Consolidated financial statements 2017 and independent auditor's report

Votorantim S.A.

December 31, 2017

VOTORANTIM 100 YEARS

(A free translation of the original in Portuguese)

Independent auditor's report

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

Opinion

We have audited the accompanying consolidated financial statements of Votorantim S.A. and its subsidiaries ("Consolidated"), which comprise the consolidated balance sheet as at December 31, 2017 and the consolidated statements of operations, comprehensive income (loss), 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, 2017, and their financial performance and their cash flows for the year then ended, 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).

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 Consolidated 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.

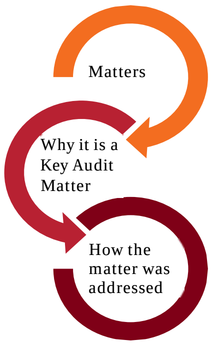
Emphasis of matter

Reissuance of the financial statements

We draw attention to Notes 2.1(b) and 36(e) of the financial statements, which refers to the update and reissuance of the financial statements due to the subsequent event related to the corporate reorganization of the joint venture Fibria Celulose S.A. We issued our original report dated March 2, 2018 on the previously issued financial statements. Due to the update described in the notes above, we are providing this new audit report on the reissued financial statements. Our opinion is not qualified in respect of this matter.

Votorantim S.A.

Key audit matters



Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Our audit for the year ended December 31, 2017 was planned and executed considering that the operations of the Company and its subsidiaries did not had any significant changes in relation to the to the prior year. In this context, the Key Audit Matters, as well as our audit approach, have remained substantially aligned with prior year, except for the exclusion of the matters related to the securitization of receivables from the Company's indirect subsidiary, and assets held for sale – Votorantim Siderurgia S.A., as they were related to events of the year ended on December 31, 2016.

Why it is a Key Audit Matter

Assessment of impairment of goodwill (Notes 16, 17 and 18)

During 2017, the economic scenario of the main countries in which the Company and its subsidiaries operate remained challenging. At December 31, 2017, goodwill based on expected future profitability from business combinations occurred in prior years amounted to R$ 6,141 million (of which R$ 4,862 million in "Intangible assets", and R$ 1,279 million in "Investments"), and property, plant and equipment totaled R$ 25,855 million.

We considered this an area of focus in our audit, since the test of impairment of assets involves critical judgments by the Company’s management. The determination of the recoverable value depends on the materialization of the projections for economic and market conditions in Brazil, and in the several countries where the Company operates, and is susceptible to changes in assumptions related to the growth rates of prices, volume of sales, expenses and discount rates established by management, among other assumptions used in management's valuation models. Adverse economic conditions may result in significant changes in these assumptions.

How the matter was addressed in the audit

In this respect, we obtained an understanding of the existing key controls for this area and tested them. We also assessed the methodology that management used to identify the CGUs. In addition, we assessed the reasonableness of the Company's main assumptions, including the discount rate used to determine the value in use or the fair value less cost to sell, when applicable, and the growth rates for prices and volumes, by comparing them with available economic and industry-related estimates. Furthermore, with the support of our experts, we tested the mathematical accuracy of the calculations and data for the main assumptions used in the cash flow estimates.

We used sensitivity analyses involving the main assumptions used in order to assess whether the individual or cumulative changes would lead to impairment losses that significantly exceeded those recorded by the Company.

After performing these audit procedures, we considered that the assumptions and methodology used by management are reasonable, and the disclosures are consistent with the data and information obtained in our procedures.

Why it is a Key Audit Matter	How the matter was addressed in the audit
Realization of deferred income tax and social contribution tax assets (Notes 21)	
The Company and its subsidiaries record deferred taxes arising from temporary differences and income tax and social contribution losses, as well as credits from income tax and social contribution recoverable. These credits were recorded to the extend management considers that the Company will generate future taxable profit that is sufficient for the utilization of these credits. We considered this an area of focus in our audit since the Company's assessment of the realization of these credits involves important and subjective judgment to determine the future taxable bases for the utilization of these amounts.	In this respect, we obtained an understanding of the key controls that the Company uses to calculate and record the tax credits and tested these controls, as well as the templates used to estimate the future taxable profits, which were subject to Company's Board of Directors approval. We counted on the support of our specialists in tax matters and in company valuations to test the calculations of the credits in relation to the templates and critical assumptions used by management. We compared these assumptions with macroeconomic information available in the market and compared the information from these projections with budgets approved by the Company's governance bodies. In addition, we analyzed the realization periods considered in the Company's and its subsidiaries historical data and studies in order to test the adequacy and the consistency of these realization estimates in relation to those used in prior years. Finally, we assessed the disclosures related to the recognition of these tax credits. We consider that the criteria and assumptions that management adopted to determine the tax credits are reasonable in all relevant aspects in the context of the financial statements.
Provisions and contingent liabilities (Note 23)	
At December 31, 2017, the Company and its subsidiaries had recorded provisions calculated based on probable losses estimated in the respective proceedings. The Company and its subsidiaries also have tax, civil, and labor proceedings in progress for which no provisions were recorded in the financial statements because management considered the likelihood of losses arising from these proceedings as only possible, based on the opinion of the Company's internal and external legal advisors.	In this respect, we determined whether the procedures adopted by management to calculate the provisions and their related disclosures were in compliance with the related accounting policy. Furthermore, we obtained confirmation from the external legal advisors regarding the likelihood of loss for the major proceedings and the quantification of the amounts estimated as possible and probable losses.

Why it is a Key Audit Matter	How the matter was addressed in the audit
Management applies critical judgments to determine the likelihood of positive outcomes for proceedings in progress as well as to estimate the probable losses, since these matters depend on future events that management is not able to control. In this context, the progress of these proceedings in the different applicable levels can differ from the results estimated by the Company and its internal and external legal advisors, taking into account that changes in court directives or in case law may significantly affect management's estimates.	We counted on the support of our tax specialists to assess the reasonableness of estimates prepared by management and its internal and external legal advisors for certain proceedings, considering their progress and the existing case law, when applicable. We consider that the criteria and assumptions used by management to determine the provisions and the disclosures in the related explanatory notes are consistent with the information received during our audit.

Other matters

Statements of Value Added

The consolidated Statement of Value Added for the year ended December 31, 2017, prepared under the responsibility of the Company's management and presented as supplementary information for IFRS purposes, was submitted to audit procedures performed in conjunction with the audit of the Company's consolidated financial statements. For the purposes of forming our opinion, we evaluated whether this statement is reconciled with the financial statements and accounting records, as applicable, and if its form and content are in accordance with the criteria defined in Technical Pronouncement CPC 09 - "Statement of Value Added". In our opinion, this Statement of Value Added has been properly prepared in all material respects, in accordance with the criteria established in the Technical Pronouncement, and is consistent with the consolidated financial statements taken as a whole.

Other information accompanying the parent company and consolidated financial statements and the auditor's report

The Company's management is responsible for the other information that comprises the Management Report, which is expected to be received after the date of this report.

Our opinion on the parent company and consolidated financial statements does not cover the Management Report, and we do not express any form of audit conclusion thereon.

In connection with the audit of the parent company and consolidated financial statements, our responsibility is to read the Management Report, when made available to us, and, in doing so, consider whether this report is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Responsibilities of management and those charged with governance for the parent company and 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.

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 parent company and 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.

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- 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.

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.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Curitiba, March 27, 2018

PricewaterhouseCoopers
Auditores Independentes
CRC 2SP000160/O-5

Maurício Colombari
Contador CRC 1SP195838/O-3

Summary

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All amounts in millions of reais

	Note	2017	2016
Assets			
Current assets			
Cash and cash equivalents	9	8,960	6,946
Financial investments	10	3,562	3,190
Derivative financial instruments	6.1.1	52	136
Trade receivables	11	2,421	2,001
Inventory	12	3,526	3,381
Taxes recoverable	13	1,317	1,527
Dividends receivable	14	148	180
Financial instruments - firm commitment	15	210	317
Other assets		784	580
		20,980	18,258
Assets classified as held-for-sale	34	2,199	2,125
		23,179	20,383
Non-current assets			
Long-term receivables			
Financial investments	10	25	39
Derivative financial instruments	6.1.1	138	232
Taxes recoverable	13	1,784	1,586
Related parties	14	143	535
Deferred income tax and social contribution	21 (b)	4,079	4,055
Judicial deposits	23 (b)	765	420
Financial instruments - firm commitment	15	154	371
Other assets		667	858
		7,755	8,096
Investments	16 (c)	13,372	12,949
Property, plant and equipment	17	25,855	25,091
Intangible assets	18	12,443	13,013
Biological assets		65	66
		59,490	59,215
Total assets		82,669	79,598

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

All amounts in millions of reais

	Note	2017	2016
Liabilities and equity			
Current liabilities			
Borrowing	19	2,573	1,775
Derivative financial instruments	6.1.1	299	401
Confirming payables	20	1,070	968
Trade payables		3,353	2,723
Salaries and payroll charges		895	848
Taxes payable		617	422
Advances from clients		408	174
Dividends payable	14	188	48
Use of public assets	24	76	67
Financial instruments - firm commitment	15	1	
Deferred revenue - performance obligations	22	246	244
Deferred revenue - silver streaming		104	146
Other liabilities		643	649
		10,473	8,465
Liabilities related to assets held-for-sale	34	1,526	1,522
		11,999	9,987
Non-current liabilities			
Borrowing	19	22,057	22,644
Derivative financial instruments	6.1.1	83	342
Deferred income tax and social contribution	21 (b)	1,965	1,983
Related parties	14	25	22
Provision	23 (a)	2,587	2,346
Use of public assets	24	1,056	1,119
Pension plan	31	317	317
Financial instruments - firm commitment	15	207	10
Deferred revenue - performance obligations	22	272	515
Deferred revenue - silver streaming		630	669
Other liabilities		656	821
		29,855	30,788
Total liabilities		41,854	40,775
Equity			
Share capital	25 (a)	28,656	28,656
Revenue reserves		6,569	6,254
Carrying value adjustments	25 (e)	733	1,255
Total equity attributable to the owners of the Company		35,958	36,165
Non-controlling interests		4,857	2,658
Total equity		40,815	38,823
Total liabilities and equity		82,669	79,598

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

All amounts in millions of reais unless otherwise stated

	Note	2017	2016 Reclassified (Note 2.3)
Continuing operations			
Net revenue from products sold and services rendered	26	27,225	25,965
Cost of products sold and services rendered	27	(20,649)	(20,010)
Gross profit		**6,576**	**5,955**
Operating income (expenses)			
Selling	27	(1,666)	(1,639)
General and administrative	27	(2,018)	(2,091)
Other operating expenses, net	29	(536)	(2,616)
		(4,220)	**(6,346)**
Operating profit (loss) before equity results and finance results		**2,356**	**(391)**
Results from equity investments			
Equity in the results of investees	16 (c)	1,219	724
Realization of other comprehensive income on disposal of investments		3	44
		1,222	**768**
Finance results, net	30		
Finance income		1,155	1,397
Finance costs		(2,710)	(2,643)
Result of derivative financial instruments		(213)	(1,006)
Foreign exchange losses, net		(724)	535
		(2,492)	**(1,717)**
Profit (loss) before income tax and social contribution		**1,086**	**(1,340)**
Income tax and social contribution	21 (a)		
Current		(723)	(481)
Deferred		592	870
Profit (loss) for the year from continuing operations		**955**	**(951)**
Discontinued operations			
Loss for the year from discontinued operations	34 (c)	(145)	(300)
Profit (loss) for the year attributable to the owners of the Company		**810**	**(1,251)**
Profit (loss) attributable to the owners of the Company		590	(1,296)
Profit attributable to non-controlling interests		220	45
Profit (loss) for the year		**810**	**(1,251)**
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		**32.28**	**(70.90)**
From continuing operations			
Basic and diluted earnings (loss) per thousand shares, in reais		**40.21**	**(54.49)**
From discontinued operations			
Basic and diluted loss per thousand shares, in reais		**(7.93)**	**(16.41)**

All amounts in millions of reais

	Note	2017	2016
Profit (loss) for the year		**810**	**(1,251)**
Other components of comprehensive income to be subsequently reclassified to profit or loss			
Attributable to the owners of the Company			
Foreign exchange variations attributable to the owners of the Company	25 (e)	473	(4,537)
Hedge accounting for net investments abroad, net of taxes	6.1.3 e 25 (e)	(163)	2,033
Hedge accounting for the operations of subsidiaries	25 (e)	(101)	52
Fair value of financial assets available-for-sale of the non-consolidated investments	25 (e)	39	227
Realization of comprehensive income on the disposal of investments	25 (e)	(555)	(25)
Share in other comprehensive income of investees	25 (e)		(84)
Attributable to non-controlling			
Foreign exchange variations attributable to non-controlling interests		94	(711)
Hedge accounting for the operations of subsidiaries		17	
Realization of comprehensive income on the disposal of investments			(19)
Share in other comprehensive income of investees		60	23
		(136)	**(3,041)**
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 taxes	25 (e)		(37)
Attributable to non-controlling			
Remeasurement of retirement benefits, net of taxes			(4)
Other comprehensive income (loss) for the year		**(136)**	**(3,082)**
Comprehensive income (loss) from			
Continuing operations		674	(3,934)
Discontinued operations			(399)
		674	**(4,333)**
Comprehensive income (loss) attributable to			
Owners of the Company		283	(3,667)
Non-controlling interests		391	(666)
		674	**(4,333)**

All amounts in millions of reais unless otherwise stated

		Attributable to the owners of the Company								
			Revenue reserves							
	Note	Share capital	Tax incentives	Legal	Profit retention	Retained earnings	Carrying value adjustments	Total	Non-controlling interests	Total equity
At January 1, 2016		**21,419**	**6**	**654**	**6,776**		**2,952**	**31,807**	**4,176**	**35,983**
Comprehensive income for the year										
Profit (loss) for the year						(1,296)		(1,296)	45	(1,251)
Other comprehensive income (loss)							(2,371)	(2,371)	(711)	(3,082)
Comprehensive income for the year						**(1,296)**	**(2,371)**	**(3,667)**	**(666)**	**(4,333)**
Increase in share capital		7,237						7,237		7,237
Fair value on interest variation - Nexa Resources S.A. ("Nexa")							572	572	(572)	
Repurchase of shares of Nexa Resources Perú S.A.A. ("Nexa Peru")							102	102	(191)	(89)
Reversal of dividends					114			114		114
Allocation of net income for the year										
Legal reserve			4			(4)				
Dividends									(89)	(89)
Profit retention					(1,300)	1,300				
Total contributions and distributions to shareholders		**7,237**	**4**		**(1,186)**	**1,296**	**674**	**8,025**	**(852)**	**7,173**
At December 31, 2016		**28,656**	**10**	**654**	**5,590**		**1,255**	**36,165**	**2,658**	**38,823**
Comprehensive income (loss) for the year										
Profit for the year						590		590	220	810
Other comprehensive income (loss)							(307)	(307)	171	(136)
Comprehensive income (loss) for the year						**590**	**(307)**	**283**	**391**	**674**
Increase of non-controlling shareholders - Nexa - dilution of interest	1.1 (f)						(215)	(215)	1,075	860
Increase of non-controlling shareholders - Nexa - sale of interest	25 (f)								957	957
Allocation of net income for the year										
Legal revenue				30		(30)				
Dividends	25 (b)				(135)	(140)		(275)	(224)	(499)
Profit retention					420	(420)				
Total contributions and distributions to shareholders				**30**	**285**	**(590)**	**(215)**	**(490)**	**1,808**	**1,318**
At December 31, 2017		**28,656**	**10**	**684**	**5,875**		**733**	**35,958**	**4,857**	**40,815**

All amounts in millions of reais

	Note	2017	2016
Cash flow from operating activities			
Profit (loss) before income tax and social contribution		1.086	(1.340)
Loss for the year from discontinued operations		(145)	(300)
Adjustments to items that do not represent changes in cash and cash equivalents			
Discontinued Operations			
Realization of other comprehensive income from the sale of the China operations	34 (c)	(133)	(44)
Net gain on sale of investments in China, California and Florida	34 (c)	(118)	
Goodwill decrease on sale of operations - China	34 (c)	228	
Realization of other comprehensive income - other operating income (expenses), net	29	(753)	
Realization of other comprehensive income - financial income		331	
Result on the sale of investment in Nexa	29	161	
Gain on sales of investments, net - Cement and Metals Operations	29	(33)	(312)
Provision (reversal) of impairment of investments - long steel Brazil	34 (a)	(71)	988
Gain on sales of fixed and intangible assets, net	29	(4)	(149)
Provision (reversal) for the impairment of fixed, intangible assets and investments	16, 17 and 18	(23)	1.164
Depreciation, amortization and depletion	27	2.360	2.603
Equity in the results of investees	16 (c)	(1.219)	(724)
Interest, indexation and foreign exchange variations		2.042	1.052
Allowance for doubtful accounts	11 (c)		4
Discount on repurchase of bonds	30		(173)
Constitution (reversal) of provision		(273)	384
Derivative financial instruments	6.1.1	(319)	791
Financial instruments - firm commitment	15	522	253
Fair value adjustment - Resolution 4131	19 (b)	47	(26)
Change in fair value of biological assets		8	(2)
		3.694	**4.169**
Decrease (increase) in assets			
Financial investments		225	1.754
Derivative financial instruments		(202)	(72)
Trade accounts receivable		(420)	522
Inventory		(130)	322
Taxes recoverable		12	171
Related parties		395	320
Other accounts receivable and other assets		(358)	(111)
Increase (decrease) in liabilities			
Trade payables		630	(300)
Salaries and social charges		47	(20)
Use of public assets		(84)	105
Taxes payable		160	(102)
Other obligations and other liabilities		171	304
Cash provided by operating activities		**4.140**	**7.062**
Interest paid on borrowing and use of public assets		(1.558)	(1.779)
Income tax and social contribution paid		(688)	(491)
Net cash provided by operating activities		**1.894**	**4.792**

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

All amounts in millions of reais

	Note	2017	2016
Cash flow from investment activities			
Proceeds from disposals of fixed and intangible assets		178	379
Public offering capture - Nexa	1.1 (f)	1.009	
Sale of Nexa shares		753	
Proceeds from sales of investments - Sirama			566
Sale of investments in China, California and Florida		1.937	82
Dividends received		540	245
Acquisitions of property, plant and equipment	17	(3.108)	(3.026)
Increase in biological assets		(4)	(5)
Increase in intangible assets	18	(174)	(181)
Net cash provided by (used in) investment activities		**1.131**	**(1.940)**
Cash flow from financing activities			
New borrowing	19 (b)	5.399	6.162
Repayment of borrowing	19 (b)	(5.881)	(7.376)
Derivative financial instruments	6.1.1	(561)	(371)
Dividends paid		(359)	(105)
Net cash used in financing activities		**(1.402)**	**(1.690)**
Increase in cash and cash equivalents		**1.623**	**1.162**
Cash increase resulting from incorporation			177
Reduction of cash resulting from reclassification to assets held-for-sale			
Effect of fluctuations in exchange rates		391	(1.042)
Cash and cash equivalents at the beginning of the year		**6.946**	**6.649**
Cash and cash equivalents at the end of the year		**8.960**	**6.946**
Main non-cash transactions			
Increase in non-cash assets resulting from incorporation			7.060
Adoption of debts in Special Tax Regularization Program (“PERT”) without cash effect		(259)	
Transfer of assets classified as held-for-sale			2.125
Transfer of liabilities related to assets classified as held-for-sale			(1.522)

All amounts in millions of reais

	Note	2017	2016
Revenue			
Sales of products and services		31,362	30,383
Estimated loss on doubtful accounts	11 (c)		(4)
Other operating income, net		894	581
		32,256	**30,960**
Inputs acquired from third parties			
Raw materials and other production inputs		(18,545)	(17,225)
Materials, energy, outsourced services and others		(517)	(512)
Impairment of assets	29	94	(2,152)
Gross value added		**13,288**	**11,071**
Depreciation, amortization and depletion	27	(2,360)	(2,603)
Net value added generated by the Company		**10,928**	**8,468**
Value added received through transfers			
Equity in the results of investees		1,222	768
Finance income and foreign exchange losses		2,279	5,097
		3,501	**5,865**
Total value added to distribute		**14,429**	**14,333**
Distribution of value added			
Personnel and payroll charges	28		
Direct remuneration		2,469	2,553
Social charges		947	1,023
Benefits		600	597
		4,016	**4,173**
Taxes and contributions			
Federal		2,491	2,217
State		2,604	2,904
Municipal		13	18
Deferred taxes		(592)	(870)
		4,516	**4,269**
Third-party capital remuneration			
Finance costs and foreign exchange losses		4,771	6,814
Rentals		316	328
		5,087	**7,142**
Own capital remuneration			
Non-controlling interests		220	45
Dividends		(499)	89
Reinvested profits (offset losses)		1,234	(1,085)
Loss on discontinued operations		(145)	(300)
		810	**(1,251)**
Value added distributed		**14,429**	**14,333**

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

1 General considerations

Votorantim S.A. (the "Company", the "parent company", or "VSA"), formerly known as Votorantim Industrial S.A., is a privately held company, fully controlled by the Ermírio de Moraes family, and is the holding company of the Votorantim Group. 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: cement, zinc and byproducts, aluminum, electrical energy, steel, wood pulp, agribusiness and finance.

1.1 Main events that occurred during the year 2017

(a) Corporate transactions in the long steel segment

On February 22, 2017, ArcelorMittal Brasil S.A. (“AMB”) and VSA entered into an agreement under which Votorantim Siderurgia S.A. (“VS”) will become a subsidiary of AMB and VSA will hold a minority interest of 15% in the capital of AMB (Note 34 (a)).

Votorantim's long steel operations in Argentina (Acerbrag) and Colombia (PazdelRío) were not included in the transaction.

(b) Sale of assets and liabilities in the Cement segment

(i) China operations

In June 2017, the indirect subsidiary Votorantim Cimentos EAA Inversiones SL ("VCEAA") carried out the sale of assets and liabilities related to the operations of Suzhou Nanda Cement Co. Ltd., Hua Wo Cement Co. Ltd. - (Shandong) and Hua Wo Cement Co. Ltd. - (Huai'an), located in China.

In October 2017, VCEAA sold all the shares representing Hua Wo (Zaozhuang) Cement Co. Ltd. and Liyand Dongfang Cement Co Ltd., with both companies held by Votorantim Cimentos ("VCSA") indirectly.

As a result, the VCEAA recorded a loss related to the sale of the investment in the amount of R$ 139 and exchange variation of the realization of the other comprehensive income - the exchange variation on these foreign investments in the amount of R$ 60, both recorded under "Discontinued Operations" (Note 34 (c)).

As a result of the sale of this investment, VCSA also carried out proportionally the reduction of goodwill and exchange variation of the realization of other comprehensive income on these investments abroad, in the amount of R$ 228 and R$ 73, respectively, recorded under "Discontinued operations "(Note 34 (c)).

(ii) Florida and California operations

The indirect subsidiary Votorantim Cement North America Inc. ("VCNA") and the Anderson Columbia Group ("Anderson Columbia") entered into a contract for the sale of all the shares representing the capital stock of the operations in the states of Florida and California (USA), which includes VCNA Prestige Concrete Products Inc., VCNA Prestige Gunite Inc. (including its wholly-owned subsidiary Sacramento Prestige Gunite Inc.) and its 50% interest in Suwanee American Cement LLC ("SAC") and Sumter Cement Co LLC.

In November 2017, the operation was completed and VCSA recorded net gain related to the sale of the investment in the amount of R$ 257, recorded under "Discontinued operations" (Note 34 (c)).

All amounts in millions of reais unless otherwise stated

(c) Reversed a provision referring to the exclusion of State Value-Added Tax on Sales and Services ("ICMS") from the basis of calculation of the PIS and COFINS contributions

In the second quarter of 2017, the investees reversed a provision referring to the exclusion of ICMS from the basis of calculation of the PIS and COFINS contributions, based on the judgment of the Federal Supreme Court (“STF”) with general repercussions. The net result of this reversal represented a gain effect, in the amount of R$ 327, in the income for the year.

(d) Adoption the Special Tax Regularization Program

In 2017, the subsidiaries adopted the Special Tax Regularization Program (“PERT”), including debits with the Brazilian Federal Revenue (“RFB”) in accordance with the Provisional Executive Act (“MP”) 783/2017, converted into Law 13,496, on October 24, 2017. The amount included in the program was R$ 374, of which R$ 117 had already been provisioned. Accordingly, there was an impact on the result for the year, in the amount of R$ 257, of which R$ 122 was recorded under "Other operating income (expenses), net" (Note 29), R$ 79 in financial income and R$ 56 in tax income and social contribution. Of the total included in the program, R$ 259 was paid with tax loss and negative basis, and the rest will be settled in cash.

(e) Mato Grosso State Credit Recovery Program – (“REFIS – MT Program”)

The subsidiary VCSA joined the REFIS-MT and signed an agreement with the Public Ministry of the State of Mato Grosso with the purpose of adjusting and ratifying the ICMS tax benefits related to the construction of the Cuiabá plant. Under the agreement, it was recognized that VCSA made investments higher than those provided for in the respective terms of concession of tax benefits. However, divergences in legal interpretation led to tax assessments, which led to the need to resolve pending tax issues through a payment in the amount of R$ 237 to the State in September 2017. VCSA also pledged to increase investments of R$ 15, of which R$ 13.5 was paid in September 2017, for a state development fund for the promotion of small entrepreneurs, and R$ 1.5 for the municipality of Nobres, which will benefit from projects in the area of health, developed in partnership with the Votorantim Institute, which includes the construction of two service stations for the population. To settle this agreement, the Company adhered to the Mato Grosso State Credit Recovery Program - REFIS-MT Program.

(f) Public offering of shares Nexa Resources S.A. ("Nexa")

On October 27, 2017, the subsidiary Nexa announced its initial public offering and began trading its shares on the New York Stock Exchange (“NYSE”) and the Toronto Stock Exchange (“TSX”), under the ticker name "NEXA".

On October 31, 2017, Nexa announced the closing of its initial public offering of 35,650,000 common shares of the Company at a price of USD 16.00 per share, which included a total of 15,150,000 shares sold by VSA, in which 4,650,000 shares are included in the additional purchase option held by VSA. As a result, Nexa's shareholders' equity increased by R$ 1,009 (USD 306).

In primary funding, the VSA share was diluted from 89.35% to 75.61%, resulting in a reduction of R$ 215 in investment and this was reflected in shareholders' equity (Note 25).

The sale of shares by VSA corresponded to 15.57% of Nexa's remaining balance, with the Company holding 64.25%. As a reflection of the operation, VSA recognized a net gain of R$ 258, of which R$ 589 was recorded under "Other operating income (expenses), net" (Note 29) and a loss of R$ (331) recorded in financial income, with the following effects:

Effects sale of investment in Nexa	
Net income from sale of investment (Note 29)	(161)
Realization of other comprehensive income from sale (Note 29)	750
Hedge Net Investment - Exchange rate variation	(331)
Gain on the sale of investment in Nexa	258

All amounts in millions of reais unless otherwise stated

(g) Sale of interests in Cementos Bio Bio S.A. ("Bio Bio") and in Guanaco Inversiones Ltda. ("Guanaco")

In October 2017, the subsidiary Votorantim Cimentos Chile S.A. ("VCC") was partially spun-off, aiming at the creation of a new company named Guanaco Inversiones Ltda., which received through the spinoff the 13.1% interest held by VCC in Bio Bio. In November 2017, the Company sold all the shares of Guanaco and recognized a net gain of R$ 16. In the same period, VCC also sold the remaining shares it held in Bio Bio, equivalent to a 3.6% interest in such company, and recognized a net gain of R$ 4 (Note 29).

(h) Joint venture in energy operation

On December 13, 2017, the subsidiary Votorantim Geração de Energia SA ("VGE") signed an investment agreement with Canada Pension Plan Investment Board ("CPPIB") to set up a joint venture serving as an investment platform related to acquisition and development of new renewable energy generation assets in Brazil. On the same date, as an initial investment strategy, VGE and CPPIB entered into an agreement to buy and sell shares with Casa dos Ventos Energias Renováveis S.A., aiming at the acquisition by the joint venture of the wind farms of Ventos do Araripe III.

As part of the constitution of the joint venture, VGE will contribute its wholly-owned subsidiaries of Ventos do Piauí I wind farms and CPPIB will contribute approximately R$ 690. The completion of the operation is subject to verification of some previous conditions.

(i) Change of corporate name

In the fourth quarter of 2017, due to the repositioning in the market, the main companies that are part of the Nexa corporate structure, changed their corporate name. The amendments are still under review by the bodies responsible for approval. Here are the changes that were made:

From	To
Compañía Minera Milpo S.A.A.	Nexa Resources Perú S.A.A.
Votorantim Metais Zinco S.A.	Nexa Recursos Minerais S.A.
Votorantim Metais – Cajamarquilla S.A.	Nexa Resources Cajamarquilla S.A.

2 Presentation of the consolidated financial statements

2.1 Basis of preparation

(a) Consolidated financial statements

The financial statements have been prepared in accordance with accounting practices adopted in Brazil effective up to December 31, 2017 , including the pronouncements issued by the Brazilian Accounting Pronouncements Committee ("CPC"), as well as according to the International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and their interpretations ("IFRIC"), and show all relevant information pertinent to interim financial statements, which is consistent with that used by the management in carrying out its duties.

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. To international practice, this statement is presented as additional information.

The preparation of these consolidated financial statements considered the historical cost basis, which in the case of certain financial assets and liabilities, including derivative instruments, is adjusted to reflect the fair value measurement.

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 policies. The areas involving a higher degree of judgment or complexity or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4.

(b) Approval of the financial statements

The issuance of these financial statements was originally approved by Management on February 28, 2018 and subsequently re-approved on March 21, 2018, due to the disclosure of the subsequent event related to the corporate reorganization of the jointly-controlled subsidiary Fibria Celulose S.A. (Note 36 (e)).

2.2 Consolidation

(a) Subsidiaries

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

Transactions, balances and unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated, unless the transaction provides evidence of impairment of the asset transferred. Accounting policies of acquired subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Company.

(b) Transactions with non-controlling interests

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

(c) Loss of control of subsidiaries

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

(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 Restatement of comparative figures

(a) Assets classified as held-for-sale

In accordance with IFRS 5 / CPC 31 - "Non-current assets held-for-sale and discontinued operations", the Company reclassified certain cement operations from China and the states of Florida and California (USA) from continuing operations to discontinued operations, consequently, the result balances were subject to changes in the amounts previously presented in the financial statements as at December 31, 2016. Thus, the effects of these reclassifications are as follows:

All amounts in millions of reais unless otherwise stated

			2016
	As prior presented	Impacts of reclassification of cement	Restated
Continuing operations			
Net revenue from products sold and services rendered	26.738	(773)	25.965
Cost of products sold and services rendered	(20.773)	763	(20.010)
Loss of profit	**5.965**	**(10)**	**5.955**
Operating income (expenses)			
Selling	(1.667)	28	(1.639)
General and administrative	(2.112)	21	(2.091)
Other operating income (expenses), net	(2.605)	(11)	(2.616)
	(6.384)	**38**	**(6.346)**
Operating profit (loss) before equity results and finance results	**(419)**	**28**	**(391)**
Results from equity investments			
Equity in the results of investees	737	(13)	724
Realization of other comprehensive income on disposal of investments	44		44
	781	**(13)**	**768**
Finance results, net			
Finance income	1.397		1.397
Finance costs	(2.666)	23	(2.643)
Income from derivative financial instruments	(1.006)		(1.006)
Foreign exchange, net	544	(9)	535
	(1.731)	**14**	**(1.717)**
Profit (loss) before income tax and social contribution	**(1.369)**	**29**	**(1.340)**
Income tax and social contribution			
Current	(482)	1	(481)
Deferred	868	2	870
Profit (loss) for the year from continuing operations	**(983)**	**32**	**(951)**
Discontinued operations			
Loss for the year from discontinued operations	(268)	(32)	(300)
Loss for the period attributable to the owners	**(1.251)**		**(1.251)**
Loss attributable to the owners of the Company	(1.296)		(1.296)
Profit attributable to non-controlling interests	45		45
Loss for the year	**(1.251)**		**(1.251)**
Weighted average number of shares - thousands (to the owners of the Company)	18.278.789		18.278.789
Basic and diluted loss per thousand shares, in reais	**(70,90)**		**(70,90)**
From continuing operations			
Basic and diluted earnings per thousand shares, in reais	**(56,24)**	**1,75**	**(54,49)**
From discontinued operations			
Basic and diluted loss per thousand shares, in reais	**(14,66)**	**(1,75)**	**(16,41)**

2.4 Foreign currency translation

(a) Functional and presentation currency of the financial statements

The functional currency of the Company is the Brazilian Real ("R$", "Real" or "reais”).

(b) Transactions and balances

Foreign currency transactions are translated into reais using the exchange rates prevailing at the dates of the transactions or the dates of valuation when items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end 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 (none of which has the currency of a hyper-inflationary economy) 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 taken to 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
Votorantim Cement North America Inc.	Canada	US Dollar	Holding
Votorantim Cimentos EAA Inversiones, S.L.	Spain	Euro	Holding
Nexa Resources Cajamarquilla S.A.	Peru	US Dollar	Zinc
US Zinc Corporation	EUA	US Dollar	Zinc
Nexa Resources Perú S.A.A.	Peru	US Dollar	Mining
Acerías Paz del Río S.A.	Colombia	Colombian Peso	Steel
Acerbrag S.A.	Argentina	Argentine Peso	Steel
Nexa Resources S.A.	Luxembourg	US Dollar	Holding
Votorantim GmbH	Austria	US Dollar	Zinc
Votorantim FinCO GmbH	Luxembourg	US Dollar	Trading

All amounts in millions of reais unless otherwise stated

3 Changes in accounting policies and disclosures

3.1 New standards not yet adopted

The following standards have been published and are mandatory for accounting periods starting from January 1, 2018. There was no early adoption of these standards by the Company.

Standard	IFRS 15 – "Revenue from contracts with customers"
Validity	January 1, 2018
Main points introduced by the standard	This standard introduces a comprehensive framework for determining the measurement of revenue and when revenue should be recognized. In accordance with IFRS 15, revenue must be recognized when: (i) there is a written or oral contract; (ii) the obligation to perform the contract is identified; (iii) it is possible to determine the price of the transaction and allocate by performance obligation; and (iv) the performance obligation is met. IFRS 15 replaces current revenue recognition standards, including CPC 30 (IAS 18) – "Revenue", CPC 17 (IAS 11) – "Construction Contracts" and CPC 30 - Interpretation A (IFRIC 13) – "Loyalty Programs with the client".
Impacts	Management evaluated the principles and amendments introduced by the new standard and concluded that its adoption will not impact the Company in relation to the time for recognition of revenue from customer contracts, as well as its measurement, presentation and disclosure in the financial statements. The observed impacts are related to the review of internal documents and the creation and / or change of procedures, in order to ensure that the new contracts with clients are adequately evaluated and accounted in accordance with IFRS 15.

Standard	CPC 48 / IFRS 9 – "Financial instruments: Recognition and measurement"
Validity	January 1, 2018
Main points introduced by the standard	This standard addresses three aspects of accounting for financial instruments: classification and measurement, impairment and hedge accounting. IFRS 9 is intended to replace IAS 39 - "Financial Instruments: Recognition and Measurement". **(i) Classification and measurement** The standard provides a new assessment for the classification and measurement of financial instruments, which will be defined based on the contractual cash flow and the entity's business model, and introduces a new classification of financial assets at fair value through other entities results. **(ii) Impairment** IFRS 9 defines that an entity shall measure an expected credit loss from the initial recognition of the financial asset. The standard allows the Company to make this estimate through a general model in which there is a need to monitor whether there is any significant credit risk increase or a simplified model. **(iii) Hedge accounting** IFRS 9 introduces three requirements for hedge effectiveness:

	(i) There is an economic relationship between the object and the hedging instrument; (ii) The effect of credit risk does not dominate the changes in values arising from the economic relationship; and (iii) The hedge ratio of the hedge relationship is the same as that resulting from the amount of the hedged item that the hedge effectively protects and the amount of the hedge instrument that the hedge actually uses to hedge that hedged item amount. The standard also requires a prospective assessment of expectations about the effectiveness of coverage. In addition, exclusively for hedge accounting of cash flow there is a change in relation to the concept of time value, which will no longer be treated as a component of the transaction and will begin to affect shareholders' equity (other comprehensive income) with the adoption of the IFRS 9.
Impacts	Management evaluated the principles and amendments introduced by the new standard and concluded that its adoption will not cause significant impacts to the Company and its subsidiaries in relation to the time for recognition, as well as their measurement, presentation and disclosure in the financial statements. **(i) Classification and measurement** The Company and its subsidiaries analyzed the classification of their financial assets, based on the three new categories: amortized cost, fair value through other comprehensive income and at fair value through profit or loss. The Company does not expect a significant impact on its balance sheet or shareholders' equity when applying the classification and measurement requirements. **(ii) Impairment** The Company and its subsidiaries will apply the simplified approach to recognize the expected credit loss for trade accounts receivable. The methodology for calculating the provision for losses is based on a risk matrix, which was composed of historical data of losses for all aging lists and prospective data, including considering the securities to be matched. In the analysis performed by the Company, an increase was estimated in the estimated loss that is intangible in the consolidated as at January 1, 2018. **(iii) Hedge accounting** The Company and its subsidiaries analyzed the economic relationship, credit risk and the hedge ratio of the current net investment hedge operations and concluded that they will continue to qualify for hedge accounting with the adoption of IFRS 9. As this standard does not change the general principles of accounting of effective hedges, there will be no impact as a result of the application of IFRS 9.

Standard	IFRS 16 – "Leases"
Validity	January 1, 2019
Main points introduced by the standard	This standard replaces the previous lease standard, IAS 17 / CPC 06 (R1) – "Leasing Operations", and related interpretations, and establishes the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract, ie customers (lessees) and suppliers

	(lessors). Tenants are required to recognize a lease liability reflecting future lease payments and a "right to use an asset" for virtually all lease agreements, with the exception of certain short-term leases and low value asset leases. For landlords, the accounting treatment remains practically the same, with the classification of leases as operating leases or financial leases, and accounting for these two types of lease differently.
Impacts	The evaluation of the Company and its subsidiaries on the impacts of the new standard is underway. The evaluation is being conducted in the different areas, with the objective of identifying the existing lease contracts, as well as the environment of internal controls and systems impacted by the adoption of the new standard.

There are no other standards, changes in standards and interpretations that are not in force that the Company expects to have a material impact arising from its application in its financial statements.

4 Critical accounting estimates and judgments

Based on assumptions, the Company makes 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 receivable (Note 11);
(iii) Property, plant and equipment (Note 17);
(iv) Intangible assets (Note 18);
(v) Current and deferred income and social contribution taxes (Note 21);
(vi) Provision (Note 23);
(vii) Pension plan (Note 31).

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, or those relating to environmental protection. The 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 the compliance with the mandatory emissions levels.

The Company carries out periodic studies to identify any potentially affected areas and records, based on the best estimates of costs, 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.

All amounts in millions of reais unless otherwise stated

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 does not enter into transactions involving financial instruments for speculative purposes.

(a) Market risk

(i) Foreign exchange risk

The Foreign Exchange Exposure Management Policy highlights that the purpose of derivative transactions is to reduce cash flow volatility, hedge against foreign exchange exposure, and avoid the mismatch between Company currencies.

The Company has certain investments in foreign operations, the net assets of which are exposed to foreign exchange risk. Foreign exchange exposure arising from the Company's foreign operations is mainly hedged by borrowings in the same currency of these investments, being classified as net investment hedges.

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

	Note	2017	2016
Assets denominated in foreign currency			
Cash and cash equivalents	9	6,062	4,641
Financial investments	10	326	517
Derivative financial instruments		189	367
Trade receivables	11	1,192	995
Related parties		67	228
		7,836	**6,748**
Liabilities denominated in foreign currency			
Borrowing (*)		17,817	18,439
Derivative financial instruments		382	742
Trade payables		1,955	1,861
Confirming payables	20	761	605
		20,915	**21,647**
Net exposure		**(13,079)**	**(14,899)**

(*) Does not consider borrowing costs.

(ii) 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 to fair value interest rate risk.

(iii) Commodity price risk

The Commodity Price Exposure Management Policy 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 adopts the 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.

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.

The Company performs initial analyses of customer credit and, when necessary, guarantees deemed or letters of credit are obtained to safeguard the Company's interests. Additionally, most of the export sales to the United States, Europe and Asia are collateralized by letters of credit and credit insurance.

(c) Liquidity risk

Liquidity risk is managed in accordance with Votorantim's Financial Policy, aiming to guarantee sufficient liquid resources to honor the Company's financial commitments in the period and at no additional cost. One of the main instruments of measurement and monitoring of liquidity is the projection of cash flow, observing a minimum term of 12 months of projection as of the reference date.

The following table analyzes the Company's principal financial liabilities by maturity, corresponding to the period remaining in the balance sheet up to the contractual maturity date. Derivative financial liabilities are included in the analysis when their contractual maturities are essential for an understanding of the temporary cash flows. The amounts disclosed in the table are the undiscounted contractual cash flows, these amounts may not be reconciled with the amounts disclosed in the balance sheet.

All amounts in millions of reais unless otherwise stated

	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, 2017							
Borrowing (*)		3,603	5,531	6,970	12,941	7,931	36,976
Derivative financial instruments		310	63	9			382
Confirming payables	20	1,070					1,070
Trade payables		3,353					3,353
Dividends payable	14	188					188
Related parties		19	6				25
Use of public assets		79	170	192	591	1,637	2,669
		8,622	**5,770**	**7,171**	**13,532**	**9,568**	**44,663**
At December 31, 2016							
Borrowing (*)		3,826	7,247	8,530	9,924	9,368	38,895
Derivative financial instruments		401	286	56			743
Confirming payables	20	968					968
Trade payables		2,723					2,723
Dividends payable	14	48					48
Related parties		10	12				22
Use of public assets		78	171	193	595	1,889	2,926
		8,054	**7,716**	**8,779**	**10,519**	**11,257**	**46,325**

(*) Does not include the recorded fair value of the debts contracted under Resolution 4131.

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 method for recognizing the resulting gain or loss depends on whether or not the derivative is designated as a hedge instrument in cases of adoption of hedge accounting. If this is the case, the method depends on the nature of the item being hedged. The Company adopts hedge accounting and designates certain derivatives such 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 U.S. 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 and qualify as fair value hedges are recorded in "Operating income (expenses)".

(iii) Fair value of derivatives and other financial instruments

The fair value of financial instruments that are not traded in active markets is determined through the use of valuation techniques. The Company uses its judgment to choose among several methods and to establish assumptions that are based primarily on the market conditions existing at the balance sheet date.

All amounts in millions of reais unless otherwise stated

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

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

Details of the main derivative operations

	Principal Value							Fair value		Realized gain (loss)	Fair value by maturity			
Programs	**2017**	**2016**	**As per unit**	**Purchase/ sale**	**Average FWD rate**		**Average term (days)**	**2017**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Sales at a fixed price														
Zinc forward	2,318	922	ton	P	3,016	USD/ton	123	2.1	1.8	4.3	2.1			
								2.1	**1.8**	**4.3**	**2.1**			
Hedging instruments for mismatches of quotation periods														
Zinc forward	281,397	184,835	ton	P/S			24	(16.3)	14.3	(17.1)	(16.3)			
Silver forward	238		k oz (*)	P/S			17	0.6		(0.1)	0.6			
Aluminum forward	6,850	1,497	ton	P/S			29	(0.2)		(2.8)	(0.2)			
								(15.9)	**14.3**	**(20.0)**	**(15.9)**			
Hedging instruments for the operating margin of metals														
Aluminum forward	18,970	5,165	ton	S	1,722	USD/ton	1	(21.9)	(1.9)		(21.9)			
Zinc forward		10,690	ton	S		USD/ton			(23.2)					
US Dollar forward	33	16	USD	S	4	BRL/USD	1	8.9	11.4		8.9			
								(13.0)	**(13.7)**		**(13.0)**			
Hedging instruments for foreign exchange exposure														
US Dollar forward	451		USD	P	3	BRL/USD	5	(21.2)		(9.1)	(21.2)			
Euro forward			EUR	P		BRL/EUR				(0.9)				
Turkish lira forward	26		USD	P	4	TRY/USD	22	0.4			0.4			
								(20.8)		**(10.0)**	**(20.8)**			
Hedging instruments for debts														
Fixed rate in reais vs. CDI floating rate swaps		100	BRL						(1.0)	(0.9)				
TJLP floating rate vs. CDI floating rate swaps	28	28	BRL		97.00%	% CDI	197	1.0	1.0	(0.3)	1.0			
LIBOR floating rate vs. CDI floating rate swaps	254	773	USD		111.07%	% CDI	1,030	42.4	(320.3)	(535.1)	(23.5)	(30.0)	10.6	85.3
US dollar fixed rate vs. CDI floating rate swaps	50	50	USD		101.90%	% CDI	24	(42.7)	(47.7)	(14.9)	(42.7)			
								0.7	**(368.0)**	**(551.2)**	**(65.2)**	**(30.0)**	**10.6**	**85.3**
								(46.9)	**(365.6)**	**(576.9)**	**(112.8)**	**(30.0)**	**10.6**	**85.3**

(*) k oz– Troy Ounce

All amounts in millions of reais unless otherwise stated

Details of the main derivative operations

	Principal Value							Fair value		Realized gain (loss)	Fair value by maturity			
Programs	**2017**	**2016**	**As per unit**	**Purchase/ sale**	**Average FWD rate**		**Average term (days)**	**2017**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Hedge accounting - cash flow hedge														
Hedging instruments for the operating margin of metals														
Zinc forward		94,559	ton	S					(74.9)	(145.2)				
Aluminum forward	165,175	225,000	ton	S	2,019	USD/ton	198	(143.2)	(10.6)	(184.0)	(133.6)	(9.6)		
Copper forward		540	ton	S					0.7	(0.6)				
US Dollar forward	334	473	USD	S	3	BRL/USD	200	0.1	80.8	173.4	1.2	(1.1)		
								(143.1)	**(4.0)**	**(156.4)**	**(132.4)**	**(10.7)**		
Hedging instruments for mismatches of quotation periods														
Zinc forward	58,800	43,294	ton	P/S			47	9.9	(5.6)	14.7	9.9			
Silver forward	265		k oz (*)	P/S			58	(0.2)		(0.3)	(0.2)			
								9.7	**(5.6)**	**14.4**	**9.7**			
Hedge accounting - fair value hedge														
Sales at a fixed price														
Zinc forward	202	426	ton	P	3,169	USD/ton	69	0.1	0.3	1.2	0.1			
								0.1	**0.3**	**1.2**	**0.1**			
Hedging instruments for mismatches of quotation periods														
Zinc forward	93,003	23,940	ton	P/S			43	(11.4)	0.3	(45.2)	(11.4)			
								(11.4)	**0.3**	**(45.2)**	**(11.4)**			
								(144.7)	**(9.0)**	**(186.0)**	**(134.0)**	**(10.7)**		
								(191.6)	**(374.6)**	**(762.9)**	**(246.8)**	**(40.7)**	**10.6**	**85.3**

(*) k oz– Troy Ounce

The transactions involving derivative financial instruments recognized in “Carrying value adjustments” amount a loss of R$ (41) in 2017. Besides this, there are hedge accounting operations, which amounted to a loss of R$ (15) in 2017, in the subsidiaries not consolidated recognized in “Carrying value adjustments”.

All amounts in millions of reais unless otherwise stated

(b) Effects of financial derivative instruments on the financial result

The chart below shows the impact of the financial derivative instruments in the financial result of the year:

Programs	Fair value	Realized loss	Total
Hedging instruments for foreign exchange exposure			
US Dollar forward	(21.2)	(9.1)	(30.3)
Euro forward		(0.9)	(0.9)
Turkish lira forward	0.4		0.4
	(20.8)	**(10.0)**	**(30.8)**
Hedging instruments for debts			
Fixed rate in reais vs. CDI floating rate swaps	1.0	(0.9)	0.1
TJLP vs. CDI floating rate swaps		(0.3)	(0.3)
LIBOR floating rate vs. CDI floating rate swaps	362.7	(535.1)	(172.4)
US Dollar fixed rate vs. CDI floating rate swaps	5.0	(14.9)	(9.9)
	368.7	**(551.2)**	**(182.5)**
Effect on the finance results	**347.9**	**(561.2)**	**(213.3)**

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 at December 31, 2017 and 2016, the financial assets and liabilities carried at fair value were classified as levels 1 and 2 in the fair value measurement hierarchy.

All amounts in millions of reais unless otherwise stated

		Fair value measured based on		2017
	Note	Prices quoted in an active market (Level 1)	Valuation supported by observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9	5,715	3,245	8,960
Financial investments	10	1,573	2,014	3,587
Derivative financial instruments	6.1.1		190	190
Financial instruments - firm commitment	15		364	364
		7,288	**5,813**	**13,101**
Liabilities				
Borrowing	19	15,292	10,217	25,509
Confirming payables	20		1,070	1,070
Derivative financial instruments	6.1.1		382	382
Financial instruments - firm commitment	15		173	173
Deferred revenue - silver streaming			734	734
		15,292	**12,576**	**27,868**

		Fair value measured based on		2016
	Note	Prices quoted in an active market (Level 1)	Valuation supported by observable prices (Level 2)	Fair value
Assets				
Cash and cash equivalents	9	3,128	3,818	6,946
Financial investments	10	1,401	1,828	3,229
Derivative financial instruments	6.1.1		368	368
Financial instruments - firm commitment	15		688	688
		4,529	**6,702**	**11,231**
Liabilities				
Borrowing	19	11,252	12,027	23,279
Confirming payables	20		968	968
Derivative financial instruments	6.1.1		743	743
Financial instruments - firm commitment	15		10	10
Deferred revenue - silver streaming			815	815
		11,252	**14,563**	**25,815**

6.1.3 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.

Were designated as hedged investments presented in the following table including the portion of the debt of the Company and its subsidiaries Companhia Brasileira de Aluminio ("CBA"), Nexa Mineral Resources S.A. ("Nexa BR"), VCSA and VS, denominated in Euros and Dollars.

All amounts in millions of reais unless otherwise stated

	2017		2016	
	Investment	Debt	Investment	Debt
Nexa Resources Cajamarquilla S.A.	2,825	2,981	3,233	2,968
Votorantim Cement North America Inc.	2,170	4,219	3,173	4,540
Votorantim Cimentos EAA Inversiones, S.L.	1,723	2,263	2,410	2,577

The foreign exchange loss on the conversion of debts, net of income tax and social contribution, recognized as equity valuation adjustments on December 31, 2017, was R$ 163 (December 31, 2016, gain of R$ 2,033) (Note 25 (e)).

The Company documents and evaluates quarterly the effectiveness of the investment hedge operations, both prospectively and retrospectively.

6.1.4 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 of the 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 market sources and specialized sources, following the Company's governance.

The scenarios as of December 31, 2017 are described below:

Scenario I - Considers a shock in the market curves and quotations at December 31, 2017, according to the base scenario defined by Management for March 31, 2018;

Scenario II - considers a shock of + or - 25% in the market curves at December 31, 2017;

Scenario III - considers a shock of + or - 50% in the market curves at December 31, 2017.

All amounts in millions of reais unless otherwise stated

							Impacts on profit (loss)					Impacts on comprehensive income				
							Scenario I	Scenarios II & III				Scenario I	Scenarios II & III			
Risk factors	Cash and cash equivalents and financial investments (i)	Borrowing and related parties (i)	Derivative financial instruments/As per unit			Changes from 2017	Results of scenario I	-25%	-50%	+25%	+50%	Results of scenario I	-25%	-50%	+25%	+50%
Foreign exchange rates																
USD	5,365	14,170	(*)	1,147	USD million	-3.8%	61	403	806	(403)	(806)	401	2,628	5,256	(2,628)	(5,256)
EUR	206	2,934				-5.4%		(1)	(3)	1	3	148	682	1,364	(682)	(1,364)
PEN	81					-4.5%	(3)	(19)	(38)	19	38	(4)	(20)	(40)	20	40
BOB	17	396				-2.4%						9	95	189	(95)	(189)
TRY	129	267				0.4%	1	(32)	(65)	32	65	(1)	34	69	(34)	(69)
ARS	127					0.8%						1	(32)	(64)	32	64
Interest rates																
BRL - CDI	6,144	4,456		3,768	BRL million			(25)	(49)	25	50		9	18	(8)	(17)
USD - LIBOR		839		2,118	USD million	-2 bps		(4)	(9)	4	9		2	5	(2)	(5)
US Dollar coupon				1,121	USD million	3 bps	(1)	18	36	(17)	(33)		(3)	(7)	3	7
Price of commodities																
Zinc				435,720	ton	-2.9%	50	196	393	(196)	(393)	(2)	(8)	(16)	8	16
Aluminum				190,995	ton			2	3	(2)	(3)	78	309	618	(309)	(618)
Copper						-11.8%										
Silver				503	k oz (**) thousand	5.2%		1	2	(1)	(2)		4	7	(4)	(7)
Firm commitment - electric energy																
Sale and purchase agreements - fair value				114	BRL million			4	7	(4)	(8)					

(*) Considers baskets of currencies
(**) k oz - Ounces troy

(i) The balances presented do not reconcile with the cash and cash equivalents, financial investments, related parties and borrowing notes, as the analysis only covers the most significant currencies and the interest rates cover only the principal value.

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) Held to maturity

Investments in non-derivative marketable securities, made by the Company with the ability and intention of being held to maturity, are classified as held to maturity investments and recorded at amortized cost. The Company assesses, at the balance sheet date, whether there is objective evidence that a financial asset or group of financial assets is impaired. If there is such evidence, a provision for the impairment of the asset is recorded.

(c) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially measured at fair value and subsequently at amortized cost using the effective interest method.

(d) Financial assets available-for-sale

Financial assets available-for-sale are non-derivatives that are not classified in any of the previous categories. They are presented as non-current assets unless management intends to dispose of the investment within 12 months after the balance sheet date.

(e) Impairment of financial assets carried at amortized cost

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

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

All amounts in millions of reais unless otherwise stated

	Note	2017	2016
Assets			
Borrowing and receivables			
Cash and cash equivalents	9	8,960	6,946
Trade receivables	11	2,421	2,001
Related parties	14	143	535
		11,524	9,482
Assets held-for-trading			
Financial investments	10	3,468	3,204
Derivative financial instruments	6.1.1	160	258
Financial instruments - firm commitment		364	688
		3,992	4,150
Assets available-for-sale			
Financial investments	10	68	3
		68	3
Held-to-maturity investments			
Financial investments	10	51	22
		51	22
Derivatives used for hedging			
Derivative financial instruments	6.1.1	30	110
		30	110
Liabilities			
Liabilities at fair value through profit or loss			
Borrowing	19	12,859	963
Derivative financial instruments	6.1.1	199	613
Financial instruments - firm commitment		208	10
		13,266	1,576
Derivatives used for hedging			
Derivative financial instruments	6.1.1	183	130
		183	130
At amortized cost			
Borrowing	19	11,771	23,456
Trade payables		3,353	2,723
Related parties	14	25	22
Confirming payables	20	1,070	968
Use of public assets	24	1,132	1,186
		17,351	28,355

All amounts in millions of reais unless otherwise stated

8 Credit quality of financial assets

			2017			2016
	Local rating	Global rating	Total	Local rating	Global rating	Total
Cash and cash equivalents						
AA+	376		376			
AA	70		70			
AA-	2,452	464	2,916	1,831	815	2,646
A+		2,233	2,233	175	815	990
A		847	847		278	278
A-		393	393		736	736
BBB+		391	391		479	479
BBB		458	458		409	409
BBB-		58	58		111	111
BB+					34	34
BB		140	140	297	91	388
B-		77	77			
B+		21	21		81	81
CCC+					96	96
Unrated (i)		980	980	2	696	698
	2,898	**6,062**	**8,960**	**2,305**	**4,641**	**6,946**
Financial investments						
AA+	867		867	59		59
AA	30		30			
AA-	2,315	14	2,329	2,105		2,105
A+	3	168	171	479	308	787
A		25	25	3	12	15
A-	18	2	20	17	66	83
BBB+		21	21			
BBB					3	3
BB				23		23
B-		50	50			
CCC+					104	104
Unrated (ii)	28	46	74	26	24	50
	3,261	**326**	**3,587**	**2,712**	**517**	**3,229**
Derivative financial instruments						
AAA	30		30	84		84
AA+	7		7			
AA-	69	17	86	173		173
A+		11	11	10	1	11
A		1	1		24	24
A-					76	76
Unrated (i)	55		55			
	161	**29**	**190**	**267**	**101**	**368**
	6,320	**6,417**	**12,737**	**5,284**	**5,259**	**10,543**

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

(i) Refers to values invested in offshore banks, which are not rated by any rating agency.

(ii) Refers to Grupo Votorantim's exclusive investment funds (Credit Receivables Investment Funds – "FIDCs"), which are not rated by any rating agency

All amounts in millions of reais unless otherwise stated

9 Cash and cash equivalents

Accounting policy

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.

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. Cash equivalents in foreign currency are mainly composed of financial instruments in local currency.

	2017	2016
Local currency		
Cash and banks	14	14
Certificates of deposits	534	
Repurchase agreements - private securities	165	1,072
Repurchase agreements - public securities	2,185	1,219
	2,898	**2,305**
Foreign currency		
Cash and banks	3,516	1,895
Certificates of deposits	1,503	2,746
Term deposits	1,043	
	6,062	**4,641**
	8,960	**6,946**

10 Financial investments

Accounting policy

Financial investments are held for the purpose of servicing investments whose maturities are long-term from the date of acquisition.

Most financial investments have immediate liquidity, however, they are classified as financial investments based on the original maturities, considering the intended allocation of funds. The investments in national currency comprise government securities or financial institutions indexed to the interbank deposit rate. Foreign currency-denominated investments consist mainly of fixed-income financial instruments in local currency (time deposits).

All amounts in millions of reais unless otherwise stated

	2017	2016
Held-for-trading		
Bank Deposit Certificates - "CDBs"	543	657
Financial Treasury Bills - "LFTs"	961	740
Repurchase agreements - public securities	605	661
Repurchase agreements - private securities	1,048	603
Financial investments in foreign currency	282	517
Investment fund quotas	29	26
	3,468	**3,204**
Available-for-sale		
Bank Deposit Certificates - "CDBs"	68	3
	68	**3**
Held-to-maturity		
Financial Treasury Bills "LFTs"	7	
Financial investments in foreign currency	44	
Bank Deposit Certificates - "CDBs"		22
	51	**22**
	3,587	**3,229**
Current	3,562	3,190
Non-current	25	39
	3,587	**3,229**

11 Trade receivables

Accounting policy

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of the Company's business.

Trade receivables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest rate method, less provision for impairment of trade receivables. Receivables from customers abroad are presented based on the exchange rates prevailing at the balance sheet date.

(a) Breakdown

	Note	2017	2016
Trade receivables - Brazil		1,296	1,125
Trade receivables - foreign customers		1,231	1,009
Related parties	14	53	26
		2,580	**2,160**
Allowance for doubtful accounts		(159)	(159)
		(159)	**(159)**
		2,421	**2,001**

All amounts in millions of reais unless otherwise stated

(b) Breakdown by currency

	2017	2016
Brazilian Real	1.229	1.006
US Dollar	620	449
Euro	115	110
Colombian peso	111	83
Argentine peso	74	100
Canadian dollar	4	3
Other	268	250
	2.421	**2.001**

(c) Changes in estimated loss for doubful accounts

	2017	2016
Opening balance	(159)	(155)
Additions, net	(17)	(70)
Receivables written off as uncollectible (i)	13	17
Reclassification of assets classified as held-for-sale	4	30
Foreign exchange variations		19
Closing balance	**(159)**	**(159)**

(i) The amounts charged to the estimated loss account with bad debt are generally written off when there is no expectation of recovering the funds.

(d) Aging of trade receivables

	2017	2016
Current	1,975	1,796
Up to three months past due	326	169
Three to six months past due	32	20
Over six months past due	247	175
	2,580	**2,160**

All amounts in millions of reais unless otherwise stated

12 Inventory

Accounting policy

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the weighted average cost method. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct costs and related production overheads. Raw materials derived from biological assets are measured at fair value, less estimated point-of-sale costs at the point of harvest, when they are transferred to inventories in non-current assets.

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

The Company, at least once a year, carries out a physical inventory. Inventory adjustments are recorded under "Cost of goods sold and services rendered".

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

	2017	2016
Finished products	749	700
Semi-finished products	1,482	1,396
Raw materials	624	617
Auxiliary materials and consumables	856	952
Imports in transit	205	101
Other	84	104
Provision for inventory losses	(474)	(489)
	3,526	**3,381**

13 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 object of future recovery.

	2017	2016
Corporate Income Tax ("IRPJ") and Social Contribution on Net Income ("CSLL")	1,524	1,354
State Value-added Tax on Sales and Services ("ICMS")	465	542
Social Contribution on Revenue ("COFINS")	379	386
Value-added Tax ("VAT") (foreign companies)	265	275
Social Integration Program ("PIS")	85	85
"IRPJ/CSLL" - "*Plano Verão*"	81	185
Withholding Income Tax ("IRRF")	69	90
("ICMS") on property, plant and equipment	66	78
Excise Tax ("IPI")	32	29
Other	135	89
	3,101	**3,113**
Current	1,317	1,527
Non-current	1,784	1,586
	3,101	**3,113**

All amounts in millions of reais unless otherwise stated

14 Related parties

Assets	Trade receivables		Dividends receivable		Non-current assets	
	2017	2016	2017	2016	2017	2016
Related companies and joint ventures						
Banco Votorantim S.A.			55	51		
Citrosuco GmbH (i)					43	205
Citrosuco S.A. Agroindústria (i)	32				86	302
Fibria Celulose S.A.	12	4	76	116	1	1
Mineração Rio do Norte S.A.			5	7		
Supermix Concreto S.A.	5	21				
Other	4	1	12	6	13	27
	53	**26**	**148**	**180**	**143**	**535**
Current	53	26	148	180		
Non-current					143	535
	53	**26**	**148**	**180**	**143**	**535**

Liabilities	Trade payables		Dividends payable		Non-current liabilities	
	2017	2016	2017	2016	2017	2016
Parent company						
Hejoassu Administração S.A.			140			
Related companies and joint ventures						
Fibria Celulose S.A.	3	4			1	
Suwannee American Cement LLC		27				
Other	6	3			24	22
	9	**34**	**140**		**25**	**22**
Non-controlling interests			48	48		
Current	9	34	188	48		
Non-current					25	22
	9	**34**	**188**	**48**	**25**	**22**

Profit and loss	Sales (purchases), net		Finance income (expenses), net	
	2017	2016	2017	2016
Related companies and joint ventures				
Cementos Granadilla S.L.	14	64		
Citrosuco S.A. Agroindústria	28	12	5	15
Fibria Celulose S.A.	143	59		(1)
Superior Materials Holdings, LLC	58	68		
Supermix Concreto S.A.	167	276		
Cementos Avellaneda S.A.	32			
Cementos Especiales de las Islas, S.A.	12	20		
Midway Group, LLC.	21			
Other	12	4	2	1
	487	**503**	**7**	**15**

(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 contractual rules laid down in the shareholder agreement and the closing memorandum signed between Fischer S.A. – Comércio, Indústria e Agricultura and Votorantim.

All amounts in millions of reais unless otherwise stated

15 Financial instruments – firm commitment

The controlled company 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 the energy of self-production, in accordance with the productive demands of the Company's subsidiaries and, therefore, the definition of a financial instrument.

Another part of these transactions refers to purchases and sales of energy, not used in the productive process of Votorantim companies, being transacted in the active market, therefore, it meets the definition of financial instruments, due to the fact of being liquidated in energy, and promptly convertible into cash. Such contracts are recorded as derivatives in accordance with IAS 39 / CPC 38 and are recognized in the Company's balance sheet at fair value on the date the derivative is entered into and is revalued to fair value at the balance sheet date.

The fair value of these derivatives is estimated based, in part, on quotations of prices published in active markets, to the extent that such observable market data exist, and partly by the use of valuation techniques, which considers: (i) prices established in the purchase and sale operations; (ii) risk margin in the supply and (iii) projected market price in the period of availability. Whenever the fair value at initial recognition for these contracts differs from the transaction price, gain or loss, it is recognized in profit or loss for the period.

The Company, through its subsidiary Votener, operates in the Regulated Contracting Environment ("ACR") and participated in the 13th electric power purchase auction on April 30, 2014, in which, through a firm commitment, it made sales until December 2019. These transactions, on initial recognition, resulted in gains from the sale of surplus energy to the Company, which was recognized at fair value. The net difference of expenses and revenues generated by the realization of the fair value, through the physical settlement of the sale and purchase agreements, was recognized as an expense in the amount of R$ 286 in "Other operating expenses, net".

In addition, the other operations carried out by the subsidiaries in the Free Contracting Environment ("ACL"), which meet the definition of a financial instrument, were likewise recognized at fair value. The realization of the fair value in the amount of R$ 236 was recognized as an expense in "Other operating expenses, net" (Note 29).

The values quoted above have the following composition:

	ACR				ACL			Total	
	CBA	**Energy**	**Total**	**Votorantim Cimentos**	**CBA**	**Energy**	**Total**	**2017**	**2016**
Realization	(134)	(39)	(173)	(12)	(14)	(113)	(139)	(312)	(286)
Recognition					(37)	(60)	(97)	(97)	33
Reversal (i)	(87)	(26)	(113)					(113)	
	(221)	**(65)**	**(286)**	**(12)**	**(51)**	**(173)**	**(236)**	**(522)**	**(253)**

(i) The reduction in volume was caused by the exit of distributors from the regulated trading environment, and they migrated to the free environment.

All amounts in millions of reais unless otherwise stated

The table below present the composition of equity balances:

	ACR			ACL				Total	
	CBA	Energy	Total	Votorantim Cimentos	CBA	Energy	Total	2017	2016
Assets									
Current	106	31	137		9	64	73	210	317
Non-current	119	35	154					154	371
	225	**66**	**291**		**9**	**64**	**73**	**364**	**688**
Liabilities									
Current				(1)			(1)	(1)	
Non-current				(22)	(53)	(132)	(207)	(207)	(10)
				(23)	**(53)**	**(132)**	**(208)**	**(208)**	**(10)**
	225	**66**	**291**	**(23)**	**(44)**	**(68)**	**(135)**	**156**	**678**

16 Investments

Accounting policy

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

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 line method, 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 uses criteria similar to those used to test goodwill impairment.

All amounts in millions of reais unless otherwise stated

(a) Breakdown

Main consolidated companies	Percentage of total and voting capital 2017	2016	Headquarters	Main activity
Subsidiaries				
Acerbrag S.A.	100.00	100.00	Argentina	Steel
Votorantim FinCO GmbH	100.00	100.00	Austria	Trading
Votorantim GmbH (formerly known as Votorantim Metals GmbH)	100.00	100.00	Austria	Zinc
Acariúba Mineração e Participação Ltda.	100.00	100.00	Brazil	Holding
Companhia Brasileira de Alumínio	100.00	100.00	Brazil	Aluminum
Interávia Transportes Ltda.	100.00	100.00	Brazil	Transportation
Nexa Recursos Minerais S.A. (formerly known as Votorantim Metais Zinco S.A.)	100.00	100.00	Brazil	Zinc
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
Ventos de São Vicente Energias Renováveis S.A.	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
Votorantim Cement North America Inc.	100.00	100.00	Canada	Holding
Acerías Paz del Río S.A.	82.42	82.42	Colombia	Steel
Votorantim Cimentos EAA Inversiones, S.L.	100.00	100.00	Spain	Holding
St. Marys Cement Inc.	100.00	100.00	USA	Cement
US Zinc Corporation	100.00	100.00	USA	Zinc
St. Helen Holding II B.V.	100.00	100.00	Cayman Islands	Holding
Hailstone Ltd.	100.00	100.00	British Virgin Islands	Holding
Nexa Resourses S.A. (formerly known as VM Holding S.A.)	64.25	89.35	Luxembourg	Holding
Votorantim RE	100.00	100.00	Luxembourg	Insurance
Compañia Minera Atacocha S.A.A.	91.00	91.00	Peru	Mining
Nexa Resources Perú S.A.A. (formerly known as Compañia Minera Milpo S.A.A.)	80.23	80.23	Peru	Mining
Nexa Resources Cajamarquilla S.A." (formerly known as Votorantim Metais Cajamarquilla S.A.)	99.91	99.91	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 Limited	50.00	50.00	Cayman Islands	Trading
Exclusive investment funds				
Fundo de Investimento Pentágono VC Multimercado – Crédito Privado	100.00	100.00	Brazil	Finance
Fundo de Investimento Pentágono CBA Multimercado – Crédito Privado	100.00	100.00	Brazil	Finance
Odessa Multimercado Crédito Privado	89.97	81.39	Brazil	Finance
Odessa Multimercado Crédito Privado Fundo de investimento VC	100.00	100.00	Brazil	Finance
Odessa Multimercado Crédito Privado Fundo de investimento VM	100.00	100.00	Brazil	Finance

All amounts in millions of reais unless otherwise stated

Main non-consolidated companies	Percentage of total and voting capital		Headquarters	Main activity
	2017	2016		
Associates				
Cementos Avellaneda S.A.	49.00	49.00	Argentina	Cement
Alunorte - Alumina do Norte S.A.	3.03	3.03	Brazil	Mining
Mineração Rio do Norte S.A.	10.00	10.00	Brazil	Mining
Supermix Concreto S.A.	25.00	25.00	Brazil	Cement
IMIX Empreendimentos Imobiliários Ltda.	25.00	25.00	Brazil	Mining
Cementos Bio Bio S.A. (Nota 1.1 (g))		16.70	Chile	Cement
Cementos Especiales de las Islas S.A.	50.00	50.00	USA	Cement
Joint ventures				
Citrosuco GmbH	50.00	50.00	Austria	Agribusiness
Banco Votorantim S.A.	50.00	50.00	Brazil	Finance
Citrosuco S.A. Agroindústria	50.00	50.00	Brazil	Agribusiness
Fibria Celulose S.A.	29.42	29.42	Brazil	Wood pulp
Hutton Transport Ltda.	25.00	25.00	Canada	Transportation
Midway Group, LLC.	50.00	50.00	USA	Cement
Sumter Cement Co, LLC. (i)		50.00	USA	Cement
Superior Materials Holdings, LLC	50.00	50.00	USA	Cement
Suwannee American Cement, LLC. (i)		50.00	USA	Cement
Trinity Materials, LLC.		50.00	USA	Cement
Cemento Portland S.A.	50.00	50.00	Peru	Cement

(i) The elimination of the percentages in 2017 refers to the sale of cement companies, as described in Note 1.1 (b).

All amounts in millions of reais unless otherwise stated

(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, 2017:

Investments accounted for based on the equity method - Associates

	Cementos Avellaneda S.A.	Alunorte - Alumina do Norte S.A.	Mineração Rio do Norte S.A.	Supermix Concreto S.A.	IMIX Empreendimentos Imobiliários Ltda.	Cementos Especiales de las Islas S.A.
Assets						
Current assets	491	8.234	399	207	18	105
Non-current assets	360		2.390	215	7	88
Liabilities						
Current liabilities	307	2.296	726	128	1	22
Non-current liabilities	6	1.476	1.231	46		33
Other comprehensive income	(84)					
Equity	538	4.462	832	248	24	138
Results						
Net revenue	1.240	5.543	1.164	1.014	11	3
Operation results	297	201	197	2	11	3
Finance income (costs)	10	(161)	(72)	4	1	
Profit (loss) for the year	198	58	106	7	10	(2)
Total and voting capital (%)	49,00%	3,03%	10,00%	25,00%	25,00%	50,00%

All amounts in millions of reais unless otherwise stated

Joint ventures	Citrosuco GmbH	Banco Votorantim S.A.	Citrosuco S.A. Agroindústria	Fibria Celulose S.A.	Hutton Transport Ltda.	Midway Group, LLC.	Superior Materials Holdings, LLC	Cemento Portland S.A.
Assets								
Current assets	2.781	48.366	2.435	10.530	30	28	100	36
Non-current assets	323	45.148	3.006	28.163	56	20	48	108
Liabilities								
Current liabilities	284	55.803	2.340	5.790	4	15	43	30
Non-current liabilities	168	28.480	2.038	18.253	11	5		6
Other comprehensive income		(86)						
Equity	2.652	9.231	1.063	14.650	71	28	105	108
Results								
Net revenue	3.381	13.397	2.823	11.739		84	330	
Operation results	411	5.528	546	1.173	12	9	52	(2)
Finance income (costs)	159		(124)	(783)				(3)
Profit (loss) for the year	553	629	406	1.085	12	9	51	(4)
Total and voting capital (%)	50,00%	50,00%	50,00%	29,42%	25,00%	50,00%	50,00%	50,00%

All amounts in millions of reais unless otherwise stated

(c) Changes in investments

Investments accounted for based on the equity method - Associates									**2017**	**2016**
	Cementos Avellaneda S.A. (i)	**Alunorte - Alumina do Norte S.A. (ii)**	**Mineração Rio do Norte S.A. (ii)**	**Supermix Concreto S.A.**	**IMIX Empreend. Imobiliários Ltda.**	**Cementos Bio Bio S.A. (ii)**	**Cementos Especiales De Las Islas, S.A.**	**Other**	**Total**	**Total**
Opening balance for the year	237	150	105	64	3	152	57	241	1,009	1,150
Equity in the results of investees	97	2	11	2	3	11	(1)	13	138	160
Dividends	(32)	(17)	(33)	(4)		(4)			(90)	(39)
Exchange variation on foreign investments	(51)					3	13		(35)	(210)
Disposals						(161)			(161)	
Effect of associates included in the consolidation (iv)										(41)
Actuarial benefits						(1)			(1)	
Other								(3)	(3)	(11)
Closing balance for the year	**251**	**135**	**83**	**62**	**6**		**69**	**251**	**857**	**1,009**

Joint ventures											**2017**	**2016**
	Citrosuco GmbH (i)	**Banco Votorantim S.A.**	**Citrosuco S.A. Agroindústria (i)**	**Fibria Celulose S.A. (iii)**	**Hutton Transport Ltda.**	**Midway Group, LLC.**	**Sumter Cement Co, LLC.**	**Superior Materials Holdings, LLC**	**Suwannee American Cement, LLC. (i)**	**Cemento Portland S.A.**	**Total**	**Total**
Opening balance	2,088	4,809	816	3,867	15	9	19	42	222	53	11,940	4,103
Equity in the results of investees	247	315	167	320	3	5		26		(2)	1,081	564
Dividends	(255)	(55)		(76)	(1)			(16)			(403)	(253)
Exchange variation on foreign investments	34		5	1			(1)	1	(6)	3	37	(423)
Cash flow hedge			(15)								(15)	63
Provision for impairment of investments abroad												(43)
Effect of joint ventures included in the consolidation			56								56	7,541
Fair value of financial assets available-for-sale (v)		42									42	262
Disposals (vi)							(18)		(216)		(234)	
Other	6			4	1						11	126
Closing balance for the year	**2,120**	**5,111**	**1,029**	**4,116**	**18**	**14**		**53**		**54**	**12,515**	**11,940**
											13,372	**12,949**

All amounts in millions of reais unless otherwise stated

(i) At December 31, 2017, the following investments consider the goodwill paid on the acquisition of investments and the surplus value, which is amortized in the income statement of the parent company:

	2017	2016
Cementos Avellaneda S.A.	(13)	(2)
Citrosuco S.A. Agroindústria	498	478
Citrosuco GmbH	794	816
Suwannee American Cement, LLC.		96

(ii) Relates to investees in which the participation is less than 20%, but the Company has significant influence over the activities through agreements established with shareholders.

(iii) The equity income of the investee considers eliminations of unrealized profits, in the amount of R$ 178 (December 31, 2016 – R$ 178), in exchange for land with the Company.

(iv) The values presented in 2016 refer to the effects of the incorporation of Votorantim Participações S.A.

(v) Refers to the adjustment to the fair value of available-for-sale securities recognized in Banco Votorantim's shareholders' equity.

(vi) Refers to the assets and liabilities sale in the cement segment (Note 1.1 (b)).

(d) Investments in listed companies

	2017		2016	
	Book value	Market value	Book value	Market value
Cementos Bio Bio S.A. (*)			152	143
Fibria Celulose S.A. (*)	4,289	7,798	4,046	5,197

(*) Calculated in proportion to the ownership interest held by the Company.

17 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) Leases

Leases of property, plant and equipment under which the Company has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalized at the inception of the lease at the lower of the fair value of the leased item and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding rental obligations, net of finance charges, are included in other payables.

The interest element of the finance cost is charged to the statement of income over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases are depreciated over the useful life of the asset.

(iii) 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 (CGU). 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.

All amounts in millions of reais unless otherwise stated

(a) Breakdown and changes

									2017	2016
	Land and improvements	Buildings and constructions	Machinery, equipment and facilities	Vehicles	Furniture and fittings	Construction in progress	Leasehold improvements	Other	Total	Total
Opening balance for the year										
Cost	2,017	9,840	31,904	1,206	192	3,471	459	439	49,528	55,491
Accumulated depreciation	(56)	(4,022)	(18,692)	(932)	(139)		(245)	(351)	(24,437)	(26,210)
Net opening balance	**1,961**	**5,818**	**13,212**	**274**	**53**	**3,471**	**214**	**88**	**25,091**	**29,281**
Additions	1	122	1,157	4	4	1,818		2	3,108	3,026
Disposals	(18)	(6)	(84)	(19)	(2)	(23)	(6)	(1)	(159)	(146)
Depreciation	(4)	(289)	(1,410)	(78)	(10)		(18)	(5)	(1,814)	(2,168)
Foreign exchange variation	37	37	82	4	(2)	(60)	12		110	(2,016)
Effect of subsidiaries included in (excluded from) consolidation		23	(20)	(3)		(10)		5	(5)	55
Reversal (constitution) for impairment	(2)	78	25			(6)	(1)		94	(769)
Reclassification to assets classified as held-for-sale	(87)	(233)	(61)	(31)		(34)	(30)		(476)	(1,982)
Transfers (i)	13	685	1,482	52	3	(2,363)	34		(94)	(190)
Closing balance for the year	**1,901**	**6,235**	**14,383**	**203**	**46**	**2,793**	**205**	**89**	**25,855**	**25,091**
Cost	1,959	10,467	34,105	1,121	191	2,793	456	444	51,536	49,528
Accumulated depreciation	(58)	(4,232)	(19,722)	(918)	(145)		(251)	(355)	(25,681)	(24,437)
Net closing balance for the year	**1,901**	**6,235**	**14,383**	**203**	**46**	**2,793**	**205**	**89**	**25,855**	**25,091**
Average annual depreciation rates - %	**2**	**3**	**9**	**10**	**11**		**9**	**18**		

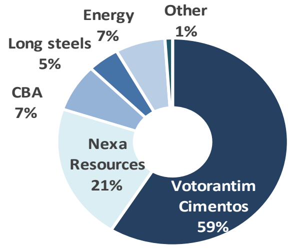
(i) The transfers at December 31, 2017 are related to the reclassification from “Construction in progress” within “Property, plant and equipment” to “Software” and “Rights to use natural resources”, within “Intangible assets”.

All amounts in millions of reais unless otherwise stated

(b) Construction in progress

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

	2017	2016
Votorantim Cimentos	1,360	2,044
Nexa Resources	779	737
CBA	368	257
Long steels	195	154
Energy	20	242
Other	71	37
	2,793	**3,471**



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

Main projects in progress - Votorantim Cimentos	2017	2016
Cement production capacity expansion in Charlevoix- North America	461	280
Equipment refurbishment	123	89
Environment and security	84	27
New lines of co-processing	63	33
Cement production capacity expansion - Tunisia	45	33
New unit in Ituaçú - Brazil	43	43
Structural recovery	40	19
Cement grinding - Pecém - Brazil	39	42
Geology and mining rights	37	27
New unit in Sobral - Brazil	35	35
Hardware and software	27	10
Burden removal - cement	26	47
New lines of co-processing - North America	18	7
New unit in Primavera - Brazil	14	81
New unit in Yacuses - Bolivia	12	530
New plant in Edealina - Brazil	7	7
Cement production capacity expansion in Sivas - Turkey	5	364
Agricultural supplies plant Ponte Alta - Brazil		15
Other	281	355
	1,360	**2,044**

Main projects in progress - Nexa Resources	2017	2016
Mining project - Brazil	271	297
Acquisition and renovation of parts and equipment - Brazil	140	170
Security, health and environment projects - Brazil	119	146
Production line construction - Brazil	84	18
Information technology projects - Peru	10	23
Modernization and production increase projects - Brazil	6	33
Other	149	50
	779	**737**

All amounts in millions of reais unless otherwise stated

Main projects in progress - CBA	2017	2016
Rondon Alumina project - Brazil	111	108
Furnace refurbishment - Brazil	75	16
Revitalization and adequacy of power plant - Brazil	51	39
Automation system modernization - Brazil	32	25
Plastic transformation and foundry projects - Brazil	26	19
Alumina factory project - Brazil	25	24
Furnace rooms project - Brazil	18	15
Other	30	11
	368	**257**

Main projects in progress - Long steels	2017	2016
Repair plant operating equipment - Colombia	51	18
Revitalization and adaptation of plant - Argentina and Colombia	44	5
Battery vertical repair project - Colombia	39	7
Modernization of plant operating equipment - Argentina and Colombia	35	36
Security projects, health and environment - Colombia	8	20
Other	18	68
	195	**154**

Main projects in progress - Energy	2017	2016
Corumbá project - Brazil	16	11
Change of Corporate Center - Brazil	2	
Ventos de São Vicente wind power complex - Brazil	1	231
Other	1	
	20	**242**

18 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 Cash-Generating Units ("CGUs") for the purpose of impairment testing. The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the business combination in which the goodwill arose.

(ii) 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 is operational, 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

Computer software licenses and development costs directly attributable to software are recorded as intangible assets. These costs are amortized over the estimated useful life of the software (three to five years).

(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.

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 as follows:

Customer relationships	15 years
Non-competition agreements	5 years

(vi) Impairment of goodwill and investments

Annually, the Company reviews the net book value of goodwill, in order to assess whether there was deterioration or 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 purposes.

All amounts in millions of reais unless otherwise stated

(a) Breakdown and changes

									2017	2016
	Rights over natural resources	Goodwill	ARO (i)	Use of public assets	Contracts, customer relationships and agreements	Softwares	Rights over trademarks and patents	Other	Total	Total
Opening balance for the year										
Cost	8,694	5,193	873	541	408	548	481	771	17,509	20,859
Accumulated amortization	(2,533)		(505)	(161)	(260)	(422)	(283)	(332)	(4,496)	(4,289)
Net opening balance	**6,161**	**5,193**	**368**	**380**	**148**	**126**	**198**	**439**	**13,013**	**16,570**
Additions	46	38	88			1		1	174	181
Disposals	(11)	(228)	(4)						(243)	(84)
Amortization and depletion	(381)		(48)	(19)	(13)	(46)	(25)	(12)	(544)	(596)
Foreign exchange variation	42	210	10		(1)	1	(2)	6	266	(2,227)
Reclassification from assets classified as held-for-sale	(34)	(265)	(1)		(55)				(355)	1
Effect of subsidiaries excluded from	(9)	(38)							(47)	(653)
Constitution for impairment	(23)	(48)							(71)	(352)
Revision of estimated cash flow			145						145	23
Changes in the interest rate	(2)		13						11	(39)
Transfers	53					34	1	6	94	189
Closing balance for the year	**5,842**	**4,862**	**571**	**361**	**79**	**116**	**172**	**440**	**12,443**	**13,013**
Cost	8,693	4,862	1,127	541	235	593	485	783	17,319	17,509
Accumulated amortization	(2,851)		(556)	(180)	(156)	(477)	(313)	(343)	(4,876)	(4,496)
Net closing balance for the year	**5,842**	**4,862**	**571**	**361**	**79**	**116**	**172**	**440**	**12,443**	**13,013**
Average annual amortization and depletion rates - %	**16**		**5**	**7**	**7**	**6**	**10**	**10**		

(i) *Asset Retirement Obligation.*

All amounts in millions of reais unless otherwise stated

(b) Goodwill on acquisitions

Accounting policy

The Company applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Company. The consideration transferred includes the fair value of assets or liabilities resulting from a contingent consideration arrangement, when applicable. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Company recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the fair value of the acquiree's identifiable net assets. Non-controlling interests are determined on each acquisition.

	2017	2016
Votorantim Cimentos		
Votorantim Cimentos EAA Inversiones, S.L.	1,134	1,192
Prairie Material Sales Inc	663	653
St. Marys Cement Inc.	364	360
Prestige Materials		132
Prestige Gunite Inc.		94
Engemix S.A.	76	76
Votorantim Investimentos Internacionais S.A.		48
Companhia de Cimento Ribeirão Grande		47
CJ Mineração Ltda.	16	16
Cementos Artigas S.A.	12	12
Other	6	3
	2,271	**2,633**
Nexa Resources		
Nexa Resources Perú S.A.A.	1,913	1,885
Nexa Resources Cajamarquilla S.A.	306	301
US Zinc Corporation	30	29
Pollarix S.A.	1	
	2,249	**2,215**
Long steels		
Acergroup S.A.	149	149
Acerholding S.A.	15	18
Acerbrag S.A.	3	4
	167	**171**
CBA		
Campos Novos Energia S.A.	58	57
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
	158	**157**
Holding and other		
Votorantim Andina S.A.	16	16
Fazenda Bodoquena Ltda.	1	1
	17	**17**
	4,862	**5,193**

All amounts in millions of reais unless otherwise stated

(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 Company.

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.

These calculations use cash flow projections, before income tax and social contributions, based on financial budgets approved by management for a five-year period. Cash flow that exceeds the five-year period is extrapolated using the estimated growth rates. The growth rate does not exceed the average long-term growth rate of the operating sector of each segment.

The calculations of the value-in-use were based on the discounted cash flow model, and are based on the assumptions below:

	Growth rate	Discount rate
Cement	0.0% to 1.0%	8.91% to 14.34%
CBA	(ii)	9.72% to 10.94%
Nexa Resources	(ii)	10.60% to 11.53%
Long steels (i)	Not used	11.91% to 17.10%
Holding and other	Not used	7.53% to 8.91%

(i) Considers units located abroad only (Argentina and Colombia).

(ii) Growth rates take into account independent information on LME's projections for quotations (mainly aluminum, zinc and copper).

19 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.

All amounts in millions of reais unless otherwise stated

(a) Breakdown and fair value

		Current		Non-current		Total		Fair value	
Type	**Average annual charges (i)**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**	**2017**	**2016**
Local currency									
Debentures	115.27% CDI	1,288	252	3,257	3,633	4,545	3,885	4,599	3,936
BNDES	TJLP + 2.39% / 4.54% fixed rate BRL / SELIC + 2.74%	486	453	1,410	938	1,896	1,391	1,774	1,285
Commercial notes			267				267		266
Development promotion agency	7.56% fixed rate BRL / TJLP + 0.98%	41	38	208	243	249	281	238	246
FINAME	4.85% fixed rate BRL	23	29	91	113	114	142	102	117
Export credit notes	118.00% CDI	3	101	100		103	101	105	99
Other		16	13	11	16	27	29	26	24
		1,857	**1,153**	**5,077**	**4,943**	**6,934**	**6,096**	**6,844**	**5,973**
Foreign currency									
Eurobonds - USD	6.15% fixed rate USD	156	122	11,948	9,518	12,104	9,640	12,877	9,298
Loans - Resolution 4131 (ii)	LIBOR USD + 1.56% / 3.73% fixed rate USD	176	6	763	2,663	939	2,669	944	2,482
Eurobonds - EUR	3.44% fixed rate EUR	37	26	2,246	1,939	2,283	1,965	2,415	1,954
Syndicated loan/bilateral agreements	EURIBOR + 2.01% / 6.81% fixed rate	123	38	1,192	1,234	1,315	1,272	1,320	1,416
Export prepayments	LIBOR USD + 2.54%	1	78	659	2,160	660	2,238	709	1,666
BNDES	UMBNDES + 2.46%	112	122	37	150	149	272	152	268
Export credit notes	LIBOR USD + 1.85%	1		104		105		107	
Working capital	IBR + 3.70% / 9.25% fixed rate INR	96	90			96	90	98	89
Development promotion agency			128		5		133		93
Other		14	12	31	32	45	44	43	40
		716	**622**	**16,980**	**17,701**	**17,696**	**18,323**	**18,665**	**17,306**
		2,573	**1,775**	**22,057**	**22,644**	**24,630**	**24,419**	**25,509**	**23,279**
Current portion of long-term borrowing		1,743	1,360						
Interest on borrowing		365	324						
Short-term borrowing		465	91						
		2,573	**1,775**						

All amounts in millions of reais unless otherwise stated

(i) The average annual charges are presented only for agreements that represent a large share of the total debt amount.

(ii) Loans relating to Resolution 4131 have swaps that are indexed to both exchange rates (LIBOR and fixed rates for floating CDI rates) and currency (US Dollars for reais), and resulted in a final weighted cost of 108.33% p.a. of the CDI. Borrowing of this type relates to compound financial instruments, contracted as a single product with the financial institution (debt in US Dollars + swap to a % of CDI in reais). The terms and conditions of the loan and derivative instrument are configured as a compound operation, so that the resulting cost is a debt adjusted by the CDI in reais. The difference in measurement between the two instruments (loan at amortized cost x derivative at fair value), creates an accounting mismatch in the statement of income. To eliminate this accounting mismatch, some of the borrowing contracts made from August 2015, were designated at fair value, and the effect of this designation is the measurement of debt at fair value through profit or loss, according to Note 30.

Legenda:

BNDES – National Bank for Economic and Social Development.
BRL – Brazilian currency (Real).
CDI – Interbank Deposit Certificate.
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
LIBOR – London Interbank Offered Rate.
SELIC – Special System for Clearance and Custody.
TJLP – Long-term interest rate set by the National Monetary Council. The TJLP is the BNDES basic cost of financing.
IPCA – Extended Consumer Price Index.
UMBNDES – Monetary unit of the BNDES reflecting the weighted basket of currencies of foreign currency debt obligations. At December 31, 2017, 99.60% of the basket consisted of US Dollars.
USD – US Dollar.

(b) Changes

	2017	2016
Opening balance for the year	**24,419**	**30,531**
New borrowing	5,399	6,162
Interest	1,616	1,757
Effect of subsidiaries included in consolidation		(829)
Addition of borrowing fees, net of amortization	(21)	(40)
Fair value adjustment - Resolution 4131	47	(26)
Discount on repurchase of bonds		(173)
Payments - interest	(1,558)	(1,735)
Foreign exchange variation	609	(3,852)
Payments - principal	(5,881)	(7,376)
Closing balance for the year	**24,630**	**24,419**

(c) New borrowing and amortizations

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

The main funding and amortizations made in 2017 were as follows:

All amounts in millions of reais unless otherwise stated

New borrowing

Date	Company	Modality	Currency	Amount	Amount BRL	Maturity	Cost	Guarantor	Note
Jan-17	Votorantim S.A.	Resolution 4131	USD	73	235	2021	96.90% CDI		Renegotiation of cost and maturity
Jan-17	Votorantim Cimentos S.A.	Debenture	BRL	500	500	2022	119.90% CDI		
Jan-17	Votorantim S.A.	Debenture	BRL	69	69	2022	118.90% CDI		Renegotiation of cost and maturity
Jan-17	Votorantim S.A.	Debenture	BRL	241	241	2023	118.90% CDI		Renegotiation of cost and maturity
Jan-17	Votorantim S.A.	Debenture	BRL	240	240	2024	118.90% CDI		Renegotiation of cost and maturity
Feb-17	Votorantim S.A.	Resolution 4131	USD	100	321	2021	119.80% CDI		Renegotiation of cost and maturity
Feb-17	Nexa Recursos Minerais S.A.	Export Credit Note	BRL	100	100	2020	118% CDI		
Apr-17	Nexa Recursos Minerais S.A.	Export Credit Note	USD	31	100	2020	119.90% CDI		
Apr-17	Nexa Resources S.A.	Eurobond	USD	700	2225	2027	5.375% p.y.	Nexa CJM, Nexa Peru and Nexa BR	
Jul-17	Ventos de São Vicente Energias Renováveis S.A.	Debenture	BRL	100	100	2024	IPCA + 5.4739% p.y.	VSA	Development of wind farms
Sep-17	Ventos de São Vinicius Energias Renováveis S.A.	Debenture	BRL	102	102	2018	106% CDI	VSA	Development of wind farms
Sep-17	Ventos de Santo Agostinho Energias Renováveis S.A.	Debenture	BRL	54	54	2018	106% CDI	VSA	Development of wind farms
Sep-17	Ventos de Santa Albertina Energias Renováveis S.A.	Debenture	BRL	69	69	2018	106% CDI	VSA	Development of wind farms
Sep-17	Ventos de São Casimiro Energias Renováveis S.A.	Debenture	BRL	69	69	2018	106% CDI	VSA	Development of wind farms
Sep-17	Ventos de São Adeodato Energias Renováveis S.A.	Debenture	BRL	99	99	2018	106% CDI	VSA	Development of wind farms
Sep-17	Ventos de Santo Afonso Energias Renováveis S.A.	Debenture	BRL	27	27	2018	106% CDI	VSA	Development of wind farms
Sep-17	Campos Novos Energia S.A.	Debenture	BRL	384	384	2020	107.5% CDI	Actual guarantee	
Sep-17	Campos Novos Energia S.A.	Debenture	BRL	256	256	2022	107.5% CDI	Actual guarantee	
Dec-17	Ventos de Santo Afonso Energias Renováveis S.A.	BNDES	BRL	114	114	2034	TJLP + 2.06%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de São Adeodato Energias Renováveis S.A.	BNDES	BRL	109	109	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de São Casimiro Energias Renováveis S.A.	BNDES	BRL	113	113	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de Santa Albertina Energias Renováveis S.A.	BNDES	BRL	111	111	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de Santo Agostinho Energias Renováveis S.A.	BNDES	BRL	115	115	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de São Vinicius Energias Renováveis S.A.	BNDES	BRL	114	114	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms
Dec-17	Ventos de Santo Alberto Energias Renováveis S.A.	BNDES	BRL	115	115	2034	TJLP + 2.18%	VSA and Ventos de São Vicente	Development of wind farms

All amounts in millions of reais unless otherwise stated

Amortizations

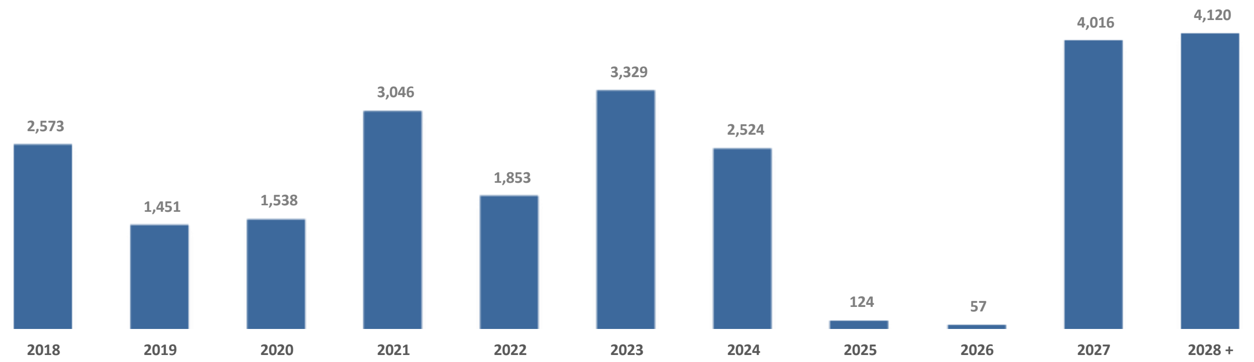
Date	Company	Modality	Currency	Main	Main BRL	Maturity	Note
Jan-17	Votorantim Cimentos S.A.	Debenture	BRL	(150)	(150)	2017	Prepayment
Jan-17	Votorantim S.A.	Resolution 4131	USD	(73)	(235)	2017	Renegotiation of cost and maturity
Feb-17	Votorantim S.A.	Resolution 4131	USD	(100)	(308)	2018	Prepayment
Mai-17	Votorantim GMBH	PPE	USD	(290)	(921)	2019	Prepayment
Mai-17	Votorantim GMBH	PPE	USD	(200)	(635)	2021	Prepayment
Jun-17	Companhia Brasileira de Alumínio	NCE	BRL	(100)	(100)	2017	
Aug-17	Votener - Votorantim Comercializadora de Energia Ltda.	Commercial note	BRL	(250)	(250)	2017	
Aug-17	Votorantim Cimentos S.A.	Debenture	BRL	(240)	(240)	2021	Prepayment
Aug-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(50)	(156)	2019	Prepayment
Nov-17	Votorantim Cimentos S.A.	Debenture	BRL	(240)	(240)	2021	Prepayment
Nov-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(100)	(325)	2021	Prepayment
Nov-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(100)	(328)	2020	Prepayment
Dec-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(200)	(662)	2020	Prepayment
Dec-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(50)	(166)	2019	Prepayment
Dec-17	Votorantim Cimentos S.A.	Resolution 4131	USD	(50)	(164)	2020	Prepayment

All amounts in millions of reais unless otherwise stated

(d) Breakdown by currency

	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
US Dollar	366	372	13,509	14,409	13,875	14,781
Real	1,857	1,153	5,077	4,943	6,934	6,096
Euro	110	32	2,825	2,500	2,935	2,532
Boliviano	1	3	395	392	396	395
Turkish lire	47	27	220	279	267	306
Currencies basket	83	90	14	101	97	191
Other	109	98	17	20	126	118
	2,573	**1,775**	**22,057**	**22,644**	**24,630**	**24,419**

(e) Maturity



(f) Breakdown by index

	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
Local currency						
CDI	1,287	252	3,259	3,633	4,546	3,885
TJLP	436	421	1,239	824	1,675	1,245
Fixed rate	74	196	286	354	360	550
Reference rate (TR)		267				267
SELIC	55	17	196	132	251	149
Other	5		97		102	
	1,857	**1,153**	**5,077**	**4,943**	**6,934**	**6,096**
Foreign currency						
Fixed rate	515	238	15,549	12,662	16,064	12,900
LIBOR	5	213	1,179	4,671	1,184	4,884
EURIBOR	39	5	215	218	254	223
UMBNDES	112	122	37	150	149	272
Other	45	44			45	44
	716	**622**	**16,980**	**17,701**	**17,696**	**18,323**
	2,573	**1,775**	**22,057**	**22,644**	**24,630**	**24,419**

All amounts in millions of reais unless otherwise stated

(g) Collateral

As at December 30, 2017, R$ 10,607 (December 31, 2016 – R$ 8,828) of the balance of the Company's borrowing was collateralized under promissory notes and sureties and R$ 527 of the property, plant and equipment items (December 31, 2016 – R$ 142) were collateralized by liens on the financed assets.

(h) Covenants/financial ratios

Certain borrowings are subject to compliance with certain financial ratios ("covenants"). When applicable, such obligations are standardized for all borrowing.

The Company was in compliance with all of these covenants, as applicable.

20 Confirming payables

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

Operations - Confirming payables	2017	2016
Domestic market	309	363
Foreign market	761	605
	1,070	**968**

21 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 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.

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

Deferred tax 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 is 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 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

All amounts in millions of reais unless otherwise stated

(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 periods ended December 31 are reconciled to their Brazilian standard rates as follows:

	2017	2016
Profit (loss) before income tax and social contribution	**1.086**	**(1.340)**
Standard rates	**34%**	**34%**
Income tax and social contribution at standard rates	**(369)**	**456**
Adjustments for the calculation of income tax and social contribution at effective rates		
Equity	415	265
Differential rate of foreign companies	192	(87)
Income tax credit paid in foreign IN 1520/14	273	183
Income tax and social contribution losses without recording the deferred amounts, net	(9)	(340)
Dividends received	(59)	
Tax on mining operations	(74)	(37)
Foreign income IN 1520/14	(550)	(383)
Other exclusions, net	50	332
Income tax and social contribution calculated	**(131)**	**389**
Current	(723)	(481)
Deferred	592	870
Income tax and social contribution expenses	**(131)**	**389**
Effective rate - %	**12%**	**29%**

All amounts in millions of reais unless otherwise stated

(b) Breakdown of deferred tax balances

	2017	2016
Tax credits on tax losses	**1,884**	**1,868**
Tax credits on temporary differences		
Foreign exchange gains	1,300	1,496
Estimation for losses on investments, fixed and intangible assets	1,153	1,102
Tax, civil and labor provision	506	545
Tax benefit on goodwill	465	263
Use of public assets	172	178
Asset retirement obligation	166	170
Environmental liabilities	116	106
Estimation for inventory losses	66	77
Deferred losses on derivative instruments	63	109
Provision for energy charges	46	35
Estimated asset disposals	20	7
Other tax credits	260	278
Tax debits on temporary differences		
Borrowing costs	(3)	(4)
Asset retirement obligation	(6)	(25)
Pension funds	(18)	(42)
Adjustment to present value	(55)	(57)
Financial instruments - firm commitment	(61)	(234)
Capitalized interest	(140)	(133)
Fair value adjustments	(143)	(112)
Goodwill amortization	(367)	(337)
Market value Citrosuco	(154)	(148)
Market value adjustments to property, plant and equipment	(1,581)	(1,669)
Adjustment of useful lives of PP&E (depreciation)	(1,561)	(1,367)
Other tax debits	(14)	(34)
Net	**2,114**	**2,072**
Net deferred tax assets related to the same legal entity	**4,079**	**4,055**
Net deferred tax liabilities related to the same legal entity	**(1,965)**	**(1,983)**

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

	2017	2016
Opening balance for the year	**2,072**	**2,004**
Effects on the results for the year	592	870
Deferred income tax and social contribution on hedge accounting	(17)	(906)
Effects of foreign exchange variations in other comprehensive income	(46)	155
Consumption of IRPJ and CSLL tax credits for payment of PERT (Note 1.1 (d))	(259)	
Reclassification to assets classified as held-for-sale		120
Effect on the result of discontinued operations	(228)	(171)
Closing balance for the year	**2,114**	**2,072**

All amounts in millions of reais unless otherwise stated

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

	2017	Percentage
In 2018	240	13%
In 2019	249	13%
In 2020	268	14%
In 2021	222	12%
After 2022	905	48%
	1,884	100%

22 Deferred revenue - obligation for performance

Accounting policy

Deferred revenue, arising from the anticipation of receivables from financial institutions, represents an obligation for the Company to physically deliver the electric energy already sold to customers and consequently to pass on to the financial institution the amount received from the sale of energy. The obligation is performed monthly, after the transfer of energy to the client and consequent financial transfer to the financial institution.

In December 2014, the subsidiary Votener ceded to a financial institution the receivables due until December 2019 as a result of certain contracts for the Sale of Electric Energy in the Regulated Environment ("CCEAR"), which are being carried out with the physical delivery of energy. This transaction corresponded to R$ 1,252, and has no right of return and / or type of co-obligation of the Company on the receivables. Due to the assignment of receivables, Votener received a total amount of R$ 905, and the interest to be appropriated from the transaction will be recognized pro rata to the result during the term of the agreement.

In May 2015, Votener carried out a second credit assignment operation, without any right of return and / or co-obligation of the subsidiary, in the total amount of R$ 368. By assigning the receivables, Votener received the total amount R$ 251, and interest to be appropriated from the operation will be recognized pro rata to the result during the term of the agreement.

The updated value of these operations as of December 31, 2017 is R$ 516 (December 31, 2016, R$ 759).

23 Provision

Accounting policy

The Company is a 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 "Provisions". 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 Company and its subsidiaries are parties to tax, labor, civil and environmental and other litigation in progress and are discussing these matters at both the administrative and judicial levels. These matters are backed by judicial deposits where applicable.

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 considers its disclosure justified. The classification of losses between possible, probable and remote is based on the management's assessment, based on the opinion of its legal advisors.

Provision is measured at the present value of the expenditures 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 the impossibility of returning 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 are 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.

The Company recognizes 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 considers 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 if 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.

(iii) Obligation for environmental liabilities

The environmental liability must be recognized when there is an obligation on the part of the Company that incurred an environmental cost not yet paid, provided that it meets the recognition criteria as an obligation. Therefore, this type of liability is defined as being a present obligation of the Company that arose from past events.

All amounts in millions of reais unless otherwise stated

(a) Breakdown and changes

						2017	2016
		Legal claims					
	ARO (i)	Tax	Labor	Civil	Other	Total	Total
Opening balance for the year	**1,035**	**725**	**176**	**372**	**38**	**2,346**	**2,189**
Present value adjustment	52					52	27
Additions	57	311	196	107	16	687	486
Reversals (ii)	(2)	(746)	(163)	(21)	(13)	(945)	(256)
Judicial deposits, net of write-offs (ii)		438	(108)	(105)		225	(76)
Settlement in cash	(39)	(48)	(45)	(48)	(2)	(182)	(127)
Reclassification to related liability			(2)			(2)	(11)
Effect of subsidiaries included in (excluded from) consolidation	(7)	2	17	3		15	79
Reclassification of liabilities related to assets held for sale			12	(30)		(18)	(18)
Monetary restatement	(10)	164	16	38	8	216	231
Foreign exchange variation	24	3		1		28	(134)
Revision of estimated cash flow	165					165	(44)
Closing balance for the year	**1,275**	**849**	**99**	**317**	**47**	**2,587**	**2,346**

(i) Asset Retirement Obligation

(ii) In the second trimester the investees reversed a provision referring to the exclusion of ICMS from the basis of calculation of contributions to PIS and COFINS, for which there were judicial deposits constituted in the same amount. This reversal was based on the conclusion of the Federal Supreme Court (STF), which decided that the inclusion of ICMS in the PIS and COFINS taxes bases are unconstitutional and supported by the position of the legal counsel of the investees. The amount of R$ 307 was recorded in the "Reversal of provisions, net" (operating income) and the amount R$ 190 in the "Reversal of adjustment of liability provisions" (financial results) in the income statement. The reversal totaled R$ 169 in the income tax and social contribution and the net effect of these amounts totaled R$ 327. Consequently, the corresponding judicial deposits were reclassified to current assets

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

				2017				2016
	Judicial deposits	Provision	Net amount	Outstanding judicial deposits (i)	Judicial deposits	Provision	Net amount	Outstanding judicial deposits (i)
Tax	(124)	973	849	679	(562)	1,287	725	214
Civil	(120)	437	317	10	(15)	387	372	104
Labor	(205)	304	99	71	(97)	273	176	99
Other		47	47	5		38	38	3
	(449)	**1,761**	**1,312**	**765**	**(674)**	**1,985**	**1,311**	**420**

(i) The Company has balances deposited in relation to lawsuits classified by management, following the directions of the Company's legal counsel as representing remote or possible losses and, therefore, they are made without respective provision.

All amounts in millions of reais unless otherwise stated

(c) Litigation with likelihood of loss considered possible

The Company is party to litigations representing a risk of possible loss, for which no constituted provision has been made, as detailed below.

	2017	2016
Tax	10,351	7,329
Civil	7,215	7,149
Environmental	496	484
Labor and social security	441	309
	18,503	**15,271**

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

The contingent liabilities relating to tax lawsuits in progress with a likelihood of loss considered possible, for which no provision has been recorded, are commented on below. In the table below we present the materiality of these lawsuits:

Nature	2017	2016
Tax assessment notice - "IRPJ/CSLL" (i)	1,794	828
ICMS credit (ii)	923	757
"IRPJ/CSLL" – Profits abroad (iii)	765	172
Disallowances of "PIS/COFINS" credits	582	425
Compensation for exploration for mineral resources ("CFEM")	571	564
Disallowance of "IRPJ/CSLL" negative balance	362	306
Offset of tax loss – 30% limit (merger)	276	271
Tax assessment notice – "ICMS" (iv)	272	216
"IRPJ/CSLL" – Transfer costs (v)	192	222
"ICMS" – transfer costs	242	225
Errors in fiscal classification - Importation (vi)	163	
"ICMS" requirements on TUSD	134	149
Collection of ICMS due to divergences regarding the destination of the property	90	
"IRPJ/CSLL" – Deduction of expenses (vii)	71	85
Tax assessment notice - ISS	61	
Other lawsuits with individual amounts lower than R$ 100	3,853	3,109
	10,351	**7,329**

(i) Tax assessment notice – "IRPJ / CSLL"

In December, 2011, the subsidiary VCSA was assessed by the Brazilian Federal Revenue, for the historical value of R$ 185, due to supposed non-payment or underpayment of IRPJ and CSLL, related to the period from 2006 to 2010, according to: (i) amortization of goodwill supposedly being incorrect; (ii) utilization of tax loss more than the limit of 30% permitted by tax regulations (merger); and (iii) non-payment of IRPJ and CSLL obligations on a monthly estimates basis. In March 2015, regarding the voluntary appeals filed with the Administrative Board of Tax Appeals, the board authorized the exclusion of the qualified and isolated fines and confirmed the lower court decision regarding the reduction mentioned above. Such court decision denied the taxpayer's Special Appeal.

On September 30, 2017, the updated amount assessed amounted to R$ 298 and VCSA opted to include this case in Special Program of Tax Regularization "PERT" (Note 1.1 (d)).

Of the total residual balance, part of the amount refers to the assessment that the VCSA received in December 2016 by the Brazilian Federal Revenue in the historical amount of R$ 470, demanding the collection of IRPJ and CSLL related to the period of 2011, undue deduction of expenses and operating costs. Currently, the VCSA awaits the judgment of the impugnation presented to the Special Revenue Service. On December 31, 2017, the amount updated in controversy is R$ 473, whose likelihood of loss is possible.

In December 2017, VCSA was assessed by the Federal Revenue Service in the amount of R$ 1,295, due to the alleged absence of payment or lower payment of IRPJ and CSLL related to the period between 2012 and 2013, due to: (i) gain of capital allegedly obtained as a result of an exchange made by the Company; and (ii) amortization of supposedly incorrect goodwill. In January 2018, the Company filed the challenge and is currently awaiting judgment before the Federal Revenue Service. As of December 31, 2017, the adjusted amount in contingency is R$ 1,302, estimated as possible.

(ii) ICMS credit

Between 2011 and 2013, eight notices of infringement and fines were filed against its subsidiary Citrovita Agro Industrial Ltda. ("CAI"), mainly aimed at the collection of the ICMS credited, as highlighted in invoices for the transfer of other subsidiaries, for the specific purpose of export, whose exits are not taxed. The tax assessment notices totaled R$ 817 as of December 31, 2017.

Of the eight cases mentioned above, seven are awaiting judgment in the administrative sphere, and (i) three of them with a totally unfavorable decision; (ii) and four in which decisions kept the entries only in part, reducing the assessed value. In view of these decisions, appeals were filed by the company and by the State Treasury Attorney of São Paulo, which are pending judgment by the Tax and Tax Court. One of them was terminated unfavorably at the administrative level and is being discussed in court.

In the period ended on December 31, 2017, the CBA has notice, relating to the ICMS tax credits relating to items applied in the production process, which, in the opinion of the State of Goiás, would not generate the right to the credit of said tax. The amount updated as of December 31, 2017 corresponds to R$ 106. In the opinion of Management, and in the opinion of independent legal advisors, the Company makes ICMS credits in accordance with the pertinent legislation, which is why the probability of process is considered possible.

(iii) Profits abroad – "IRPJ/CSLL"

The Company has official notifications served by the Brazilian Federal Revenue, for supposed non-payment of IRPJ and CSLL due to the profit realized abroad by its subsidiaries, in 2007 and 2008, which amounted to R$ 266 in December 2017. In June 2017, the Company was assessed in R$ 329 for supposedly not computing, in its IRPJ and CSLL tax calculation of the 2012 calendar year, the profit realized by subsidiaries abroad. The Company has R$ 607 under discussion.

The subsidiary VCSA has official notifications served by the Brazilian Federal Revenue as well, for supposed non-payment of IRPJ and CSLL due to the profit realized abroad by its subsidiaries from the 2008 to 2010 calendar years, which amounted to R$ 158 in December 2017.

(iv) Tax assessment notice – "ICMS"

In the fourth quarter of 2016, its subsidiary CAI received a tax assessment notice whose amount updated through December 31, amounts to R$ 164. The lawsuit currently awaits judgment of the special appeal filed by the company with the Tax Court of São Paulo.

(v) "IRPJ/CSLL" – Transfer costs

Between 2007 and 2010, four tax assessments were filed against its subsidiary, Citrovita Agroindustrial Ltda., 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 glosses in 2003 and 2004. In October 2017, one of the cases was closed in a favorable way to the company, remaining under administrative discussion the amount of R$ 192, updated until December 31, 2017. The active processes await judgment of appeals by the Administrative Council of Tax Appeals.

(vi) Errors in fiscal classification - Importation

In June, 2017, the subsidiary CBA was allegedly assessed in error in relation to the fiscal classification of the importation of inputs, for tax enforcement purposes (IPI, PIS, COFINS E II), in the amount of R$ 163. The subsidiary understands than the assessment is improper and presented its impugnation. As at the date of these financial statements, the subsidiary was awaiting an administrative decision in the first instance.

All amounts in millions of reais unless otherwise stated

(vii) "IRPJ/CSLL" – Deduction of expenses

In December 2016, its subsidiary CAI was assessed by the Federal Revenue Service ("RFB") for the collection of Corporate Income Tax ("IRPJ") and Social Contribution on Net Income ("CSLL"), the reason for the gloss of exclusions from the calculation base of said taxes in the 2011 calendar year. The amount required by the tax assessment notice amounts to R$ 71 (updated until December 2017). Currently, it is awaited the judgment of the presented impugnation.

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

Nature	2017	2016
Public civil suit – Violation of the economic order (i)	3,872	3,630
Administrative investigations carried out by the Secretariat of Economic Law (ii)	2,258	2,128
Litigation with a São Paulo transportation company (iii)	187	179
Indemnity lawsuits		57
Other lawsuits	898	1,155
	7,215	**7,149**

(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 Company, 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 10.0% 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 8,884/94: (i) in addition to the payment mentioned in item (1) above, a fine ranging from 1.0% to 30.0% 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.

There has been not been yet a significant decision on the lawsuit. The likelihood of loss in this matter is considered possible, and the Company has not recorded any provision for this claim. As at December 31, 2017, the restated balance of the contingency was R$ 3,872.

(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 the obligation of 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 (3) a specific cement asset that, in CADE's opinion, was directly related to the alleged illegal ac 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) the prohibition from contracting with official financial institutions credit lines with financing conditions subsidized by public programs or resources provided by these institutions; and (3) the recommendation to the Federal Revenue that they restrict or limit some other benefits and tax incentives. As at December 31, 2017, the restated balance of the contingency was R$ 1,994.

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 judgment of the merit. CADE was summoned and filed its defense, while VCSA presented its reply in November 2016. Now, the settlement of the lawsuit is awaited. The Company 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 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.

(iii) Litigation with a transportation company in São Paulo

In September 2003, a transportation company filed a claim against VCB (a company merged into the Company) seeking compensation for property damages amounting to R$ 84 and pain and suffering in an unspecified amount, alleging that the Company failed to honor two oral contracts. The transportation company argued that those breaches resulted in the discontinuation of the activities of its sales department and significant losses to its transportation department. The Company filed its response in September 2009, arguing that: (1) the transportation company's statute of limitations had expired; (2) the Company did not change the general conditions of the agreement; and (3) the transportation company was unable to provide the contracted services, which resulted in its insolvency. In August 2011, the Court rejected the argument regarding the expiration of the statute of limitations and determined an expert examination, as requested by the parties. The expert examination was concluded and the report was presented. The parties filed their challenges to the report and the lawsuit was sent to the expert for his opinion. In June 2014, clarifications were provided by the expert. On June 24, 2014, the Company's challenge was filed. In December 2014, the Company received a decision declaring the end of the fact-finding phase and requesting the parties to declare whether they would be interested in holding a conciliation hearing. In July 2016, the request was partially judged, sentencing Votorantim to pay R$ 400 thousand. In October 2016, Votorantim filed an appeal request. As at December 31, 2017, the restated balance of this contingency was R$ 187.

All amounts in millions of reais unless otherwise stated

24 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 Company invests in companies that have 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:

							2017			2016
Plants/Companies	Investor	Concession start date	Concession end date	Payment start date	Ownership interest	Intangible assets (Note 18)	Liabilities	Ownership interest	Intangible assets (Note 18)	Liabilities
Salto Pilão	CBA	nov-01	dec-36	jan-10	60%	194	493	60%	204	516
Salto do Rio Verdinho	CBA	aug-02	sep-37	oct-10	100%	8	20	100%	8	21
Itupararanga	CBA	nov-03	dec-23	jan-04	100%	1	2	100%	1	2
Piraju	CBA	dec-98	jan-34	feb-03	100%	1	6	100%	1	6
Ourinhos	CBA	jul-00	aug-35	sep-05	100%	1	5	100%	1	5
Baesa - Energética Barra Grande	CBA	jun-01	may-36	jun-07	15%	14	42	15%	14	44
Capim Branco I e Capim Branco II	Nexa BR	aug-01	sep-36	oct-07	13%	3	10	13%	3	11
Picada	Nexa BR	may-01	jun-36	jul-06	100%	18	65	100%	19	68
Enercan - Campos Novos	CBA	apr-00	may-35	jun-06	0%			33%	5	
Enercan - Campos Novos	Votorantim Metais S.A.	apr-00	may-35	jun-06	0%			12%	1	12
Enercan - Campos Novos Energia S.A	CBA Energia Participações S.A.	apr-00	may-35	jun-06	24%	2	6	0%		
Enercan - Campos Novos Energia S.A	Pollarix S.A.	apr-00	may-35	jun-06	21%	1	5	0%		
Pedra do Cavalo	Votorantim Cimentos N/NE S.A.	mar-02	apr-37	apr-06	100%	118	478	100%	123	501
						361	1,132		380	1,186
Current							76			67
Non-current						361	1,056		380	1,119
						361	1,132		380	1,186

All amounts in millions of reais unless otherwise stated

25 Equity

(a) Share capital

Accounting policy

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

On December 31, 2017 and December 31, 2016, the fully subscribed and paid-up capital of the Company was R$ 28,656, consisting of 18,278,789 thousand common shares.

(b) Dividends

Accounting policy

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 the General Meeting.

Therefore, the calculation of the dividends as at December 31 can be shown as follows:

	2017	2016
Net income (loss) attributable to controlling shareholders	590	(1,296)
Legal reserve	(30)	
Dividend calculation basis	560	
Dividends	**140**	
Percentage of net income for the year	25%	25%

During 2017, the Company approved to its parent company Hejoassu Administração S.A, the amount of R$ 135, corresponding to dividends related to part of the balance of the "Profit Reserve" account, accumulated up to December 31, 2016.

(c) Earnings per share

Accounting policy

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.

(d) Government grants

Accounting policy

Government grants are recorded at fair value when there is a reasonable guarantee that the grant will be received and the Company will be able to comply with all of the required conditions.

Government grants related to costs are deferred and recorded in the statement of income during the period required to reconcile them with the costs that they are intended to offset.

All amounts in millions of reais unless otherwise stated

(e) Carrying value adjustments

	Currency translation of investees located abroad	Hedge accounting for net investments abroad, net of taxes	Hedge accounting for the operations of subsidiaries	Remeasurement of retirement benefits	Fair value of available-for-sale assets	Other comprehensive income	Total
At January 1, 2016	**9,808**	**(6,375)**	**(82)**	**(41)**		**(358)**	**2,952**
Other comprehensive income							
Currency translation of investees located abroad	(4,537)						(4,537)
Hedge accounting for net investments abroad, net of taxes		2,033					2,033
Hedge accounting for the operations of subsidiaries			52				52
Remeasurement of retirement benefits				(37)			(37)
Other comprehensive income on disposal of investments	(25)						(25)
Share in other comprehensive income of investees						(84)	(84)
Fair value of available-for-sale financial assets of non-consolidated investments					227		227
Repurchase of shares of Nexa Resources Perú S.A.A.						102	102
Fair value per share variation - Nexa						572	572
At December 31, 2016	**5,246**	**(4,342)**	**(30)**	**(78)**	**227**	**232**	**1,255**
Other comprehensive income							
Currency translation of investees located abroad	473						473
Hedge accounting for net investments abroad, net of taxes		(163)					(163)
Hedge accounting for the operations of subsidiaries			(101)				(101)
Fair value of available-for-sale financial assets of non-consolidated investments					39		39
Realization of comprehensive income on disposals of investments	(136)						(136)
Realization of comprehensive income on the sale of interest in Nexa Resources S.A.	(593)	330	13	(4)		(165)	(419)
Increase in noncontrolling interest - Nexa Resourses S.A. - dilution interest						(215)	(215)
At December 31, 2017	**4,990**	**(4,175)**	**(118)**	**(82)**	**266**	**(148)**	**733**

All amounts in millions of reais unless otherwise stated

(f) Non-controlling interests

	2017	2016
Nexa Resources S.A. (i)	2,967	808
Nexa CJM	795	736
Nexa Perú	406	521
Cementos Artigas S.A.	204	197
Asment de Témara	170	144
Yacuces, S.L.	125	108
Itacamba Cemento S.A.	92	99
Shree Dijivay Cement Co. Ltd	54	52
Yibitas Yozgat Isci Birligi Insaat M.T.S	22	23
Acerías Paz Del Rio S.A.	12	18
Other (ii)	10	(48)
	4,857	2,658

(i) The variation refers to the issuance of new shares and sale of interest by VSA.

(ii) The value presented as a debt is substantially derived from the balances of investees that had negative equity at the end of the year.

26 Net revenue

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 Company. Revenue is shown net of value added tax, rebates, discounts and rebates, after elimination of sales among consolidated companies.

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

Revenue will not be reliably measured if all terms of sale aren't resolved. The Company bases its 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) Sale of products

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

(ii) Sales of products and service

The Company and its subsidiaries recognize revenue when: (i) the amount of revenue can be reliably measured; (ii) it is probable that future economic benefits will flow to the entity; and (iii) specific criteria have been met for each of the activities of the Company and its subsidiaries as described below. Revenue will not be deemed as reliably measured if all sale conditions are not resolved. The Company and its subsidiaries base their estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(iii) Sale of surplus energy

The sale of energy, which meets the definition of a financial instrument, is recognized in the Company's financial statements at its fair value.

All amounts in millions of reais unless otherwise stated

(a) Reconciliation of revenues

	2017	2016
Gross revenue		
Sales of products - domestic market	10,350	11,068
Sales of products - foreign market	14,156	13,467
Supply of electrical energy	6,569	5,498
Services provided	486	663
	31,561	30,696
Taxes on sales, services and other deductions	(4,336)	(4,731)
Net revenue	**27,225**	**25,965**

(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 Company, classified by currency and destination, is as follows:

All amounts in millions of reais unless otherwise stated

(i) Revenue by destination

	2017	2016
Brazil	13.290	12.680
United States	3.336	3.395
Peru	2.234	1.823
Argentina	1.127	1.080
Canada	1.062	950
Colombia	991	1.005
Turkey	682	701
Switzerland	567	287
Spain	487	653
Luxembourg	418	347
Morocco	394	425
Uruguay	307	296
Japan	227	153
Bolívia	222	122
Tunisia	199	258
Singapore	194	145
India	181	193
China	153	137
Chile	148	166
Taiwan	147	53
Austria	119	79
Belgium	110	143
Germany	75	150
Italy	67	56
Ecuador	65	29
Other countries	423	639
	27.225	**25.965**

(ii) Revenue by currency

	2017	2016
Real	13,063	12,495
US Dollar	9,150	8,308
Canadian Dollar	1,017	953
Colombian Peso	834	854
Argentinian Peso	857	800
Euro	519	680
Turkish Lira	567	627
Dirham	394	425
Dinar	199	258
Other currencies	625	565
	27,225	**25,965**

All amounts in millions of reais unless otherwise stated

27 Expenses by nature

				2017	2016
	Cost of products sold and services rendered	Selling	General and administrative	Total	Total
Raw materials, inputs and consumables	13,404	66	177	13,647	12,857
Employee benefit expenses	2,615	349	1,052	4,016	4,173
Depreciation, amortization and depletion	2,212	49	99	2,360	2,603
Outsourced services	1,020	43	498	1,561	1,493
Transportation expenses	92	865	12	969	1,084
Other expenses	1,306	294	180	1,780	1,530
	20,649	**1,666**	**2,018**	**24,333**	**23,740**

28 Employee benefit expenses

(a) 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.

(b) 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”.

	2017	2016
Salaries and bonuses	2,469	2,553
Payroll charges	947	1,023
Benefits	600	597
	4,016	**4,173**

All amounts in millions of reais unless otherwise stated

29 Other operating expenses, net

	2017	2016
Realization of other comprehensive income - Nexa (Note 1.1 (f))	750	
Realization of other comprehensive income - Others	3	
Net income from sale of investment - Nexa (Note 1.1 (f))	(161)	
Gain on sale of investments - Cement and Metals Operations	33	312
Reversal (provision) for impairment of investments - long steel Brazil (Note 34 (a))	71	(988)
Reversal (constitution) for impairment of investments, fixed and intangible assets	23	(1,164)
Gain on sale of fixed and intangible assets, net	4	149
Tax benefits	74	109
Net gain on co-processing	22	11
Special mining tax	8	
Reinsurance operations	(26)	
Expenses with environmental obligations	(30)	(248)
Royalties of mining and exploration rights	(37)	(36)
Special Program for Tax Regularization - State	(44)	
Loss on hedge	(63)	(127)
Special Program for Tax Regularization - Federal	(122)	
Spending on not activatable projects	(316)	(210)
Financial instrument - firm commitment (i)	(522)	(253)
Other expenses, net	(203)	(171)
	(536)	**(2,616)**

(i) Relates to the result of the sale of energy surplus, recognized by the fair value of the contracts and carried out in accordance with the physical energy delivery, as described in Note 15.

30 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 period in which they arise.

All amounts in millions of reais unless otherwise stated

	2017	2016
Finance income		
Income from financial investments	583	754
Reversal of monetary restatement of provision	207	
Interest on financial assets	119	156
Monetary updating of assets	119	131
Fair value of borrowing	61	115
Discounts obtained	29	19
Interest and monetary restatement - use of public assets (i)	6	
Interest on related-party transactions (Note 14)	7	15
Discount on repurchase of bonds		173
Other finance income	24	34
	1,155	**1,397**
Finance costs		
Capitalization of borrowing costs	29	73
Interest on borrowing	(1,580)	(1,728)
Monetary restatement of provision	(268)	(197)
Income tax on remittances of interest abroad	(120)	(106)
Interest on taxes payable	(123)	
Fair value of borrowing and financing	(117)	(89)
Interest on anticipation of receivables	(101)	(101)
Adjustment to present value CPC 12	(83)	(66)
Borrowing fees	(40)	(74)
"PIS/COFINS" on financial results	(38)	(57)
Interest and monetary restatement - use of public assets (i)	(3)	(106)
Discounts granted	(2)	(20)
Other finance costs	(264)	(172)
	(2,710)	**(2,643)**
Results of derivative financial instruments (Note 6.1.1 (b))		
Revenue	3	43
Expenses	(216)	(1,049)
	(213)	**(1,006)**
Foreign exchange variation, net	(724)	535
Finance results, net	**(2,492)**	**(1,717)**

(i) In 2017, the Company recognized a monetary adjustment revenue on "UBP" - Use of the Public Asset, as a result of the index used to update ("IGP-M" General Market Price Index).

31 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.

All amounts in millions of reais unless otherwise stated

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.

	2017	2016
Obligations recorded in the balance sheet with:		
Pension plan benefits	166	197
Post-employment healthcare benefits	151	120
Liabilities recorded in the balance sheet	317	317
Expenses recognized in the statement of income with:		
Pension plan benefits	20	22
Post-employment healthcare benefits	11	7
	31	29
Remeasurement with:		
Pension plan benefits - gross amount		63
Deferred income tax and social contribution	8	(21)
Pension plan benefits - net amount	8	42

(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.

All amounts in millions of reais unless otherwise stated

(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:

	2017	2016
Present value of funded obligations	1,042	865
Fair value of plan assets	(808)	(733)
Deficit of funded plans	234	132
Present value of non-funded obligations	82	176
Total deficit of defined benefit pension plans	316	308
Impact of the minimum funding requirement/assets ceiling	1	9
Assets and liabilities in the balance sheet	317	317

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

					2017	2016
	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 for the year	**1,046**	**(736)**	**310**	**9**	**319**	**303**
Current service cost	8		8		8	5
Finance cost (income)	51	(33)	18		18	23
	59	**(33)**	**26**		**26**	**28**
Re-measurements:						
Return on assets, excluding the amount included as finance income		(35)	(35)		(35)	(5)
Losses (gains) arising from changes in demographic assumptions	13		13		13	(12)
Losses arising from changes in financial assumptions	42		42		42	75
Losses (gains) arising from experience	(10)		(10)		(10)	7
Changes in the asset ceiling, excluding the amount included as finance cost				(8)	(8)	
	45	**(35)**	**10**	**(8)**	**2**	**65**
Foreign exchange gains (losses)	59	(48)	11		11	(40)
Contributions:						
Employer		(4)	(4)		(4)	(6)
Payments of the plans:						
Payment of benefits	(84)	47	(37)		(37)	(33)
Closing balance for the year	**1,125**	**(809)**	**316**	**1**	**317**	**317**

All amounts in millions of reais unless otherwise stated

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

												Percentage
						2017						2016
	Brazil	Europe	North America	South America	Colombia	Total	Brazil	Europe	North America	South America	Colombia	Total
Present value of the obligation	49	19	706		268	1,042	43	21	540	2	258	864
Fair value of plan assets	(52)	(4)	(624)		(128)	(808)	(54)	(4)	(559)		(117)	(734)
	(3)	15	82		140	234	(11)	17	(19)	2	141	130
Present value of non-financial obligations		46	32	4		82		43	135			178
Impact of the minimum requirement of the funds/asset ceiling	1					1	8		1			9
	(2)	61	114	4	140	317	(3)	60	117	2	141	317

The actuarial assumptions used were as fallows:

						2017						2016
	Brazil	Europe	North America	South America	Colombia	Total	Brazil	Europe	North America	South America	Colombia	Total
Discount rate	9.93%	7.25%	3.46%	10.70%	6.75%	7.62%	11.41%	6.20%	4.00%	10.00%	7.50%	7.82%
Inflation rate	4.46%	2.85%	2.00%			3.10%	4.97%	0.75%	2.00%	11.50%	3.50%	4.54%
Future salary increases	5.25%	6.85%	2.50%	6.70%		5.33%	5.76%	7.25%	2.50%	3.00%		4.63%
Increases in future pension plans	4.46%				3.50%	3.98%	4.97%				3.50%	4.24%

The assumptions relating to mortality experience are established based on the opinion of actuaries, in accordance with published statistics and the experience in each territory. The mortality assumptions for the most important countries are based on the following post-retirement mortality tables: (i) Brazil AT-2000 Basic segregated for gender and disability table RRB-1994, modified and aggravated by 15%, segregated by gender; (ii) Europe: CSO80 with a projection period of ten to 15 years; (iii) North America: RP- 2000 segregated by gender with a projection period of eight years and (IV) Colombia: Based on table RV8, regulated by resolution 115-2010, without an expiration period.

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

The Company operates post-employment health care plans through its subsidiary 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.

32 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:

(a) FDI - Ceará Industrial Development Fund

Tax incentives granted until 2020 and 2026, within the scope of the Ceará Industrial Development Fund, created under State Law No. 10,367 of December 7, 1979 and State Decree No. 29,183, of February 8, 2008.

(b) PSDI – Sergipe Industrial Development Program

Tax incentives granted until 2031, under the Sergipe Industrial Development Program, created under the terms of State Law No. 3,140 of December 23, 1991 and State Decree No. 29,935 of December 30, 2014.

(c) Pro-Indústria - Tocantins Industrial Development Program - Xambioá - TO

Tax incentives granted until 2023, under the Tocantins Industrial Development Program, created under the terms of State Law No. 1,385 of July 9, 2003 and State Decree No. 2,845, of September 14, 2006.

(d) PRODEIC - Mato Grosso Industrial and Commercial Development Program

Tax incentives granted until 2021 and 2023 under the Industrial and Commercial Development Program of Mato Grosso, created under the terms of State Law 7,958, of September 25, 2003 and State Decree No. 1,432, of September 29, 2003.

(e) PRODIC – Industrial, Commercial and Mineral Development Program of the State of Rondônia

Fiscal incentives granted until 2018, within the scope of the Industrial, Commercial and Mineral Development Program of the State of Rondônia, created under the terms of State Law No. 1,558, of December 26, 2005 and State Decree No. 12,988, of July 13, 2007.

(f) PRO MARANHÃO - Incentive Program for Industrial Activities and in the State of Maranhão

Tax incentives granted until 2031, within the scope of the Incentive Program for Industrial and Technological Activities in the State of Maranhão, created under the terms of State Law No. 9,121, dated March 4, 2010 and State Decree No. 26,689, of June 30, 2010.

(g) M.A.E. - Program for the Attraction of Companies in the State of Pará

Tax incentives granted until 2027, within the scope of the Program for the Attraction of Companies in the State of Pará, created under the terms of State Law 6,913, dated October 3, 2006 and State Decree No. 2,490, dated October 6, 2010.

(h) PRODUZIR – Industrial Development Program in the State of Goiás

Tax incentives granted up to 2020, within the scope of the Industrial Development Program in the State of Goiás, created pursuant to State Law 13,591 of January 18, 2000 and State Decree No. 5,265, of June 30, 2000.

(i) Federal tax incentives

Income tax incentives granted by the federal government through the Northeast Development Authority and the Amazon Development Authority, to encourage economic and social development in some areas of the North and Northeast regions of Brazil. These incentives are recorded in profit or loss on an accrual basis and are allocated at the end of the year to the “Tax incentives” reserve account.

33 Insurance

The Company and its subsidiaries maintain property risk insurance coverage amounting to R$ 55,321 and for loss of income amounting to R$ 7,583 on December 31, 2017. The Company’s management considers these amounts sufficient to cover eventual property risks and loss of profits.

34 Assets and liabilities classified as held-for-sale

Accounting policy

They are classified as assets held-for-sale when their book value is recovered, mainly through sale and when the sale is considered highly probable.

The asset or group of assets to be classified as held-for-sale should be measured at initial recognition at the lower of its book value if it were not classified as such and the fair value less costs to sell. If the asset or group of assets is acquired as part of a business combination, it must be measured at fair value less costs to sell. When the sale is expected to occur after one year, the entity shall measure selling expenses at present value. Any increase in the present value of selling expenses that results from the passage of time should be presented in the results as financial expense.

All amounts in millions of reais unless otherwise stated

Depreciation of assets held for trading ceases when a group of assets is designated as held-for-sale. The assets and liabilities of the group of discontinued assets are presented in single lines in assets and liabilities.

	Assets	Liabilities
Assets classified as held-for-sale - Long steel Brazil	2,194	1,522
Net investment		672
Assets classified as held-for-sale - Cement segment	5	4
Net investment		1

(a) Long steel segment

On February 22, 2017, AMB and VSA entered into a contract under which VS will become a subsidiary of AMB and VSA will hold a 15% minority interest in the combined long steel business. Votorantim's long steel operations in Argentina (Acerbrag) and Colombia (PazdelRío) were not included in the transaction.

In compliance with the accounting rule for assets classified as held-for-sale, the Company carried out the valuation of the assets and liabilities of these operations at their fair value.

Assets and liabilities classified as held-for-sale, which were valued at their fair value, generated expenses in the amount of R$ 988 in 2016. In 2017, there was a revaluation of the fair value and a reversal of R$ 71, both recorded as impairment in item "Other operating expenses, net" (Note 29).

During the year ended December 31, 2017, VSA made a contribution of R$ 220 in the capital of VS. As this contribution will not be subject to adjustment in the negotiation, this amount was classified in the result, net of taxes, as "discontinued operations". Also during the 2017 fiscal year, the companies of the long steel operation, located in Argentina, decided dividends in the amount of R$ 89 for VS. Due to the fact that operations in Argentina were not included in the transaction, the amount receivable was reclassified to "discontinued operations", net of taxes. The tax effect of the operations was R$ 105.

The loss for the year ended December 31, 2016 of the long steel operation in Brazil, in the amount of R$ 268, was retained in the income statement and reclassified from "Continuing Operations" to "Discontinued Operations".

Considering that the asset classified as held-for-sale is valued at its fair value, consequently, it was not revalued by equity method on December 31, 2017.

(b) Cement segment

The assets and liabilities of the cement segment correspond to outstanding balances of China's operations.

All amounts in millions of reais unless otherwise stated

(c) Income from discontinued operations

	Cement	Siderurgy	Total
Loss for the year 2017	**36**		**36**
VSA			
Contribution of capital, net of taxes - long steel in Brazil		(145)	(145)
Deliberate dividends, net of taxes - long steel in Brazil		(59)	(59)
VCEAA			
Result from the sale of assets and liabilities of China (Note 1.1 (b))	(139)		(139)
Other Comprehensive Income - China (Note 1.1 (b))	60		60
VCSA			
Other Comprehensive Income - China (Note 1.1 (b))	73		73
Write-off of goodwill on sale of operations - China (Note 1.1 (b))	(228)		(228)
Net gain on the sale of assets and liabilities of California and Florida (Note 1.1 (b))	257		257
Loss for the year 2017	**59**	**(204)**	**(145)**

35 Supplemental information – Business segments

In order to provide more detailed information the Company has elected to present financial information organized into two business segments. Each segment presented has been prepared following the accounting consolidation policies in note 22 and consider, first, the elimination of balances and transactions among the companies before: (i) eliminations between business segments; (ii) eliminations of investments held by the holding companies.

Additionally, the eliminations and reclassifications among the companies are presented so that the net results reconcile with the consolidated financial information of VSA according to the supplementary information. This supplementary information is not intended to be in accordance with, and is not required by, the accounting practices adopted in Brazil, or by IFRS.

All amounts in millions of reais unless otherwise stated

(a) Capital management

The financial leverage ratios are calculated according to the information of the industrial segments, considering the accumulated result of 12 months, as loan covenants, are summarized as follows:

		Industrial segments	
Adjusted EBITDA	**Note**	**2017**	**2016**
Net income (loss) for the year		**810**	**(1,251)**
Plus (less):			
Continuing operations			
Equity in the results of investees		(1,197)	(774)
Net financial results		2,506	1,745
Income and social contribution taxes		133	(397)
Depreciation, amortization and depletion		2,360	2,603
Discontinued operations			
Equity in the results of investees		(151)	(31)
Net financial results		96	140
Income and social contribution taxes		126	2
Depreciation, amortization and depletion		35	185
EBITDA before other additions and exceptional items		**4,718**	**2,222**
Plus :			
Dividends received		489	188
Extraordinary items			
EBITDA - discontinued operations		306	4
Non-recurring items - discontinued operations		(267)	
Gain on sale of investments, net		(625)	(312)
Constitution (reversal) for impairment - property, plant, equipment		(10)	1,121
Constitution (reversal) for impairment of investments		(71)	1,031
Fair value of biological assets		8	(2)
PERT payment with deferred tax credit		99	
Other		113	1
Adjusted annualized EBITDA (A)		**4,760**	**4,253**
Net debt			
Borrowing	19	24,630	24,419
Cash and cash equivalents, financial investments and derivative financial instruments		(12,274)	(9,691)
Net debt (B)		**12,356**	**14,728**
Gearing ratio (B/A)		**2.60**	**3.46**

All amounts in millions of reais unless otherwise stated

(b) Balance sheet - business segments

											2017
Assets	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Current											
Cash and cash equivalents, financial investments and derivative financial instruments	4,657	4,078	1,009	197	759	1,793		12,493	81		12,574
Trade receivables	879	598	395	174	387	269	(281)	2,421			2,421
Inventory	1,358	1,075	660	348		85		3,526			3,526
Taxes recoverable	292	264	434	44	10	192		1,236	81		1,317
Dividends receivable	11		5		2	327	(183)	162	55	(69)	148
Financial instruments - firm commitment			115		95			210			210
Other assets	308	61	274	31	13	97		784			784
	7,505	6,076	2,892	794	1,266	2,763	(464)	20,832	217	(69)	20,980
Assets classified as held-for-sale	5					2,194		2,199			2,199
	7,510	6,076	2,892	794	1,266	4,957	(464)	23,031	217	(69)	23,179
Non-current assets											
Long-term receivables											
Financial investments and derivative financial instruments	18	15	6			124		163			163
Taxes recoverable	705	108	566	16		389		1,784			1,784
Related parties	64	2	1,222	14	459	834	(2,452)	143			143
Deferred income tax and social contribution	728	743	918	64	9	1,130	465	4,057	22		4,079
Judicial deposits	675	36	15	2	2	35		765			765
Financial instruments - firm commitment			119		35			154			154
Other assets	394	73	20	2	26	152		667			667
	2,584	977	2,866	98	531	2,664	(1,987)	7,733	22		7,755
Investments	695	1	219		155	32,178	(19,876)	13,372	5,113	(5,113)	13,372
Property, plant and equipment	12,426	5,825	4,766	932	1,222	684		25,855			25,855
Intangible assets	5,464	6,992	602	64	506	1,005	(2,190)	12,443			12,443
Biological assets			4	6		55		65			65
	21,169	13,795	8,457	1,100	2,414	36,586	(24,053)	59,468	5,135	(5,113)	59,490
Total assets	28,679	19,871	11,349	1,894	3,680	41,543	(24,517)	82,499	5,352	(5,182)	82,669

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

All amounts in millions of reais unless otherwise stated

											2017
Liabilities and equity	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
Current liabilities											
Borrowing	1,666	135	229	46	458	39		2,573			2,573
Derivative financial instruments	65	42	165			27		299			299
Confirming payable	644	367		59				1,070			1,070
Trade payables	1,178	1,091	461	312	409	129	(227)	3,353			3,353
Salaries and payroll charges	376	264	138	29	17	71		895			895
Taxes payable	326	136	43	73	20	19		617			617
Advances from customers	31	3	241	128	2	3		408			408
Dividends payable	167	13	18		9	179	(198)	188	69	(69)	188
Use of public assets	31	5	40					76			76
Related parties			249				(248)	1			1
Deferred revenue - performance obligation	3				243			246			246
Deferred revenue - silver streaming		104						104			104
Other	348	71	81	30	15	96		641	2		643
	4,835	2,231	1,665	677	1,173	563	(673)	10,471	71	(69)	10,473
Liabilities related to assets held-for-sale	4					1,522		1,526			1,526
	4,839	2,231	1,665	677	1,173	2,085	(673)	11,997	71	(69)	11,999
Non-current liabilities											
Borrowing	11,967	4,653	2,589		846	2,002		22,057			22,057
Derivative financial instruments		8	11			64		83			83
Deferred income tax and social contribution	552	1,075				170		1,797	168		1,965
Related parties	175	7	314	558	742	482	(2,253)	25			25
Provision	1,088	851	461	83	26	78		2,587			2,587
Use of public assets	447	75	534					1,056			1,056
Pension plan	177			140				317			317
Financial instruments - firm commitment	22		53		132			207			207
Deferred revenue - performance obligation					272			272			272
Deferred revenue - silver streaming		630						630			630
Other	208	257	61	94	10	26		656			656
	14,636	7,556	4,023	875	2,028	2,822	(2,253)	29,687	168		29,855
Total liabilities	19,475	9,787	5,688	1,552	3,201	4,907	(2,926)	41,684	239	(69)	41,854
Equity											
Total equity attributable to owners of the Company	8,527	5,323	5,661	330	479	36,636	(20,998)	35,958	5,113	(5,113)	35,958
Non-controlling interests	677	4,761		12			(593)	4,857			4,857
Total equity	9,204	10,084	5,661	342	479	36,636	(21,591)	40,815	5,113	(5,113)	40,815
Total liabilities and equity	28,679	19,871	11,349	1,894	3,680	41,543	(24,517)	82,499	5,352	(5,182)	82,669

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

All amounts in millions of reais unless otherwise stated

(c) Statement of income - business segments

	Votorantim Cimentos	Nexa Resources	CBA	Long steels (*)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
											2017
Continuing operations											
Net revenue from products sold and services rendered	11,104	7,828	4,673	1,659	4,124	800	(2,963) (*)	27,225			27,225
Cost of products sold and services rendered	(8,357)	(5,370)	(3,973)	(1,341)	(3,857)	(714)	2,963 (*)	(20,649)			(20,649)
Gross profit	**2,747**	**2,458**	**700**	**318**	**267**	**86**		**6,576**			**6,576**
Operating income (expenses)											
Selling	(1,133)	(285)	(74)	(111)	(7)	(56)		(1,666)			(1,666)
General and administrative	(812)	(473)	(205)	(89)	(98)	(300)		(1,977)	(41)		(2,018)
Other operating income (expenses), net	(197)	(413)	279	46	(251)	589	(589) (**)	(536)			(536)
	(2,142)	**(1,171)**		**(154)**	**(356)**	**233**	**(589)**	**(4,179)**	**(41)**		**(4,220)**
Operating profit (loss) before equity results and finance results	**605**	**1,287**	**700**	**164**	**(89)**	**319**	**(589)**	**2,397**	**(41)**		**2,356**
Result from equity investments											
Equity in the results of investees	157		12		20	1,256	(251)	1,194	315	(290)	1,219
Realization of other comprehensive income on disposal of investments	3							3			3
	160		**12**		**20**	**1,256**	**(251)**	**1,197**	**315**	**(290)**	**1,222**
Finance results, net											
Finance income	661	93	177	18	119	204	(131)	1,141	14		1,155
Finance costs	(1,577)	(335)	(404)	(89)	(152)	(284)	131	(2,710)			(2,710)
Results of derivative financial instruments	(169)	(2)				(42)		(213)			(213)
Foreign exchange gains (losses), net	(205)	(154)	18	(1)		(417)	35	(724)			(724)
	(1,290)	**(398)**	**(209)**	**(72)**	**(33)**	**(539)**	**35**	**(2,506)**	**14**		**(2,492)**
Profit (loss) before income tax and social contribution	**(525)**	**889**	**503**	**92**	**(102)**	**1,036**	**(805)**	**1,088**	**288**	**(290)**	**1,086**
Income tax and social contribution											
Current	(164)	(404)	(54)	(61)	(43)	3		(723)			(723)
Deferred	11	57	68	42	86	132	194	590	2		592
Profit (loss) from continuing operations	**(678)**	**542**	**517**	**73**	**(59)**	**1,171**	**(611)**	**955**	**290**	**(290)**	**955**
Discontinued operations											
Profit (loss) from discontinued operations	59					(204)		(145)			(145)
Profit (loss) for the year	**(619)**	**542**	**517**	**73**	**(59)**	**967**	**(611)**	**810**	**290**	**(290)**	**810**
Profit (loss) attributable to the owners of the Company	(681)	356	518	78	(59)	967	(589)	590	290	(290)	590
Profit (loss) attributable to non-controlling interests	62	186	(1)	(5)			(22)	220			220
Profit (loss) for the year	**(619)**	**542**	**517**	**73**	**(59)**	**967**	**(611)**	**810**	**290**	**(290)**	**810**

(*) Relates to the net revenue from electric energy operations (Votener and CBA).
(**) Refers to the net gain of CBA on the sale of the Pollarix S.A. investment. Preferred shares for VGE and common shares for Nexa BR. Deducted from the cost of write-off of respective investments.
(***) Relates to long steel operations abroad (Argentina and Colombia).

All amounts in millions of reais unless otherwise stated

	Votorantim Cimentos	Nexa Resources	CBA	Long steels (***)	Nickel (**)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Eliminations	Total, consolidated
												2016
Continuing operations												
Net revenue from products sold and services rendered	11,924	6,386	4,345	1,569	332	3,306	878	(2,775) (*)	25,965			25,965
Cost of products sold and services rendered	(8,815)	(4,801)	(3,685)	(1,207)	(489)	(3,145)	(643)	2,775 (*)	(20,010)			(20,010)
Gross profit	**3,109**	**1,585**	**660**	**362**	**(157)**	**161**	**235**		**5,955**			**5,955**
Operating income (expenses)												
Selling	(1,063)	(315)	(98)	(111)	(5)		(47)		(1,639)			(1,639)
General and administrative	(905)	(437)	(180)	(115)	(55)	(72)	(313)		(2,077)	(14)		(2,091)
Other operating income (expenses), net	343	(586)	(1,178)	(153)	(42)	(102)	(898)		(2,616)			(2,616)
	(1,625)	**(1,338)**	**(1,456)**	**(379)**	**(102)**	**(174)**	**(1,258)**		**(6,332)**	**(14)**		**(6,346)**
Operating profit (loss) before equity results and finance results	**1,484**	**247**	**(796)**	**(17)**	**(259)**	**(13)**	**(1,023)**		**(377)**	**(14)**		**(391)**
Result from equity investments												
Equity in the results of investees	121	(1)	67		10		709	(176)	730	166	(172)	724
Realization of other comprehensive income on disposal of investments	44								44			44
	165	**(1)**	**67**		**10**		**709**	**(176)**	**774**	**166**	**(172)**	**768**
Finance results, net												
Finance income	872	56	166	23	28	124	225	(127)	1,367	30		1,397
Finance costs	(1,652)	(201)	(493)	(87)	(37)	(132)	(166)	127	(2,641)	(2)		(2,643)
Results of derivative financial instruments	(770)	(13)	3		(5)	1	(222)		(1,006)			(1,006)
Foreign exchange gains (losses), net	552	499	470	(10)	270		(22)	(1,224)	535			535
	(998)	**341**	**146**	**(74)**	**256**	**(7)**	**(185)**	**(1,224)**	**(1,745)**	**28**		**(1,717)**
Profit (loss) before income tax and social contribution	**651**	**587**	**(583)**	**(91)**	**7**	**(20)**	**(499)**	**(1,400)**	**(1,348)**	**180**	**(172)**	**(1,340)**
Income tax and social contribution												
Current	(82)	(238)	(67)	(74)		(33)	16		(478)	(3)		(481)
Deferred	(117)	(99)	433	(51)		41	344	324	875	(5)		870
Profit (loss) for the year from continuing operations	**452**	**250**	**(217)**	**(216)**	**7**	**(12)**	**(139)**	**(1,076)**	**(951)**	**172**	**(172)**	**(951)**
Discontinued operations												
Loss from discontinued continuing operations	**(28)**						**(272)**		**(300)**			**(300)**
Profit (loss) for the year	**424**	**250**	**(217)**	**(216)**	**7**	**(12)**	**(411)**	**(1,076)**	**(1,251)**	**172**	**(172)**	**(1,251)**
Profit (loss) attributable to the owners of the Company	370	218	(217)	(160)	7	(12)	(304)	(1,198)	(1,296)	172	(172)	(1,296)
Profit (loss) attributable to non-controlling interests	54	32		(56)			(107)	122	45			45
Profit (loss) for the year	**424**	**250**	**(217)**	**(216)**	**7**	**(12)**	**(411)**	**(1,076)**	**(1,251)**	**172**	**(172)**	**(1,251)**

(*) Relates to the net revenue from electric energy operations (Votener and CBA).
(**) Corresponds to the period between January 1 and June 30, 2016, as VMSA was merged into CBA on July 1, 2016.
(***) Relates to long steel operations abroad (Argentina and Colombia).

All amounts in millions of reais unless otherwise stated

(d) Adjusted EBITDA - business segments

										2017
	Votorantim Cimentos	Nexa Resources	CBA	Long Steel (***)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Total, consolidated
Net revenue from products sold and services rendered	11,104	7,828	4,673	1,659	4,124	800	(2,963) (*)	27,225		27,225
Cost of products sold and services rendered	(8,357)	(5,370)	(3,973)	(1,341)	(3,857)	(714)	2,963 (*)	(20,649)		(20,649)
Gross profit	**2,747**	**2,458**	**700**	**318**	**267**	**86**		**6,576**		**6,576**
Operating income (expenses)										
Selling	(1,133)	(285)	(74)	(111)	(7)	(56)		(1,666)		(1,666)
General and administrative	(812)	(473)	(205)	(89)	(98)	(300)		(1,977)	(41)	(2,018)
Other operating income (expenses), net	(197)	(413)	279	46	(251)	589	(589) (**)	(536)		(536)
	(2,142)	**(1,171)**		**(154)**	**(356)**	**233**	**(589)**	**(4,179)**	**(41)**	**(4,220)**
Operating profit (loss) before equity results and finance results	**605**	**1,287**	**700**	**164**	**(89)**	**319**	**(589)**	**2,397**	**(41)**	**2,356**
Plus:										
Depreciation, amortization and depletion - continuing operations	991	864	318	108	16	63		2,360		2,360
EBITDA	**1,596**	**2,151**	**1,018**	**272**	**(73)**	**382**	**(589)**	**4,757**	**(41)**	**4,716**
Plus:										
Dividends received	67		51			371		489	51	540
Exceptional items										
Loss (gain) on sale of investments, net	(20)	(16)	(589)			(589)	589	(625)		(625)
Constitution (reversal) for impairment - fixed assets	21		(31)			(71)		(81)		(81)
Fair value of biological assets						8		8		8
REFIS payment with deferred income tax credit	99							99		99
Other						113		113		113
Adjusted EBITDA	**1,763**	**2,135**	**449**	**272**	**(73)**	**214**		**4,760**	**10**	**4,770**

(*) Relates to the net revenue from electric energy operations (Votener and CBA).
(**) Refers to the net gain of CBA on the sale of the Pollarix S.A. Investment. Preferred shares for VGE and common shares for Nexa BR. Deducted from cost of write-off of respective investments.
(***) Relates to long steel operations abroad (Argentina and Colombia).

All amounts in millions of reais unless otherwise stated

											2016
	Votorantim Cimentos	Nexa Resources	CBA	Long Steel (***)	Nickel (**)	Energy	Holding and other	Eliminations	Total, industrial segments	Votorantim Finanças	Total, consolidated
Net revenue from products sold and services rendered	11,924	6,386	4,345	1,569	332	3,306	878	(2,775) (*)	25,965		25,965
Cost of products sold and services rendered	(8,815)	(4,801)	(3,685)	(1,207)	(489)	(3,145)	(643)	2,775 (*)	(20,010)		(20,010)
Gross profit	**3,109**	**1,585**	**660**	**362**	**(157)**	**161**	**235**		**5,955**		**5,955**
Operating income (expenses)											
Selling	(1,063)	(315)	(98)	(111)	(5)		(47)		(1,639)		(1,639)
General and administrative	(905)	(437)	(180)	(115)	(55)	(72)	(313)		(2,077)	(14)	(2,091)
Other operating income (expenses), net	343	(586)	(1,178)	(153)	(42)	(102)	(898)		(2,616)		(2,616)
	(1,625)	**(1,338)**	**(1,456)**	**(379)**	**(102)**	**(174)**	**(1,258)**		**(6,332)**	**(14)**	**(6,346)**
Operating profit (loss) before equity results and finance results	**1,484**	**247**	**(796)**	**(17)**	**(259)**	**(13)**	**(1,023)**		**(377)**	**(14)**	**(391)**
Plus:											
Depreciation, amortization and depletion - continuing operations	1,015	951	374	146	37	1	79		2,603		2,603
EBITDA	**2,499**	**1,198**	**(422)**	**129**	**(222)**	**(12)**	**(944)**		**2,226**	**(14)**	**2,212**
Plus:											
Dividends received	68		32				88		188	57	245
Exceptional items											
Loss (gain) on sale of investments, net	(297)	(2)	24				(37)		(312)		(312)
Constitution (reversal) for impairment - fixed assets	103	(2)	846	175	(1)				1,121		1,121
Compensation energy assets		134					(134)				
Provision (reversal) for impairment - investments							1,031		1,031		1,031
Fair value of biological assets							(2)		(2)		(2)
Other			1						1		1
Adjusted EBITDA	**2,373**	**1,328**	**481**	**304**	**(223)**	**(12)**	**2**		**4,253**	**43**	**4,296**

(*) Relates to the net revenue from electric energy operations (Votener and CBA).
(**) Corresponds to the period between January 1 and June 30, 2016, as VMSA was merged into CBA on July 1, 2016.
(***) Relates to long steel operations abroad (Argentina and Colombia).

36 Subsequent events

(a) Transactions in the subsidiary VS

In the first quarter of 2018, the Company paid the residual amount of R$ 150, corresponding to the capital contribution in the VS investee, as resolved at the Extraordinary General Meeting held on December 21, 2017.

On February 7, 2018, the Administrative Council for Economic Defense ("CADE") approved, pursuant to Concentration Act 08700.002165 / 2017-97, the transaction by which the Company, as provided for in the initial agreement signed in February 2017, will become a subsidiary of AMB. The process now enters its final phase and, while not complete, VS and AMB continue to operate independently.

On February 9, 2018, the Company resolved, at the Extraordinary General Meeting, to reduce the amount of R$ 354 of the capital stock in the VS investee, transferring the investments in Acerholding and Acergroup to VSA.

(b) Early liquidation of debentures

On January 11, 2018, VCSA redeemed in advance, in the amount of R$ 500, all the outstanding debentures of the ninth public issuance of debentures. The debentures matured on January 10, 2022.

On January 26, 2018, VCSA made the early amortization of installments maturing on March 5, 2022, on the fifth, sixth and eighth issues of public debentures. The total value of the principal amortized amounted to R$ 200.

(c) Early liquidation of Loans - Resolution 4131

On January 24, 2018, VCSA prepaid the loan agreement related to Resolution 4131, in the amount of USD 50 (R$ 161), signed on September 17, 2015, with maturity on September 25, 2020. The swap contract linked to this loan was also settled.

(d) Early liquidation of loans with the BNDES

On January 26, 2018, VCSA prepaid loans contracted with BNDES in the amount of R$ 210. These contracts were executed in 2009 and 2011 and expire in 2018, 2019 and 2020.

On January 26, 2018, the company VCNNE prepaid loans contracted with BNDES in the amount of R$ 24. These contracts were signed in 2009 and expire in 2018 and 2019.

(e) Corporate reorganization of Fibria

On March 15, 2018, the Company collectively with BNDES Participações S.A. – BNDESPAR (jointly, the "Fibria Controlling Shareholders"), Suzano Holding S.A. and the other controlling shareholders of Suzano Papel e Celulose S.A. (jointly, the "Suzano Controlling Shareholders"), and acting as intervening party Suzano Papel e Celulose S.A. ("Suzano"), have entered into the Voting Agreement and other Obligations ("Commitment"), pursuant to which Suzano Controlling Shareholders and Fibria Controlling Shareholders agreed to exercise their voting rights in order to combine the operations and shareholding basis of Suzano and Fibria Celulose S.A. ("Fibria"), through a corporate reorganization ("Transaction").

The terms and conditions of the Transaction, briefly described below, will be included in the Protocol and Justification of a Merger of Shares and of Company, to be submitted together with the appraisal reports and other applicable documents to the approval of the Boards of Directors of Fibria and Suzano, as well as, of the Extraordinary General Shareholders' Meetings of Fibria and Suzano.

(i) Financial Basis of the Transaction

Pursuant to the Commitment, a corporate reorganization shall be submitted to the shareholders of Fibria and Suzano, which will result in: (a) the ownership by Suzano of all the shares issued by Fibria; and (b) the receipt by Fibria's shareholders, for each common share issued by Fibria, of (i) fifty-two Reais and fifty cents (R$ 52.50), adjusted by the CDI variation from March 16, 2018 until the date of its effective payment, to be made in a single installment on the date of closing of the Transaction ("Cash Installment") and (ii) 0.4611 (zero comma, four, six, one, one) common shares of Suzano, adjusted pursuant to the exchange ratio referred to below ("Exchange Ratio"). Such shares of Suzano shall also be delivered to the shareholders of Fibria on the date of Closing of the Transaction.

In addition to the CDI adjustment, as indicated above, the Cash Installment will be adjusted by any dividends, interest on net equity and other proceeds declared by Fibria and Suzano as of March 15, 2018, except for the minimum mandatory dividend of Suzano and Fibria that have already been disclosed to the market. The Exchange Ratio will be proportionally adjusted by any stock splits, reverse stock splits and bonus stocks of Suzano and Fibria.

(ii) Conditions precedent for the Transaction

The closing of the Transaction is subject to the fulfillment of conditions precedent usual for these type of transactions, including the approval by certain antitrust authorities in Brazil and abroad.

(iii) Other relevant information

Until the date of closing of the Transaction, Fibria and Suzano will carry out its activities in the ordinary course of businesses and will remain operating independently.

The financial statements are being reissued only for the disclosure of this subsequent event, and the balance sheet and income statement presentations remain unchanged since, as of December 31, 2017, there were no facts or other elements being able to be conclude, that moment, which the implementation this process would be highly probable over a period up to one year. Upon closing of the Transaction as described above, the Company will make the appropriate accounting registrations relating to the probable gain resulting from the Transaction, in addition to the accounting registration at Fair Value of the 5.6% capital shareholding in Suzano.

For further information regarding the Transaction, please refer to the Material Fact and the Transaction documents available on Fibria Investor Relations website (www.fibria.com.br/ri).