

Votorantim S.A.

**Consolidated financial
statements
and independent
auditor's report
2020**



(A free translation of the original in Portuguese)

Independent auditor's report on the consolidated financial statements

To the Board of Directors and Stockholders
Votorantim S.A.

Opinion

We have audited the accompanying consolidated financial statements of Votorantim S.A. (the “Company”) and its subsidiaries, which comprise the consolidated balance sheet as at December 31, 2020 and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Votorantim S.A. and its subsidiaries as at December 31, 2020, and their financial performance and their cash flows for the year then ended, in accordance with the accounting practices adopted in Brazil and with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for opinion

We conducted our audit in accordance with Brazilian and International Standards on Auditing. Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company and its subsidiaries in accordance with the ethical requirements established in the Code of Professional Ethics and Professional Standards issued by the Brazilian Federal Accounting Council, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting practices adopted in Brazil and with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of 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.



Votorantim S.A.

Those charged with governance are responsible for overseeing the financial reporting process of the Company and its subsidiaries.

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 Brazilian and International Standards on Auditing 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 financial statements.

As part of an audit in accordance with Brazilian and International Standards on Auditing, 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 internal control of the Company and its subsidiaries.
- 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 ability of the Company 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 these 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 Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.



Votorantim S.A.

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.

Curitiba, March 12, 2021

PRICEWATERHOUSECOOPERS
PricewaterhouseCoopers
Auditores Independentes
CRC 2SP000160/O-5

A handwritten signature in blue ink, appearing to read 'C. Guaraná'.

Carlos Eduardo Guaraná Mendonça
Contador CRC 1SP196994/O-2

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	Note	2020	2019
Assets			
Current assets			
Cash and cash equivalents	9	9,783	6,262
Financial investments	10	5,678	4,444
Derivative financial instruments	6.1.1 (a)	221	62
Trade receivables	11	3,209	2,196
Inventory	12	4,724	4,129
Taxes recoverable	14	2,033	1,968
Dividends receivable	15	176	81
Future energy contracts	16	49	
Other assets		538	621
		26,411	19,763
Assets classified as held-for-sale		25	
		26,436	19,763
Non-current assets			
Long-term receivables			
Financial investments	10	20	23
Financial instruments - shares	13	2,590	2,749
Derivative financial instruments	6.1.1 (a)	1,945	337
Derivative financial instruments - put option	6.1.1 (b)	252	655
Taxes recoverable	14	2,966	3,477
Related parties	15	196	229
Deferred income tax and social contribution	24 (b)	2,731	3,341
Judicial deposits	25 (b)	193	345
Future energy contracts	16	9	29
Securitization of receivables		149	140
Other assets		701	586
		11,752	11,911
Investments	17 (c)	12,698	11,720
Property, plant and equipment	18 (a)	30,105	27,148
Intangible assets	19 (a)	14,594	13,283
Right-of-use assets	20	797	813
Biological assets		96	85
		70,042	64,960
Total assets		96,478	84,723

	Note	2020	2019
Liabilities and equity			
Current assets			
Borrowing	21 (a)	1,407	954
Derivative financial instruments	6.1.1 (a)	511	69
To rent	22	235	210
Confirming payables	23	2,380	1,415
Trade payables		5,404	4,429
Salaries and payroll charges		1,174	836
Taxes payable		760	424
Advances from clients		182	102
Dividends payable		44	120
Use of public assets	26	97	87
Financial instruments - firm commitment	16	75	81
Deferred revenue - silver streaming		141	106
Other liabilities		924	870
		13,334	9,703
Liabilities related to assets held-for-sale		2	2
		13,336	9,705
Non-current assets			
Borrowing	21 (a)	23,658	18,801
Derivative financial instruments	6.1.1 (a)	2,412	383
To rent	22	623	631
Deferred income tax and social contribution	24 (b)	2,373	2,087
Related parties	15	11	50
Provision	25 (a)	3,586	3,137
Use of public assets	26	1,400	1,151
Pension plan and post-employment health care benefits	27	524	367
Financial instruments - firm commitment	16	210	122
Deferred revenue - silver streaming		722	621
Other liabilities		827	761
		36,346	28,111
Total liabilities		49,682	37,816
Equity			
Share capital		28,656	28,656
Revenue reserves		8,806	11,165
Carrying value adjustments	28 (c)	4,879	1,948
Total equity attributable to the owners of the Company		42,341	41,769
Non-controlling interests		4,455	5,138
Total equity		46,796	46,907
Total liabilities and equity		96,478	84,723

	Note	2020	2019
Continuing operations			
Net revenue from products sold and services rendered	29	36,667	30,907
Cost of products sold and services rendered	30	(29,620)	(25,812)
Gross profit		7,047	5,095
Operating income (expenses)			
Selling	30	(900)	(873)
General and administrative	30	(2,626)	(2,492)
Other operating income (expenses), net	31	(2,182)	6,007
		(5,708)	2,642
Operating profit before equity results and finance results		1,339	7,737
Results from equity investments			
Equity in the results of investees	17 (c)	727	919
Realization of other comprehensive income on disposal of investments			108
		727	1,027
Finance results, net			
	32		
Finance income		680	1,269
Finance costs		(3,075)	(2,514)
Result of derivative financial instruments		(121)	(235)
Foreign exchange losses, net		(1,024)	(137)
		(3,540)	(1,617)
Profit (loss) before income tax and social contribution		(1,474)	7,147
Income tax and social contribution			
	24 (a)		
Current		(901)	(1,461)
Deferred		(691)	(705)
Profit (loss) from continuing operations		(3,066)	4,981
Discontinued operations			
Profit (loss) on discontinued operations		1	(56)
Profit (loss) for the quarter attributable to the owners of the Company		(3,065)	4,925
Profit (loss) attributable to the owners of the Company		(1,636)	5,170
Loss attributable to non-controlling interests		(1,429)	(245)
Profit (loss) for the quarter		(3,065)	4,925
Weighted average number of shares - thousands (to the owners of the Company)		18,278,789	18,278,789
Basic and diluted earnings (loss) per thousand shares, in reais		(89.50)	282.84
From continuing operations			
Basic and diluted earnings (loss) per thousand shares, in reais		(89.55)	285.90
From discontinued operations			
Basic and diluted earnings (loss) per thousand shares, in reais		0.05	(3.06)

	Note	2020	2019
Profit for the quarter		(3,065)	4,925
Other components of comprehensive income to be subsequently reclassified to profit or loss			
Attributable to the owners of the Company			
Foreign exchange variations	28 (c)	3,062	96
Hedge accounting for net investments abroad, net of taxes	28 (c)	(289)	92
Hedge accounting for the operations of subsidiaries	28 (c)	(636)	(39)
Fair value of financial assets available-for-sale of the non-consolidated investments	28 (c)	(25)	43
Realization of comprehensive results from the sale of investments	28 (c)	(173)	(15)
Adjust the fair value of the shares, net of tax	28 (c)	712	(121)
Loss on capital contribution to investee	28 (c)		(120)
Inflation adjustments for hyperinflationary economies	28 (c)	426	340
Realization of comprehensive results on settlement of investments			(108)
Participation in other comprehensive results of investees	28 (c)	(2)	(24)
Attributable to non-controlling			
Foreign exchange variations attributable to non-controlling interests		960	(50)
Hedge accounting for the operations of subsidiaries		(3)	3
Participation in other comprehensive results of investees		(7)	28
		4,025	125
Other components of comprehensive income that will not be reclassified to profit or loss			
Attributable to the owners of the Company			
Remeasurement of retirement benefits, net of tax	28 (c)	(169)	(133)
Credit risk of debts measured at fair value		25	
Attributable to non-controlling interests			
Remeasurement of retirement benefits, net of taxes		1	(1)
Other components of comprehensive income for the quarter		3,882	(9)
Comprehensive income (loss) from			
Continuing operations		816	4,972
Discontinued operations		1	(56)
		817	4,916
Comprehensive income attributable to			
Owners of the Company		1,295	5,181
Non-controlling interests		(478)	(265)
		817	4,916

Consolidated statement of charges in equity
Years ended December 31
All amounts in millions of reais unless otherwise stated

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	Attributable to the owners of the Company									
	Note	Revenue reserves				Retained (loss) earnings	Carrying value adjustments	Total	Non-controlling interests	Total equity
		Share capital	Tax incentives	Legal	Profit retention					
At January 1, 2019		28,656	10	771	6,307		1,475	37,219	5,623	42,842
IAS 29 adjustment (i)					(295)		419	124		124
St Marys goodwill (i)					94		43	137		137
CESP purchase allocation (i)					356			356		356
At January 1, 2019 after restatement impacts		28,656	10	771	6,462		1,937	37,836	5,623	43,459
Profit (loss) for the year						5,170		5,170	(245)	4,925
Other comprehensive income							11	11	(20)	(9)
Comprehensive income for the year						5,170	11	5,181	(265)	4,916
Acquisition of non-controlling interest									(3)	(3)
Distribution of dividends					(1,475)			(1,475)	(217)	(1,692)
Reversal of deliberate dividends					415			415		415
Allocation of net income for the year										
Constitution of legal reserve				261		(261)				
Profit retention					4,909	(4,909)				
Total contributions and distributions to shareholders				261	3,661	(5,170)		(1,248)	(220)	(1,468)
At December 31, 2019		28,656	10	1,032	10,123		1,948	41,769	5,138	46,907
At January 1, 2020		28,656	10	1,032	10,123		1,948	41,769	5,138	46,907
Loss for the year						(1,636)		(1,636)	(1,429)	(3,065)
Other comprehensive income							2,931	2,931	951	3,882
Comprehensive income (loss) for the year						(1,636)	2,931	1,295	(478)	817
Distribution of dividends	28 (c)				(800)			(800)	(205)	(1,005)
Effect of liquidation of related parties on the spin-off of subsidiary					37			37		37
Reversal of deliberate dividends and interest on equity					40			40		40
Allocation of net income for the year										
Absorption of injury					(1,636)	1,636				
Total contributions and distributions to shareholders					(2,359)	1,636		(723)	(205)	(928)
At December 31, 2020		28,656	10	1,032	7,764		4,879	42,341	4,455	46,796

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

	Note	2020	2019
Cash flow from operating activities			
Profit (loss) before income tax and social contribution		(1,474)	7,147
Profit (loss) on discontinued operations		1	(56)
Adjustments to items that do not represent changes in cash and cash equivalents			
Depreciation, amortization and depletion	30	3,293	3,067
Equity in the results of investees	17 (c)	(727)	(919)
Interest, indexation and foreign exchange variations (i)		2,066	510
Provisions (reversal) for the impairment of fixed, intangible assets and investments	30	2,777	714
Loss (gain) on sales of fixed and intangible assets, net	30	74	(8)
Fair value adjustment	21 (b)	95	22
Constitution of provisions		202	98
Derivative financial instruments		252	152
Financial instruments - firm commitment		54	195
Net revenue on sale of investments	30	(427)	(6,720)
Net gain from financial instrument - put option	6.1.1 (b)	403	89
Gain on purchase of investee	1.1 (a)	(366)	
Credit of ICMS on the calculation bases of PIS and COFINS		(168)	(747)
Provision for estimated losses from doubtful accounts	11 (c)	(44)	17
Realization of comprehensive income on the sale of investment			(108)
		17	
		6,028	3,453
Decrease (increase) in assets			
Financial investments		(1,040)	(695)
Derivative financial instruments		(239)	136
Trade accounts receivable		73	333
Inventory		45	(207)
Taxes recoverable		754	(494)
Related parties		33	42
Judicial deposits		125	356
Other accounts receivable and other assets		(64)	(99)
Increase (decrease) in liabilities			
Trade payables		(111)	292
Salaries and social charges		250	(9)
Use of public assets		(8)	(17)
Taxes payable		(230)	(51)
Advances from customers		57	(26)
Other obligations and other liabilities		487	(476)
Cash provided by operating activities		6,160	2,538
Interest paid on borrowing and use of public assets		(1,320)	(1,252)
Income tax and social contribution paid		(407)	(189)
Net cash provided by operating activities		4,433	1,097

	Note	2020	2019
Cash flow from investment activities			
Proceeds from disposals of fixed and intangible assets		242	132
Investment sale		1,462	8,181
Dividends received		172	546
Acquisitions of property, plant and equipment	18	(3,516)	(3,189)
Increase in biological assets		(7)	(11)
Acquisitions of investments	17	(222)	(156)
Increase in intangible assets	19	(22)	(59)
Income tax and social contribution paid			(1,287)
Net cash provided by (used in) investment activities		(1,891)	4,157
Cash flow from financing activities			
New borrowing	21 (b)	11,772	4,323
Repayment of borrowing	21 (b)	(10,846)	(9,356)
Repayment of leasing contracts	22	(251)	(217)
Derivative financial instruments		55	(7)
Dividends paid		(1,041)	(1,639)
Net cash used in financing activities		(311)	(6,896)
Increase (decrease) in cash and cash equivalents		2,231	(1,642)
Effect of companies excluded from consolidation		7	
Effect of fluctuations in exchange rates		1,283	162
Cash and cash equivalents at the beginning of the year		6,262	7,742
Cash and cash equivalents at end of the year		9,783	6,262

1 General considerations

Votorantim S.A. (the "Company", the "parent company", or "VSA"), is a long-term Brazilian holding company. With its headquarters in the city of São Paulo, Brazil, the Company's purpose is to manage assets and companies, as well as to invest in other companies in order to further its objectives.

The Company, through its subsidiaries and associates, operates in the following segments: construction, finance, electrical energy, metals and mining, agribusiness, aluminum and long steel.

1.1 Main events that occurred during the year of 2020

(a) Acquisition of factory unit - CBA

In August 2019, the Company announced the signing of the share purchase and sale agreement with the purpose of fully acquiring the shares of Arconic Indústria e Comércio de Metais Ltda., A unit located in Pernambuco, in the Northeast of Brazil, which will complement the line of rolled products from CBA.

In accordance with IFRS3 / CPC 15 (R1) - "Business combination", in the event of an advantageous purchase, the acquirer must recognize the resulting gain in the income statement for the year, on the acquisition date. Before recognizing the gain from an advantageous purchase, CBA carried out a prior review to make sure that all assets acquired and liabilities assumed were correctly identified and recognized them during the review. CBA hired a specialized company to issue a PBA (Purchase Price Allocation) report from the acquired company, concluded in December 2020.

In February 2020, the corporate name of the acquired investment was renamed CBA Itapissuma Ltda.

The price paid for the acquisition totaled R\$ 204, generating a gain for a favorable purchase in the amount of R\$ 466, using the acquisition method provided for in IFRS 13 / CPC 15 (R1), recorded under the heading "Other income operating expenses, net", with a tax effect of R\$ 100, resulting in a gain of R\$ 366. Additionally, there was a tax effect in the amount of R\$ 124 referring to the gain from an advantageous purchase due to the effective taxation, which will occur upon its realization (sale, incorporation, spin-off or merger), if applicable.

The preliminary composition of the acquired net assets is detailed below:

	Opening balance 02/01/2020	Adjust selling price	Added value	Deferred tax	Final balance 12/31/2020
As of December 31, 2020					
Cashier	224	(20)			204
Total consideration transferred	224	(20)			204
Recognized values of acquired identifiable assets and assumed liabilities					
Cash and cash equivalents	7				7
Financial investments	20				20
Accounts receivable	58				58
Stocks	139				139
Immobilized	216		294	(100)	410
Other assets acquired	21		1		22
Suppliers	(69)				(69)
Other assets assumed	(16)				(16)
Total identifiable net assets	376		295	(100)	571
Gain for Advantageous Purchase	151	20	295	(100)	366
Deferred taxes (34%) on advantageous purchases					(124)
Total net advantageous purchase					242

(b) Option to purchase Winds from Piauí II and III - VE

In January 2020, the joint venture VTRM Energia Participações S.A. ("VTRM"), with shared control between Votorantim Geração de Energia ("VGE") and CPP Investments exercised its option to purchase the Ventos do Piauí II and III wind complexes for the development of new wind farms in the Northeast region of Brazil, with an investment of approximately R\$ 2,000. The purchase and sale contract was signed on July 10, 2020, after the fulfillment of the precedent conditions established in the agreement, for the amount of R\$ 115. The construction of the parks is scheduled to start in 2021, and the park are due to start operating in 2022. Each of the complexes will consist of five wind farms located in the Serra do Inácio region. Ventos do Piauí II will have 100% of its structure distributed among 3 Piauí municipalities (Curral Novo, Paulistana and Betânia do Piauí) and the Ventos do Piauí III complex will have wind turbines installed in Curral Novo (Piauí), Araripina and Ouricuri (Pernambuco). Together, the new complexes will have an installed power generation capacity of 409.2 MW and will make VTRM responsible for approximately 1 GW of installed generation capacity in that region.

(c) Resolution of dividends - VSA

On January 20, 2020, the Company resolved to pay R\$ 401 to its parent company Hejoassu Administração S.A., corresponding to dividends related to the portion of the "Profit Reserves" account balance, accumulated from previous years. The amount was paid in full on February 10, 2020.

On December 01, 2020, the Company resolved and paid its parent company Hejoassu Administração S.A. the amount of R\$ 399 corresponding to dividends related to part of the balance of the "Profit reserves" account accumulated up to December 31, 2019.

(d) Amendment to the loan agreement under Law No. 4,131 / 1962 - Votorantim Cimentos

On January 30, 2020, the Company renegotiated the contractual conditions of the loan under Law No. 4,131 / 1962, contracted in March 2018, in the total amount of USD 100 million (R\$ 426). The Company extended the final maturity from 2023 to 2025, and contracted a new swap (derivative financial instrument) at a cost of 107.00% of the CDI. The previous swap, at a cost of 112.00% of the CDI, was extinguished at the time of renegotiating the main loan agreement.

On March 9, 2020, the subsidiary VCNNE renegotiated the contractual terms of the loan under Law 4,131 / 1962, signed in September 2018, in the total amount of USD 50 million (R\$ 239). VCNNE extended the final maturity from 2023 to 2025, and contracted a new swap (derivative financial instrument) at a cost of 111.00% of the CDI. The previous swap, at a cost of 108.00% of the CDI, was extinguished at the time of renegotiating the main loan agreement.

The swaps tied to the operations were contracted jointly with the same financial institution as the loan, and aim at both the exchange of exposure to the floating rate LIBOR to the floating rate CDI and the exchange of currency from dollar to real (debt in USD + swap to BRL in% CDI).

(e) Export Credit Notes ("NCE") - CBA and Nexa

In February 2020, the subsidiary CBA signed an NCE contract to finance its exports in the amount of R\$ 250, with final maturity in 2029. The operation has a swap contract linked to it (derivative financial instrument - hedge accounting), which aims to exchange exposure to the floating rate CDI in reais for a fixed rate in US dollars, resulting in a weighted average cost of 4.25% per year. It is noteworthy that the loan is characterized as green financing based on the guidelines of the Green Loan Principles.

At the end of March 2020, to expand its short-term liquidity in Brazil, the subsidiary Nexa signed 4 NCE contracts in the total principal amount of R\$ 1,247 (approximately USD 250 million) at costs between 134.20% of the CDI and CDI + 1.80% to 4.20%, with maturities between 1 and 5 years.

On April 9, 2020, the subsidiary Nexa entered into an additional NCE contract in the total principal amount of R\$ 230 (approximately USD 45 million) and CDI + 3.90%, maturing in 1 year, which was settled on October 30, 2020.

(f) Distribution of dividends - Nexa

On February 13, 2020, the Board of Directors of the subsidiary Nexa approved, in accordance with the laws of Luxembourg, distribution of dividends to its shareholders registered on March 16, 2020, in the amount of R\$ 260 (USD 50 million), paid on March 30, 2020.

(g) Loan agreement entered into by - Nexa

On March 12, 2020, in order to expand its short-term liquidity, the subsidiary Nexa contracted a loan with a global financial institution in the principal amount of R\$ 477 (approximately USD 100 million) at a fixed cost in reais of 8.50 % p.a., maturing in 5 years. At the same time, the subsidiary Nexa contracted a swap to exchange the pre-fixed interest rate in US dollars of 2.45% p.a., as well as the currency of the debt service payments from BRL to USD.

(h) Borrowing under the terms of Law No. 4,131 / 1962 - Votorantim Cimentos

On March 16, 2020, VCSA entered into a loan agreement under Law No. 4,131 / 1962 in the total amount of USD 50 million (R\$ 249) with maturity on March 20, 2025.

The operation has a swap contract (derivative financial instrument) that aims at both the exchange of exposure from the fixed dollar rate to the floating rate CDI, as well as the exchange of dollar to real currency, resulting in a final cost of 110.80% p.a. of the CDI. This swap was contracted jointly with the same financial institution as the loan (debt in USD + swap to BRL in% of CDI).

(i) Use of a revolving credit facility (Revolving Credit Facility) - Votorantim Cimentos and Nexa

During the year, the indirect subsidiaries St. Mary's and Votorantim Cimentos International ("VCI") made several movements in the available revolving credit line, although the line was fully withdrawn until mid-September 2020. These borrowings were part of the strategy of the indirect subsidiaries to reinforce their liquidity position and face the uncertainties generated by the pandemic and the seasonality period that recurrently affects markets located abroad.

On September 28, 2020, indirect subsidiary VCI made a partial prepayment of Committed Credit Facility in the amount of USD 126 million, using its own cash position and capital contributions from subsidiary VCSA.

In the fourth quarter of 2020, indirect subsidiary St. Marys prepaid the amount of USD 152 million of its revolving credit line (Committed Credit Facility), continuing its capital optimization strategy. After this transaction, the amount of USD 12 million remains in use by St. Marys.

As of December 31, 2020, the amount of USD 278 million was available to the indirect subsidiary for new withdrawals, if necessary. During the period of subsequent events, additional withdrawals were made, as per Note 37.

On May 13, 2020, indirect subsidiary Votorantim Cimentos Europe Asia and Africa ("VCEAA") withdrew the revolving credit line in the amount of USD 200 million. The proceeds from this withdrawal were used to repurchase the bonds of the indirect subsidiary VCI maturing in April 2021.

On September 14, 2020, indirect subsidiary VCEAA made the total prepayment of the outstanding balance at the Revolving Credit Facility in the amount of USD 200 million. The proceeds of this prepayment came, predominantly, from capital contributions of the subsidiary VCSA. This credit line was contracted by the subsidiary VCSA and its subsidiaries in the total amount of USD 500 million and maturing in August 2023. The funds remain available for new withdrawals, if necessary.

On April 14, 2020, in order to increase its short-term liquidity, the subsidiary Nexa fully withdrew its revolving credit line in the amount of USD 300 million. On June 30, 2020, the amount was fully reimbursed with funds obtained from the Bond Offering, as per note 1.1 (j). The revolving credit line remains available to the subsidiary until October 2024.

(j) Bond Offering - NEXA

On June 15, 2020, the subsidiary Nexa made a Bond Offering in the amount of R\$ 2,738 (USD 500 million), with maturity in January 2028 at an interest rate of 6.50% per year. This new offer was made in accordance with the subsidiary's strategy of increasing its liquidity and refinancing part of its current debt, extending its average term.

With the funds raised through the Bond Offering mentioned above, the subsidiary anticipated the payment of the following liabilities:

(i) on June 19, 2020, the principal outstanding and accrued interest in an Export Prepayment Agreement in the amount of USD 100 million; (ii) on June 23, 2020, the principal outstanding and accrued interest of the Revolving Credit Line in the total amount of USD 301 million; (iii) on June 29, 2020, the principal outstanding and the accrued interest of an Export Credit Note in Brazil in the amount of USD 96 million.

(k) Recognition of impairment loss - Nexa and Votorantim Cimentos

The subsidiary Nexa recognized, during the year of 2020, an impairment loss, classified in property, plant and equipment, in the class of works in progress, in the total amount of R\$ 217. The amount refers mainly to the Jarosita project. The execution of the project is suspended and there is no expectation that it will resume.

In addition, the subsidiary Nexa, during the year 2020, recognized impairment loss in its Cash Generating Unit ("CGU") Cerro Pasco in the amount of R\$ 1,101 and in goodwill in the mining segment in the amount of R\$ 1,191. The impairment loss represents an overvaluation of the book value of the assets included in the UGC and in the Peruvian mining segment over their respective fair values less disposal costs ("FVLCD") of the included assets.

Such impairment losses occurred mainly as a result of the drop in metal prices, suspension of production and increase in operating costs, totaling an impairment loss in the amount of R\$ 2,509, recognized in "Other operating results, net".

For the subsidiary VCSA, within the Europe, Asia and Africa segment, Turkey's operations are considered, in a manner consistent with previous years, as a single CGU. Through the value-in-use method, impairment was identified in the second quarter of 2020 in the classes of fixed assets of land and land, buildings and construction, and in the classes of intangible software assets, rights to exploit natural resources, asset retirement obligation and others, in the amount of R\$ 143, mainly due to the update of sales volume assumptions for the coming years. However, in the fourth quarter of 2020, during the annual review of the recoverability of assets, the subsidiary VCSA confirmed that the impairment provision previously realized must be maintained and the updated amount of the impairment for the conversion rate on the date of the financial statements is R\$ 146.

Likewise, Spain's operations are considered, in a manner consistent with previous years, to be a single CGU.

Using the value in use method, impairment reversal was identified in the Europe, Asia and Africa segment and in the Brazil segment, in the machinery and equipment, computer equipment, buildings and construction, intangible asset class, and rights to explore natural resources, in the amount of R\$ 13.

In the Latin America segment, Bolivia's operations are considered, in a manner consistent with previous years, to be a single CGU. Through the value in use method, in the second quarter of 2020, impairment was identified in the asset classes of machinery and equipment, in the amount of R\$ 136, mainly due to the increase in the discount rate, due to an upward revision of the country risk. and cost of debt, and the reduction in expected cement sales volumes for 2020. However, in the fourth quarter of 2020, during the annual review of the recoverability of assets, the subsidiary identified the need for partial reversal of impairment, by the amount of R\$ 74, and the updated impairment value for the conversion rate on the date of the financial statements is R\$ 65.

In the period ended in September 2020, the subsidiary CBA recorded an impairment provision, in its fixed assets, in the amount of R\$ 18.

(l) Return of the mining sector in Peru - Nexa

Currently, although Peruvian subsidiaries continue to operate subject to additional measures to control and mitigate the spread of COVID-19, they have returned to their normal adjusted production levels, except for the Atacocha subsoil, which remains suspended. On January 27, 2021, the Peruvian government, among other measures in response to the "second wave" of COVID-19, declared a new blockade in certain areas of the country for a two-week period ending on February 14, 2021. This initial period was extended on February 10, 2021 for two more weeks ending on February 28, 2021, with the possibility of extension.

(m) Loan agreement with BNDES - Nexa

In July 2020, the subsidiary Nexa contracted a loan, approved by the BNDES, in the total principal amount of R\$ 750 (approximately USD 140 million) at a cost of TLP + 3.39%, with a 20-year term. The amount will be used to finance the Aripuanã project.

During the fourth quarter of 2020, the subsidiary Nexa disbursed the following amounts:

(i) On October 26, 2020, the amount of approximately USD 40 million was used; (ii) On December 28, 2020, the amount of approximately USD 47 million was used.

(n) Reversal of the deferred tax credit constitution - CBA

In the third quarter of 2020, the subsidiary CBA reevaluated the recovery of deferred taxes recorded in its tax calculation and the technical study carried out showed that it was not possible to fully book the credit related to Provisions (impairment and miscellaneous losses). Accordingly, the deferred tax credit was reversed in the amount of R\$ 376.

In the fourth quarter of 2020, the subsidiary CBA reevaluated the recovery of deferred taxes recorded in its tax calculation, based on the technical study, and due to the lack of expectation of realization, it resulted in the reversal of the deferred tax credit currently constituted on Niquelândia's impairment, São Miguel Paulista and Ferro Níquel, in the total amount of R\$ 446.

(o) Exclusion of ICMS from the PIS and COFINS calculation base

During the year ended December 31, 2020, the tax credit related to the exclusion of the Tax on Circulation of Goods and Services ("ICMS") was recognized on the calculation basis of the Social Integration Program ("PIS") and Contribution for Social Security Financing ("COFINS"), with an asset recorded in the amount of R\$ 156, of which R\$ 69 of the principal, recorded under "Other operating income, net" and R\$ 86 from monetary restatement, is recorded in "Net financial result".

(p) Contract of intention to sell the São Miguel Paulista Unit - CBA

The subsidiary CBA signed an agreement to sell the São Miguel Paulista (Nickel) Unit on September 28, 2020, and the closing of the transaction will only occur after a period of evaluations of the plant by the buyer, and if successful, it will be completed by December 2021.

(q) Sales of shares held by Suzano shares

On December 2, 2020, the VSA sold 25,000,000 common shares in Suzano S.A (“Suzano”) held by the Company, for the amount of R\$ 55.71 each, totaling R\$ 1,393 million. After the sale, VSA holds 50,180,059 common shares, corresponding to approximately 3.7% of Suzano's total and voting capital. The impacts of the transaction are detailed in the table below:

Other operating results	406
Revenue from the sale of shares	1,393
Fees	(12)
Cost of selling shares	(1,238)
Realization of other comprehensive results	263
Income tax and social contribution	(138)
Chains	(341)
Deferred	203
Net gain on sale	268

(r) Distribution of interest on own capital - CESP

On December 16, 2020, the investee Companhia Energética de São Paulo (“CESP”) approved the proposal for the distribution of interest on own capital (“JCP”), attributable to the minimum mandatory dividend, in the gross amount of R\$ 150, relating to the year ended December 31, 2020. The gross amount per share is R\$ 1.8245 for preferred shares A and R\$ 0.4265 for preferred shares B and common shares, with payment in the year 2021, on coinciding with the next dividend payment, to be defined by the investee's Shareholders' Meeting.

(s) Prepayment of Bond 2021 - VSA

On December 23, 2020, the Company prepaid the remaining amount of the debt security with a coupon of 6.75% per year and maturity in 2021 (“Bond 2021”), in the total principal amount of US \$ 240 million. This operation is in line with VSA's debt management strategy. With this liquidation, there are no more outstanding debts at the holding company level.

(t) GSF (Generation Scale Factor) - Votorantim Cimentos and CBA

Law No. 14,052, published on September 9, 2020, amended Law No. 13,203, of December 8, 2015, to establish new conditions for the renegotiation of the hydrological risk of electricity generation, providing that the generators will be compensated through extension of the granting period for their grants due to the occurrence of non-hydrological risks that negatively influenced the GSF (Generation Scaling Factor or Adjustment Factor of the MRE of the Marketing Rules) after 2012, with the worsening of the water crisis. The events classified as non-hydrological risks are mainly those related to: (i) hydroelectric projects called “structuring” (Belo Monte, Jirau and Santo Antônio hydroelectric plants), which were delayed in their construction and affected the supply of the entire sector ; (ii) anticipation of physical guarantee from structuring plants (between January 2013 to October 2017), and restriction on the flow (transmission) of energy from these plants; (iii) in addition to generation outside the order of merit, which caused damage to hydraulic generators that stopped generating because they were “replaced” by thermal generation outside the order of merit - GFOM (electric and energy) and imports. The extension of the grant is limited to 7 years, subject to the withdrawal of any lawsuits or the right to discuss issues related to the Energy Reallocation Mechanism - MRE by the eligible agents.

By extending the concession period for hydroelectric generators, since they are not subject to IFRIC 12 (ICPC 01) - Concessions, the Granting Authority compensates companies by granting a non-pecuniary right, in the form of an extension of the concession period, with the character of recovery of costs incurred as of 2012, recognized as capital spent by law.

During the regulatory process by ANEEL, which culminated in the publication of Normative Resolution No. 895 of 2020 (“Resolution”), the Electricity Trading Chamber (“CCEE” or “Chamber”) carried out, at the request of the National Agency of Electricity (“ANEEL” or “Agency”), preliminary calculations of the estimated extension time of the eligible agents' concession, according to the initial premises of the opening of the public consultation, disclosed on the Agency's website in October 2020, of some plants of the subsidiaries CBA and VCSA.

Certain factors considered for the initial calculation of the CCEE were, to some extent, changed by ANEEL in the approval of the final version of the regulation, which is in force today and which subsidizes the calculations, which, on this date, are being prepared by the Chamber. Additionally, some factors for the correct calculation of the extension of the grant are not known by the Company, mainly regarding the effects caused by the Belo Monte, Jirau and Santo Antônio Hydroelectric Plants (the so-called “structuring plants”), restrictions originated by the non-conclusion, by companies’ transmission, construction of lines and installations for the outflow of the Belo Monte Hydroelectric Plant.

In this regard, it is worth mentioning that, depending on the Company's concession period, these input data, ascertained by the National Electricity System Operator - ONS and Energy Research Company - EPE, and sent directly to the Chamber to be considered in the calculation and calculation processing of final compensation amounts, without public disclosure or to agents, are relevant in determining the estimated total grant extension time and in determining cost recovery.

Therefore, it is impracticable, at this moment, to come to a reliable estimate on the part of the Administration of compensation applicable to the titleholders of hydroelectric plants participating in the MRE, it is necessary to wait for the CCEE to make available the final calculations, considering all the parameters given by the Resolution, with grant in force on the date of publication of the Law.

As of the date of disclosure of this Financial Statement, there was no confirmation that the calculations had already been completed by CCEE and sent to ANEEL. This step is expected to occur before March 3, 2021, and ANEEL will disclose before April 2, 2021, with the beginning of the adhesion by the agents. In possession of the figures released, Management will submit it for the approval of the Board of Directors for adhesion and registration of the regulatory asset. It is worth mentioning that the plants managed by the CBA do not have a lawsuit whose object is the exemption or mitigation of hydrological risks related to the MRE, nor any obligation in relation to the subject.

Thus, the Management concluded that the previous calculation published by CCEE in October 2020 does not consider all parameters given by the Resolution, and thus, the registration will be made from the disclosure of the extension by ANEEL, scheduled for April 2, 2021 and after the approval of the adhesion by the Company and the Board of Directors.

(u) Effects of the pandemic caused by the new Coronavirus (“COVID-19”)

In view of the emergence of the pandemic related to the new Coronavirus, which caused impacts on public health and the economy of Brazil and several countries, the Company reports that it has been taking preventive and risk mitigation measures according to the guidelines established by health authorities national and internacional, aiming to minimize impacts on the health and safety of employees, family, partners and communities, as well as to ensure the continuity of all its operations. These measures are in accordance with the laws in force in the countries in which the Company operates and its internal regulations.

The extent of the impacts of COVID-19 will depend on the duration of the pandemic, possible restrictions imposed by governments and other possible developments in the countries in which the Company and its subsidiaries operate. The Company and its subsidiaries constantly evaluate and implement action plans together with customers, suppliers and other stakeholders involved, according to the current scenario and the best possible projections. In this scenario, the Company and its subsidiaries have been monitoring the effects on the main critical accounting estimates and judgments, as well as other balances with the potential to generate uncertainties and impacts on the financial information disclosed. Below, the most relevant evaluations:

(i) Impairment of non-financial assets

The Company and its subsidiaries consider that the potential effects of the pandemic represent a change in the facts and circumstances considered in the future scenarios projected by Management for the annual analysis of the recoverability of non-financial assets prepared for the consolidated financial statements for the year ended December 31 2019. Therefore, the Company and its subsidiaries are constantly reassessing and monitoring the indications of impairment of non-financial assets, with the intention of identifying evidence of impairment losses.

During the year 2020, the subsidiaries Nexa, VCSA and CBA recorded impairment of R\$ 2,777, as detailed in Note 1.1 (k).

(ii) Recoverability of deferred tax assets

During the year of 2020, given the scenario of uncertainty, the subsidiary VCSA did not record new amounts of tax loss and negative base in the segments Brazil, Latin America, Europe, Asia and Africa. However, during the annual review of the recoverability of deferred tax assets, carried out in the fourth quarter of 2020, which considers future taxable profits calculated based on the updated Strategic Planning, VCSA recorded the amount of R\$ 27 for the year ended on December 2020.

The subsidiary CBA assessed deferred tax assets on tax loss / negative basis and temporary differences recorded in its balance sheet as of December 31, 2020 and verified the need to reverse part of the deferred tax assets, based on the recoverability tests carried out in the fourth quarter of 2020, as per Note 1.1 (n).

(iii) Analysis of liquidity ratios and available credit lines

The Company has a solid liquidity position, reinforced by revolving credit lines available in the amount of USD 200 million. Its subsidiaries Votorantim Cimentos and Nexa also have similar lines. Votorantim Cimentos has a line of USD 778 million. Nexa, in turn, has a USD 300 million credit line. This position provides the Company with conditions to mitigate, the impacts of this adverse scenario, even if not fully known.

Considering the aforementioned uncertainty, addition to the review of ratings of Brazilian and foreign institutions by specialized agencies, the Company and its subsidiaries continue to monitor their liquidity ratios.

(iv) Compliance with obligations contained in debt contracts (covenants)

In accordance with the contracts in force, the financial ratios that are monitored by the Company have been achieved, since they are calculated in accordance with the annual financial statements. Considering that the Company and its subsidiaries are exposed to risks arising from COVID-19, which may deteriorate their operating results, it is not possible to ensure that these covenants will be reached in the future. Accordingly, Management assiduously monitors the covenants assumed in its financial contracts, making it possible to anticipate possible non-compliances.

(v) Compliance with obligations assumed with customers and suppliers

The Company and its subsidiaries evaluated their main supply and supply contracts with customers and suppliers, respectively, and concluded that, despite the impacts caused by the COVID-19 pandemic, their main contractual obligations were fulfilled.

(vi) Risk matrix for calculating the estimate of losses due to doubtful debts

The Company and its subsidiaries monitor the need for reassessment of the risk rating assumptions of customers that base the calculation of the estimate of losses on doubtful accounts. Until the issuance of these financial statements, the Company and its subsidiaries did not identify the need for a relevant change in the risk classification of their customers that would generate a material increase in the estimated amount of loss on doubtful debts recorded on December 31, 2020 or other adverse effects to be accounted for in the group of accounts receivable from customers.

(vii) Inventory loss estimate due to low turnover and change in realizable value

The Company and its subsidiaries monitor the inventory turnover, considering that this represents the main premise for the constitution of the estimated loss recorded by the Company and its subsidiaries. Assumptions for the net realizable value of inventories were revised after the effects of the pandemic caused by COVID-19 in the normal course of business. Until the

issuance of these financial statements, the Company and its subsidiaries did not identify any material changes in the realizable value of inventories, nor did they identify the need to increase the estimated loss of inventories accounted for, due to the pandemic caused by COVID-19, considering the inventory turnover analysis.

(viii) Final considerations

As of the date of issuance of these annual financial statements, the Company and its subsidiaries have not identified any other relevant impacts to be disclosed and have no visibility of impacts or accounting evidence arising from the pandemic caused by COVID-19 that imply changes in accounting policies, in the main established estimates and in the critical accounting judgments mentioned above.

2 Presentation of the consolidated financial statements

2.1 Basis of preparation

(a) Consolidated financial statements

The consolidated financial statements have been prepared and are being presented in accordance with the accounting practices adopted in Brazil, in effect on December 31, 2020, which includes the pronouncements issued by the Accounting Pronouncements Committee (“CPCs”) and in accordance with the International Financial Reporting Standards (International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (IASB)) and interpretation of (“IFRIC”) and evidence all relevant information specific to the financial statements and are consistent with those used by Management in its management.

The Company voluntarily discloses its consolidated statement of value added, according to the accounting practices adopted in Brazil, applicable to public companies and presented as an integral part of these financial statements. In accordance with international practice, this statement is presented as additional information, without prejudice to the set of financial statements.

The financial statements require the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Company’s accounting practices. 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 4.

(b) Approval to the financial statements

The Board of Directors approved the consolidated financial statements for issue on March 30, 2021.

2.2 Consolidation

(a) Subsidiaries

Subsidiaries are fully consolidated from the date on which control is transferred to the Company.

Unrealized balances and gains on transactions between Company companies are eliminated. Unrealized losses are also eliminated, unless the transaction provides evidence of a loss (impairment) of the transferred asset. In the acquisition, the accounting policies of the subsidiaries are changed when necessary, to ensure consistency with the policies adopted by the Company.

The consolidated financial statements were prepared separately from the individual financial statements, issued on March 12, 2021.

(b) Transactions with non-controlling interests

The Company treats transactions with non-controlling shareholders as transactions with owners of the Company's assets. For purchases of non-controlling interests, the difference between any consideration paid and the acquired portion of the carrying amount of the subsidiary's net assets is recorded in equity. Gains or losses arising from the sale of non-controlling interests are also recorded directly in equity, in the “Retained earnings” account.

(c) Loss of control of subsidiaries

When the Company ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in book value recognized in the income statement. The amounts previously recognized in equity value adjustments are reclassified to the result.

(d) Associates and joint arrangements

Joint operations are accounted for in the financial statements in order to represent the Company's contractual rights and obligations. Therefore, the assets, liabilities, revenues and expenses related to its interests in joint operations are individually accounted for in its financial statements.

Investments in associates and joint ventures are accounted for using the equity method and are initially recognized at cost.

The Company's investments in associates and joint ventures includes goodwill identified on acquisition, net of any accumulated impairment loss.

Dilution gains and losses on investments in associates and joint ventures are recognized in the statement of income.

2.3 Foreign currency conversion

(a) Functional and presentation currency of the financial statements

The functional currency of the Company is the Brazilian Real ("R\$" or "BRL").

(b) Transactions and balances

Foreign currency transactions are translated into reais. When items are remeasured, the exchange rates prevailing at the dates of the transactions or the dates of valuation are used. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the statement of income, except when deferred in equity as net investment hedges.

(c) Subsidiaries with a different functional currency

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

- (i) Assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- (ii) Income and expenses for each statement of income are translated at average exchange rates;
- (iii) All resulting exchange differences are recognized as a separate component of equity, in "Carrying value adjustments".

The amounts presented in the cash flow are extracted from the translated movements of the assets, liabilities and profit or loss, as detailed above.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations, and of borrowings and other foreign currency instruments designated as hedges of such investments, are recognized in equity. When a foreign operation is partially disposed of or sold, exchange differences that were recorded in equity are recognized in the statement of income as part of the gain or loss on sale.

Goodwill and fair value arising from the acquisition of an entity abroad are treated as assets and liabilities of the entity abroad and converted at the closing rate.

Below are the functional currencies defined for the significant foreign subsidiaries:

Company	Country	Functional currency	Main activity
St. Marys Cement Inc. - "St. Mary's"	Canada	US Dollar	Cement
Votorantim Cimentos EAA Inversões, S.L. - "VCEAA"	Espanha	Euro	Cement
Votorantim Cimentos International S.A. - "VCI"	Luxemburgo	US Dollar	Holding
Nexa Resources Cajamarquilla S.A.	Peru	US Dollar	Zinc
Nexa Resources Perú S.A.A.	Peru	US Dollar	Mining
Nexa Resources S.A.	Luxemburgo	US Dollar	Holding
Acerbrag S.A.	Argentina	Argentine Peso	Steel
Acerías Paz del Río S.A.	Colombia	Colombian Peso	Steel
Votorantim FinCO GmbH	Luxemburgo	US Dollar	Trading
Janssen Capital B.V.	Netherlands	US Dollar	Holding

3 Changes in accounting policies and disclosures

3.1 New standards issued and amendments to the accounting standards adopted by the Company and its subsidiaries

The following changes to standards issued by the International Accounting Standards Board (IASB) were adopted for the first time for the year beginning January 1, 2020:

- (i) Definition of material: changes to IAS 1 / CPC 26 "Presentation of Financial Statements" and IAS 8 / CPC 23 "Accounting Policies, Change in Estimates and Correction of Errors";
- (ii) Definition of business: changes to IFRS 3 / CPC 15 "Business Combination";
- (iii) IBOR reform: amendments to IFRS 9 / CPC 48, IAS 39 / CPC 38 and IFRS 7 / CPC 40 "Financial Instruments";
- (iv) Revised Conceptual Framework for Financial Reporting;
- (v) Benefits Related to COVID-19 Granted to Leaseholders in Lease Contracts: amendments to IFRS 16 / CPC 06 (R2) "Leases".

The Company analyzed the amendments to the accounting standards mentioned above and did not identify any impacts on its operating and accounting policies.

3.2 New standards issued and amendments to accounting standards not yet adopted by the Company and its subsidiaries

The following changes to standards issued by the International Accounting Standards Board (IASB) will be adopted for the first time in years beginning after January 1, 2021:

- (i) Classification of liabilities between current and non-current: changes to IAS 1 / CPC 26 "Presentation of Financial Statements";
- (ii) Gains on the sale of inventories produced while the asset is not ready for use: changes to IAS 16 / CPC 27 "Property, plant and equipment";
- (iii) Initial adoption of IFRS in subsidiaries: changes to IFRS 1 / CPC 37 "Initial adoption of international accounting standards";
- (iv) Borrowing costs in the derecognition test of financial liabilities: changes to IFRS 9 / CPC 48 "Financial instruments";
- (v) Lease incentives: changes to IFRS 16 / CPC 06 "Leases";
- (vi) Cost of fulfilling onerous contracts: changes to IAS 37 / CPC 25 "Provisions, contingent liabilities and contingent assets";
- (vii) Concessions related to COVID-19: amendments to IFRS 17 "Insurance contracts";
- (viii) Reform of Interbank offered rates (IBORs): amendments to IFRS 9 / CPC 48 "Financial instruments", IAS 39 / CPC 38 "Financial instruments - recognition and measurement", IFRS 7 / CPC 40 "Financial instruments: disclosure", IFRS 4 / CPC 11 "Insurance contracts" and IFRS 16 / CPC 06 "Leases".

The Company analyzed the amendments to the accounting standards mentioned above and did not identify any impacts on its operating and accounting policies to be adopted retrospectively or at the beginning of the year 2021.

4 Critical accounting estimates and judgments

Based on assumptions, the Company and its subsidiaries make estimates regarding the future. By definition, accounting estimates and judgments are continuously reviewed and are based on historical experience and other factors, including expectations of future events, which are considered reasonable for the circumstances. Revisions to the estimates are recognized prospectively.

The accounting estimates will rarely be the same as the actual results. Estimates and assumptions that present a significant risk and are likely to cause a material adjustment to the carrying amounts of assets and liabilities for the next fiscal year are described in the respective notes below:

- (i) Fair value of financial instruments and derivatives (Note 6.1.1);
- (ii) Trade receivables (Note 11);
- (iii) Future energy contracts (Note 16);
- (iv) Property, plant and equipment (Note 18);
- (v) Intangible assets (Note 19);
- (vi) Lease liabilities (Nota 22);
- (vii) Current and deferred income and social contribution taxes (Note 24);
- (viii) Provision (Note 25);
- (ix) Pension plan (Note 28).

5 Social and environmental risk management

The Company, through its subsidiaries and associates, operates in various segments and consequently, these activities are subject to several Brazilian and international environmental laws, regulations, treaties and conventions, including those that regulate the discharge of materials into the environment, which establish the removal and cleaning of the contaminated environment, and those relating to environmental protection. Violations of the environmental regulations in force expose the violator(s) to significant fines and monetary penalties, and may require technical measures or investments to ensure compliance with the mandatory emissions levels.

The Company and its subsidiaries carry out periodic studies to identify any potentially affected areas and records, based on the best estimates of costs, and the amounts expected to be disbursed for the investigation, treatment and cleaning of the potentially affected areas.

The Company and its subsidiaries believe they are in compliance with all of the applicable environmental standards in the countries in which they operate.

6 Financial risk management

6.1 Financial risk factors

The activities of the Company and its subsidiaries expose them to a variety of financial risks, namely: (a) market risk (including currency, commodity price and interest rate risk), (b) credit risk and (c) liquidity risk.

A significant portion of the products sold by the Company and its subsidiaries, such as aluminum, nickel and zinc are commodities, with prices pegged to international indexes and denominated in US Dollars. Their costs, however, are mainly denominated in reais, and therefore, there is a mismatch of currencies between revenues and costs. Additionally, the Company and its subsidiaries have debts linked to different indexes and currencies, which may have an impact on their cash flow.

In order to mitigate the various effects of each market risk factor, the Company and its subsidiaries follow a Market Risk Management Policy, approved by the Finance Committee, with the objective of establishing governance and the overall guidelines of the process of managing these risks, as well as the metrics for their measurement and monitoring.

The financial risk management process aims to protect the cash flow and its operational (revenues and costs) and financial (financial assets and liabilities) components against adverse market events, such as fluctuations in the prices of currencies, interest rates and commodity prices, and against adverse credit events. In addition, it aims to preserve liquidity.

The following financial instruments may be taken out in order to mitigate and manage risk: conventional swaps, call options, put options, collars, currency futures contracts and Non-Deliverable Forward contracts. Strategies that include simultaneous purchases and sales of options are authorized only when they do not result in a net short position in volatility of the underlying asset. The Company and its subsidiaries do not carry out transactions involving financial instruments for speculative purposes.

(a) Market risk

(i) Foreign exchange risk

The Company and its subsidiaries have certain investments in foreign operations, the net assets of which are exposed to foreign exchange risk. The foreign exchange exposure arising from the Company's and its subsidiaries' participation in foreign operations is mainly hedged by borrowing in the same currency as these investments, classified as net investment hedges.

Presented below are the accounting balances of assets and liabilities indexed to a foreign currency at the closing date of the balance sheets:

	Note	2020	2019
Assets denominated in foreign currency			
Cash and cash equivalents	9	7,992	5,125
Financial investments	10	1,209	96
Trade receivables	11	1,875	1,178
Derivative financial instruments		382	234
Related parties		105	82
		11,563	6,715
Liabilities denominated in foreign currency			
Borrowing (*)	21	18,755	15,172
Derivative financial instruments		1,173	155
Lease liabilities		634	567
Trade payables		2,917	2,227
Confirming payables	23	1,840	1,159
Deferred revenue - silver streaming		863	727
		26,182	20,007
Net exposure		(14,619)	(13,292)

(ii) Hedge of net investments in foreign operations

Accounting policy

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 "Carrying value adjustments". The gain or loss relating to the ineffective portion is recognized immediately in income. Gains and losses accumulated in equity are included in the statement of income when the foreign operation is partially or fully disposed of or sold.

The investments shown in the following table were designated as hedged objects and the portion of the debt of the Company and its subsidiaries CBA, Votorantim Cimentos International S.A. and St. Marys Cement Inc., denominated in euros and dollars, as a hedge instrument.

Investment		Debt	
Nexa Resources Cajamarquilla S.A.	822	Votorantim S.A. (i) CBA	747
St. Marys Cement Inc.	1,245	St. Marys Cement Inc.	1,245
Votorantim Cimentos EAA Inversões, S.L.	2,598	Votorantim Cimentos International S.A.	2,598
	4,665		4,590
2019			
Investment		Debt	
Nexa Resources Cajamarquilla S.A.	1,616	Votorantim S.A. CBA	968 580
St. Marys Cement Inc.	2,015	St. Marys Cement Inc.	2,015
Votorantim Cimentos EAA Inversões, S.L.	1,581	Votorantim Cimentos International S.A.	1,581
	5,212		5,144

(i) Early settlement of the debt, as per note 1.1 (s).

The Company and its subsidiaries document and evaluate monthly the effectiveness of investment hedge operations prospectively, as required by CPC 48 / IFRS 9 - "Financial instruments".

The exchange variation loss on debt conversion, net of income tax and social contribution, recognized as "Equity valuation adjustments" on December 31, 2020, was R\$ 289 (December 31, 2019, net gain in the amount of R\$ 92) (Note 29 (c)).

(iii) Cash flow and fair value interest rate risk

The interest rate risk arises from the fluctuations of each of the main indexes of interest rates from borrowing and from financial investments, which have an impact on the payments and receipts of the Company and its subsidiaries. Borrowing at fixed rates exposes the Company and its subsidiaries to fair value interest rate risk.

(iv) Commodity price risk

The Financial Policy of the Company's operating subsidiaries establishes guidelines to mitigate the risk of fluctuations in commodity prices that have an impact on the cash flow of the Company's operating subsidiaries.

The exposure to each commodity price considers the monthly projections of production, purchases of inputs and flows of maturities of the related hedges. Hedge transactions are classified into the following categories:

Fixed-price commercial transactions - hedge transactions that switch, from fixed to floating, the price contracted in commercial transactions with customers interested in purchasing products at a fixed price;

Hedges for "quotation periods" - hedges that set a price for the different "quotation periods" between the purchases of certain inputs (metal concentrate) and the sale of products arising from the processing of these inputs;

Hedges for "costs of inputs" - intended to ensure protection against volatility in the prices/costs of its operating subsidiaries for commodities such as oil and natural gas;

Hedges for "operating margin" - intended to set the operating margin for a portion of the production of certain operating subsidiaries.

(b) Credit risk

Derivative financial instruments and financial investments create exposure to credit risk of counterparties and issuers. The Company and its subsidiaries adopt a policy of working with issuers which have, at a minimum, been assessed by two of the following three rating agencies: Fitch Ratings, Moody's or Standard & Poor's ("S&P"). The minimum rating required for the counterparties is "A" (Brazilian scale) or "BBB-" (international scale), or equivalent. For financial assets where issuers do not meet the minimum credit risk ratings, criteria proposed by the Finance Committee are applied as an alternative, criteria approved by the Board of Directors.

The credit quality of financial assets is disclosed in Note 8. The ratings disclosed in this Note always represent the most conservative ratings of the agencies in question.

The pre-settlement risk methodology is used to assess counterparty risk on derivatives transactions, determining (via Monte Carlo simulations) the likelihood of a counterparty not honoring the financial commitments defined by the contract. The use of this methodology is described in the Votorantim Financial Policy.

(c) Liquidity risk

The following table analyzes the financial liabilities of the Company and its subsidiaries, by maturity, corresponding to the period remaining from the balance sheet date up to the contractual maturity date. The amounts disclosed in the table represent the undiscounted contractual cash flows, these amounts may not be reconciled with the amounts disclosed in the balance sheet.

	Note	Up to one year	From one to three years	From three to five years	From five to ten years	From ten years	Total
At December 31, 2020							
Borrowing (i)	21	2,258	1,869	11,654	13,418	5,998	35,197
Derivative financial instruments	6.1.1 (a)	514	334	635	1,269	171	2,923
To rent	22	253	208	169	173	55	858
Confirming payables	23	2,380					2,380
Trade payables		5,404					5,404
Dividends payable		44					44
Related parties	15		11				11
Use of public assets	26	100	177	312	828	1,213	2,630
		10,953	2,599	12,770	15,688	7,437	49,447
At December 31, 2019							
Borrowing (i)	21	1,362	5,506	6,918	9,126	4,544	27,456
Derivative financial instruments		69	117	51	213	2	452
To rent	22	229	288	177	119	28	841
Confirming payables	23	1,415					1,415
Trade payables		4,429					4,429
Dividends payable		120					120
Related parties	15		50				50
Use of public assets		88	152	254	732	1,233	2,459
		7,712	6,113	7,400	10,190	5,807	37,222

- (i) Does not consider adjustment to fair value of the operations contracted in Law No. 4131/1962.

6.1.1 Derivatives contracted

Accounting policy

Initially, derivatives are recognized at fair value on the date of their contracting and are subsequently re-measured at their fair value.

The fair value of financial instruments that are not traded on active markets is determined using valuation techniques. The Company and its subsidiaries use their judgment to choose between different methods and to define assumptions that are mainly based on the market conditions existing at the balance sheet date.

The method for recognizing the resulting gain or loss depends on whether the derivative is designated or not as a hedge instrument in cases of adoption of hedge accounting. This being the case, the method depends on the nature of the item being hedged. The Company and its subsidiaries adopt hedge accounting and designate certain derivatives as:

(i) Cash flow hedge

With a view to ensuring a fixed operating margin in reais for a portion of the production of the metal businesses, the subsidiaries enter into commodity forward contracts (zinc, aluminum and nickel) on sales of certain commodities combined with the sale of US Dollar forward contracts. These subsidiaries adopt hedge accounting for the derivative instruments entered into for this purpose.

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in equity within "Carrying value adjustments". The gain or loss relating to the ineffective portion is recognized as "Operating income (expenses)". The amounts recognized in equity are recorded in the statement of income (in the same line item affected by the transaction originally hedged) upon realization of the hedged exports and/or sales referenced to London Metal Exchange ("LME") prices.

(ii) Fair value hedges

With the objective of maintaining the flow of the metal businesses' operating revenue pegged to LME prices, the subsidiaries enter into hedging transactions under which they convert sales at fixed prices to floating prices in commercial transactions with customers interested in purchasing products at a fixed price. Changes in the fair values of derivatives that are designated derivatives are recognized in the income for the year.

(a) Effects of derivative financial instruments on the balance sheet and cash flow

The table below summarizes the derivative financial instruments and the underlying hedged items:

Programs	Principal Value			2019								2020				Fair value by maturity				
	2020		2019	As per unit	Fair value	Inventory	Net revenue from products sold and services rendered	Cost of products sold and services rendered	Other operating income (expenses), net	Finance results, net	Changes in fair value		Fair value	2020	2021	2022	2023	2024+		
											Other comprehensive income	Gain (loss) Realized								
Hedges for sale of zinc at a fixed price																				
Zinc forward	15,695	15,252	ton	(4)					(3)		(17)	10		10						
				(4)					(3)		(17)	10		10						
Hedges for mismatches of quotational period																				
Zinc forward	204,394	258,220	ton	(3)	(3)	48	(93)	6			(56)	11		11						
				(3)	(3)	48	(93)	6			(56)	11		11						
Operating margin hedging																				
Aluminum forward	203,130	151,800	ton	(19)		38					(307)	62	(350)	(326)	(24)					
Collars	5	18	USD millions	3		(14)					(2)	(13)								
USD forward	337	273	USD millions	42		(231)					24	(217)	52	46	6					
				26		(207)					(285)	(168)	(298)	(280)	(18)					
Foreign exchange risk																				
Collars		181	USD millions	(2)					(98)		(100)									
Turkish Lira Term (EUR/TRY)	1		EUR milhões						(1)			(1)		(1)						
Turkish Lira Term (USD/TRY)			USD milhões						(2)			(2)		(2)						
				(2)					(101)		(100)	(3)		(3)						
Interest rates risk																				
LIBOR floating rate vs. CDI floating rate swaps	225	315	USD millions	54					325		189	190	(14)	(40)	(13)	257				
IPCA floating rate vs. CDI floating rate swaps	760	227	BRL	6					39		8	37	6	(10)	(16)	57				
USD vs. CDI floating rate swaps		50	BRL						14		(1)	15	(2)	(9)	(11)	37				
CDI floating rate swaps vs. USD floating swaps	1,335	747	BRL	(127)		(44)					(563)	(44)	(690)	(48)	(10)	(9)	(623)			
IPCA floating rate vs. USD floating rate swaps	160	139	BRL	(3)		2					(49)	2	(52)	(3)	(4)	(4)	(41)			
BRL vs. USD floating rate swaps		477	BRL						(2)			(2)	30	29	26	(87)				
				(70)		(42)			376		(612)	154	(502)	(31)	(44)	(27)	(400)			
Hedge of operational contracts																				
Floating rate swap at IPCA vs. floating rate in USD	823		USD thousands								25	25				23	2			
											25	25				23	2			
Total value of the derivative instruments				(53)	(3)	(201)	(93)	3	275		(872)	(187)	(757)	(293)	(62)	(4)	(398)			

As of December 31, 2020, derivative transactions net of taxes recognized in "Equity valuation adjustment" totaled R\$ 636. In addition, there are hedge accounting transactions net of taxes, with gains in the amount of R\$ 17, in subsidiaries' non-consolidated accounts also recognized in "Equity valuation adjustment".

(b) Derivative financial instruments – Put-option

During the year ended on December 31, 2018, the transaction was concluded as a result of which Votorantim Siderurgia S.A. became a subsidiary of ArcelorMittal Brasil S.A. (“AMB”). According to the agreement between the parties, VSA now holds a minority interest of 15% in the AMB combined long steel business which, in compliance with accounting rules, was recognized as a financial instrument, in accordance with CPC 48 - "Financial instruments". The change in the fair value of this operation in the period resulted in a net loss of R\$ 403 (December 31, 2019, loss of R\$ 89), recorded in the “Net financial result” account.

6.1.2 Fair value estimation

The main financial assets and liabilities are described below, as well as their valuation assumptions:

Financial assets - considering the nature and the terms, the amounts recorded approximate their realizable values.

Financial liabilities - these instruments are subject to the usual market interest rates. The market value was based on the present value of the expected future cash disbursements, at interest rates currently available for the issue of debts with similar maturities and terms.

The Company discloses fair value measurements according to their level of the following fair value measurement hierarchy:

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

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

Level 3 – Inputs for the assets or liabilities that are not based on observable market data (that is, unobservable inputs).

As of December 31, 2020, financial assets measured at fair value and financial liabilities disclosed at fair value were classified in hierarchy levels 1 and 2, see classification below.

Fair value measured based on				2020
Valuation supported by				
	Note	Prices quoted in an active market (Level 1)	observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9	4,391	5,392	9,783
Financial investments	10	1,279	4,419	5,698
Derivative financial instruments (i)	6.1.1 (a)		2,166	2,166
Derivative financial instruments - put option			252	252
Financial instruments - shares			2,590	2,590
		5,670	14,819	20,489
Liabilities				
Borrowing (i)	21	16,633	13,377	30,010
Derivative financial instruments (ii)	6.1.1 (a)		2,923	2,923
To rent			858	858
Confirming payables	23		2,380	2,380
Deferred revenue - silver streaming			863	863
		16,633	20,401	37,034
Fair value measured based on				12/31/2020
Valuation supported by				
	Note	Prices quoted in an active market (Level 1)	observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9	3,833	2,429	6,262
Financial investments	10	1,392	3,075	4,467
Derivative financial instruments	6.1.1 (a)		399	399
Derivative financial instruments - put option			655	655
Financial instruments - firm commitment	0		29	29
Financial instruments - shares			2,749	2,749
		5,225	9,307	14,532
Liabilities				
Borrowing	21	13,014	8,068	21,082
Derivative financial instruments	6.1.1 (a)		452	452
To rent	22		841	841
Confirming payables			1,415	1,415
Deferred revenue - silver streaming			727	727
		13,014	11,503	24,517

(i) The fair value of these financial instruments takes into account the credit risk of the Company and its subsidiaries; the value of the change in the fair value of the financial liability that is attributable to changes in credit risk is recorded in equity in other comprehensive income. If the classification of credit risk in other comprehensive income creates or increases the accounting mismatch in the result, the entity must present all gains or losses in the income for the year. The accumulated amount of changes in credit risk remains in other comprehensive income until the settlement of the financial instrument, when it is reclassified to retained earnings, without affecting the income for the year.

6.1.3 Sensitivity analysis

The main risk factors affecting the pricing of cash and cash equivalents, financial investments, loans and financing and derivative financial instruments are exposure to the fluctuation in the US Dollar, Euro, Turkish Lira, New Peruvian Sun, Argentine Peso and Bolivian interest rates, LIBOR, CDI, US Dollar coupon, commodity prices and electricity purchase and sale contracts. The scenarios for these factors are prepared using both market sources and specialized sources of information, in line with the Company's governance. The scenarios as at December 31, 2020 are described below:

Scenario I - Considers a shock to the market curves and quotations at December 31, 2020, according to the base scenario defined by management as at March 31, 2021;

Scenario II - Considers a shock of + or - 25% in the market curves at December 31, 2020;

Scenario III - Considers a shock of + or - 50% in the market curves at December 31, 2020.

Notes to the consolidated financial statements
at December 31, 2020

All amounts in millions of reais unless otherwise stated

VOTORANTIM

Risk factors	Cash and cash equivalents and financial investments (i)	Borrowing and related parties (i)	Derivative financial instruments/As per unit	Changes from 2020	Impacts on profit (loss)					Impacts on comprehensive income					
					Scenario I		Scenarios II & III			Scenario I		Scenarios II & III			
					Results of scenario I	-25%	-50%	+25%	+50%	Results of scenario I	-25%	-50%	+25%	+50%	
Foreign exchange rates															
USD	7,939	16,604	2,829	USD millions	0.5%	(117)	(99)	(198)	99	198	(472)	3,262	6,525	(3,261)	(6,525)
EUR	318	960	0		-5.4%	(1)	(6)	(12)	6	12	16	166	332	(166)	(332)
MAD	178	-	0		-5.6%	(10)	(44)	(89)	44	89	-	-	-	-	-
BOB	37	602	0		-7.1%	4	151	301	(151)	(301)	(3)	(9)	(18)	9	18
TRY	21	51	0		-4.4%	-	7	15	(7)	(15)	-	-	-	-	-
CAD	31	92	0		-5.2%	(1)	(6)	(12)	6	12	1	21	43	(21)	(43)
UYU	23	147	0		-5.3%	-	-	-	-	-	4	31	62	(31)	(62)
TND	173	-	-		-5.6%	(10)	(43)	(87)	43	87	-	-	-	-	-
ARS	94	-	-		-6.3%	-	-	-	-	-	(6)	(23)	(47)	23	47
NAD	10	-	-		6.7%	-	-	-	-	-	1	(3)	(5)	3	5
PEN	252	14	-		-3.4%	(9)	(56)	(112)	56	112	-	(3)	(7)	3	7
COP	125	382	-		-2.1%	313	96	191	(96)	(191)	(3)	(32)	(64)	32	64
	9,201	18,852	2,829			169		(3)		3	(462)	3,410	6,821	(3,409)	(6,821)
	-	-	-			-	-	-	-	-	-	-	-	-	-
Interest rates															
BRL - CDI	6,213	4,231	10,217	BRL millions	1 bps	5	5	12	(3)	(3)	28	53	114	(46)	(85)
BRL - IPCA	-	1,437	-		-81 bps	(12)	208	416	(208)	(416)	-	-	-	-	-
BRL - TJLP	-	120	-		-36 bps	165	180	361	(180)	(361)	-	-	-	-	-
USD - LIBOR	-	2,418	1,326	USD millions	7 bps	7	18	36	(18)	(36)	-	-	1	-	(1)
Dollar coupon	-	-	763	USD millions	-6 bps	2	14	28	(14)	(27)	4	(54)	(110)	50	98
	6,213	8,206	12,306			167	425	853	(423)	(843)	32	(1)	5	4	12
Price of commodities															
Zinc	-	-	220,089	ton	-13.7%	43	78	156	(78)	(156)	(14)	(26)	(53)	26	53
Aluminium	-	-	203,130	ton	-13.3%	-	-	-	-	-	222	482	964	(482)	(964)
			423,219			43	78	156	(78)	(156)	208	456	911	(456)	(911)
Firm Commitment - electric energy															
Purchase and sale contracts - fair value	-	-	227	-		-	3	7	(3)	(7)	-	-	-	-	-
			227				3	7	(3)	(7)					

- (i) The balances presented do not reconcile with the notes, as the analysis carried out included only the most significant currencies and rates. Interest rates only include the principal amount.

7 Financial instruments by category

Accounting policy

The Company and its subsidiaries classify their financial instruments depending on the purpose for which the financial instruments were acquired. Management determines the classification of financial instruments upon initial recognition, in the following categories:

(a) Financial instruments at fair value through profit or loss

These are financial assets held for active and frequent trading. These assets are measured at their fair value, and the changes are recognized in the statement of income for the year.

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

These are financial instruments that meet the criteria of contractual terms, which give rise to cash flows that are exclusively the payment of principal and interest and are maintained in a business model, the objective of which is achieved both by obtaining contractual cash flows and by sale of financial assets. The instruments in this classification are measured at fair value through other comprehensive income.

(c) Financial instruments at amortized cost

These are financial instruments maintained in a business model whose purpose is to obtain contractual cash flows and their contractual terms give rise to cash flows that are exclusively the payment of principal and interest. The instruments in this classification are measured at amortized cost.

(d) Impairment of financial assets measured at cost

This is measured as the difference between the book value of the assets and the present value of the estimated future cash flows (excluding future credit losses that were not incurred), discounted at the current interest rate of financial assets. The book value of the asset is reduced and the amount of the loss is recognized in the statement of income.

If, in a subsequent period, the impairment loss decreases and the impairment can be objectively related to an event occurring after recognition of the impairment (such as an improvement in the debtor's credit rating), the reversal of the loss will be recognized in the statement of the results.

	Note	2020	2019
Assets			
At amortized cost			
Trade receivables		2,352	1,918
Related parties	15	196	229
		2,548	2,147
Fair value through profit or loss			
Cash and cash equivalents	9	9,783	6,262
Financial investments	10	5,698	4,467
Accounts receivable from customers		857	278
Derivative financial instruments	6.1.1 (a)	1,154	265
Derivative financial instruments - put option	6.1.1 (b)	252	655
Future energy contracts		58	29
		17,802	11,956
Fair value through other comprehensive income			
Financial instruments - shares	13	2,590	2,749
Derivative financial instruments	6.1.1 (a)	1,012	134
		1,012	134
Liabilities			
At amortized cost			
Borrowing	21 (a)	23,676	18,848
Trade payables		5,404	4,429
Financial instruments - firm commitment	22	858	841
Related parties	15	11	50
Confirming payables	23	2,380	1,415
Use of public assets	26	1,497	1,238
		33,826	26,821
Fair value through profit or loss			
Borrowing	21 (a)	1,389	907
Derivative financial instruments	6.1.1 (a)	511	69
Financial instruments - firm commitment		285	203
		2,185	976
Fair value through other comprehensive income			
Derivative financial instruments	6.1.1 (a)	2,412	383
		2,412	383

(i) In practice, fair value and amortized cost are equivalent, considering, by definition, the characteristics of cash equivalents.

8 Credit quality of financial assets

	2020			2019		
	Local rating	Global rating	Total	Local rating	Global rating	Total
Cash and cash equivalents						
AAA	1,575		1,575	1,563		1,563
AA+	309		309			
AA	158		158	1	446	447
AA-	46	136	182	416	295	711
A+		2,092	2,092		884	884
A		2,216	2,216		994	994
A-		1,790	1,790		259	259
BBB+		687	687		384	384
BBB		300	300		130	130
BBB-		292	292		102	102
BB		13	13		29	29
BB-		10	10		9	9
B+					9	9
B		60	60			
B-		1	1		76	76
CCC+		2	2			
CCC		30	30		16	16
Unrated (i)		66	66		649	649
	2,088	7,695	9,783	1,980	4,282	6,262
Financial investments						
AAA	3,639		3,639	3,840		3,840
AA+	26		26	45		45
AA	317		317	74	2	76
AA-	487		487	373	12	385
A+	20	29	49	20	13	33
A		131	131			
BBB-					29	29
CCC+		4	4			
CCC					36	36
Unrated (ii)		1,045	1,045	19	4	23
	4,489	1,209	5,698	4,371	96	4,467
Derivative financial instruments						
AAA	1,688		1,688	377		377
AA					4	4
AA-	323		323	7		7
A+		10	10		2	2
A-		145	145		9	9
	2,011	155	2,166	384	15	399
Financial instruments						
AAA	2,590		2,590	2,749		2,749
	2,590		2,590	2,749		2,749
	11,178	9,059	20,237	9,484	4,393	13,877

The local and global ratings were obtained from ratings agencies (Standard & Poor's, Moody's and Fitch Ratings). The Company considered the ratings of Standard & Poor's and Fitch Ratings for presentation purposes, and the classification as established in the Company's Financial Policies.

- (i) Refers to values invested in offshore banks which are not rated by any ratings agency.
- (ii) Refer to amounts invested in liquid assets traded abroad that are not classified by rating agencies.

9 Cash and cash equivalents

Accounting policy

Cash and cash equivalents include cash, bank deposits and other highly liquid short-term investments whose original maturities are less than three months, which are readily convertible into a known amount of cash and which are subject to an insignificant risk of change in value.

(a) Breakdown

Cash and cash equivalents in local currency include deposits in current bank accounts and government securities (overnight operations) or financial institutions, indexed to the interbank deposit rate. Foreign currency cash equivalents are mainly composed of financial instruments in local currency of the company and its investees.

	2020	2019
Local currency		
Cash and banks	27	9
Bank Deposit Certificates - "CDBs"	798	326
Repurchase agreements - private securities	11	241
Repurchase agreements - public securities	955	561
	1,791	1,137
Foreign currency		
Cash and banks	3,409	3,263
Time deposits	4,583	1,862
	7,992	5,125
	9,783	6,262

10 Financial investments

Accounting policy

Financial investments have, for the most part, immediate liquidity, however, they are classified as financial investments based on the original maturities, considering the expected destination of the funds. Investments in national currency comprise government bonds or financial institutions, indexed to the interbank deposit rate.

Investments denominated in foreign currency are mainly composed of fixed income financial instruments in local currency (time deposits). There are also investments that have immediate liquidity considering the expected allocation of funds by the Investment Policy. Such investments comprise sovereign bonds and ETFs (Exchange Traded Funds) with low risk concentration in specific assets, following restrictions defined in the Investment Policy to safeguard liquidity and mitigate risk of capital loss.

(a) Breakdown

Bank Deposit Certificates - "CDBs"	2,583	2,308
Financial Treasury Bills - "LFTs"	1,169	1,218
Repurchase agreements - private securities	290	3
Repurchase agreements - public securities	110	173
Investment fund quotas	337	669
Financial investments in foreign currency (i)	1,209	96
	5,698	4,467
Current	5,678	4,444
Non-current	20	23
	5,698	4,467

(i) Balance refers substantially to investments in sovereign bonds and ETFs with low risk concentration in specific assets.

11 Trade receivables

Accounting policy

Trade receivables correspond to the amounts referring to the sale of goods or provision of services in the normal course of the activities of the Company and its subsidiaries.

They are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method less the estimated loss on allowance for loan losses. Accounts receivable from customers in the foreign market are updated based on the exchange rates in effect on the balance sheet date.

(a) Breakdown

	2020	2019
Trade receivables - Brazil	1,475	1,144
Trade receivables - foreign customers	1,892	1,230
Related parties	64	13
	3,431	2,387
Allowance for doubtful accounts	(222)	(191)
	(222)	(191)
	3,209	2,196

(b) Breakdown by currency

	2020	2019
Brazilian real	1,334	1,018
U.S. dollar	1,213	764
Euro	181	60
Colombian peso	131	125
Turkish lira	71	16
Uruguayan peso	62	67
Moroccan dirham	61	35
Argentine peso	55	60
Other	101	51
	3,209	2,196

(c) Changes in estimated loss for doubtful accounts

	2020	2019
Opening balance	(191)	(174)
Additions, net	(44)	(56)
Receivables written off as uncollectible (i)	21	39
Effect of subsidiaries excluded from consolidation	(2)	
Foreign exchange variations	(6)	
Closing balance	(222)	(191)

(i) The debits on the estimated loss account with doubtful accounts are generally written off when there is no expectation of recovery of funds.

(d) Aging of trade receivables

	2020	2019
Current	2,945	1,864
Up to three months past due	166	282
Three to six months past due	14	4
Over six months past due	306	237
	3,431	2,387

12 Inventory

Accounting policy

Presented at the lower of cost and net realizable value. The cost is determined using the weighted average cost method. The costs of finished products and products in preparation comprise raw materials, direct labor and other direct and indirect production costs (based on normal operational capacity). The raw materials from biological assets (e.g: trees from a plantation, plants, fruit trees, cattle, etc.) are measured at fair value, less selling expenses at the point of harvest, when they are transferred from non-active assets current to the inventory group.

The subsidiaries, at least once a year, carry out the physical inventory of the goods included in their inventory. Inventory adjustments are recorded under "Cost of goods sold and services provided".

The provision for inventory losses refers substantially to obsolete and low turnover materials.

(a) Breakdown

	2020	2019
Finished products	949	862
Semi-finished products	1,705	1,587
Raw materials	858	826
Auxiliary materials and consumables	1,249	995
Imports in transit	319	79
Other	114	173
Provision for inventory losses	(470)	(393)
	4,724	4,129

(b) Changes in the estimate of inventory losses

						2020	2019
	Finished products	Semi-finished products	Raw materials	Auxiliary materials and consumables	Other	Total	Total
Balance at the beginning of the year	(25)	(64)	(7)	(211)	(86)	(393)	(482)
Addition	(31)	(31)	(19)	(98)	(50)	(229)	(200)
Reversal	43	41	9	93	33	219	308
Exchange variation	(4)						
Balance at the end of the year	(17)	(57)	(17)	(246)	(133)	(470)	(393)

13 Financial instruments - Shares

Uses the average share price quote for the last ninety days of the closing date.

The value of financial instruments refers, substantially, to the portion of the Company's shares held by Suzano S.A.

	2020	2019
Balance at beginning of year	2,749	
Closing the operation		2,932
Change in fair value	1,078	(183)
Sale of shares	(1,238)	
Balance at the end of the year	2,589	2,749

14 Taxes recoverable

Accounting policy

The recoverable taxes are held in assets mainly for the purpose of recognizing in the balance sheet of the entity the book values that will be the object of future recovery.

	2020	2019
Corporate Income Tax ("IRPJ") and Social Contribution on Net Income ("CSLL")	1,725	1,826
Social Contribution on Revenue ("COFINS") (i)	1,561	1,963
State Value-added Tax on Sales and Services ("ICMS")	719	695
Social Integration Program ("PIS")	368	400
Value-added Tax ("VAT") (foreign companies)	252	249
	68	76
Withholding Income Tax ("IRRF")	59	47
State VAT on Sales and Services on PP&E	44	65
Excise Tax ("IPI")	32	31
Social Security Credit	20	20
	11	8
Other	140	65
	4,999	5,445
Current	2,033	1,968
Non-current	2,966	3,477
	4,999	5,445

15 Related parties

Accounting policy

Related parties are individuals or legal entities that are related to the entity that reports the financial statements.

Assets	Trade receivables		Dividends receivable		Non-current assets	
	2020	2019	2020	2019	2020	2019
Related companies and joint ventures						
Cementos Avellaneda S.A.	3	2		9		
Banco Votorantim S.A.			36			
Citrosuco S.A. Agroindústria (i)					126	159
Citrosuco GmbH (i)					67	52
Supermix Concreto S.A.	22	5				
VTRM Energia Participações S.A	3		140	65		
Superior Building Materials LL	24					
Other	12	5		7	3	18
	64	13	176	81	196	229
Current	64	13	176	81		
Non-current					196	229
	64	13	176	81	196	229

- (i) Refers to accounts receivable related to assets in excess of the basic net assets invested in Citrosuco's operation. The realization period is linked to the performance of each item under the contractual rules laid down in the shareholder agreement and the closing memorandum signed between Fischer S.A. – Commerce, Industry and Agriculture and Votorantim.

Liabilities	Trade payables		Dividends payable		Non-current liabilities	
	2020	2019	2020	2019	2020	2019
Related companies and joint ventures						
Superior Materials Holdings, LLC	11	7				
Cementos Avellaneda S.A.	1					36
Others	6	5			11	50
	18	12			11	50
Non-controlling interests						
Current	18	12	44	120		
Non-current					11	50
	18	12	44	120	11	50

Profit and loss	Sales (purchases), net		Finance income (expenses), net	
	2020	2019	2020	2019
Related companies and joint ventures				
Cementos Especiales De Las Islas, S.A.	22	23		
Cementos Granadilla S.L.	20	15		
Citrosuco S.A. Agroindústria	20	44		
Midway Group, LLC	32	32		
Supermix Concreto S.A.	235	201		
Superior Materials Holdings, LLC	112	75		
Others	21	31	(4)	(4)
	462	421	(4)	(4)

16 Future energy contracts

The subsidiary Votorantim Comercializadora de Energia Ltda. (“Votener”) Centralizes energy purchase and sale transactions to meet the demands of Votorantim companies. A portion of these transactions takes the form of contracts that have been entered into and continue to be carried out for the purpose of receiving the energy for own use or delivering self-produced energy, in accordance with the productive demands of the Company's subsidiaries and, therefore, meets the definition of a financial instrument.

Another part of these transactions refers to energy purchases and sales, not used in the production process of Votorantim companies, being traded in an active market, therefore, it meets the definition of a financial instruments, due to the fact that transactions are settled in energy, and promptly convertible into cash. Such contracts are accounted for as derivatives under IFRS 9 / CPC 48 and are recognized in the balance sheet of their subsidiaries at fair value, on the date the derivative is entered into, and are revalued at fair value on the balance sheet date.

The operations carried out by the indirect subsidiary Votener until 2023 in the Free Contracting Environment (“ACL”) were recognized at their fair value on the closing date of each operation. In 2020, the realization of the fair value of these operations, resulting from the physical settlement of the energy purchase and sale contracts, resulted in a gain of R\$ 83 (R\$ 81 in loss in 2019). These amounts were accounted for under “Other operating income (expenses), net”. The A-0/2014 contracts, which were traded in the Regulated Contracting Environment (“ACR”), were fully settled in December 2019.

The values quoted above have the following composition:

	ACL			Total		
	Votorantim Cimentos	CBA	Votorantim Energia	Total	2020	2019
Realization	(12)	34	83	105	105	(264)
Recognition		(159)		(159)	(159)	74
Reversal						(6)
	(12)	(125)	83	(54)	(54)	(196)

The table below shows the composition of the assets and liabilities:

	ACL			Total	
	CBA	Votorantim Energia	Votorantim Cimentos	2020	2019
Assets					
Current		49		49	
Non-current		9		9	29
		58		58	29
Liabilities					
Current	(65)		(10)	(75)	(81)
Non-current	(153)		(57)	(210)	(122)
	(218)		(67)	(285)	(203)

17 Investments

Accounting policy

Investments in affiliates, subsidiaries and joint ventures are accounted for using the equity method of accounting as of the date they become their jointly controlled joint ventures and subsidiary.

Affiliates are those entities in which the Company, directly or indirectly, has significant influence, but not control or joint control over financial and operating policies. In order to be classified as a jointly controlled entity, there must be a contractual agreement that allows the Company to share control of the entity and gives the Company the right to the net assets of the jointly controlled entity, not the right to its specific assets and liabilities.

The Company also recognizes its assets in accordance with the venturer's participation in the assets, liabilities, revenues and expenses of the controlled entity on a proportional basis. This implies recognizing the venturer's share of the assets, liabilities, income and expenses of the joint ventures by adding such amounts to its own assets, liabilities, revenues and expenses by the straight-line method, and including such amounts in corresponding to the balance sheet and income statement of the same nature.

(i) Impairment of investments

For the calculation of the recoverable amounts of the investments, the Company and its subsidiaries use criteria similar to those used to test goodwill impairment.

(a) Breakdown

	Information on December 31, 2020		Equivalence result		Balance	
	Net worth	Net income (loss) for the year	2020	2019	2020	2019
Investments accounted for under the equity method - Associates						
Cementos Avellaneda S.A.	1,261	153	28	132	717	578
Alunorte - Alumina do Norte S.A.	3,528	(45)	1		107	107
IMIX Empreendimentos Imobiliários Ltda.	12	6	(2)	2	3	5
Mineração Rio do Norte S.A.	916	(17)	2	14	92	98
Supermix Concreto S.A.	250	18	(5)	1	63	58
Jaguatirica Empreendimento Imobiliário SPE S.A.	213	12	(6)	2	112	111
Cementos Especiales de las Islas S.A.			(20)	15		77
Outros					205	81
Joint ventures						
Citrosuco GmbH	5,208	590	(249)	(88)	3,628	2,643
Banco Votorantim S.A.	10,752	1,473	(719)	797	5,871	5,383
Citrosuco S.A. Agroindústria	(1,248)	(1,145)	602	(267)	(357)	387
Juntos Somos Mais Fidelização S.A.	19	(8)	4	(1)	8	12
VTRM Energia Participações S.A.	3,879	625	(308)	271	2,076	2,058
Hutton Transport Ltda.	40	12	(6)	3	25	19
Midway Group, LLC.	51	19	(10)	9	38	26
RMC Leasing LLC	30				23	15
Superior Materials Holdings, LLC	124	56	(39)	29	87	62
			(727)	919	12,698	11,720

	Goodwill		Added value	
	2020	2019	2020	2019
Citrosuco GmbH	145	145	879	718
Citrosuco S.A. Agroindústria	194	194	73	103
Cementos Avellaneda S.A.	193	117		
Jaguatirica Empreendimento Imobiliário SPE S.A.	5	5		
VTRM Energia Participações S.A.			136	141

Main consolidated companies	Percentage of total and voting capital		Headquarters	Main activity
	2020	2019		
Subsidiaries				
Acerbrag S.A.	100.00	100.00	Argentina	Steel
Votorantim FinCO GmbH	100.00	100.00	Austria	Trading
Janssen Capital B.V.	100.00		Netherlands	Holding
Companhia Brasileira de Alumínio	100.00	100.00	Brazil	Aluminum
Santa Cruz Geração de Energia S.A.	100.00	100.00	Brazil	Electric power
Silcar Empreendimentos, Comércio e Participações Ltda.	100.00	100.00	Brazil	Holding
Votener - Votorantim Comercializadora de Energia Ltda.	100.00	100.00	Brazil	Electric power
Votorantim Cimentos N/NE S.A.	100.00	100.00	Brazil	Cement
Votorantim Cimentos S.A.	100.00	100.00	Brazil	Cement
Votorantim Energia Ltda.	100.00	100.00	Brazil	Holding
Votorantim Finanças S.A.	100.00	100.00	Brazil	Finance
Votorantim Geração de Energia S.A.	100.00	100.00	Brazil	Holding
Votorantim Investimentos Latino-Americanos S.A.	100.00	100.00	Brazil	Holding
Nexa Recursos Minerais S.A.	64.67	66.40	Brazil	Zinc
Votorantim Cement North America Inc.	100.00	100.00	Canada	Holding
Acerías Paz del Río S.A.	91.20	91.20	Colombia	Steel
Votorantim Cimentos EAA Inversiones, S.L.	100.00	100.00	Spain	Holding
St. Marys Cement Inc.	100.00	100.00	USA	Cement
St. Helen Holding II B.V.	100.00	100.00	Cayman Islands	Holding
Hailstone Ltd.	100.00	100.00	British Virgin Islands	Holding
Nexa Resources S.A.	64.67	64.25	Luxembourg	Holding
Votorantim Cimentos International S.A.	100.00		Luxembourg	Holding
Votorantim RE	100.00	100.00	Luxembourg	Insurance
Compañía Minera Atacocha S.A.A.	58.85	58.85	Peru	Mining
Nexa Resources Perú S.A.A	51.77	51.77	Peru	Mining
Nexa Resources Cajamarquilla S.A.	64.61	64.61	Peru	Zinc
Cementos Artigas S.A.	51.00	51.00	Uruguay	Cement
Joint operations				
Baesa - Energética Barra Grande S.A.	15.00	15.00	Brazil	Electric power
Campos Novos Energia S.A.	44.76	44.76	Brazil	Electric power
Great Lakes Slag Inc.	50.00	50.00	Canada	Cement
Voto - Votorantim Overseas Trading Operations IV Ltd.		50.00	Cayman Islands	Trading
Exclusive investment funds				
Fundo de Investimento Pentágono VC Multimercado – Crédito	100.00	100.00	Brazil	Finance
Fundo de Investimento Pentágono CBA Multimercado – Crédito	100.00	100.00	Brazil	Finance
Odessa Multimercado Crédito Privado	94.19	93.49	Brazil	Finance
Odessa Multimercado Crédito Privado Fundo de investimento	100.00	100.00	Brazil	Finance
Odessa Multimercado Crédito Privado Fundo de investimento	100.00	100.00	Brazil	Finance

	Investing entity	Percentage of total capital		Headquarters	Main activity
		2020	2019		
Main non-consolidated companies					
Associates					
Alunorte - Alumina do Norte S.A.	Companhia Brasileira de Alumínio	3.03	3.03	Brazil	Mining
Mineração Rio do Norte S.A.	Companhia Brasileira de Alumínio	10.00	10.00	Brazil	Mining
Cementos Avellaneda S.A.	Votorantim Cimentos S.A.	49.00	49.00	Argentina	Cement
IMIX Empreendimentos Imobiliários Ltda.	Votorantim Cimentos S.A.	25.00	25.00	Brazil	Mining
Supermix Concreto S.A.	Votorantim Cimentos S.A.	25.00	25.00	Brazil	Concrete
Cementos Especiales de las Islas S.A.	Votorantim Cimentos S.A.	50.00	50.00	Spain	Cement
Joint ventures					
Banco Votorantim S.A.	Votorantim S.A.	50.00	50.00	Brazil	Finance
Citrosuco GmbH	Votorantim S.A.	50.00	50.00	Austria	Agribusiness
Citrosuco S.A. Agroindústria	Votorantim S.A.	50.00	50.00	Brazil	Agribusiness
Juntos Somos Mais Fidelização S.A.	Votorantim Cimentos S.A.	45.00	45.00	Brazil	Services
Hutton Transport Ltda.	Votorantim Cimentos S.A.	25.00	25.00	Canada	Transportation
Midway Group, LLC.	Votorantim Cimentos S.A.	50.00	50.00	USA	Cement
RMC Leasing, LLC.	Votorantim Cimentos S.A.	50.00	50.00	USA	Equipment leasing
Superior Materials Holdings, LLC.	Votorantim Cimentos S.A.	50.00	50.00	USA	Cement
VTRM Energia Participações S.A.	Votorantim Geração de Energia S.A.	50.00	50.00	Brazil	Electric power

(b) Information about the companies investees

The following is a summary of selected financial information of the principal associates and joint ventures as at December 31, 2020:

	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity	Net revenue	Operation results	Finance income (costs)	Profit (loss) for the year	Total and voting capital (%)
Investments accounted for based on the equity method - Associates										
Cementos Avellaneda S.A.	450	1,466	422	233	1,261	1,747	462	(149)	153	49%
Alunorte - Alumina do Norte S.A.	9,604		3,131	2,945	3,528	7,996	1,252	(1,326)	(45)	3%
IMIX Empreendimentos Imobiliários Ltda.	6	7	1		12	7	7		6	25%
Mineração Rio do Norte S.A.	479	3,355	991	1,927	916	1,633	339	(347)	(17)	10%
Supermix Concreto S.A.	280	312	206	136	250	1,279	29	(4)	18	25%
Cementos Especiales de las Islas S.A.										50%
Jaguatirica Empreendimento Imobiliário SPE S.A.	209	6		2	213	17	14		12	50%
Controladas em conjunto (Joint ventures)										
Citrosuco GmbH	5,183	1,005	573	407	5,208	4,465	490	129	590	50%
Banco Votorantim S.A.	45,124	68,729	72,412	30,689	10,752	5,299	6,678		1,473	50%
Citrosuco S.A. Agroindústria	3,259	4,924	3,598	5,833	(1,248)	3,467	(595)	(462)	(1,145)	50%
Juntos Somos Mais Fidelização S.A.	57	20	58		19	65	(8)	1	(8)	45%
VTRM Energia Participações S.A.	353	4,226	327	373	3,879		(23)	(2)	625	50%
Hutton Transport Ltda.	35	32	11	16	40	78	14	(1)	12	25.00%
Midway Group, LLC.	39	27	15		51	142	19		19	50.00%
RMC Leasing LLC	4	26			30					50.00%
Superior Materials Holdings, LLC	97	65	38		124	423	56		56	50.00%

(i) These investments below consider the goodwill paid on the acquisition of the investments and the balance of capital gain, as detailed, which is amortized in the parent company's results;

(ii) As of December 31, 2020, the investment includes an adjustment to fair value in the amount of R\$ 495 (December 31, 2019 - R\$ 495).

(c) Changes in investees

	2020	2019
Opening balance for the semester	11,720	11,310
Equity in the results of investees	727	919
Foreign exchange variations	734	(56)
Increase	10	156
Write-off		(68)
Dividends	(264)	(613)
Fair value of assets	(31)	44
Cash flow hedge	(115)	28
Other	(83)	
Closing balance for the semester	12,698	11,720

18 Property, plant and equipment

Accounting policy

(i) Property, plant and equipment

Property, plant and equipment are stated at their historical cost of acquisition or construction, less accumulated depreciation. Historical cost also includes finance 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 Company and they can be measured reliably. The carrying amount of the replaced items or parts is derecognized.

All other repairs and maintenance are charged to the statement of income during the financial period in which they are incurred. The cost of major refurbishments is included in the carrying value of the asset when 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.

Land is not depreciated. Depreciation of other assets is calculated using the straight-line method to reduce their cost to their residual values over their estimated useful lives.

An asset's carrying amount is written down immediately to its recoverable amount when the asset's carrying amount is greater than its estimated recoverable amount, in accordance with the criteria adopted by the Company in order to determine the recoverable amount.

Gains and losses on disposals are determined by comparing the sales amount with the carrying amount and are recognized within "Other operating income (expenses), net" in the statement of income.

(ii) Impairment of non-financial assets

Assets that are subject to depreciation and amortization are reviewed for impairment whenever events or changes in economic, operating or technological circumstances may indicate impairment or loss of book value. An impairment loss is recognized when the carrying amount of the asset or cash generating unit ("CGU") exceeds its recoverable amount, adjusting the carrying amount to the recoverable amount.

The recoverable amount is the greater of an asset's fair value less costs to sell and its value-in-use. For the purpose of impairment assessment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (CGUs). Non-financial assets, except goodwill, which have been impaired, are subsequently reviewed for the analysis of a possible reversal of impairment, at the balance sheet date.

The recoverability of the assets that are used in the activities of the Company and its subsidiaries is evaluated whenever events or changes in circumstances indicate that the book value of an asset or group of assets may not be recoverable based on future cash flows. If the carrying amount of these assets exceeds their recoverable value, the net amount is adjusted and their useful life is adjusted to new levels.

(a) Breakdown and changes

										2020	2019
	Land and improvements	Buildings and construction	Machinery, equipment and facilities	Vehicles	Furniture and fittings	Construction in progress	Asset retirement obligation	Leasehold improvements	Other	Total	Total
Opening balance for the semester											
Cost	2,100	11,246	36,839	1,381	236	3,580	1,058	564	548	57,552	54,540
Accumulated depreciation	(67)	(5,014)	(22,888)	(1,041)	(178)		(533)	(335)	(348)	(30,404)	(28,327)
Net opening balance for the year	2,033	6,232	13,951	340	58	3,580	525	229	200	27,148	26,213
Additions	14	34	68	6	1	3,391			2	3,516	3,189
Disposals	(25)	(37)	(55)	(1)	(1)	(5)			(12)	(136)	(115)
Depreciation	(6)	(451)	(1,814)	(99)	(15)		(45)	(33)	(4)	(2,467)	(2,197)
Foreign exchange variation	264	519	1,407	69	10	296	59	61	(21)	2,664	323
Effect of subsidiaries included in (excluded from) consolidation (i)	(6)	33	469	7	2	13			(4)	514	42
Reversal (constitution) for impairment (ii)	(23)	(305)	(217)	(1)	(5)	(247)	(84)		3	(879)	(309)
Revision of estimated cash flow							96			96	291
Reclassification to assets classified as held-for-sale	(20)		(5)						(9)	(34)	
Write off by corporate transaction									(7)	(7)	
Adjustments to operations in countries with a hyperinflationary economy									75	75	85
Transfers (iii)	93	486	1,472	146	5	(2,564)	(49)	24	2	(385)	(374)
Closing balance for the semester	2,324	6,511	15,276	467	55	4,464	502	281	225	30,105	27,148
Cost	2,396	12,753	43,573	1,739	282	4,464	1,247	742	574	67,770	57,552
Accumulated depreciation	(72)	(6,242)	(28,297)	(1,272)	(227)		(745)	(461)	(349)	(37,665)	(30,404)
Net closing balance for the semester	2,324	6,511	15,276	467	55	4,464	502	281	225	30,105	27,148
Average annual depreciation rates - %	1	4	9	20	11		5	9			

(i) Refers mainly to the acquisition of Arconic Indústria e Comércio de Metais Ltda - Note 1.1 (a).

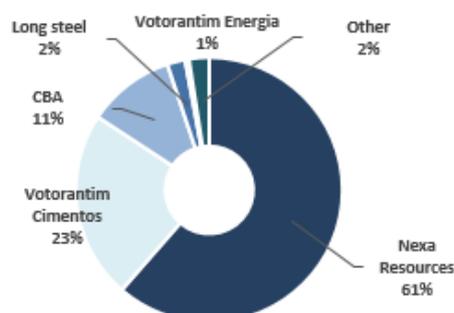
(ii) The impacts related to impairment refer to the subsidiaries Nexa and VCSA - Note 1.1 (k).

(iii) The transfers include the reclassification of "Works in progress" in the group of property, plant and equipment to "Softwares", "Rights over natural resources" and "Other" in the group of intangible assets.

(b) Construction in progress

The balance is composed mainly of expansion and optimization projects related to industry.

Segment	2020	2019
Nexa Resources	2,741	2,123
Votorantim Cimentos	1,021	849
CBA	475	448
Long steel	97	60
Votorantim Energia	22	23
Other	108	77
	4,464	3,580



The main projects in progress by business segment are as follows:

Nexa Resources	2020	2019
Expansion and modernization projects	2,006	1,403
Sustaining	605	460
Security, health and environment projects	112	213
Information technology	16	45
Other	2	2
	2,741	2,123

Votorantim Cimentos	2020	2019
Sustaining	357	283
Modernization industry	182	76
Cement grinding - Pecém - Brazil	135	117
New production line in Sobral - CE	72	72
New lines of co-processing	63	33
Hardware and software	41	28
Environment and security	35	51
Geology and mining rights	31	24
Other	105	165
	1,021	849

CBA	2020	2019
Rondon Bauxite projects	121	118
Furnace refurbishment	115	111
Alumina factory project	66	44
Casting Projects	33	27
Plastic transformation projects	28	21
Security, health and environment projects	24	19
Mining projects	13	22
Projects oven rooms	13	18
Revitalization and adequacy of the plant	1	24
Other	61	44
	475	448

Long steel	2020	2019
Sustaining	86	53
Security projects, health and environment projects - Colombia	8	3
Other	3	4
	97	60

Energy	2020	2019
Corumba - GO projects	21	20
Information technology	1	3
	22	23

19 Intangible assets

Accounting policy

(i) Goodwill

Goodwill represents the excess of the cost of an acquisition over the net fair value of assets and liabilities of the acquired entity. Goodwill on acquisitions of subsidiaries is recorded as "assets" in the consolidated financial statements. 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.

Annually, the Company and its subsidiaries review the net book value of goodwill, in order to assess whether there was impairment. The recoverable amounts of CGUs were determined according to the value in use, based on the discounted cash flow model. The recoverable amount is sensitive to the rate used in the discounted cash flow model, as well as the expected future cash receipts and the growth rate used for extrapolation purposes.

(ii) Rights over natural resources

Costs for the acquisition of rights to explore and develop mineral properties and to explore wind resources are capitalized and amortized using the straight-line method over their useful lives, or, when applicable, based on the depletion of the mines in question. Once the mine or wind farm starts operating, these costs are amortized and considered a cost of production.

Depletion of mineral resources and wind farms is calculated based on extraction and utilization, respectively, taking into consideration their estimated productive lives.

(iii) Computer software

Costs associated with software maintenance are amortized over their useful lives.

(iv) Use of public assets

This represents the amounts established in the concession contracts regarding the rights to hydroelectric power generation (onerous concession) under Use of Public Assets agreements.

These transactions are accounted for at the time when the operating permit is awarded, regardless of the disbursement schedule established in the contract. Upon inception, this liability (obligation) and intangible asset (concession right) correspond to the total amount of the future obligations discounted to their present value (present value of cash flow from future payments).

The amortization of the intangible asset is calculated on a straight-line basis over the period of the authorization to use the public asset. The financial liability is updated by the effective interest method and reduced by the payments contracted.

(v) Contractual customer relationships and non-competition agreements

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

(a) Breakdown and changes

									2020	2019
	Rights over natural resources	Goodwill	Asset retirement obligation	Use of public assets	Contracts, customer relationships and agreements	Software	Rights over trademarks and patents	Other	Total	Total
Opening balance for the year										
Cost	10,253	6,008	457	540	316	602	81	1,134	19,391	18,421
Accumulated amortization	(4,587)		(157)	(217)	(227)	(429)	(53)	(438)	(6,108)	(4,929)
Net opening balance for the year	5,666	6,008	300	323	89	173	28	696	13,283	13,492
Additions	1		8			1		12	22	59
Disposals	(6)					(18)		(1)	(25)	(9)
Amortization and depletion	(413)		(15)	(19)	(26)	(70)	(1)	(6)	(550)	(633)
Foreign exchange variation	1,314	1,777	48		20	16	1	193	3,369	302
Effect of subsidiaries included in						5	1		6	12
Impairment (i)	(635)	(1,206)	(1)			(3)		(53)	(1,898)	(405)
Changes in the interest rate				(13)					(13)	91
Transfers (ii)	129				2	103		166	400	374
Closing balance for the year	6,056	6,579	327	304	85	207	29	1,007	14,594	13,283
Cost	13,078	6,579	535	540	403	770	86	1,639	23,630	19,389
Accumulated amortization	(7,022)		(208)	(236)	(318)	(563)	(57)	(632)	(9,036)	(6,106)
Net closing balance for the year	6,056	6,579	327	304	85	207	29	1,007	14,594	13,283
Average annual amortization and depletion rates - %	6		5	7	7	20				

(i) Refers, substantially, to impairment in the subsidiary Nexa described in item 1.1 (n).

(ii) Transfers include the reclassification of "Works in progress" in the group of property, plant and equipment to "Softwares", "Rights over natural resources" and "Other" in the group of intangible assets.

(b) Goodwill on acquisitions

Accounting policy

The Company and its subsidiaries use the acquisition method to account for transactions classified as a business combination. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, liabilities incurred and equity instruments. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration agreement when applicable. Acquisition-related costs are recorded in the income statement for the year as incurred. Identifiable assets acquired and liabilities assumed in a business combination are initially measured at fair values on the acquisition date. The Company and its subsidiaries recognize the non-controlling interest in the acquiree, both at fair value and at the proportional portion of the non-controlling interest in the fair value of the acquiree's net assets. The non-controlling interest to be recognized is determined on each acquisition.

	2020	2019
Votorantim Cimentos		
North America	2,163	1,499
Europe, Asia and Africa	1,831	1,302
Latin America	13	11
Brazil		
Cimento Vencemos do Amazonas Ltda.	64	64
Engemix S.A.	76	76
CJ Mineração Ltda.		16
	4,147	2,968
Nexa Resources		
Latin America		
Nexa Resources Perú S.A.A.	(i) 1,616	2,330
Nexa Resources Cajamarquilla S.A.	481	373
Brazil		
Campos Novos Energia S.A.	26	26
Pollarix S.A.	1	1
	2,124	2,730
Long steels		
Latin America		
Acergroup S.A.	149	149
Acerholding S.A.	5	6
Acerbrag S.A.	1	1
	155	156
CBA		
Brazil		
Campos Novos Energia S.A.	31	32
Metalex Ltda.	49	49
Rio Verdinho Energia S.A.	29	29
Machadinho Energética S.A.	15	15
BAESA - Energética Barra Grande S.A.	7	7
	131	132
Holding and other		
Latin America		
Votorantim Andina S.A.	16	16
Fazenda Bodoquena Ltda.	1	1
Jaguaritica Empreendimento Imobiliário SPE S.A.	5	5
	22	22
	6,579	6,008

(i) Variation refers to impairment, according to note 1.1 (k).

(c) Impairment test for goodwill

Assets that have an indefinite useful life, for example goodwill, are not subject to amortization and are tested annually for impairment.

The Company and its subsidiaries evaluate at least annually the recoverability of the carrying value of the operating segment of each CGU. The process of estimating these values involves the use of assumptions, judgments and estimates of future cash flows that represent the best estimate of the Company and its subsidiaries.

The Company's management determined the budgeted gross margin based on past performance and its expectations of market development. The discount rates used are pre-tax and reflect specific risks related to the operating segment or the CGU being tested.

The calculations of the value in use are based on cash flow projections, before the calculation of income tax and social contribution, and based on the financial budgets approved by Management for the projected period for the next five years. The amounts referring to cash flows, for the period exceeding five years, were extrapolated based on the estimated growth rates. The growth rate does not exceed the long-term average for the sector.

	Growth rate	Discount rate
Cement	6.50% a 15.80%	5.86% a 14.93%
CBA	9.19%	5.57% a 10.15%
Nexa Resources (i)	0.07% a 6.75%	3.50% a 5.30%
Long steels	9.66 a 20.03%	8.63% a 16.85%
Holding and other	9.34 a 11.14%	6.31% a 8.94%

- (i) The fair value calculations were based on the discounted cash flow model and are based on the premise that growth rates take into account independent information about projections, such as LME quotes (mainly zinc and copper).

20 Right of use assets

(a) Breakdown and changes

						2020	2019
	Land and improvements	Property, buildings and commercial rooms	Machinery, equipment and facilities	IT equipment	Vehicles	Total	Total
Opening balance for the year							
Cost	88	206	266	29	461	1,050	
Accumulated amortization	(12)	(46)	(61)	(17)	(101)	(237)	
Net opening balance for the year	76	160	205	12	360	813	
Initial adoption							666
Remeasurement of principal	(1)	1	1	1	(3)	(1)	
New contracts	14	14	45	5	40	118	355
Amortization	(15)	(51)	(81)	(13)	(116)	(276)	(237)
Disposals	(2)	(1)				(3)	(25)
Renegotiation of contracts		(7)	(1)			(8)	
Effect of subsidiaries excluded in consolidation	1	(2)		(1)	3	1	
Foreign exchange variation	20	18	24	2	90	154	54
Transfers		(1)				(1)	
Closing balance for the year	93	131	193	6	374	797	813
Cost	123	234	340	39	613	1,349	1,050
Accumulated amortization	(30)	(103)	(147)	(33)	(239)	(552)	(237)
Net closing balance for the year	93	131	193	6	374	797	813
Average annual amortization rates - %	12	18	35	62	33		

21 Borrowing

Accounting policy

Borrowings are initially recognized at fair value, net of transaction costs incurred, and subsequently carried at amortized cost. Any difference between the proceeds (net of transaction costs) and the total amount payable is recognized in the statement of income over the period of the 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 Company and costs can be measured reliably. The other borrowing costs are recognized as finance costs in the period in which they are incurred.

(a) Breakdown and fair value

Type	Average annual charges	Current		Non-current		Total		Fair value	
		2020	2019	2020	2019	2020	2019	2020	2019
Local currency									
Debentures	110.18% CDI / IPCA + 3.80%	53	424	2,511	2,287	2,564	2,711	3,214	2,678
Export credit notes	112.09% CDI	267	8	1,825	1,078	2,092	1,086	2,827	1,081
BNDES	TJLP + 2.33% / 0.67% Pré BRL / SELIC + 3.01% / IPCA + 5.00%	66	97	1,037	641	1,103	738	1,829	720
Development promotion agency	10.00% Pré BRL / TJLP + 0.65%	1	7	34	23	35	30	47	32
FINAME	4.62% Pré BRL	10	17	14	43	24	60	25	59
Syndicated loan/bilateral agreements	8.49 % Pré BRL	38		553		591		591	
Other		18	29	13	29	31	58	34	59
National Total		453	582	5,987	4,101	6,440	4,683	8,567	4,629
Foreign currency									
Eurobonds - USD	6.10% Pré USD	231	137	13,315	10,156	13,546	10,293	16,225	11,550
Eurobonds - EUR	3.50% Pré EUR		26		1,576		1,602		1,682
Loans - Law 4131/1962 (i)	Libor + 0.66% / 1.65% Pré USD	2	2	1,387	905	1,389	907	1,389	907
Eurobonds - BOB	5.38% Pré BOB	1	1	407	315	408	316	408	316
Syndicated loan/bilateral agreements	3.73% Pré BOB / 1.81% Pré CAD / 15.09% Pré TRY/ 13.09% Pré UYU / 5.55% Pré BOB	90	22	1,320	358	1,410	380	1,535	394
Export prepayments	Libor + 1.27%	209		312	799	521	799	530	823
Working capital	IBR + 4.02% / 6.90% Pré COP / 0.98% Pré PEN	368	146	29		397	146	368	146
Development promotion agency	Libor + 1.10%	40	31	181	171	221	202	229	210
Other		4	3	697	389	701	392	725	107
		9	4	23	31	32	35	34	318
		954	372	17,671	14,700	18,625	15,072	21,443	16,453
		1,407	954	23,658	18,801	25,065	19,755	30,010	21,082
Current portion of long-term borrowing		488	562						
Interest on borrowing		358	236						
Short-term borrowing		561	156						
		1,407	954						

- (i) Loan agreements (NCE - Export Credit Note) of the subsidiary CBA are intended to financing export-related operations and are linked to swap contracts (derivative financial instrument), which aim to switch floating rate exposure exchange in Brazilian reais (CDI) to an exchange rate pre-fixed in US Dollars, resulting in a weighted average cost of 5.00% per year. The subsidiary Nexa also has NCE contracts, which have linked swap contracts, which aim to exchange the exposure of floating rates in LIBOR to CDI + spread. These swaps were contracted together with the financing and with the same financial institution.
- (ii) Loans related to Law 4,131 / 1962 have swaps (derivative financial instruments) that aim at both the exchange of floating rates in LIBOR and fixed rates for floating rates in CDI, as well as the exchange in currency in dollars for reais. These swaps were contracted with the financial institution in conjunction with the loan (dollar-denominated debt + swap to reais in% of CDI). The terms and conditions of the loan and derivative are configured as a matched operation, so that economically the resulting is a debt in% of the CDI in reais. The difference in measurement between the two instruments (loan at amortized cost x derivative at fair value) generates an “accounting mismatch” in the result and, to eliminate this effect, contracts made as of August 2015 were designated as “fair value”, the effect of this designation being the measurement of debt at fair value through profit or loss as per note 20.

Key:

BNDES	– National Bank for Economic and Social Development.
BRL	– Brazilian currency (Real).
BOB	– Bolivian peso
CAD	– Canadian Dollar
CDI	– Interbank Deposit Certificate
CDOR	– Canadian Dollar Offered Rate
COP	– Colombian Peso
EUR	– European Union currency (Euro)
EURIBOR	– Euro Interbank Offered Rate.
FINAME	– Government Agency for Machinery and Equipment Financing.
IBR	– Interbank Rate (Colombia)
INR	– Indian Rupee
IPCA	– Extended Consumer Price Index.
LIBOR	– London Interbank Offered Rate.
SELIC	– Special System for Clearance and Custody.
TJLP	– Long-term interest rate set by the National Monetary Council. Until December 2017, the TJLP is the BNDES basic cost of financing. As of January 2018, the Long-Term Rate (TLP) became the main financial cost of BNDES financing.
TYR	– Turkish lira
USD	– US Dollar
UYU	– Uruguayan peso

(b) Changes

	2020	2019
Opening balance for the year	19,755	24,451
New borrowing	11,772	4,323
Interest	1,314	1,007
Addition of borrowing fees, net of amortization	10	17
Fair value adjustment	26	22
Foreign exchange variation	4,345	507
Payments - interest	(1,263)	(1,217)
Payments - principal	(10,846)	(9,356)
Reclassification to liabilities related to legal assets for sale	(55)	
Gain on debt renegotiation	6	
Others	1	1
Closing balance for the year	25,065	19,755

(c) **New borrowing and amortizations**

Through the funding and prepayment of certain debts, the Company seeks to extend the average maturities, as well as to balance the exposure to different currencies for loans and financing against cash generation in these currencies.

The main amortization in the year was as follows:

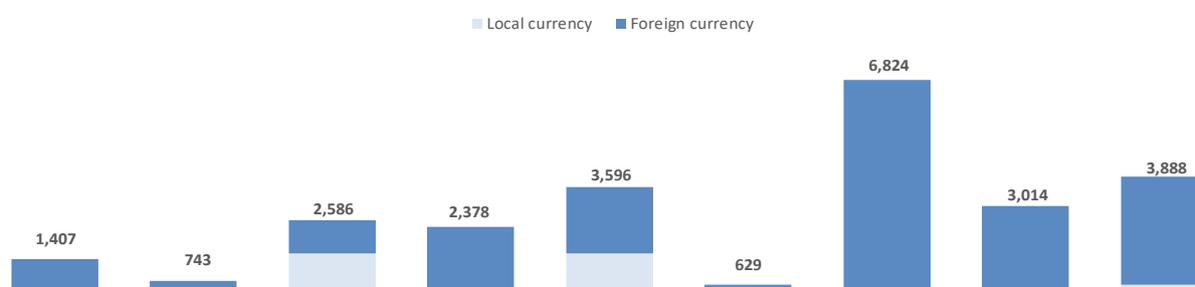
Date	Company	Type	Currency	Principal	Principal BRL	Maturity	Cost
Feb-20	Companhia Brasileira de Alumínio	Export Credit Note (i)	BRL	250	250	2029	4,25% Pré
Mar-20	Nexa Recursos Minerais S.A.	Export Credit Note	BRL	252	252	2025	134,2% CDI
Mar-20	Nexa Resources Peru S.A.A.	Syndicated loan/bilateral agreements (ii)	BRL	477	477	2025	2,45% Pré
Mar-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	USD	20	102	2024	LIBOR 01M + 1%
Mar-20	Votorantim Cimentos S.A.	Loans - Law 4131/1962 (iii)	USD	50	249	2025	110,8% CDI
Mar-20	Nexa Recursos Minerais S.A.	Export Credit Note	BRL	245	245	2022	CDI + 1,80%
Mar-20	Votorantim Cimentos Internacional	Syndicated loan/bilateral agreements	USD	60	304	2024	LIBOR 03M + 1%
Mar-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	CAD	28	100	2024	CDOR 01M + 1%
Mar-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	USD	30	152	2024	LIBOR 01M + 1%
Mar-20	Votorantim Cimentos Internacional	Syndicated loan/bilateral agreements	USD	46	237	2024	LIBOR 03M + 1%
Apr-20	Nexa Resources	Syndicated loan/bilateral agreements	USD	300	1,555	2024	LIBOR 03M + 1%
May-20	Votorantim Cimentos EAA Inversiones S.L.	Syndicated loan/bilateral agreements	USD	200	1,180	2023	LIBOR 03M + 1%
Jun-20	Nexa Resources	Syndicated loan/bilateral agreements	USD	500	2,673	2028	6,50% Pré
Aug-20	Companhia Brasileira de Alumínio	Syndicated loan/bilateral agreements	USD	46	250	2024	3,60% Pré
Oct-20	Mineração Dardanelos	Syndicated loan/bilateral agreements	BRL	225	225	2040	IPCA + 5,52%
Nov-20	Votorantim Cimentos EAA Inversiones S.L.	Syndicated loan/bilateral agreements	EUR	50	328	2025	EURIBOR 03M + 2,40%
Nov-20	Votorantim Cimentos EAA Inversiones S.L.	Syndicated loan/bilateral agreements	EUR	100	635	2025	EURIBOR 06M + 2,30%
Dec-20	Cementos Artigas S.A.	Syndicated loan/bilateral agreements	UYU	1,074	133	2025	9,50% Pré
Dec-20	Mineração Dardanelos	Syndicated loan/bilateral agreements	BRL	250	250	2040	IPCA + 5,52%

- (i) Export Credit Note and BNDES modalities have a fixed rate in US dollars as described in item (a).
- (ii) Syndicated / Bilateral Loans contracted by the subsidiary Nexa Resources Peru S.A.A. has a swap that aims to exchange currency in BRL to US dollar and rate at 8.5% a.a. to 2.45% p.a.
- (iii) The 4131 modality has a floating rate in CDI, as described in item (a).

The main amortizations made in the year were as follows:

Date	Company	projects	Currency	Principal	Principal BRL	Maturity	Observation
Feb-20	Votorantim Cimentos S.A.	Debentures	BRL	113	113	2025	Pre payment
Feb-20	Nexa Resources Peru S.A.A.	Eurobonds	USD	215	952	2023	Pre payment
Mar-20	Votorantim Cimentos Internacional	Syndicated loan/bilateral agreements	USD	23	115	2024	Pre payment
Jun-20	Nexa Resources	Pre payment export	USD	100	535	2023	Pre payment
Jun-20	Nexa Resources	Syndicated loan/bilateral agreements	USD	300	1,567	2024	Pre payment
Aug-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	USD	10	57	2024	Pre payment
Sep-20	Votorantim Cimentos EAA Inversiones S.L.	Syndicated loan/bilateral agreements	USD	200	1,060	2023	Pre payment
Sep-20	Votorantim Cimentos Internacional	Syndicated loan/bilateral agreements	USD	26	706	2024	Pre payment
Oct-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	USD	70	394	2024	Pre payment
Nov-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	USD	25	134	2024	Pre payment
Dec-20	St Marys Cement Inc.	Syndicated loan/bilateral agreements	CAD	61	245	2024	Pre payment
Dec-20	Votorantim Cimentos Internacional	Eurobonds	EUR	195	1,210	2022	Pre payment

(d) Maturity



(e) Breakdown by currency

	Current		Non-current		Total	
	2020	2019	2020	2019	2020	2019
USD	488	174	15,892	12,597	16,380	12,771
Real	453	582	5,987	4,101	6,440	4,683
Euro	3	25	954	1,576	957	1,601
Boliviano	26	2	577	459	603	461
Turkish lire	22	34	29	42	51	76
Colombian peso	364	133	19		383	133
Other	51	4	200	26	251	30
	1,407	954	23,658	18,801	25,065	19,755

(f) Breakdown by index

	Current		Non-current		Total	
	2020	2019	2020	2019	2020	2019
Local currency						
CDI	321	431	3,796	2,848	4,117	3,279
TJLP	19	73	99	238	118	311
TLP	48	30	795	312	843	342
Fixed rate	54	28	575	74	629	102
SELIC	11	20	148	114	159	134
IPCA			574	515	574	515
National Total	453	582	5,987	4,101	6,440	4,683
Foreign currency						
Fixed rate	565	251	14,621	12,262	15,186	12,513
LIBOR	252	36	2,077	2,438	2,329	2,474
EURIBOR	3		954		957	
Other	134	85	19		153	85
Foreign total	954	372	17,671	14,700	18,625	15,072
	1,407	954	23,658	18,801	25,065	19,755

(g) Collateral

On December 31, 2020, the Company guaranteed or provided guarantees for the following balance of loans and financing.

Company	2020	2019
Companhia Brasileira de Alumínio	907	955
Votorantim Cimentos International S.A.	3,226	2,502
Votorantim S.A. (i)		983
Other	13	16
	4,146	4,456

(i) Refers to the assumption of debt originally contracted by the subsidiary CBA.

In addition to these guarantees, the Company guarantees the balance of R\$ 1,344 of the joint venture VTRM Energia e Participações S.A. (December 31, 2019, R\$ 1,403).

As of December 31, 2020, the amount of R\$ 879 was guaranteed by fixed assets due to chattel mortgage (December 31, 2019, R\$ 895).

(h) Covenants/financial ratios

Certain loan and financing agreements are subject to compliance with certain financial ratios (covenants). When applicable, these obligations are standardized for all loan and financing contracts.

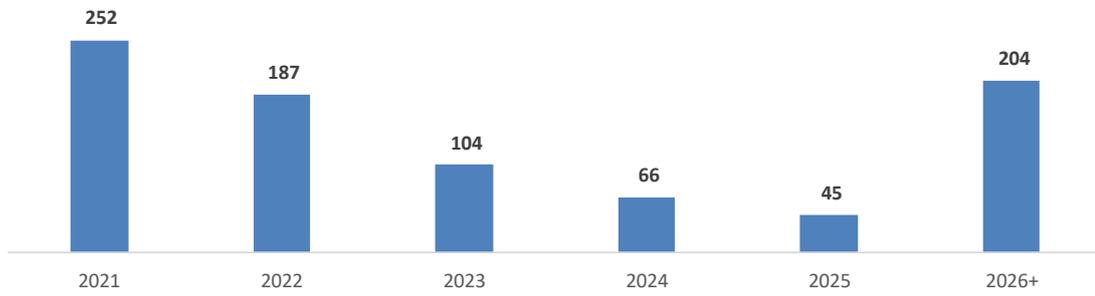
The Company and its subsidiaries complied with all the conditions established in the loan and financing contractual clauses, considering the obtaining of waivers by the subsidiary Nexa in order to correct the leverage ratio or prepayment of debts linked to these covenants. Therefore, there is no possibility that a counterparty will require payment of outstanding debts or default on other debt contracts.

22 Lease liabilities

(a) Changes to lease obligations – IFRS16

	2020	2019
Opening balance for the year	841	
Initial adoption IFRS 16		666
Remeasurement of interest	15	
New contracts	112	355
Amortization	(251)	(217)
Fair value adjustment	(7)	
Renegotiation of contracts	(8)	
Effect of subsidiaries included in consolidation	1	13
Foreign exchange variation	163	24
Closing balance for the year	858	841
Current	235	210
Non-current	623	631
	858	841

(b) Maturity profile



23 Confirming payables

The Company and subsidiaries have entered into agreements with financial institutions, aiming to anticipate receivables from suppliers in domestic and foreign markets. As part of this operation, suppliers transfer the right to receive their accounts receivable related to sales of goods to financial institutions.

Operations - Confirming payables	2020	2019
Domestic market	540	256
Foreign market	1,840	1,159
	2,380	1,415

24 Current and deferred income tax and social contribution

Accounting policy

The income tax and social contribution expense for the period comprises current and deferred taxes. Taxes on profit are recognized in the statement of income, except to the extent that they relate to items recognized directly in equity. In such cases, the taxes are also recognized in comprehensive income or directly in equity.

The current and deferred income tax and social contribution is 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. Management periodically evaluates positions taken by the Company in income tax returns with respect to situations in which the applicable tax regulation is subject to interpretation. It establishes provision where appropriate on the basis of amounts expected to be paid to the tax authorities.

Income tax and current social contribution are shown net, by taxpayer entity, in liabilities when there are amounts to be paid, or in assets when the amounts paid in advance exceed the total due on the balance sheet date.

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

Deferred income tax assets and liabilities are presented net in the balance sheet when there is a legal right and the intention to offset them upon the calculation of current taxes, generally related to the same legal entity and the same taxation authority. Thus, deferred tax assets and liabilities in different entities or in different countries are presented separately, and not net.

The Company and its subsidiaries are subject to income taxes in all countries in which it operates. The provision for income tax is calculated individually by the entity based on tax rates and rules effective at the entity's location. The Company and its subsidiaries also recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will have an impact on the current and deferred tax assets and liabilities in the period in which the determination is made.

(a) Reconciliation of income tax and social contribution expenses

The current amounts are calculated based on the current rates levied on taxable income, adjusted upwards or downwards by the respective additions and exclusions.

The income tax and social contribution amounts presented in the statements of income for the year ended December 31 are reconciled to their Brazilian standard rates as follows

	2020	2019
Profit (loss) before income tax and social contribution	(1,474)	7,147
Standard rates	34%	34%
Income tax and social contribution at standard rates	501	(2,430)
Adjustments for the calculation of income tax and social contribution at effective rates		
Equity	247	312
Difference related to the rate of companies abroad	(45)	(82)
Tax loss and negative basis without deferred tax constitution	(607)	(219)
Mining operation tax	(31)	(29)
Impairment of goodwill without deferred constitution (i)	(351)	
Tax effect of VCSA corporate reorganization	22	82
Addition of Profit abroad IN 1520/14	(381)	(238)
IR credit non-external payment IN 1520/14	280	166
Deferred constitution on exchange variation of fixed assets	(356)	(21)
Impairment of deferred tributes (ii)	(524)	
Permanent difference - Impairment of investments of years after amending Spain VCEAA legislation	(20)	(14)
Impairment of deferred IR	(98)	
Permanent additions (exclusions), net	(229)	307
Income tax and social contribution calculated	(1,592)	(2,166)
Current	(901)	(1,461)
Deferred	(691)	(705)
Income tax and social contribution expenses	(1,592)	(2,166)
Effective rate - %	-108%	30%

(i) Refers to goodwill impairment of subsidiary Nexa, as mentioned in note 1.1 (k)

(ii) Refers, substantially, to the reversal of deferred tax in subsidiary CBA, as mentioned in note 1.1 (n)

(b) Breakdown of deferred tax balances

	2020	2019
Tax credits on tax losses	1,843	2,371
Tax credits on temporary differences		
Estimation for losses on investments, fixed and intangible assets	990	1,011
Foreign exchange gains	318	278
Deferred of losses on derivative instruments	726	343
Tax, civil and labor provision	640	597
Tax benefit on goodwill	503	504
Asset retirement obligation	228	178
Use of public assets	143	149
Estimation for inventory losses	118	93
Environmental liabilities	98	109
PPR - Provision for profit sharing	197	129
Provision for loan	67	74
Provision for social security obligations	57	48
Financial instruments - firm commitment	77	50
Provision for energy charges	57	54
Estimated asset disposals	14	3
Other tax credit	236	168
Tax debts on temporary differences		
Adjustment of useful lives of PP&E (depreciation)	(2,472)	(1,981)
Adjust the fair value in the Suzano transaction	(623)	(549)
Goodwill amortization	(343)	(299)
Market value assets	(1,728)	(1,344)
Adjustment to present value	(151)	(179)
Capitalized interest	(136)	(206)
Fair value adjustments	(50)	(34)
Gain in fair value in VTRM's operation		(48)
Other tax debts	(451)	(265)
Net	358	1,254
Net deferred tax assets related to the same legal entity	2,731	3,341
Net deferred tax liabilities related to the same legal entity	(2,373)	(2,087)

(c) Effects of deferred income tax and social contribution on the profit for the year and comprehensive income

	2020	2019
Opening balance for the year	1,254	1,885
Effects on the results for the year - continuing operations	(691)	(705)
Deferred income tax and social contribution - financial instruments	127	103
Effects of foreign exchange variations in other comprehensive income	(233)	(29)
Others	(99)	
Closing balance for the year	358	1,254

(d) Realization of deferred income tax and social contribution on tax losses

	2020	Percentage
In 2021	183	10%
In 2022	158	9%
In 2023	267	14%
In 2024	343	19%
After 2025	891	48%
	1,843	100%

25 Provision

Accounting policy

The Company and its subsidiaries are party to tax, civil, labor and other legal claims in progress at different Court levels. Provision against potentially unfavorable outcomes of litigation in progress is established and updated based on management evaluation, as supported by external legal counsel, and requires a high level of judgment regarding the matters involved.

The judicial deposits are monetarily restated and when they have a corresponding provision they are presented net in "Provision". Judicial deposits that do not have a corresponding provision are presented in non-current assets.

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

The provision for tax, civil, labor, environmental and other legal claims is recognized when: (i) the Company 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. Losses classified as possible are not recognized for accounting purposes, and are disclosed in the notes. Contingencies with probability of loss classified as remote are not provisioned nor disclosed, except when the Company and its subsidiaries consider their disclosure justified.

Provision is measured at the present value of the expenditure expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to time elapsing is recognized as interest expense. Provision does not include future operating losses.

(ii) Asset retirement obligations

The calculation of asset retirement obligations involves judgment about certain assumptions. In environmental terms, they refer to the future obligation to restore the ecological conditions similar to those existing before the beginning of the project or activity, or to carry out compensatory measures, agreed upon with the applicable bodies, as a result of it being impossible to return the areas to the pre-existing condition. These obligations arise from the beginning of the environmental degradation of the area occupied by the operation or from formal commitments made to the environmental body, under which the degradation must be compensated. The dismantling and removal of an asset from an operation occurs when it is permanently retired, through the interruption of its activities, or by its sale or disposal.

Expenditures relating to mine retirement is recorded as asset retirement obligations. 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. These liabilities are recorded as provisions.

The Company and its subsidiaries recognize a liability based on the fair value for the demobilization of assets in the period in which they occur, against the corresponding intangible asset. The Company and its subsidiaries consider the accounting estimates related to the recovery of degraded areas and the costs of closing a mine as a critical accounting practice because it involves expressive amounts of provisions and these are estimates that involve several assumptions such as interest rates, inflation, useful life of the assets considering the current stage of exhaustion, the costs involved and the projected depletion dates of each mine. These estimates are reviewed annually by the Company and its subsidiaries.

(iii) Obligation for environmental liabilities

The environmental liability must be recognized when there is an obligation on the part of the Company and its subsidiaries through having incurred an environmental cost which is not yet disbursed.

(a) Breakdown and changes

	2020					2019	
	Legal claims					Total	Total
	Asset retirement obligation	Tax	Labor	Civil	Other		
Opening balance for the year	1,801	878	176	252	30	3,137	2,595
Additions	16	120	294	28	54	512	421
Reversals	(3)	(192)	(81)	(17)	(26)	(319)	(137)
Judicial deposits, net of write-offs		6	(13)	4		(3)	31
Settlement in cash	(69)	(2)	(67)	(8)		(146)	(122)
Settlements with escrow deposits		(26)	(4)	(4)		(34)	(163)
Present value adjustment	117					117	78
Monetary restatement	(3)	(22)	1	7	(2)	(19)	17
Foreign exchange variation	250	4	5	2	4	265	33
Revision of estimated cash flow	76					76	384
Closing balance for the year	2,185	766	311	264	60	3,586	3,137

(b) Provision for tax, civil, labor, other contingencies and outstanding judicial deposits

	2020			2019				
	Judicial deposits	Provision	Net amount	Outstanding judicial deposits (i)	Judicial deposits	Provision	Net amount	Outstanding judicial deposits (i)
Tax	(123)	889	766	145	(129)	1,007	878	182
Labor	(123)	434	311	22	(110)	286	176	46
Civil	(17)	281	264	3	(21)	273	252	108
Other	(1)	61	60	23	(1)	31	30	9
	(264)	1,665	1,401	193	(261)	1,597	1,336	345

(i) The Company and its subsidiaries have balances deposited in lawsuits classified by Management, following the indications of the legal advisors of the Company and its subsidiaries as of remote or possible loss. Therefore, no provision has been for these cases.

(c) Litigation with likelihood of loss considered possible

The Company and its subsidiaries are party to litigation representing a risk of possible loss, for which no constituted provision has been made, as detailed below.

	2020	2019
Tax	12,581	11,671
Civil	7,988	7,900
Environmental	527	612
Labor and social security	367	276
	21,463	20,459

(c.1) Comments on contingent tax and public rights liabilities with likelihood of loss considered possible

The following are the main contingent liabilities related to tax proceedings in progress with the likelihood of possible loss, for which there is no provision recorded. In the table below we present an analysis of the relevance of these processes:

(i) Tax assessment notice – “IRPJ / CSLL”

In December 2016, the subsidiary VCSA was assessed by the Brazilian Federal Revenue Office in the historical amount of R\$ 470 demanding the collection of IRPJ and CSLL relating to the period of 2011, due to the alleged undue deduction of operating expenses and costs. In January 2018, the VCSA became aware of the Lower Court decision from the Federal Revenue's Judgment Office, which judged the appeal partially with grounds, reducing the lawsuit by approximately R\$ 114. In December 2018, the Appeal of the Administrative Board of Tax Appeals was dismissed and the Voluntary Appeal was partially accepted for the VCSA. At this moment we await the formalization of the Court Decision. As of December 31, 2020, the restated amount of the contingency is R\$ 580, of which R\$ 54 is assessed as probable and has a properly constituted provision, the amount of R\$ 224 is assessed as possible and the remainder as remote totaling the amount of R\$ 316.

In December 2017, the VCSA received a tax assessment notice from the Brazilian Federal Revenue Office in the amount of R\$ 1,295 for alleged non-payment or underpayment of IRPJ and CSLL relating to the period from 2012 to 2013, due to: (i) capital gain allegedly obtained due to a barter made by the VCSA; and (ii) supposedly incorrect amortization of goodwill. In October 2018, the Company became aware of the lower court decision, which considered the challenge unfavorable. At the moment, the case awaits the judgment of the Voluntary Appeal by CARF. As of December 31, 2020, the updated contingency amount is R\$ 1,505 and is assessed as possible.

(ii) Profits abroad – “IRPJ/CSLL”

The Company and its subsidiaries have assessments drawn up by the Brazilian Federal Revenue Office, for alleged nonpayment of IRPJ and CSLL on profits earned abroad by its subsidiaries or affiliates, in the periods of 2007, 2008, 2010, 2012, 2013 and 2014.

The balance substantially composed by the Company, amounted to R\$ 1,061 at December 31, 2020 (R\$ 1,096 as at December 31, 2019). All cases are awaiting judgment at the administrative level.

(iii) ICMS credit

Between 2011 and 2013, eight notices of infringement and fines were filed against the Company's subsidiary Citrovita Agro Industrial Ltda. ("CAI"), mainly aimed at the collection of ICMS credited, as highlighted in invoices for the transfer of other subsidiaries, with the specific purpose of non taxable export. The tax assessment notices totaled R\$ 833 as at December 31, 2020.

(iv) PIS / COFINS credit statement

Substantially comprised by the subsidiary CBA, which has Decisional Orders and tax assessments relating to the PIS and COFINS credits, referring to the items applied in the production process, which, in the opinion of the Brazilian Federal Revenue Office, would not generate the right to credit of the said contributions. The amount restated as of December 31, 2020 was R\$ 690. Currently, all the processes await administrative decisions.

In the opinion of Management and in the opinion of its independent legal advisors, in light of precedents and case law, the likelihood of loss of the process is considered possible.

(v) Financial Compensation for the Exploration of Mineral Resources - CFEM

The subsidiaries Nexa BR, CBA and VCSA had several assessments drawn up by the National Department of Mineral Production - "DNPM" for alleged failure to pay or lower collection of CFEM from 1991 to 2015. As of December 31, 2020, the amount of possible loss amounted to R\$ 385.

(vi) IRPJ/CSLL negative balance credit

VSA and its subsidiaries CBA received decisions regarding the gloss of negative balance of IRPJ credits, totaling the updated amount of R\$ 385 as of December 31, 2020. Currently, the cases await an administrative decision due to the presentation of a challenge by the Company and its Subsidiaries.

Currently, the cases are awaiting an administrative decision due to the presentation of a challenge by the Company and its Subsidiaries.

In the opinion of Management and in the opinion of its independent legal advisors, it appears that there was a misconception on the part of RFB when assessing the amounts presented by the Company and its subsidiaries, which is why the likelihood of loss in the lawsuits is considered possible.

(vii) Tax assessment notice - ICMS

In the fourth quarter of 2016, the subsidiary CAI received a tax assessment notice whose value up to December 31, 2020 amounts to R\$ 176. The process currently awaits judgment of the special appeal filed by the company before the Tax and Taxes Court of São Paulo Paulo.

(viii) ICMS on electricity charges

The subsidiary CBA has judicial and administrative discussions regarding the incidence of ICMS on the sector charges levied on the electricity tariff. As of December 31, 2020, the amount in controversy of these discussions amounts to R\$ 226.

In the opinion of Management and in the opinion of its independent legal advisors, the assessment is unfounded, which is why the likelihood of loss of the process is considered possible.

(ix) IRPJ/CSLL – Transfer Price

Between 2007 and 2010, four tax assessments were filed against its subsidiary CAI, aiming at the collection of IRPJ and CSLL, and the adjustment in the basis of tax losses and the negative basis of CSLL, due to the losses made in the adjustments made by the Company in this transfer pricing calculations in 2003 and 2004. In October 2018, one of the cases was closed in a favorable to the CAI, with the amount of R\$ 191 remaining under administrative discussion, restated up to December 31, 2020. The active processes await judgment of appeals by the Administrative Council of Tax Appeals.

(x) Tax classification mismatch – Import

In March 2017, the subsidiary CBA was assessed on account of a supposed error in the tax classification on the importation of inputs, resulting in the tax requirement (IPI, PIS, COFINS E II), whose value in December 2020 amounts to R\$ 186.

Because the undisputed legal counsel wrongly understood the complaint, the subsidiary CBA filed a challenge that was favorably judged in the first administrative instance. Currently, the case awaits judgment by the CARF of the voluntary appeal filed by the Attorney General of the National Treasury.

In the opinion of Management and in the opinion of its independent legal advisors, the likelihood of loss of said process is considered possible.

(xi) Collection of ICMS due to divergences regarding the destination of the item

The subsidiary CBA was assessed for alleged failure to pay ICMS. As of December 31, 2020, the value of these assessments totals R\$ 86.

In the opinion of Management and in the opinion of its independent legal advisors, the criteria adopted in relation to the destination of the assets are in accordance with the pertinent legislation and the probability of loss of the process is considered possible.

(xii) IRPJ/CSLL - Expense Deduction

In December 2016, the subsidiary CAI was assessed by the RFB for the collection of IRPJ and CSLL, due to the gloss of exclusions from the calculation base of said taxes in the 2011 calendar year. The amounts required by the tax assessment notice total R\$ 78. In the last quarter of 2018, a partial cancellation of the tax assessment notice was filed by the Regional Judgment Office (DRJ), and judgment on the Voluntary Appeal filed is currently awaited.

(c.2) Comments on contingent civil liabilities with likelihood of loss considered possible

Nature	2020	2019
Public civil suit – Violation of the economic order	4,332	4,023
Administrative investigations carried out by the Secretariat of Economic Law	2,131	2,052
Other lawsuits	1,525	1,825
	7,988	7,900

(i) Civil class action – Cartel

The Office of the Public Prosecutor of the State of Rio Grande do Norte filed a civil class action against the subsidiary VCSA, together with eight other defendants, including several of Brazil's largest cement manufacturers, alleging the formation of a cartel, demanding that: (1) the defendants make an indemnity payment, jointly, amounting to R\$ 5,600, in favor of the civil class action, due to pain and suffering and property collective damage; (2) the defendants make a payment of 10% of the total amount paid by the customers for the acquisition of cement or concrete under the brands owned by the defendants, during the period from 2002 to 2006, due to individual consumer damages; (3) that the defendants pay the following penalties according to Article 23 Section 1 and Article 24 of Law 8,884/1994: (i) in addition to the payment mentioned in item (1) above, a fine ranging from 1% to 30% of annual gross revenues relating to the fiscal year immediately preceding the year in which the alleged violation occurred, but not less than the monetary advantage acquired; and (ii) a prohibition, for a period not shorter than five years, from obtaining financing from governmental financial institutions or from participating in bidding processes conducted by the federal, state or municipal governments and their entities. In view of the total number of the claims in item (1) above in the amount of R\$ 5,600 and because of the claims alleging joint liability, VCSA estimated that, based on its market share, its share of the liability would be approximately R\$ 2,400. However, there can be no assurance that this apportionment would prevail and that VCSA will not be held liable for a different proportion, which may be larger, or for the total number of these claims. Additionally, there can be no assurance that VCSA will not be required to pay other amounts as compensation for damages caused to consumers as mentioned in item (2) above and/or the fine mentioned in item (3) above.

In the last quarter of 2018, an order was issued rejecting the arguments presented by the defendants and determining the production of expert evidence. At the moment a decision is awaited on the motions to clarify against such order. The likelihood of loss in this matter is considered possible, and the VCSA has not recorded any provision for this claim. As at December 31, 2020, the restated balance of the contingency was R\$ 4,247.

(ii) Administrative Proceedings by SDE, currently CADE (Brazilian antitrust agency)

In 2006 the SDE initiated administrative proceedings against the largest Brazilian cement companies, including VCSA, alleging that the large cement companies would have breached Brazilian antitrust laws, such as in terms of price fixing and the formation of a cartel. After the finding of facts, the CADE court judged the lawsuit, issuing the final terms of the judgment on July 29, 2015, applying several penalties to the companies.

The penalties imposed on VCSA include the payment of a fine of approximately R\$ 1,566 and an obligation for VCSA to sell: (1) all its interests in other cement and concrete companies in Brazil; (2) 20% of its installed capacity of concrete services in Brazil, in relevant markets in which VCSA has more than one concrete plant; and (3) a specific cement asset that, in CADE's opinion, was directly related to the alleged illegal act of which VCSA is accused. Other non-monetary penalties were also imposed on VCSA, including: (1) the obligation to publish CADE's decision in one of the five biggest Brazilian newspapers; (2) a prohibition against contracting with official financial institutions for credit lines with financing conditions subsidized by public programs or

resources provided by these institutions; and (3) a recommendation to the Federal Revenue that they restrict or limit certain other benefits and tax incentives. As of December 31, 2020, the updated contingency amount is R\$ 2.131.

In November 2015, VCSA filed an annulment action to cancel the decision issued at the administrative level or, at least, to reduce the applied penalties. The injunction was granted on November 24, 2015, suspending the effects of the decision issued by CADE at the administrative level, preventing CADE from demanding the fulfillment of the obligations and/or executing the penalties until a judgment of the merits. CADE was summoned and filed its defense, while VCSA presented its reply in November 2016. Recently, an economic expert evidence has been accepted. The parties indicated technical assistants and raised questions. The expert is requested to report if he accepts the charge and presents an estimate of the fees. The VCSA classified the likelihood of loss on this lawsuit as possible.

During 2017, some construction companies and concrete producers filed lawsuits for indemnity claims against Votorantim Cimentos and other companies which were convicted by CADE, due to the alleged formation of a cartel in the cement and concrete markets, in summary claiming that the cartel caused economic and non-economic losses. In January 2018, the first sentence dismissing the merit of the indemnity claims was issued. In December 2019, there were already 26 decisions dismissing the merit in the lower court. Moreover, ten of these lawsuits already recognized that eventual damages arising from the facts identified in the administrative proceeding of CADE had already expired, of which seven were final decisions.

One of these indemnity actions was proposed by Mendes Junior Engenharia S.A. In the first degree, a decision was issued declaring partially the possible damages postulated, being reversed in the second degree and, currently, the subject awaits judgment of an appeal before the Superior Court of Justice. Subsequently, a decision on the merits was rendered, dismissing the requests as unfounded the plaintiff filed an appeal, pending judgment.

26 Use of public assets

Accounting policy

The amount is originally recognized as a financial liability (obligation) and as an intangible asset (right to use a public asset) which corresponds to the amount of the total annual charges over the period of the agreement discounted to present value (present value of the future payment cash flows).

The subsidiaries own or participate in companies that hold concession contracts in the electrical energy industry. Most of these contracts provide for annual payments from the commencement of operations and are adjusted by the General Market Price Index for the Use of Public Assets.

The contracts have an average duration of 35 years, and the amounts to be paid annually are as follows:

Plants/Companies	Investor	Concession start date	Concession end date	Payment start date	Ownership interest	2020		2019		
						Intangible assets (Note 18)	Liabilities	Ownership interest	Intangible assets (Note 18)	Liabilities
Salto Pilão	Companhia Brasileira de Alumínio	nov-01	dec-36	jan-10	60%	163	661	60%	173	538
Salto do Rio Verdinho	Companhia Brasileira de Alumínio	aug-02	sep-37	oct-10	100%	7	27	100%	7	22
Itupararanga	Companhia Brasileira de Alumínio	nov-03	dec-23	jan-04	100%		2	100%		2
Piraju	Companhia Brasileira de Alumínio	dec-98	jan-34	feb-03	100%	1	8	100%	1	6
Ourinhos	Companhia Brasileira de Alumínio	jul-00	aug-35	sep-05	100%	1	6	100%	1	5
Baesa - Energética Barra Grande	Companhia Brasileira de Alumínio	jun-01	may-36	jun-07	15%	11	54	15%	12	45
Capim Branco I e Capim Branco II	Pollarix S.A.	aug-01	sep-36	oct-07	13%	2	14	13%	2	12
Picada	Pollarix S.A.	may-01	jun-36	jul-06	100%	16	85	100%	17	76
Enercan - Campos Novos Energia S.A	CBA Energia Participações S.A.	apr-00	may-35	jun-06	24%	2	8	24%	2	7
Enercan - Campos Novos Energia S.A	Pollarix S.A.	apr-00	may-35	jun-06	21%	2	7	21%	2	6
Pedra do Cavalo	Votorantim Cimentos N/NE S.A.	mar-02	apr-37	apr-06	100%	99	625	100%	106	519
						304	1,497		323	1,238
Current							97			87
Non-current						304	1,400		323	1,151
						304	1,497		323	1,238

27 Pension plan and post-employment health care benefits

Accounting policy

The Company, through its subsidiaries abroad (VCNA, VCEAA, Artigas and APDR) and in Brazil (VCNNE), participates in pension plans managed by a private pension entity, which provide post-employment benefits to employees.

The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date minus the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market interest rates that 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 obligation. In countries where there is no active market related to such obligations, market rates for government securities are used.

Actuarial gains and losses arising from changes in actuarial assumptions are recognized within "Carrying value adjustments" in the period in which they arise.

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

For defined contribution plans, the Company pays contributions to the pension plan administrators on a compulsory, contractual or voluntary basis. The Company no longer has payment obligations once the contributions are paid. Contributions are recognized as employee benefit expense when due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

The Company's subsidiaries have a defined contribution plan for employees. Certain subsidiaries, however, have a defined benefit plan.

The table below shows where the balances and activities related to post-employment benefit are allocated in the consolidated financial statements.

	2020	2019
Rights recorded in the balance sheet with:		
Pension plan benefits	139	40
Assets recorded in the balance sheet	139	40
Obligations recorded in the balance sheet with:		
Pension plan benefits	240	172
Post-employment healthcare benefits	284	195
Liabilities recorded in the balance sheet	524	367
Expenses recognized in the statement of income with:		
Pension plan benefits	40	18
Post-employment healthcare benefits	16	13
	56	31
Remeasurement with:		
Pension plan benefits - gross amount	(20)	35
Deferred income tax and social contribution	12	
Deferred income tax and social contribution	11	(10)
Pension plan benefits - net amount	3	25

(a) Defined contribution pension plan

The Company and its Brazilian subsidiaries sponsor private pension plans available to all employees administered by Fundação Senador José Ermírio de Moraes ("FUNSEJEM"), a private, not for profit, pension fund. Under the terms of the regulations of the fund, the contributions of the employees to FUNSEJEM are matched by the sponsors in accordance with the level of remuneration of the employee. For employees whose remuneration is lower than the threshold established by the regulations, the Company matches the contributions that represent up to 1.5% of their monthly remuneration. For employees whose remuneration exceeds the threshold, the Company matches the contributions of employees that represent up to 6% of their monthly remuneration. Voluntary contributions can also be made to FUNSEJEM. Once the plan contributions are made, no additional contributions are required.

(b) Defined benefit pension plan

The Company has subsidiaries with defined pension plans in North America, South America and Europe, which follow similar regulatory standards. The defined benefit pension plans also offer health care and life insurance, among other benefits. The cost of the retirement benefits and the other benefits of the plan granted to employees are determined by the projected benefit method on a pro rata basis considering the length of service and the best expectations of management regarding the return on plan assets, salary adjustments, costs and mortality trends, and the age of retirement of employees.

The amounts recognized in the balance sheet are determined as follows:

	2020	2019
Present value of funded obligations	1,266	1,175
Fair value of plan assets	(1,238)	(951)
Deficit of funded plans	28	224
Present value of non-funded obligations	348	88
Total deficit of defined benefit pension plans	376	312
Impact of the minimum funding requirement/assets ceiling	9	15
Assets and liabilities in the balance sheet	385	327

The changes in the defined benefit obligation and the fair value of the plan assets during the year were as follows:

	2020			2019		
	Present value of funded and unfunded obligations	Fair value of plan assets	Total	Impact of the minimum requirement of the funds/asset ceiling	Total	Total
Opening balance	1,242	(930)	312	15	327	294
Current service cost	11		11		11	8
Finance cost (income)	65	(36)	29		30	24
Past service cost and curtailments	(3)		(3)		(3)	(2)
	73	(36)	37		38	30
Re-measurements:						
Return on assets, excluding the amount included as finance income		(62)	(62)		(62)	(78)
Losses (gains) arising from changes in demographic assumptions	(5)		(5)		(5.0)	(8)
Losses (gains) arising from changes in financial assumptions	108		108		108	126
Losses arising from experience	(19)		(19)		(19)	(14)
Changes in the asset ceiling, excluding the amount included as finance cost				(6)	(6)	6
	84	(62)	22	(6)	16	32
Foreign exchange gains (losses)	331	(267)	64		64	16
Contributions:						
Employer		(10)	(10)		(10)	(10)
Payments of the plans:						
Payment of benefits	(118)	68	(50)		(50)	(35)
Closing balance	1,612	(1,237)	375	10	385	327

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

	2020						2019					
	Brazil		North America		South America		Brazil		North America		South America	
	Brazil	Europe	America	America	Colombia	Total	Brazil	Europe	America	America	Colombia	Total
Present value of the obligation	48	17	869		357	1,291	44	14	825		292	1,175
Fair value of plan assets	(59)		(1,006)		(199)	(1,264)	(61)	-	(739)		(151)	(951)
	(11)	17	(137)		158	27	(17)	14	86		141	224
Present value of non-financial obligations		77	267	4		348		52	33			88
Impact of the minimum requirement of the funds/asset ceiling	10					10	15					15
	(1)	94	130	4	158	385	(2)	66	119	-	144	327

The actuarial assumptions used were as follows:

	2020						2019					
	Brazil		North America		South America		Brazil		North America		South America	
	Brazil	Europe	America	America	Colombia	Total	Brazil	Europe	America	America	Colombia	Total
Discount rate	6.88%	8.40%	2.50%	12.28%	6.50%	7.31%	10.51%	6.12%	3.84%	9.55%	6.30%	7.26%
Inflation rate	4.00%	3.90%	2.50%			2.60%	5.37%	1.33%	2.00%		0.0	3.05%
Future salary increases	2.77%	8.00%	2.50%	8.28%		4.31%	4.88%	7.00%	2.50%	5.55%		4.69%
Increases in future pension plans	4.00%				3.50%	3.75%	5.37%				0.00%	2.69%

(c) Post-employment benefits (pension and health care)

The Company operates post-employment health care plans through indirect subsidiaries in North America, VCNA, and in Europe, VCEAA. The accounting method, assumptions and frequency of evaluations are similar to those used for the defined benefit pension plans. Most of these plans are not funded.

The obligations relating to these plans are included in the movement of the defined benefit obligations previously presented.

28 Equity

Accounting policy

(i) Share capital

Share capital is represented exclusively by common shares classified as equity.

(ii) Dividends

This is recognized as a liability in the Company's financial statements at year-end based on the Company's bylaws. Any amount that exceeds the minimum required, 25% of the profit for the year, is only recognized on the date it is approved by the stockholders at a General Meeting. When a Company presents a loss in the year, there is no dividend.

(iii) Earnings per share

Earnings per share are calculated by dividing the profit attributable to the controlling stockholders by the weighted average number of common shares during the year. The weighted average number of shares is calculated based on the periods in which the shares were outstanding.

(iv) Statutory reserve

The statutory reserve is constituted by the appropriation of 5% of the net income for the fiscal year or remaining balance, limited to 20% of the capital stock. Its purpose is to ensure the integrity of social capital. It can only be used to offset losses and increase capital. When the Company presents a loss in the year, there will be no legal reserve.

The retained earnings reserve refers to the retention of the remaining balance of retained earnings in order to meet the business growth plan established in the Company's investment plan.

(v) Government grants

The tax incentive reserve is credited with tax incentive benefits, which are recognized in the income statement for the year and allocated to retained earnings for this reserve. These incentives are not included in the calculation of the mandatory minimum dividend.

(vi) Equity valuation adjustments

The equity valuation adjustments include:

- (a) Effective portion of the cumulative net change in fair value of hedge instruments used in hedge of cash flow until the recognition of the cash flows that were hedged.
- (b) Cumulative translation adjustments with the exchange differences arising from the translation of the financial statements of foreign operations.
- (c) Effective portion with exchange differences of hedge of the Company's net investments in a foreign operation.
- (d) Actuarial losses (gains) and measures with retirement benefits.

(a) Share capital

On December 31, 2020 and December 31, 2019, the fully subscribed and paid-up capital of the Company was R\$ 28,656, consisting of 18,278,789 thousand common shares.

(b) Dividends

During the first half of 2020, the Company resolved to pay its parent company Hejoassu Administração S.A. the amount of R\$ 800 corresponding to dividends related to part of the balance of the "Profit reserves" account accumulated up to December 31, 2019.

(c) Carrying value adjustments

	Attributable to the owners of the Company								
	Currency translation of investees located abroad	Hedge accounting for net investments abroad, net of taxes	Hedge accounting for the operations of subsidiaries, net of taxes	Fair value of available-for-sale financial assets	Shares fair value	Remeasurement of retirement benefits	Adjustment for hyperinflationary economies	Other comprehensive income	Total
At January 1, 2019	6,545	(5,106)	40	192		(47)		(106)	1,937
Currency translation of investees located abroad	96								96
Hedge accounting for net investments abroad, net of taxes		92							92
Hedge accounting for the operations of subsidiaries, net of taxes			(39)						(39)
Fair value of available-for-sale financial assets of non-consolidated investments				43					43
Remeasurement of retirement benefits						(133)			(133)
Adjustment for hyperinflationary economies							340		340
Adjustment to the fair value of shares, net of tax effects					(121)				(121)
Loss on investee's capital contribution								(120)	(120)
Realization of other comprehensive results in the sale of investments	(108)							(15)	(123)
Other comprehensive income								(24)	(24)
Reclassification between components of comprehensive income	(103)	22	(16)			(7)		104	
At December 31, 2019	6,430	(4,992)	(15)	235	(121)	(187)	759	(161)	1,948
At January 1, 2020	6,430	(4,992)	(15)	235	(121)	(187)	759	(161)	1,948
Currency translation of investees located abroad	3,062								3,062
Hedge accounting for net investments abroad, net of taxes		(289)							(289)
Hedge accounting for the operations of subsidiaries, net of taxes			(636)						(636)
Fair value of available-for-sale financial assets of non-consolidated investments				(25)					(25)
Adjust the fair value of the shares, net of the tax					712				712
Remeasurement of retirement benefits						(169)			(169)
Adjustment for hyperinflationary economies							426		426
Fair value - measurement of credit risk								25	25
Realization of other comprehensive results on the sale of investments					(173)				(173)
Participation in other comprehensive results of investees								(2)	(2)
At December 31, 2020	9,492	(5,281)	(651)	210	418	(356)	1,185	(138)	4,879

(d) Non-controlling interests

	2020	2019
Nexa Resources S.A.	2,604	3,158
Nexa CJM	717	826
Nexa Perú	332	446
Cementos Artigas S.A.	240	203
Yacuces, S.L.	130	124
Itacamba Cemento S.A.	100	100
Acerías Paz Del Rio S.A.	78	63
Other	254	218
	4,455	5,138

29 Net revenue from products sold and services rendered

Accounting policy

Revenue represents the fair value of the consideration received or receivable from the sale of goods in the ordinary course of business of the subsidiaries. Revenue is shown net of value added tax, rebates and discounts after elimination of sales among consolidated companies.

The subsidiaries recognize revenue when: (i) the amount of revenue can be measured reliably; (ii) is probable that future economic benefits will flow to the entity; and (iii) specific criteria have been met for each of the Company's and its subsidiaries' activities.

Revenue will not be reliably measured if all terms of sale are not resolved. The subsidiaries bases their estimates on historical results, taking into account the type of customer, the type of transaction and the specificities of each agreement.

Revenue recognition is based on the following principles:

(i) Sales of products and service

Revenue is shown net of value added tax, returns, rebates and discounts, after eliminating sales within the consolidated companies.

(ii) Sale of surplus energy

The Company's energy sales contracts are carried out in the free and regulated environments of Brazilian commercialization, being fully registered with CCEE, the agent responsible for accounting and settlement of the entire national integrated system (SIN).

The accounting measurement of the volume of energy to be billed results from the processing of the physical measurement, adjusted to the apportionment of losses reported by the CCEE.

Energy sales operations, which meet the definition of a financial instrument, are recognized in the financial statements at fair value.

(a) Reconciliation of revenue

	2020	2019
Gross revenue		
Sales of products - domestic market	18,584	15,478
Sales of products - foreign market	19,571	16,189
Supply of electrical energy	3,140	3,180
Services provided	668	600
	41,963	35,447
Taxes on sales, services and other deductions	(5,296)	(4,540)
Net revenue	36,667	30,907

(b) Information on geographical areas in which the Company operates

The geographical areas are determined based on the location of the customers. The net revenue of the subsidiaries classified by currency and destination, is as follows:

(i) Revenue by destination

	2020	2019
Brazil	17,508	15,049
United States	4,740	3,664
Peru	2,537	2,350
Argentina	1,491	1,346
Colombia	1,471	1,196
Canada	1,789	1,224
Spain	789	605
Turkey	480	414
Luxembourg	388	571
Switzerland	540	417
Morocco	546	487
Uruguay	513	353
Japan	242	282
Bolívia	357	351
Belgium	157	101
Tunisia	337	253
Taiwan	148	132
Chile	259	322
Austria	180	157
Singapore	399	392
Germany	185	90
Equador	46	51
Italy	78	73
Other countries	1,487	1,027
	36,667	30,907

(ii) Revenue by currency

	2020	2019
Real	17,052	14,696
US dollar	12,385	10,478
Canadian Dollar	1,788	1,224
Euro	922	698
Colombian pesos	1,271	1,043
Argentine pesos	1,186	1,088
Moroccan Dirham	546	487
Tunisian dinar	337	257
Turkish lira	351	275
Uruguayan peso	470	289
Boliviano	355	372
Other currencies	4	
	36,667	30,907

30 Expenses by nature

				2020	2019
	Cost of products sold and services rendered (j)	Selling	General and administrative	Total	Total
Raw materials, inputs and consumables	17,589	25	1	17,615	15,045
Employee benefit expenses (a)	3,072	447	1,319	4,838	4,500
Depreciation, amortization and depletion	3,114	47	132	3,293	3,067
Transportation expenses	2,518	48	2	2,568	2,077
Outsourced services	1,617	83	747	2,447	2,412
Other expenses	1,710	250	425	2,385	2,076
	29,620	900	2,626	33,146	29,177

(a) Employee benefit expenses

(i) Health care (post-retirement)

The liability related to the health care plan for retired employees is stated at the present value of the obligation, less the market value of the plan assets, adjusted by actuarial gains and losses and past-service costs, in a manner similar to the accounting methodology used for defined benefit pension plans. The post-retirement health care obligation is calculated annually by independent actuaries. The present value of the post-retirement health care obligation is determined based on an estimate of the future cash outflow.

Actuarial gains and losses arising from changes in actuarial assumptions are fully recognized within "Carrying value adjustments" in the period in which they arise.

(ii) Employee profit sharing

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

	2020	2019
Salaries and bonuses	3,007	2,787
Payroll charges	1,122	1,066
Benefits	709	647
	4,838	4,500

31 Other operating expenses, net

	Note	2020	2019
Constitution of impairment of property, plant and equipment and intangible assets	12 e 13	(2,777)	(714)
Expenses on not activatable projects		(320)	(467)
Judicial provisions, net		(191)	(270)
Gain (loss) on sale of fixed and intangible assets, net		(74)	8
Royalties on natural resources		(55)	(56)
Future energy contracts	16	(54)	(196)
Hedge gain		11	7
Income from rentals and leasing		59	56
Net income from waste sale		60	54
Tax recovery		174	817
Tax benefits		175	144
Gain on investment sale		427	6,719
Gain on purchase of investee	1.1 (a)	366	
Other income (expenses), net		17	(95)
		(2,182)	6,007

32 Finance results, net

Accounting policy

(i) Financial income (expenses)

These comprise interest rates on loans and financial investments, monetary and exchange variation on assets and liabilities, linked to loans with a swap instrument, as a result of the exchange variation net of gains and losses on derivative financial instruments (swap contracts) and various discounts that are recognized in the income for the year on the accrual basis.

(ii) Foreign exchange variations

A foreign currency transaction shall be initially recognized in the functional currency by applying the spot exchange rate between the functional currency and the foreign currency on the transaction date on the amount in foreign currency.

At the end of each reporting period, monetary items in foreign currency must be converted using the closing exchange rate.

Foreign exchange variations arising from the settlement of monetary items or the translation of monetary items at rates different from those for which they were converted at the initial measurement during the period or in previous financial statements shall be recognized in the statement of income in the year in which they arise.

	Note	2020	2019
Finance income			
Interest on financial assets		211	568
Income from financial investments		211	434
Fair value of borrowing		72	59
Monetary updating of assets		27	45
Reversal of monetary restatement of provision		75	120
Discounts obtained		18	20
Other finance income		66	23
		680	1,269
Finance costs			
Interest on borrowing		(1,386)	(1,178)
Capitalization of borrowing costs		7	49
Award paid in bond buyback (tender offer)		(190)	(172)
Monetary restatement of provision		(228)	(219)
Fair value of borrowing and financing		(167)	(127)
Borrowing fees		(58)	(140)
Interest and monetary restatement - use of public assets		(324)	(101)
Interest on anticipation of receivables		(8)	(101)
Adjustment to present value CPC 12		(135)	(101)
"PIS/COFINS" on financial results		(38)	(60)
Income tax on remittances of interest abroad		(42)	(45)
Interest on silver streaming		(32)	(26)
Commissions on financial transactions		(147)	(17)
Other finance costs		(327)	(276)
		(3,075)	(2,514)
Results of derivative financial instruments			
Revenue		420	139
Expenses		(541)	(374)
		(121)	(235)
Foreign exchange variation, net		(1,024)	(137)
Finance results, net		(3,540)	(1,617)

33 Tax benefits

VCSA and its subsidiaries have tax incentives within certain state and federal industrial development programs. The state programs are aimed at attracting industrial investments seeking regional decentralization, promoting employment and income generation, besides complementing and diversifying the industrial matrix of the states. These fiscal incentives are approved by the states in the form of percentage financing of up to 75%, presumed credit with a percentage of up to 95% and deferral of the payment of taxes or partial reductions of the amount due for imports of assets and inputs.

34 Insurance

The Company and its subsidiaries maintain civil liability policies for executives and directors, in addition to insurance coverage for equity risks and loss of profits. Such policies have coverage, conditions and limits, considered by Management to be adequate to the inherent risks of the operation.

35 Supplementary information – Business segments

In order to provide a higher level of information, the Company opted to disclose financial information by business segment. The information below refers to the opening of VSA by business segments and considers the elimination of balances and transactions between companies in the same segment, before: (i) eliminations between business segments; and (ii) the elimination of investments held by holding companies.

Additionally, the eliminations and reclassifications between the companies are highlighted, so that the net result corresponds to the consolidated financial information of the VSA, disclosed as supplementary information. This supplementary information is not intended to be in accordance and is not required by accounting practices adopted in Brazil or by IFRS.

(a) Capital management

The financial leverage ratios are calculated according to the information of the industrial segments, considering the accumulated results for 12 months, as loan covenants, and are summarized as follow:

	Note	Industrial segments	
		2020	2019
Adjusted EBITDA (unreviewed)			
Net income (loss) for the year		(3,066)	4,925
Plus (less):			
Continuing operations			
Equity in the results of investees		(715)	(1,022)
Net financial results		3,536	1,624
Income and social contribution taxes		1,599	2,168
Depreciation, amortization and depletion		3,293	3,067
Discontinued operations			
Net financial results			38
Income and social contribution taxes			(3)
EBITDA before other additions and exceptional items		4,647	10,797
Plus :			
Dividends received		142	65
Extraordinary items			
EBITDA - discontinued operations			21
Gain on sale of investments, net		(427)	(6,719)
Impairment of property, plant, equipment and intangible assets		2,802	723
Other		(247)	252
Adjusted annualized EBITDA (A)		6,917	5,139
Net debt			
Borrowing	21	25,065	19,755
Lease liabilities	22	858	841
Cash and cash equivalents, financial investments and derivative financial instruments		(14,662)	(10,614)
Net debt (B)		11,261	9,982
Gearing ratio (B/A)		1.63	1.94

(b) Balance sheet - business segments

	2020										
	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Assets											
Current											
Cash and cash equivalents, financial investments and derivative financial instruments	4,424	5,911	1,364	219	229	3,473		15,620	62		15,682
Trade receivables	1,031	1,189	475	241	400	63	(190)	3,209			3,209
Inventory	1,915	1,333	1,070	404		2		4,724			4,724
Taxes recoverable	557	350	442	100	7	480		1,936	97		2,033
Dividends receivable					174	181	(215)	140	36		176
Financial instruments - firm commitment					49			49			49
Other assets	190	179	54	53	1	61		538			538
	8,117	8,962	3,405	1,017	860	4,260	(405)	26,216	195		26,411
Assets classified as held-for-sale	6	11		8				25			25
	8,123	8,973	3,405	1,025	860	4,260	(405)	26,241	195		26,436
Non-current assets											
Long-term receivables											
Financial investments and derivative financial instruments	986	81	898					1,965			1,965
Financial instruments - Suzano						2,590		2,590			2,590
Derivative financial instruments - put option						252		252			252
Taxes recoverable	1,411	449	848	29		229		2,966			2,966
Related parties	4		17			194	(19)	196			196
Deferred income tax and social contribution	278	1,151	279	200		548	241	2,697	34		2,731
Judicial deposits	132	29	15	1		16		193			193
Financial instruments - firm commitment					9			9			9
Other assets	548	96	34	82		58	32	850			850
	3,359	1,806	2,091	312	9	3,887	254	11,718	34		11,752
Investments	1,042	(10)	198		2,997	34,682	(26,159)	12,750	5,872	(5,924)	12,698
Property, plant and equipment	14,132	8,911	5,106	1,335	34	587		30,105			30,105
Intangible assets	8,258	6,724	531	34	6	145	(1,104)	14,594			14,594
Right-of-use assets	534	98	15	129	5	16		797			797
Biological assets			1	6		89		96			96
	27,325	17,529	7,942	1,816	3,051	39,406	(27,009)	70,060	5,906	(5,924)	70,042
Total assets	35,448	26,502	11,347	2,841	3,911	43,666	(27,414)	96,301	6,101	(5,924)	96,478

(*) Relates to long steel operations abroad (Argentina and Colombia).

Notes to the consolidated financial statements
at December 31, 2020

All amounts in millions of reais unless otherwise stated

VOTORANTIM

	2020										
	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Liabilities and equity											
Current liabilities											
Borrowing	223	759	55	364		6		1,407			1,407
Lease liabilities	105	83	9	16	3	19		235			235
Derivative financial instruments	37	28	446					511			511
Confirming payable	1,031	755	594					2,380			2,380
Trade payables	2,481	1,923	426	319	376	13	(134)	5,404			5,404
Salaries and payroll charges	548	292	176	56	27	75		1,174			1,174
Taxes payable	311	218	74	128	9	13		753	7		760
Advances from customers	50	10	32	68	8	14		182			182
Dividends payable	87	68	34	1	101		(247)	44			44
Use of public assets	41	8	48					97			97
Related parties			1				(1)				
Financial instruments - firm commitment	9		66					75			75
Deferred revenue - silver streaming		141						141			141
Other	470	178	69	33	1	171		922	2		924
	5,393	4,463	2,030	985	525	311	(382)	13,325	9		13,334
Liabilities related to assets held-for-sale	2							2			2
	5,395	4,463	2,030	985	525	311	(382)	13,327	9		13,336
Non-current liabilities											
Borrowing	11,376	9,761	2,488	19		14		23,658			23,658
Lease liabilities	449	50	7	115	2			623			623
Derivative financial instruments	720	112	1,580					2,412			2,412
Deferred income tax and social contribution	745	1,110	5	33	48	264		2,205	168		2,373
Related parties	21	3	3		1	4	(21)	11			11
Provision	1,170	1,350	761	127	1	177		3,586			3,586
Use of public assets	584	100	716					1,400			1,400
Pension plan	365			159				524			524
Financial instruments - firm commitment	57		153					210			210
Deferred revenue - silver streaming		722						722			722
Other	325	241	54	92	20	95		827			827
	15,812	13,449	5,767	545	72	554	(21)	36,178	168		36,346
Total liabilities	21,207	17,912	7,797	1,530	597	865	(403)	49,505	177		49,682
Equity											
Total equity attributable to owners of the Company	13,515	6,960	3,375	1,006	3,314	42,801	(28,661)	42,310	5,924	(5,893)	42,341
Non-controlling interests	726	1,630	175	305			1,650	4,486		(31)	4,455
Total equity	14,241	8,590	3,550	1,311	3,314	42,801	(27,011)	46,796	5,924	(5,924)	46,796
Total liabilities and equity	35,448	26,502	11,347	2,841	3,911	43,666	(27,414)	96,301	6,101	(5,924)	96,478

(*) Relates to long steel operations abroad (Argentina and Colombia).

(c) Statement of income – business segments

	2020										
	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Continuing operations											
Net revenue from products sold and services rendered	16,740	10,097	5,411	2,465	3,588	76	(1,710) (**)	36,667			36,667
Cost of products sold and services rendered	(12,816)	(8,059)	(4,831)	(2,005)	(3,571)	(48)	1,710 (**)	(29,620)			(29,620)
Gross profit	3,924	2,038	580	460	17	28		7,047			7,047
Operating income (expenses)											
Selling	(708)	(129)	(37)	(23)		(3)		(900)			(900)
General and administrative	(1,061)	(673)	(284)	(158)	(101)	(335)		(2,612)	(14)		(2,626)
Other operating income (expenses), net	(113)	(2,906)	175	109	84	469		(2,182)			(2,182)
	(1,882)	(3,708)	(146)	(72)	(17)	131		(5,694)	(14)		(5,708)
Operating profit (loss) before equity results and finance results	2,042	(1,670)	434	388		159		1,353	(14)		1,339
Result from equity investments											
Equity in the results of investees	51		(3)		445	(1,411)	1,633	715	719	(707)	727
	51		(3)		445	(1,411)	1,633	715	719	(707)	727
Finance results, net											
Finance income	281	80	136	36	12	143	(11)	677	3		680
Finance costs	(1,349)	(880)	(415)	(227)	(20)	(188)	11	(3,068)	(7)		(3,075)
Results of derivative financial instruments	279	2	1			(403)		(121)			(121)
Foreign exchange gains (losses), net	(277)	(545)	(215)	10		3		(1,024)			(1,024)
	(1,066)	(1,343)	(493)	(181)	(8)	(445)		(3,536)	(4)		(3,540)
Profit (loss) before income tax and social contribution	1,027	(3,013)	(62)	207	437	(1,697)	1,633	(1,468)	701	(707)	(1,474)
Income tax and social contribution											
Current	(375)	(321)	(52)	(109)	(1)	(43)		(901)			(901)
Deferred	(215)	213	(766)	(12)	(19)	101		(698)	7		(691)
Profit (loss) from continuing operations	437	(3,121)	(880)	86	417	(1,639)	1,633	(3,067)	708	(707)	(3,066)
Discontinued operations											
Loss from continuing operations	1							1			1
Profit (loss) for the year	438	(3,121)	(880)	86	417	(1,639)	1,633	(3,066)	708	(707)	(3,065)
Profit (loss) attributable to the owners of the Company	393	(2,646)	(927)	56	425	(1,639)	2,702	(1,636)	707	(707)	(1,636)
Profit (loss) attributable to non-controlling interests	45	(475)	47	30	(8)		(1,069)	(1,430)	1		(1,429)
Profit (loss) for the year	438	(3,121)	(880)	86	417	(1,639)	1,633	(3,066)	708	(707)	(3,065)

(*) Relates to long steel operations abroad (Argentina and Colombia).

(**) Relates substantially to the net revenue from electric energy operations to CBA and VCSA.

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All amounts in millions of reais unless otherwise stated

VOTORANTIM

	2019										
	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Continuing operations											
Net revenue from products sold and services rendered	13,027	9,200	5,264	2,133	4,229	75	(3,021) (**)	30,907			30,907
Cost of products sold and services rendered	(10,689)	(7,669)	(4,606)	(1,715)	(4,103)	(51)	3,021 (**)	(25,812)			(25,812)
Gross profit	2,338	1,531	658	418	126	24		5,095			5,095
Operating income (expenses)											
Selling	(714)	(99)	(36)	(21)		(3)		(873)			(873)
General and administrative	(910)	(803)	(214)	(155)	(94)	(302)		(2,478)	(14)		(2,492)
Other operating income (expenses), net	701	(1,073)	(178)	110	(56)	6,503		6,007			6,007
	(923)	(1,975)	(428)	(66)	(150)	6,198		2,656	(14)		2,642
Operating profit (loss) before equity results and finance results	1,415	(444)	230	352	(24)	6,222		7,751	(14)		7,737
Result from equity investments											
Equity in the results of investees	189	(3)	14		356	880	(522)	914	797	(792)	919
Realization of comprehensive results on the sale of investments	108							108			108
	297	(3)	14		356	880	(522)	1,022	797	(792)	1,027
Finance results, net											
Finance income	547	122	313	25	99	283	(127)	1,262	7		1,269
Finance costs	(1,240)	(487)	(447)	(145)	(116)	(206)	127	(2,514)			(2,514)
Results of derivative financial instruments	(77)	12	(68)			(102)		(235)			(235)
Foreign exchange gains (losses), net	(42)	(49)	(46)	(52)		52		(137)			(137)
	(812)	(402)	(248)	(172)	(17)	27		(1,624)	7		(1,617)
Profit (loss) before income tax and social contribution	900	(849)	(4)	180	315	7,129	(522)	7,149	790	(792)	7,147
Income tax and social contribution											
Current	(290)	(171)	(42)	(87)	(14)	(857)		(1,461)			(1,461)
Deferred	(5)	411	11	14	25	(1,163)		(707)	2		(705)
Profit (loss) for the year from continuing operations	605	(609)	(35)	107	326	5,109	(522)	4,981	792	(792)	4,981
Discontinued operations											
Loss from continuing operations	(56)							(56)			(56)
Profit (loss) for the year	549	(609)	(35)	107	326	5,109	(522)	4,925	792	(792)	4,925
Profit (loss) attributable to the owners of the Company	479	(486)	(64)	55	326	5,109	(249)	5,170	792	(792)	5,170
Profit (loss) attributable to non-controlling interests	70	(123)	29	52			(273)	(245)			(245)
Profit (loss) for the year	549	(609)	(35)	107	326	5,109	(522)	4,925	792	(792)	4,925

(*) Relates substantially to the net revenue from electric energy operations to CBA and VCSA.

(**) Relates to long steel operations abroad (Argentina and Colombia).

(d) EBITDA ajustado –Adjusted EBITDA - business segments

	2020									
	Votorantim Cimentos	Nexa Resources	CBA	Long steel (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Total, consolidated
Net revenue from products sold and services rendered	16,740	10,097	5,411	2,465	3,588	76	(1,710) (**)	36,667		36,667
Cost of products sold and services rendered	(12,816)	(8,059)	(4,831)	(2,005)	(3,571)	(48)	1,710 (**)	(29,620)		(29,620)
Gross profit	3,924	2,038	580	460	17	28		7,047		7,047
Operating income (expenses)										
Selling	(708)	(129)	(37)	(23)		(3)		(900)		(900)
General and administrative	(1,061)	(673)	(284)	(158)	(101)	(335)		(2,612)	(14)	(2,626)
Other operating income (expenses), net	(113)	(2,906)	175	109	84	469		(2,182)		(2,182)
	(1,882)	(3,708)	(146)	(72)	(17)	131		(5,694)	(14)	(5,708)
Operating profit (loss) before equity results and finance results	2,042	(1,670)	434	388		159		1,353	(14)	1,339
Plus:										
Depreciation, amortization and depletion - continuing operations	1,420	1,248	431	157	5	32		3,293		3,293
EBITDA	3,462	(422)	865	545	5	191		4,646	(14)	4,632
Plus:										
Dividends received	129		11		38	2	(38)	142	111	253
Exceptional items										
Impairment - fixed assets	215	2,561	26					2,802		2,802
Gain for Advantageous Investee Purchase			(366)					(366)		(366)
Net gain on sale of investments						(427)		(427)		(427)
Other	29					91		120		120
Adjusted EBITDA	3,835	2,139	536	545	43	(143)	(38)	6,917	97	7,014

(*) Relates to long steel operations abroad (Argentina and Colombia).

(**) Relates substantially to the net revenue from electric energy operations to CBA and VCSA.

Notes to the consolidated financial statements
at December 31, 2020

All amounts in millions of reais unless otherwise stated

VOTORANTIM

										2019
	Votorantim Cimentos	Nexa Resources	CBA	Long steel (*)	Votorantim Energia	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Total, consolidated
Net revenue from products sold and services rendered	13,027	9,200	5,264	2,133	4,229	75	(3,021) (**)	30,907		30,907
Cost of products sold and services rendered	(10,689)	(7,669)	(4,606)	(1,715)	(4,103)	(51)	3,021 (**)	(25,812)		(25,812)
Gross profit	2,338	1,531	658	418	126	24		5,095		5,095
Operating income (expenses)										
Selling	(714)	(99)	(36)	(21)		(3)		(873)		(873)
General and administrative	(910)	(803)	(214)	(155)	(94)	(302)		(2,478)	(14)	(2,492)
Other operating income (expenses), net	701	(1,073)	(178)	110	(56)	6,503		6,007		6,007
	(923)	(1,975)	(428)	(66)	(150)	6,198		2,656	(14)	2,642
Operating profit (loss) before equity results and finance results	1,415	(444)	230	352	(24)	6,222		7,751	(14)	7,737
Plus:										
Depreciation, amortization and depletion - continuing operations	1,222	1,245	463	104	5	28		3,067		3,067
EBITDA	2,637	801	693	456	(19)	6,250		10,818	(14)	10,804
Plus										
Dividends received	65				69		(69)	65	540	605
Exceptional items										
Net gain on sale of investments						(6,719)		(6,719)		(6,719)
Impairment - fixed assets	14	564	145					723		723
Other	(39)		24			267		252		252
Adjusted EBITDA	2,677	1,365	862	456	50	(202)	(69)	5,139	526	5,665

(*) Relates to long steel operations abroad (Argentina and Colombia).

(**) Relates substantially to the net revenue from electric energy operations to CBA and VCSA.

36 Subsequent events

(a) Sale of Suzano shares - VSA

On January 23, 2021, VSA sold 25,000,000 common shares in Suzano S.A. ("Suzano") held by the Company for R\$ 64.60 each, totaling R\$ 1,615 million. After the sale, VSA holds 25,180,059 common shares, corresponding to approximately 1.9% of Suzano's total and voting share capital.

(b) Dividend resolution - VSA

On January 26, 2021, the Company decided on its parent company Hejoassu Administração S.A., the amount of R\$ 499 corresponding to dividends related to the balance of the "Profit Reserves" account, accumulated from previous years. The amount was paid in full as at February 10, 2021.

(c) Prepayment export credit note - Nexa

On January 22, 2021, Nexa paid in advance the principal open and the accrued interest of an Export Credit Note in Brazil in the amount of R\$ 250 and R\$ 13 of interest accrued.

(d) Use of a Committed Credit Facility by St. Marys

In January and February 2021, indirect subsidiary St. Marys made withdrawals on the available Committed Credit Facility, reaching the total equivalent to USD 50.4 million, maturing in August 2024. The amount of USD 239.6 million remains available to the Company and its subsidiaries for further payments, if necessary.

(e) Distribution of dividends - Nexa

On February 11, 2021, Nexa's Board of Directors approved a distribution of dividends to shareholders in the amount of approximately USD 35 million to be paid on March 26, 2021.

(f) Incident occurred in a collecting substation of the jointly controlled VTRM

On February 12, 2021, a new incident in the collector substation that connects the companies of the Ventos do Araripe III complex, formed by wind farms belonging to jointly controlled VTRM, caused the shutdown of the remaining power transformer (trafo) of this substation, which caused the total interruption of the flow of the power generation of the complex, since the totality of the energy that had been generated by the complex had already been directed to the disposal for this transformer a results of an incident that occurred in June 2020, which caused the other transformer to shut down in this substation.

VTRM Management is working to obtain an opinion on the feasibility of repair or need for transformer replacement, as well as the deadline for solving the problem in both scenarios.

The interruption of the flow of power generation of the complex should be reflected in the provision for annual reimbursement that companies obtain monthly due to the effective generation of energy, with consequent reduction in the net revenue of companies, until the situation is normalized. This impact tends to be minimized due to the insurance policy that subsidiaries have for the main risks associated with the assets, including damage to transformers, with coverage for material damage and lost profits.

Until the date of approval of these financial statements, no definitive diagnosis of the feasibility of the repair has been received or the opinion of the insurer regarding compensation.

(g) Approval of dividend distribution by VCSA

At VCSA's Extraordinary General Meeting, held on February 25, 2021, the shareholders approved the distribution of dividends in the amount of R\$ 345.

(h) Issuance of Certificates of Real Estate Receivables (CRI) - Votorantim Cimentos

On February 8, 2021, through RB Capital Companhia de Securitização, VCNNE and its parent company VCSA signed the offer documents for the 2nd issue of Certificates of Real Estate Receivables ("CRI") in the Brazilian capital market, the amount being issued by the Company of R\$ 136, which are guaranteed by the parent company VCSA. The operation has a 12-year maturity and the cost of IPCA + 4.4657% a.a .. Investors are expected to disburse the amounts on March 17, 2021.

On March 9, 2021, VCNNE contracted a forward derivative financial instrument (swap), in the total amount of R\$ 136, beginning on March 15, 2021, which aims to exchange the IPCA floating rate exposure + for CDI + floating rate, resulting in a final cost of CDI + 1.33% pa The funds raised will be used for investments and expenses in civil works, whether for the renovation, maintenance and / or expansion of our operating units in Brazil, as well as for reimbursement of expenses of this nature that occurred in the last two years.

This operation is in line with the Company's strategy to diversify its financing sources and increase its operations in the local market.

(i) Prepayment of the 1st issue of debentures - Votorantim Cimentos

On March 5, 2021, VCNNE made an early redemption of the total outstanding debentures of its 1st public issue of debentures in the amount of R\$ 450, with original maturity in April 2023. The proceeds of this prepayment came from the 12th public issue of VCSA debentures, issued on February 24, 2021, in the total amount of R\$ 450, cost of CDI + 1.45% per year and maturity in February 2026.