollars, unless otherwise stated

(c) Construction in progress

	31-Dec-2022	31-Dec-2021
Sustaining (i)	54,453	40,705
Modernization (ii)	43,018	39,260
Health & Safety	16,508	4,933
Expansion (iii)	11,090	1,051
	125,069	85,949

(i) Sustaining investments relate to the acquisition or replacement of industrial machinery and equipment linked to the operation of plants, mobile equipment and mines, with the purpose of improving reliability and continuity with the application of the same or new technologies.

(ii) Investments in industrial modernization mainly related to the use of new technologies or to the optimization of equipment and processes to generate improved financial benefits (reduced costs, improved revenue generation, improved return on investment and cashflow).

(iii) Expansion related investments are mainly related to the construction of, growth in, or improvement of the Company's assets in order to increase of the installed capacity, bring new products to markets or to enter new markets.

9 Intangible assets

(a) Accounting policies

(i) Goodwill

Goodwill is measured by the difference between the amount paid and/or payable for the acquisition of a business and the net amount of the fair value of the assets and liabilities of the entity acquired. Goodwill on acquisitions of subsidiaries is recorded as Intangible assets in the consolidated financial statements. Goodwill on acquisition of joint ventures and other investments accounted for through equity method are recorded together with the Investment balances (Note E7). Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to CGUs for the purpose of impairment testing. The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the business combination in which the goodwill arose.

(ii) Exploration rights

Exploration costs, including any material costs incurred prior to securing the legal right to explore properties, are expensed in the period in which they are incurred. Exploration rights purchased through acquisition or expenses incurred following the issuance of a legal right to explore properties that are intangible in nature are capitalized as an intangible asset. Exploration rights capitalized are amortized over the expected life of the extractable reserves. These rights are assessed for impairment following the guidance of IFRS 6- Exploration for and evaluation of mineral resources and IAS 36- Impairment of assets.

(iii) Computer software

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

In thousands of U.S. dollars, unless otherwise stated

(iv) Contractual customer relationships and non-competition agreements

Contractual customer relationships and non-compete agreements acquired in a business combination are recognized at fair value at the acquisition date. The contractual customer relations and non-compete agreements 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

The Group has decommissioning obligations as a result of their natural resources extraction activities. The accounting policies related to the liability entry of the Asset Retirement Obligations are disclosed in Note E12.

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 Company periodically reviews the useful lives of its mines and the estimated future cost necessary for the recovery of the explored area.

(b) Analysis

	Goodwill	Computer software	Exploration rights	ARO	Customer relationships and non-compete	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Balance at the beginning of the period							
Cost	295,361	30,913	480,302	54,157	121,274	982,007	757,610
Accumulated depreciation	-	(27,831)	(171,259)	(18,309)	(71,357)	(288,756)	(170,837)
Net balance	295,361	3,082	309,043	35,848	49,917	693,251	586,773
Acquisitions	-	-	-	-	-	-	1,622
Business acquisitions	-	-	-	-	-	-	114,508
Disposals	(843)	-	(2,291)	(27)	(89)	(3,250)	-
Adjustments	-	-	-	2,714	-	2,714	(1,302)
Transfers	-	4,069	(347)	2,142	(691)	5,173	-
Amortization (i)	-	(2,404)	(6,185)	(2,738)	(7,690)	(19,017)	(18,175)
Translation differences	-	(230)	(6,263)	(4,855)	(0)	(11,348)	9,825
Balance at the end of the period	294,518	4,517	293,957	33,084	41,447	667,523	693,251
Cost	294,518	34,752	471,401	54,131	120,494	975,296	982,007
Accumulated depreciation	-	(30,235)	(177,444)	(21,047)	(79,047)	(307,773)	(288,756)
Net balance	294,518	4,517	293,957	33,084	41,447	667,523	693,251
Average annual amortization rates %		5	2	12	10		

(i) Amortization expense of $18.1M is included in “cost of sales” and $0.9M is included in “general and administrative expenses”.

10 Lease

(a) Accounting policies

For the agreements considered as scope of the leasing standard, the Group recognized liability at the date at which the leased asset is available for use by the group, a lease liability that reflects the future payments and 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 option of extension, term covered by the option of termination and, mainly, management’s intention as to the term of stay 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 acquisition cost by the Group of debt with characteristics similar to those determined by the agreements. Settlement of liabilities occurs according to the flow of payments made to the lessor.

As permitted by the standard, the following are disregarded of the scope: (i) short-term leases (less than 12 months); and (ii) contracts with amounts below $5K. When identifying rights-of-use assets within the scope of identified contracts, the following are also disregarded: (i) contracts with variable payments; (ii) contracts in which the lease asset was considered as non-identifiable; (iii) contracts in which the Group is not entitled to obtain substantially all the economic benefits arising from the use of the asset; and (iv) contracts in which the Group does not have substantial control over the definition of the use of the asset. For these leases, the accounting occurs on a monthly basis with the right to use the leased asset being directly expensed in the consolidated statements of income and comprehensive income, which are shown on note E17, Expenses by Nature, as part of row "Rents and leases".

In thousands of U.S. dollars, unless otherwise stated

The amortization of the right-of-use asset is recognized as part of cost of sales or as general and administrative expenses, according to the characteristics of the asset, and the interest expense for updating the present value of the lease liability is recorded in the financial result.

(b) Right-of-use assets

Balance at the beginning of the period	Land & Buildings	Machinery & Equipment	Vehicles	Barges	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Cost	98,851	18,658	31,563	151,017	300,089	107,175
Accumulated depreciation	(9,676)	(10,037)	(22,332)	(47,647)	(89,692)	(35,036)
Net balance	89,175	8,621	9,231	103,370	210,397	72,139
Acquisitions	5,205	6,391	357	15,384	27,337	14,016
Business acquisitions	-	-	-	-	-	154,875
Disposals	-	-	-	-	-	(876)
Amortization (i)	(4,545)	(7,638)	(3,989)	(24,939)	(41,111)	(28,266)
Currency translation adjustment	(2,421)	(365)	1,231	(5,754)	(7,309)	(1,491)
Balance at the end of the period	87,414	7,009	6,830	88,061	189,314	210,397
Cost	101,635	24,684	33,151	160,647	320,117	300,089
Accumulated depreciation	(14,221)	(17,675)	(26,321)	(72,586)	(130,803)	(89,692)
Net balance	87,414	7,009	6,830	88,061	189,314	210,397
Average annual amortization rates %	10	5	5	9		

(i) Amortization expense of $41.1M is included in "cost of sales".

(c) Lease liabilities

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Balance at the beginning of the period	212,543	74,773
Additions	27,337	14,016
Disposal	-	(876)
Payments	(37,304)	(24,058)
Interest expense (Note E19)	7,657	8,138
Interest paid	(7,420)	(8,138)
McInnis acquisition	-	145,870
Superior acquisition	-	9,005
Exchange variations	1,235	(6,187)
Balance at the end of the period	204,048	212,543
Current	19,844	27,618
Non-current	184,204	184,925
	204,048	212,543

The schedule of repayments of the Group's lease liabilities is as follows:

In thousands of U.S. dollars, unless otherwise stated

		31-Dec-2022		31-Dec-2021
	Amortized	Balance	Amortized	Balance
12 months or less	9.7%	19,844	13.0%	27,618
1-5 years	22.7%	46,338	31.2%	66,251
Over 5 years	67.6%	137,866	55.8%	118,674
	100.0%	204,048	100.0%	212,543

11 Borrowings

(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 consolidated statements of income and comprehensive income over the period of the borrowings using the effective interest rate method.

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.

(b) Analysis

		Current		Non-current		Total	
Type	Average annual cost	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021	31-Dec-2022	31-Dec-2021
CAD Revolver	CDOR + 1.20%	-	-	-	20,000	-	20,000
USD Equivalent		-	-	-	15,803	-	15,803
USD Revolver	SOFR + 1.20%	-	-	-	30,000	-	30,000
Total Revolver		-	-	-	45,803	-	45,803
Bond Payable	5.8%	10,698	10,784	494,971	493,531	505,669	504,315
Mortgages Payable	3.6%	1,064	1,284	897	3,203	1,961	4,487
		11,762	12,068	495,868	542,537	507,630	554,605

(i) On October 3, 2016, St. Marys Cement Inc. (Canada) issued bonds totalling $500,000. The bonds mature in January 2027 and bear interest at a rate of 5.75% per annum, payable on a semi-annual basis. The issuance was guaranteed by VCSA.

(ii) The mortgages payable relates to the purchase of several aggregate properties between 2006 and 2025. The agreements allow the Group to defer a portion of the payments until such time as the aggregate is extracted from the ground.

(c) Maturity profile

		31-Dec-2022		31-Dec-2021
	Amortized	Balance	Amortized	Balance
6 months or less	2.37%	12,043	2.18%	12,108
6-12 months (i)	-0.06%	(281)	-0.01%	(40)
1-5 years	97.69%	495,868	7.67%	42,537
Over 5 years	0.00%	-	90.16%	500,000
	100.00%	507,630	100.00%	554,605

(i) Negative balances relate to amortization of bond upfront fee.

In thousands of U.S. dollars, unless otherwise stated

(d) Movements

The changes for the period are as follows:

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Balance at the beginning of the period	554,605	520,820
New borrowings	375,478	187,086
McInnis acquisition	-	135,607
Exchange rate variations	(1,933)	288
Interest expense (E20)	31,125	30,211
Interest paid	(31,291)	(30,197)
Amortization of financing costs	1,355	1,275
Principal paid	(421,709)	(290,485)
Balance at the end of the period	507,630	554,605

(e) Credit line

Credit line	Company	Start date	Maturity	Credit limit	Amount outstanding	Amount available
Committed Credit Facility	VCI / VCEAA / St Marys	Jun/22	Jun/27	300,000	-	300,000
Global Revolving Credit Facility	VCSA / VCI / VCEAA / St Mary's	Sep/21	Sep/26	250,000	-	250,000
					-	550,000

12 Provisions

(a) Accounting policies

(i) Provision for legal claims

The Group is party to ongoing tax, civil, labour and environmental lawsuits and are contesting these matters both at the administrative and judicial levels.

Provision for legal claims is recognized when: (i) the Group 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. The losses classified as possible are not recorded in the consolidated balance sheets but are disclosed in the explanatory notes. The contingencies for which losses are classified as remote are not provisioned nor disclosed, except when, due to the visibility of the process, the Group considers its disclosure justified. The classification of losses as possible, probable or remote is supported by the advice of the Groups 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 consolidated statements of income and comprehensive income. Provision does not include future operating losses.

(ii) Asset retirement and other obligations

The measurement of asset retirement obligations involves judgment on 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 due to the impossibility of return to these pre-existing conditions. These obligations arise from the environmental degradation of the occupied area, object of the operation or from formal commitments assumed with the environmental agency, under which the degradation must be compensated. The retirement of an asset occurs when it is permanently retired through stoppage, sale or disposal.

In thousands of U.S. dollars, unless otherwise stated

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 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 asset retirement obligation is discounted to its present value, adding the country risk and inflation differential to the used rate. The liability recorded is periodically updated based on these discount rates, which are annually reviewed by the Group.

The total undiscounted amount of the estimated cash flows required to restore/recover the environment is approximately $61,636. An average inflation factor of 2.4% has been applied to obtain the future value of the restore/recover costs, which has then been discounted at an average rate of 2.8% (2021 – 1.51%) to obtain the present value of the obligation. The expected timing of the outflows associated with the restore/recover process is within the range from 1 to 65 years.

(b) Analysis

	Asset retirement obligation	Preferred shares classified as a long-term liability	A/R securitization (Note E3)	Total
Balance - December 31, 2020	22,849	11,030	14,735	48,614
Charged to the income statement	4,364	-	-	4,364
Change in provisions/estimates	1,508	-	2,085	3,593
McInnis acquisition	15,417	-	-	15,417
Exchange for common shares	-	(11,174)	-	(11,174)
Settlements	(6,335)	-	-	(6,335)
Exchange differences	41	144	-	185
Balance - December 31, 2021	37,844	-	16,820	54,664
Charged to the income statement	717	-	-	717
Change in provisions/estimates	2,714	-	5,109	7,823
Settlements	(4,725)	-	-	(4,725)
Exchange differences	(759)	-	-	(759)
Balance - December 31, 2022	35,791	-	21,929	57,720

13 Pension plans

(a) Accounting policies

(i) Pension obligations

The Group participates in pension plans managed by a private pension entity, which provide post-employment benefits to employees determined through periodic actuarial calculations. The Group has defined benefit plans and defined contribution plans.

The liability 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 the 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 market interest rates, which are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligations. Actuarial gains and losses, also called remeasurements arising from changes in actuarial assumptions and amendments to pension plans, are recognized in Other comprehensive income.

Past service costs are recognized immediately in profit or loss, 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.

For defined contribution plans, the Group pays contributions to the managers of the pension plans on a compulsory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses 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.

In thousands of U.S. dollars, unless otherwise stated

(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

The table below shows how the balances and activities related to post-employment benefits are allocated in the Company and its subsidiaries' consolidated financial statements.

	31-Dec-22	31-Dec-21
Rights recorded in the consolidated balance sheets		
Defined pension benefits	$ 23,804	$ 38,206
Obligations recorded in the consolidated balance sheets		
Supplementary pension plans	8,580	13,467
Post-employment medical benefits	28,057	40,626
	36,637	54,093
Income statement charge included in operating profit for:		
Defined pension benefits	(248)	26
Post-employment medical benefits	2,520	2,460
	2,272	2,486
Remeasurements for:		
Defined pension benefits	5,842	(7,934)
Post-employment medical benefits	(12,700)	(4,137)
Deferred tax income	(48)	2,274
	$ (6,906)	$ (9,797)

(c) Defined benefit pension plans

The Group operates defined benefit pension plans in Canada and the U.S. based on employee pensionable remuneration and length of service. The majority of the plans are externally funded. Plan assets are held in trusts, foundations or similar entities, governed by local regulations and practice in each country, as is the nature of the relationship between the Group and the trustees (or equivalent) and their composition.

In thousands of U.S. dollars, unless otherwise stated

The amounts recognized in the consolidated balance sheets are determined as follows:

	31-Dec-22	31-Dec-21
Present value of funded obligations	$ 102,844	$ 142,957
Fair value of plan assets	(126,753)	(181,163)
Surplus of funded plans	(23,909)	(38,206)
Present value of unfunded obligations	8,580	13,467
Impact of change in asset ceiling / onerous liability	104	-
Net defined benefit liability (asset)	$ (15,225)	$ (24,739)

The movement in the defined benefit obligation and plan assets over the years ended December 31, 2022 and 2021 is as follows:

	Present value of obligation	Fair value of plan assets	Total	Impact of change in asset ceiling / onerous liability	Total
Balance - December 31, 2020	$ 175,768	$ (193,517)	$ (17,749)	$ -	$ (17,749)
Current service cost	85	-	85	-	85
Interest expense/(income)	4,295	(4,354)	(59)	-	(59)
	4,380	(4,354)	26	-	26
Remeasurement:					
Return on plan assets, excluding amounts included in interest expense/(income)	-	4,171	4,171	-	4,171
(Gain)/loss from change in demographic assumptions	8	-	8	-	8
(Gain)/loss from change in financial assumptions	(12,236)	-	(12,236)	-	(12,236)
Experience (gain)/loss	123	-	123	-	123
	(12,105)	4,171	(7,934)	-	(7,934)
Exchange differences	1,272	(1,383)	(111)		(111)
Contributions					
Employers	-	1,009	1,009	-	1,009
Payment from plans					
Benefit payments	(12,891)	12,911	20	-	20
Balance - December 31, 2021	$ 156,424	$ (181,163)	$ (24,739)	-	(24,739)

	Present value of obligation	Fair value of plan assets	Total	Impact of change in asset ceiling / onerous liability	Total
Balance - December 31, 2021	$ 156,424	$ (181,163)	$ (24,739)	$ -	$ (24,739)
Current service cost	87	-	87	-	87
Interest expense/(income)	4,482	(4,817)	(335)		(335)
	4,569	(4,817)	(248)	-	(248)
Remeasurement:					
Return on plan assets, excluding amounts included in interest expense/(income)	-	37,663	37,663	-	37,663
(Gain)/loss from change in demographic assumptions	316	-	316	-	316
(Gain)/loss from change in financial assumptions	(31,368)	-	(31,368)	-	(31,368)
Experience (gain)/loss	(873)	-	(873)	-	(873)
Change in asset ceiling, excluding amounts included in interest expense	-	-	-	104	104
	(31,925)	37,663	5,738	104	5,842
Exchange differences	(8,066)	9,201	1,135		1,135
Contributions					
Employers	-	2,770	2,770	-	2,770
Payment from plans					
Benefit payments	(9,578)	9,593	15	-	15
Balance - December 31, 2022	$ 111,424	$ (126,753)	$ (15,329)	104	(15,225)

In thousands of U.S. dollars, unless otherwise stated

The defined benefit obligations and the plan assets are composed by country, as follows:

Composition by country

		Canada		USA		Total
Present value of defined benefit obligations	$	147,819	$	8,604	$	156,423
Fair value of plan assets		(173,991)		(7,171)		(181,162)
Balance - December 31, 2021		(26,172)		1,433		(24,739)
Present value of defined benefit obligations		105,563		5,965		111,528
Fair value of plan assets		(120,531)		(6,222)		(126,753)
Balance - December 31, 2022	$	(14,968)	$	(257)	$	(15,225)

The principal actuarial assumptions were as follows:

	31-Dec-22		31-Dec-21	
	Canada	USA	Canada	USA
Discount rate	5.3%	5.2%	3.1%	2.7%
Future salary increases	2.5%	-	2.5%	-
Healthcare cost trend rate	5.2%	5.6%	5.3%	5.4%

Assumptions regarding future mortality are set based on actuarial advice in accordance with published statistics and experience in each territory. These assumptions translate into an average life expectancy in years for a pensioner retiring at age 65:

	31-Dec-22		31-Dec-21	
	Canada	USA	Canada	USA
Retiring at the end of the reporting period:				
Male	21	22	21	22
Female	24	23	24	23
Retiring 20 years after the end of the reporting period:				
Male	22	23	22	23
Female	25	24	24	24

The sensitivity of post-employment benefit obligations, related to pension and medical plans, to changes in the weighted principal assumptions is:

	Change in assumption		Increase in assumption		Decrease in assumption
Discount rate	0.5%	$	(5,957)	$	8,710
Salary growth rate	0.5%		1,038		(980)
Life expectancy	1 year		10,690		1,758

Plan assets are comprised of:

		31-Dec-22			31-Dec-21	
		Quoted	%		Quoted	%
Investment funds						
Canadian equity	$	-	0.0%	$	21,196	11.7%
Global equity		26,238	20.7%		25,182	13.9%
Emerging markets equity		13,056	10.3%		15,942	8.8%
Bond funds						
Universe bond		-	0.0%		11,051	6.1%
Long bond		87,459	69.0%		107,792	59.5%
	$	126,753	100.0%	$	181,163	100.0%

Through its defined benefit pension plans, the Group is exposed to a number of risks, the most significant of which are detailed below:

Asset volatility: The plan liabilities are calculated using a discount rate set with reference to corporate bond yields; if plan assets underperform this yield, this will create a deficit. Both the Canada and U.S. plans hold a significant proportion of equities, which are expected to outperform corporate bonds in the long-term, while providing volatility and risk in the short-term. As the plans mature, the Group intends to reduce the level of investment risk by investing more in assets that better match the liabilities. See below for more details on the Groups' asset-liability matching strategy.

Changes in bond yields: A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plan's bond holdings.

Salary risk: The present value of the benefit obligations is calculated by reference to the future salaries of plan participants, so salary increases of the plan participants greater than assumed will increase plan liabilities.

Life expectancy: The majority of the plans obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plans liabilities.

The Group ensures that the investment strategy is managed within an asset-liability matching ("ALM") framework that has been developed to achieve long-term investment objectives that align with meeting the obligations of the pension plan. Within this framework, The Groups' ALM objective is to establish an investment strategy that allocates a prudent portion of the assets to a portfolio of fixed income securities with interest rate characteristics similar to the liability profile of the plan. Further, a portion of the assets are allocated to a well-diversified portfolio of equities to provide for long-term growth and inflation protection. The Group actively monitors the investment strategy and the expected long-term return vis-a-vis the liabilities. The Group has not changed the processes used to manage its risks from previous periods. The Group does not use derivatives to manage its risk. Investments are well diversified, such that the failure of any single investment would not have a material impact on the overall level of assets. The largest proportion of assets is invested in bonds in 2022 and 2021. The Company and its subsidiaries believe that bonds offer the best returns over the long term with an acceptable level of risk. The bonds are held in a diversified portfolio with a current target of 65%. The remaining 35% is invested in equities.

The registered pension plans are subject to statutory funding requirements that are reviewed every year or every three years depending on the financial position of the plan revealed in the previous required funding valuation. Any funding deficiencies must be funded over a period not exceeding those prescribed by applicable pension legislation. The funding valuations establish minimum and maximum permitted contributions; the Group will decide on the level of contributions within this prescribed range. There are also two non-registered plans, one is unfunded, and the other secured by a letter of credit arrangement.

Expected contributions to the pension arrangements for the year ending December 31, 2023 are $4.5M. The weighted average duration of the defined benefit obligation is 9 years.

(d) Post-employment medical benefits

The Group operates a number of post-employment medical benefit schemes. The method of accounting, assumptions and the frequency of valuations are similar to those used for defined benefit pension schemes. All of these plans are unfunded.

The amounts recognized in the consolidated balance sheets are determined as follows:

In thousands of U.S. dollars, unless otherwise stated

	31-Dec-22	31-Dec-21
Present value of funded obligations	$ -	$ -
Fair value of plan assets	-	-
Surplus of funded plans	-	-
Present value of unfunded obligations	28,057	40,626
Net liability in the consolidated balance sheets	$ 28,057	$ 40,626

The movement in the medical benefit obligation over the years ended December 31, 2022 and 2021 is as follows:

	31-Dec-22	31-Dec-21
Balance at the beginning of the period	$ 40,626	$ 42,956
Current service cost	1,306	1,345
Interest expense/(income)	1,214	1,115
	2,520	2,460
Remeasurements		
(Gain)/loss from change in demographic assumptions	(2,078)	40
(Gain)/loss from change in financial assumptions	(10,602)	(4,053)
Experience (gain)/loss	(20)	(124)
	(12,700)	(4,137)
Exchange differences	(1,018)	679
Payment from plans		
Benefit payments	(1,371)	(1,332)
Balance at the end of the period	$ 28,057	$ 40,626

(e) Defined benefit and post-employment medical benefits

Expected maturity analysis of undiscounted pension and post-employment medical benefits is as follows:

	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years	Total
Pension benefits	$ 9,303	$ 9,091	$ 26,868	$ 170,091	$ 215,353
Post - employment medical	1,364	1,377	4,404	104,146	111,291
	$ 10,667	$ 10,468	$ 31,272	$ 274,237	$ 326,644

14 Current and deferred income tax

(a) Accounting policies

The tax expense for the period comprises current and deferred tax. Tax is recognized in the consolidated statements of income and comprehensive income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the consolidated balance sheet date in the countries where the Group operates and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

In thousands of U.S. dollars, unless otherwise stated

Deferred income tax is recognized on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill; deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the consolidated balance sheet date and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Deferred income tax assets and liabilities are presented as non-current.

(b) Reconciliation of income tax

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Income before income tax expense	68,323	228,153
Statutory rate	25.29%	25.25%
Income tax at standard rates	(17,279)	(57,609)
Tax effects of:		
Equity results	765	1,661
Prior year adjustments	7,367	-
Cost of investment acquisitions	(99)	(3,846)
Non-deductible expenses	(4,127)	(2,040)
Gain on investment acquisition (Note E20 (a))	-	11,763
Other	1,432	(4,939)
Income tax expense:	(11,941)	(55,010)
Current	(14,175)	39,278
Deferred	2,234	(94,288)
Income tax expense in the consolidated statements of income and comprehensive income	(11,941)	(55,010)
Effective rate - %	17.48	24.11

In thousands of U.S. dollars, unless otherwise stated

(c) Analysis of deferred tax balances

	31-Dec-2022	31-Dec-2021
Deferred tax assets (liabilities):		
Accelerated tax depreciation	(77,138)	(43,099)
Net operating losses and other	82,731	126,210
Provisions	4,156	17,498
Retirement benefit obligation	606	-
Other	8,199	148
	18,554	100,757
Deferred tax liabilities (assets):		
Accelerated tax depreciation	(137,009)	(166,639)
Net operating losses and other	75,394	24,570
Provisions	6,525	(5,132)
Retirement benefit obligation	-	(394)
Foreign exchange gains	-	(2,577)
Other	(7,921)	11
	(63,011)	(150,161)
Deferred tax (net):	(44,457)	(49,404)
Net deferred tax assets	18,554	100,757
Net deferred tax liabilities	(63,011)	(150,161)

(d) Effects of deferred income tax on net income and comprehensive income

	31-Dec-22	31-Dec-21
Balance at the beginning of the period	$ (49,404)	$ (58,025)
Effect on income	2,234	(94,288)
Tax charged directly to other comprehensive income (Note E15(c))	2,302	(2,691)
Purchase Accounting Adjustment	-	108,908
Exchange differences	412	(3,308)
Balance at the end of the period	$ (44,456)	$ (49,404)

(e) Realization of deferred income tax on net operating losses

As at December 31, 2022, the Group had income tax losses in the consolidated amount of $582,937 (2021: $824,314) for which there is a deferred tax income constituted amounting to $145,595 (2021: $151,857).

The recoverability of the balances is evaluated annually, based on the expectation of future taxable profits of the Group, and assets are constituted only for the portion of the tax losses on which the Group and its investees have projections of utilization within a term consistent with management's operational projections for the next six years.

(f) Unrecognized deferred tax asset

Deferred tax assets were not recognized on tax-loss carryforwards, considering that it is unlikely that future taxable profits will be available for the Company to use their benefits, amounting to $14,524 (2021: $12,898).

(g) Tax basis of tax losses

The tax base balances of tax losses and negative base for which the Company recognizes deferred tax amounts to $524,949 (2021: $583,365).

15 Shareholders' equity

(a) Accounting policies

(i) Share capital

Ordinary shares are classified as equity. Mandatorily redeemable preference shares in prior year were classified as other non-current liabilities (current year see Note 15b).

Incremental costs directly attributable to the issue of new ordinary shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where any Group company purchases the company's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes), is deducted from equity attributable to the company's equity holders until the shares are cancelled or reissued. Where such ordinary shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction costs and the related income tax effects, is included in equity attributable to the company's equity holders.

(ii) Retained earnings

This reserve's purpose is to preserve the undistributed balance of retained earnings in order to fund expansion projects pursuant to the Group's investment plan.

(iii) Other comprehensive income

Other comprehensive income includes:

a. cumulative translation adjustments on exchange differences arising from the translation of financial statements of foreign operations;
b. the effective portion of exchange differences on the Group's net investment hedge in a foreign operation; and
c. actuarial losses (gains) and measurement of retirement benefits.

(b) Share capital

During the first quarter of 2021, the Company reorganized its share capital structure. On February 26, 2021, VCSA contributed 12,000,000 preferred shares, being all of the issued and outstanding preferred shares of the Company, to VCI resulting in VCI becoming 100% owner of all ordinary and preferred shares of the Company.

On March 31, 2021, VCI converted the preferred shares, which were classified as a liability (Note E12), for 5,619,763 common shares of the Company. As of March 31, 2021, VCI held 1,691,783,138 common shares being all of the issued and outstanding shares of the Company. The transaction resulted in an increase of $9,226 and $1,948 in share capital and retained earnings, respectively.

On March 31, 2021, the Company amended its Articles of Incorporation to cancel the preferred shares and create a new class of common shares (referred to as Class A Common Shares). The Company entered into a share exchange agreement with VCI exchanging all its 1,697,402,901 common shares for 830,000 Class A common shares with no changes in the total share capital amount.

In thousands of U.S. dollars, unless otherwise stated

On April 28, 2021, VCI made a capital contribution to the Company amounting to $56,900 with no issuance of new shares.

On April 30, 2021, the Company issued 170,000 Class A common shares to McInnis Holding as part of the consideration for the acquisition of McInnis (Note E20 (a)), resulting in a share capital increase of $523,200.

On July 16, 2021 VCI made a capital contribution to the Company in the amount of $4,590 with no issuance of new shares. On July 16, 2021 the Company returned capital VCI in the amount of $3,858 with no cancellation of shares.

On June 28, 2022 the Company returned capital in the amount of $108.9 million to VCI and $22.3 million to McInnis Holding Limited Partnership, with no cancellation of shares.

As at December 31, 2022 the Company's fully subscribed and paid-up capital was $457,140 (December 31, 2021 – $644,318), consisting of 1,000,000 Class A Common Shares (December 31, 2021 – 1,000,000 Class A Common Shares).

(c) Other comprehensive income

	Accumulated foreign currency translation adjustment	Remeasurement actuarial gains on retirement benefits	Hedge accounting of net investments	Other comprehensive income	Total accumulated other comprehensive income
Balance - December 31, 2020	239,454		4,703	(1,919)	242,238
Unrealized gain (loss) on net investment hedge, net of tax	-		3,240	-	3,240
Changes in fair value of financial assets at fair value through other comprehensive income	-	-	-	(82)	(82)
Remeasurement acturial gains and losses on retirement benefits		12,080			12,080
Transfer of actuarial gains and losses on retirement benefits to retained earnings		(9,797)			(9,797)
Deferred taxes	-	(2,283)	(407)	(1)	(2,691)
Foreign currency translation	994	-	-	-	994
Balance - December 31, 2021	240,448	-	7,536	(2,002)	245,982
Unrealized gain (loss) on net investment hedge, net of tax	-	-	(34,055)	-	(34,055)
Changes in fair value of financial assets at fair value through other comprehensive income	-	-	-	(403)	(403)
Remeasurement acturial gains and losses on retirement benefits	-	6,857			6,857
Transfer of actuarial gains and losses on retirement benefits to retained earnings	-	(6,906)			(6,906)
Deferred taxes	-	49	2,240	13	2,302
Foreign currency translation	55,376		-	-	55,376
Balance - December 31, 2022	295,824	-	(24,279)	(2,392)	269,153

16 Revenue

(a) Accounting policies

Revenue is determined based on the amount that the Company 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, in the consolidated financial statements, after eliminating sales among consolidated companies.

The Group recognizes revenue when: (i) there is a contract and/or any agreement for the Company 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 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.

In thousands of U.S. dollars, unless otherwise stated

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 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

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Cement	742,831	660,943
Ready-mix	568,355	544,965
Aggregates	109,785	99,686
Other	25,263	21,207
	1,446,234	1,326,801

(c) Breakdown

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Gross sales		
Customers in Canada	716,211	655,228
Customers outside Canada	730,023	671,573
Revenue from contracts with customers	1,446,234	1,326,801

In thousands of U.S. dollars, unless otherwise stated

17 Expense by nature

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Employee benefit expense	301,149	290,987
Freight cost	203,778	181,226
Depreciation and amortization (Notes E8, E9 and E10)	171,163	133,193
Maintenance	112,187	97,027
Raw materials and consumables	219,134	154,312
Fuel costs	89,142	38,633
Electric power consumption	59,251	44,511
Services, miscellaneous	53,499	53,665
Taxes, fees and contributions	20,549	19,562
Insurance	10,268	8,460
Rents and leases (Note E10 (a))	6,622	14,465
Utilities	6,756	4,174
Provision for loss	2,525	5,050
Other expenses	66,904	68,079
	1,322,927	1,113,344
Reconciliation		
Cost of sales	1,229,077	1,024,250
Selling	30,241	23,964
General and administrative	63,609	65,130
	1,322,927	1,113,344

18 Wages and employee benefits expense

(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 consolidated statements of income and comprehensive income.

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognizes termination benefits at the earlier of the following dates: (i) when the Group can no longer withdraw the offer of those benefits; and (ii) when the entity recognizes costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

The Group recognizes a liability and an expense for bonuses, based on a formula that takes into consideration a combination of financial results and individual performance in relation to targets. The Group recognizes a provision where contractually obliged or where there is a past practice that has created a constructive obligation.

In thousands of U.S. dollars, unless otherwise stated

(b) Analysis

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Direct remuneration	220,862	214,819
Social charges	57,525	53,750
Benefits	22,762	22,418
	301,149	290,987

19 Other operating income (expense)

	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Gain on sale of property, plant and equipment	6,493	1,048
Rental income	1,627	1,334
Gain on investment acquisition	-	46,588
Inventory obsolescence	(617)	(4,127)
Sales tax	857	1,207
Recoveries (provisions)	2,462	3,504
Fair value gain resulting from remeasurement of previously owned interest	-	24,124
Exploration costs	(2,913)	(3,136)
Costs related to COVID	(400)	(805)
Other	1,139	(15,236)
	8,648	54,501

20 Financing expense, net

(a) Accounting policies

The Group's finance income and expense comprise:

a. Interest income;
b. Interest expenses;
c. Net gains/losses on the disposal of available for sale financial assets;
d. Net gains/losses on financial assets at fair value through profit or loss;
e. Net gains/losses on foreign exchange variations on financial assets and liabilities;
f. Fair value losses on contingent consideration classified as financial liability;
g. Impairment of financial assets (other than trade receivables);
h. Net gains/losses on hedge instruments recognized in profit or loss; and
i. Certain reclassifications of net gains/losses previously recognized in other comprehensive income.

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

In thousands of U.S. dollars, unless otherwise stated

(b) Analysis

	Note	01/01/2022 to 12/31/2022	01/01/2021 to 12/31/2021
Financial income			
A/R securitization fees income		5,739	5,511
Cross guarantee revenue		916	-
Interest income		1,847	1,751
Financial expense			
Interest expense, third party loans	E11(d)	(31,125)	(30,211)
A/R securitization fees expenses		(17,975)	(5,482)
Cross guarantee expenses		(2,317)	-
Interest expense, leasing	E10(c)	(7,657)	(8,138)
Bank charges and other financial results		(5,953)	(3,730)
Amortization of prepaid financing costs		(1,514)	(1,372)
Net foreign exchange		(8,619)	(4,712)
		(66,658)	(46,383)

21 Contingencies

The Group has contingent liabilities in respect of legal claims arising in the ordinary course of business. It is not anticipated that any material liabilities will arise from the contingent liabilities other than those already provided for.

22 Insurance

The Group contracts different types of insurance, such as property risk and civil liability, to protect its assets against losses due to production interruptions and damage caused to third parties. Such policies have coverage and conditions considered by management as appropriate to the risks involved. For the main plants in Canada and the U.S., an All Risk policy is contracted for all the Group's assets, including coverage for losses due to production interruptions. The Group also has insurance for the civil liability of directors and officers at amounts considered appropriate by management.

23 Events after the reporting period

a) Committed Credit Facility Withdraws

During January and February 2023, the Company withdrew CAD 80 million (USD 59 million) and USD 30 million of its committed credit facility.

The total amount drawn after these withdrawls is USD 89 million, and the remaining available for use of this credit facility totalled USD 211 million.

VOTORANTIM
cimentos