Companhia Brasileira de Alumínio

Parent company and consolidated financial statements at December 31, 2017 and independent auditors' review report

CBA
Companhia Brasileira de Alumínio

Votorantim

(A free translation of the original in Portuguese)

Independent auditor's report of the parent and consolidated financial statement

To the Board of Directors and Stockholders
Companhia Brasileira de Alumínio

Opinion

We have audited the accompanying parent company financial statements of Companhia Brasileira de Alumínio (the "Company"), which comprise the balance sheet as at December 31, 2017 and the statements of income, comprehensive income, changes in equity and cash flows for the year then ended, as well as the accompanying consolidated financial statements of Companhia Brasileira de Alumínio and its subsidiaries ("Consolidated"), which comprise the consolidated balance sheet as at December 31, 2017 and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Companhia Brasileira de Alumínio and of Companhia Brasileira de Alumínio and its subsidiaries as at December 31, 2017, and the financial performance and the cash flows for the year then ended, as well as the consolidated financial performance and the 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 Parent Company and 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 basics for our audit opinion.

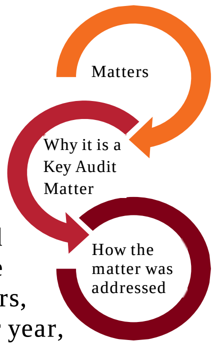
Emphasis of matter

Related-party transactions

We draw attention to Note 15 to these financial statements, which states that the Company maintains balances and carries out transactions in significant amounts with related parties under the conditions described therein. Accordingly, these financial statements should be analyzed in this context. Our opinion is not qualified in respect of this matter.

Key audit matters

Key audit matters (KAM) 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 parent company and 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 performed considering that the Company's and consolidated operations did not change significantly in relation to the prior year. In this context, the key audit matters, as well as our audit approach remained mainly in line with those of the prior year, except for the exclusion of the matter related to the assessment of the decrease in the recoverable value (impairment) of property, plant and equipment and intangible assets of the Cash Generating Unit (CGU) - Nickel, since it refers to an event that occurred in the year ended December 31, 2016.

Why it is a key audit matter	How the matter was addressed in the audit
Recovery of deferred taxes (Note 20)	
At December 31, 2017, the Company and its subsidiaries recorded R$ 917,715 thousand (consolidated) and R$ 911,791 thousand (parent company) referring to deferred income tax and social contribution, mainly arising from temporary differences and tax losses. These credits were recorded to the extent 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 analysis of the realization of these assets involves important and subjective judgments to determine the future taxable bases, arising from the projections of the results of the Company and its subsidiaries, which take into consideration several assumptions.	As an audit response, we performed the following procedures, among others: We obtained an understanding of the process of review of the business plan that is used to analyze the realization of the deferred income tax and social contribution. We counted on the support of our experts in tax matters and in the valuation of companies to test the calculation bases of the credits, and in relation to the models and critical assumptions used by management to estimate the time of realization of the deferred taxes. When applicable, we compared these assumptions with macroeconomic information disclosed in the market and also compared information from these projections with budgets approved by the Company's Board of Directors. We analyzed the reasonableness of the use of the accumulated deficit during future years, and tested the logical and arithmetic coherence of the calculations presented in the projections made by management. We also performed sensitivity tests for the main assumptions of the projections in order to assess the results in different possible scenarios.

Why it is a key audit matter	How the matter was addressed in the audit
	In addition, we analyzed the realization periods considered in the Company's studies in order to test the adequacy and the consistency of these realization estimates in relation to those used in prior years, and read the disclosures in the explanatory notes. We consider that the criteria and assumptions that management adopted to determine the tax credits, and the disclosures made, are reasonable, in all material aspects, in the context of the financial statements.

Other matters

Statements of Value Added

The parent company and consolidated Statements 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, were submitted to audit procedures performed in conjunction with the audit of the Company's financial statements. For the purposes of forming our opinion, we evaluated whether these statements are reconciled with the financial statements and accounting records, as applicable, and if their form and content are in accordance with the criteria defined in Technical Pronouncement CPC 09 - "Statement of Value Added". In our opinion, these Statements of Value Added have been properly prepared in all material respects, in accordance with the criteria established in the Technical Pronouncement, and are consistent with the parent company and consolidated financial statements taken as a whole.

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

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control of the Company and its subsidiaries.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Company to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the parent company and 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 parent company and 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.

Companhia Brasileira de Alumínio

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 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, 7 de March, 2018

PricewaterhouseCoopers
Auditores Independentes
CRC 2SP000160

Mauricio Colombari
Contador CRC 1SP 195838

(A free translation of the original in Portuguese)

Contents

Parent company and consolidated financial statements

Companhia Brasileira de Alumínio

Balance sheet
Years ended December 31
In thousands of Reais

Assets	Note	Parent company 2017	Parent company 2016	Consolidated 2017	Consolidated 2016
Current assets					
Cash and cash equivalents	10	18,191	76,605	18,854	77,040
Financial investments	11	922,348	766,312	968,767	933,800
Derivative financial instruments	6.2 (d)	20,748	62,141	20,748	62,141
Trade receivables	12	381,417	334,070	383,718	343,168
Inventory	13	638,855	574,915	659,586	604,494
Taxes recoverable	14	428,568	322,186	433,698	324,045
Dividends receivable	15	5,377	44,430	5,311	6,713
Financial instruments - firm commitment	15	114,885	161,020	114,885	161,020
Advance to suppliers	1.1 (f)	231,629		231,629	
Other assets		36,911	52,725	41,850	60,402
		2,798,929	2,394,404	2,879,046	2,572,823
Non-current assets					
Long-term receivables					
Financial investments	11	64	64	5,952	22,334
Derivative financial instruments	6.2 (d)		3,945		3,945
Taxes recoverable	14	566,374	727,711	566,431	727,857
Financial instruments - firm commitment	15	118,905	291,216	118,905	291,216
Deferred income tax and social contribution	20 (b)	911,791	968,286	917,715	973,309
Related parties	15	1,222,219	361,321	1,222,074	361,176
Judicial deposits	21 (f)	16,471	127,216	15,467	138,680
Other assets		18,882	18,771	26,901	38,471
		2,854,706	2,498,530	2,873,445	2,556,988
Investments	16	641,266	1,091,795	218,695	257,176
Property, plant and equipment	17	4,271,392	4,420,354	4,830,978	5,069,811
Intangible assets	18	435,129	476,466	541,087	614,142
		8,202,493	8,487,145	8,464,205	8,498,117
Total assets		11,001,422	10,881,549	11,343,251	11,070,940

Liabilities and equity	Note	Parent company 2017	Parent company 2016	Consolidated 2017	Consolidated 2016
Current liabilities					
Borrowing	19	185,825	247,327	228,616	299,576
Derivative financial instruments	6.2 (d)	165,240	18,837	165,240	18,837
Trade payables		451,818	376,140	422,663	328,563
Confirming payable		38,433	1,115	38,433	1,115
Salaries and social charges		135,413	116,730	137,538	118,474
Taxes payable		18,650	17,110	44,478	30,313
Customer advances		240,759	7,059	240,868	7,390
Dividends payable	15	12,796	10,323	12,796	10,371
Use of public assets		36,337	28,230	38,972	31,141
Related parties	15	249,378	221,019	249,161	220,857
Other liabilities		67,993	46,068	80,925	72,126
		1,602,642	1,089,958	1,659,690	1,138,763
Non-current liabilities					
Borrowing	19	2,467,367	2,572,974	2,588,869	2,650,949
Derivative financial instruments	6.2 (d)	10,749	177	10,749	177
Related parties	15	313,874	2,096,983	313,874	2,096,983
Provision	21 (d)	459,537	613,981	460,535	614,069
Use of public assets		488,207	521,329	533,968	574,511
Financial instruments - firm commitment	15	53,385		53,385	
Other Liabilities		54,890	65,182	61,521	74,523
		3,848,009	5,870,626	4,022,901	6,011,212
Total liabilities		5,450,651	6,960,584	5,682,591	7,149,975
Equity	23				
Share capital		5,637,299	4,399,676	5,637,299	4,399,676
Accumulated profit (deficit)		7,940	(513,509)	7,940	(513,509)
Carrying value adjustments		(94,468)	34,798	(94,468)	34,798
Total equity attributable to owners of the parent		5,550,771	3,920,965	5,550,771	3,920,965
Non-controlling interests				109,889	
Total equity		5,550,771	3,920,965	5,660,660	3,920,965
Total liabilities and equity		11,001,422	10,881,549	11,343,251	11,070,940

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

Companhia Brasileira de Alumínio

Statement of income
Years ended December 31
In thousands of Reais, unless otherwise stated

	Note	Parent company 2017	Parent company 2016	Consolidated 2017	Consolidated 2016
Net revenue from products sold and services rendered	24 (d)	4,471,810	4,078,486	4,672,684	4,345,452
Cost of products sold and services rendered	25	(3,938,009)	(3,627,853)	(3,973,179)	(3,685,151)
Gross profit		533,801	450,633	699,505	660,301
Operating income (expenses)					
Selling	25	(73,450)	(95,247)	(73,641)	(98,024)
General and administrative	25	(188,257)	(173,374)	(205,566)	(179,816)
Other operating income, net	27	282,738	(1,177,470)	279,323	(1,178,370)
		21,031	(1,446,091)	116	(1,456,210)
Operating profit before equity interest and finance result		554,832	(995,458)	699,621	(795,909)
Results from equity interest					
Equity in the results	16	108,780	193,834	12,380	67,178
		108,780	193,834	12,380	67,178
Finance income and costs	28				
Finance income		157,715	147,038	176,995	166,257
Finance costs		(385,697)	(462,001)	(404,472)	(493,321)
Derivative financial instruments		(8)	2,844	(8)	2,844
Foreign exchange variations, net		17,359	465,977	17,569	469,892
		(210,631)	153,858	(209,916)	145,672
Profit (loss) before income tax and social contribution		452,981	(647,766)	502,085	(583,059)
Income tax and social contribution	20 (a)				
Current		(29)	(12,805)	(53,721)	(67,412)
Deferred		64,812	443,771	68,097	433,671
Profit (loss) for the year		517,764	(216,800)	516,461	(216,800)
Profit (loss) attributable to the owners of the Company		517,764	(216,800)	517,764	(216,800)
Loss attributable to non-controlling interest				(1,303)	
Profit (loss) for the year		517,764	(216,800)	516,461	(216,800)
Total number of shares - thousand		1,410,673	1,117,283	1,410,673	1,117,283
Basic and diluted earnings (loss) per share (in reais)		0.37	(0.19)	0.37	(0.19)

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

Statement of comprehensive income
Years ended December 31
In thousands of Reais, unless otherwise stated

		Parent company		Consolidated	
	Note	2017	2016	2017	2016
Profit (loss) for the year		517,764	(216,800)	516,461	(216,800)
Other components of comprehensive income					
to be subsequently reclassified to the statement of income					
Operating hedge accounting	23 (d)	(123,108)	29,231	(123,108)	29,231
Interest in other comprehensive income of investees	23 (d)		44		44
		(123,108)	29,275	(123,108)	29,275
Total comprehensive income (loss) for the year		394,656	(187,525)	393,353	(187,525)
Comprehensive income (loss) attributable to the shareholders					
Comprehensive income (loss) attributable to the owners of the parent				394,656	(187,525)
Comprehensive income (loss) attributable to non-controlling interests				(1,303)	
				393,353	(187,525)

Companhia Brasileira de Alumínio

Statements of changes in equity
Years ended December 31
In thousands of Reais

		Attributable to owners of the parent							
			Profit reserves						
	Note	Share capital	Legal	Retention	Accumulated profit (deficit)	Carrying value adjustments	Total	Non-controlling interests	Total stockholders equity
At January 1, 2016		3,772,290			(296,709)	5,523	3,481,104		3,481,104
Total comprehensive income (loss) for the year									
Loss for the year					(216,800)		(216,800)		(216,800)
Other comprehensive income	23 (d)					29,275	29,275		29,275
					(216,800)	29,275	(187,525)		(187,525)
Total contributions by and distributions to stockholders									
Capital increase	23 (a)	627,386					627,386		627,386
		627,386					627,386		627,386
At December 31, 2016		4,399,676			(513,509)	34,798	3,920,965		3,920,965
Total comprehensive income (loss) for the year									
Profit (loss) for the year					517,764		517,764	(1,303)	516,461
Other comprehensive income	23 (d)				6,158	(129,266)	(123,108)		(123,108)
					523,922	(129,266)	394,656	(1,303)	393,353
Total contributions by and distributions to stockholders									
Capital increase	23 (a)	1,237,623					1,237,623		1,237,623
Non-controlling interests - Venda da participação na CBA Energia.	1.1 (e)							111,192	111,192
Legal reserve			518		(518)				
Dividends approved (R$ 0.002 per share)					(2,473)		(2,473)		(2,473)
Profit retention				7,422	(7,422)				
		1,237,623	518	7,422	(10,413)		1,235,150	111,192	1,346,342
At December 31, 2017		5,637,299	518	7,422		(94,468)	5,550,771	109,889	5,660,660

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

Companhia Brasileira de Alumínio

Statement of cash flow
Years ended December 31
In thousands of Reais

	Note	Parent company 2017	Parent company 2016	Consolidated 2017	Consolidated 2016
Cash flow from operating activities					
Profit before income tax and social contribution		452,981	(647,766)	502,085	(583,059)
Adjustments of items that do not represent changes in cash and cash equivalents					
Interest and monetary and foreign exchange variations		183,539	(195,012)	170,124	(190,687)
Equity in the results	16	(108,780)	(193,834)	(12,380)	(67,178)
Depreciation and amortization	17 and 18	283,938	339,803	318,197	374,481
Realization financial instruments – firm commitment	27	133,790	178,891	133,790	178,891
Recognition financial instruments – firm commitment	27	13,669	5,032	13,669	5,032
Realization financial instruments – firm commitment	27	37,020	(62,739)	37,020	(62,739)
Recognition financial instruments – firm commitment	27	87,353	10,383	87,353	10,383
Loss on sales of property, plant and equipment	27	1,050	3,383	1,050	3,383
Loss (gain) on sales of investments	27	(589,352)	24,119	(589,352)	24,119
Provision for impairment of assets	27	(43,740)	845,509	(43,740)	845,509
Provisions, net of reversals	12, 13 and 21	(17,067)	140,961	(16,157)	139,668
		434,401	448,730	601,659	677,803
Decrease (increase) in assets					
Financial investments		(71,748)	235,066	(117,662)	190,909
Trade receivables		(32,090)	70,158	(47,469)	137,111
Inventory		(63,623)	(30,719)	(54,775)	(37,218)
Taxes recoverable		54,955	89,934	48,881	88,622
Derivative financial instruments		45,338	(18,197)	45,338	(18,197)
Other receivables		(63,889)	(18,290)	(60,088)	(17,886)
Increase (decrease) in liabilities					
Trade payables		75,678	90,782	94,100	11,358
Confirming payable		37,318	(46,952)	37,318	(46,952)
Salaries and social charges		18,683	(920)	19,064	(1,021)
Taxes payable		1,511	2,386	2,267	(1,677)
Use of public assets		(12,108)	(9,082)	(6,356)	(12,239)
Derivative financial instruments		156,975	(33,617)	156,975	(33,617)
Other liabilities		(33,542)	(148,553)	(37,119)	(142,973)
Cash from operations		547,859	630,726	682,133	794,023
Interest paid		(185,486)	(191,617)	(189,063)	(206,341)
Income tax and social contribution				(27,321)	(56,999)
Net cash provided by operating activities		362,373	439,109	465,749	530,683
Cash flow from investment activities					
Purchases of property, plant and equipment	17 and 18	(212,546)	(140,286)	(216,602)	(144,718)
Net cash provided by incorporated companies			64		64
Proceeds from sale of property, plant and equipment and intangible assets		27,605	1,701	27,722	2,290
Proceeds from sale of investments		270,000		270,000	
Loss (gain) of investments		44,692	(2,599)		
Related parties		(122,813)		(122,813)	(5,699)
Dividends received		286,917	69,693	48,153	27,698
Net cash provided by (used in) investment activities		293,855	(71,427)	6,460	(120,365)
Cash flow from financing activities					
New borrowing	19 (c)	22,110	100,695	174,322	100,695
Repayment of borrowing	19 (c)	(231,380)	(253,971)	(310,433)	(302,630)
Dividends paid					36
Increase of interest of non-controlling stockholders				111,192	
Related parties		(505,372)	(254,419)	(505,476)	(248,650)
Net cash used in financing activities		(714,642)	(407,695)	(530,395)	(450,549)
Decrease in cash and cash equivalents		(58,414)	(40,013)	(58,186)	(40,231)
Net cash obtained from incorporation of companies			47,058		47,058
Cash and cash equivalents at the beginning of the year		76,605	69,560	77,040	70,213
Cash and cash equivalents at the end of the year		18,191	76,605	18,854	77,040
Main non-cash transactions					
Capital increase in Nazca Participações Ltda.			24,321		24,321
Capital increase - Merger of Votorantim Metais S.A.			627,386		627,386
Lieu of payment		1,237,623		1,237,623	
Capital increase		536,358		536,358	
Reviews of estimates in cash flows related to asset retirement		32,260	23,174	32,260	23,174

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

Statement of value added
Years ended December 31
In thousands of Reais

	Note	Parent company 2017	Parent company 2016	Consolidated 2017	Consolidated 2016
Revenue					
Sales of products and services (less sales returns and rebates)		5,204,736	4,705,492	5,468,674	5,021,043
Other operating income, net		317	6,341	317	6,341
Allowance for doubtful accounts, net of reversals	12 (c)	15,257	(21,238)	15,257	(20,137)
		5,220,310	4,690,595	5,484,248	5,007,247
Inputs acquired from third parties					
Raw materials and other production inputs		(2,794,913)	(2,987,869)	(2,782,494)	(2,995,398)
Materials, electric power, outsourced services and other		(229,212)	(233,978)	(248,451)	(246,233)
		(3,024,125)	(3,221,847)	(3,030,945)	(3,241,631)
Gross value added		2,196,185	1,468,748	2,453,303	1,765,616
Depreciation, amortization and depletion	17 and 18	(283,938)	(339,803)	(318,197)	(374,481)
Impairment of property, plant and equipment	27	43,740	(845,509)	43,740	(845,509)
Net value added generated		1,955,987	283,436	2,178,846	545,626
Value added received through transfer					
Equity in the results	16	108,780	193,834	12,380	67,178
Financial income and exchange gains		521,991	1,251,154	542,522	1,277,406
		630,771	1,444,988	554,902	1,344,584
Total value added to be distributed		2,586,758	1,728,424	2,733,748	1,890,210
Distribution of value added					
Personnel and charges	26				
Direct remuneration		348,789	320,625	356,556	328,015
Charges		193,183	188,486	196,934	191,923
Benefits		76,774	75,645	78,641	77,326
		618,746	584,756	632,131	597,264
Taxes and contributions					
Federal		456,266	453,330	569,119	551,785
State		232,463	219,039	236,585	223,952
Deferred taxes	20	(2,899)	(443,771)	(6,184)	(433,671)
		685,830	228,598	799,520	342,066
Third-party capital remuneration					
Financial expenses and exchange losses		732,622	1,097,296	752,438	1,131,734
Rentals		31,796	34,574	33,198	35,946
		764,418	1,131,870	785,636	1,167,680
Third-party capital remuneration					
Non-controlling interest				(1,303)	
Profit (loss) for the year		517,764	(216,800)	517,764	(216,800)
		517,764	(216,800)	516,461	(216,800)
Value added distributed		2,586,758	1,728,424	2,733,748	1,890,210

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

1 General information

Companhia Brasileira de Alumínio (the "Company" or "CBA") is a subsidiary of Votorantim S.A. ("VSA"), with its head office in São Paulo, State of São Paulo. It mainly extracts and processes bauxite ore in Brazil and produces and sells primary and semis aluminum products in the Brazilian and foreign markets, through a wide range of products, such as ingots, billets, rods, plates, coils, tiles, sheets and extruded products. The Company also, through Votorantim Energia, markets the surplus of electricity generation in the local market. Due to the spin off of Votorantim Metais S.A. ("VMSA"), from July 2016 the Company began to have control of nickel and electrolytic cobalt operations.

The Company is self-sufficient in the production of bauxite, which it extracts from its own reserves located in Poços de Caldas, Itamarati de Minas and Mirai in Minas Gerais, and the own unit of the Barro Alto mine (Goiás), managed and operated by a company independent of CBA.

The Company also has an interest in Mineração Rio do Norte S.A. (bauxite), in Trombetas, Pará, in Alunorte - Alumina do Norte S.A. (alumina), in Barcarena, Pará, in Metalex Ltda. (transformed), in Araçariguama, São Paulo, in CBA Participações Energia S.A. (energy Holding) in São Paulo, São Paulo, in Consórcio Canoas, in Canoas, Rio Grande do Sul, in Consórcio Empresarial Salto Pilão, in Ibirama, Santa Catarina and in Consórcio Machadinho Energética S.A., in Florianópolis, Santa Catarina.

The Company owns its own hydroelectric power plants and participates in consortia, enabling it to reduce the electrical power consumed during the primary alumina production process.

1.1 Main events that occurred in 2017

(a) Transfer of export prepayment

In February 2017, CBA transferred its Export Prepayments of US$ 100,000 (R$ 312,410) and US$ 290,000 (R$ 905,989) to Votorantim Metais Zinco S.A. with the consent of the counterparties, VM Holding S.A. and Votorantim GmbH, respectively, deducting funding costs of USD 931 (R$ 2,910). As a result of the transfer, CBA became a debtor of VMZ in the amount of R$ 1,215,489, which was liquidated on June 30, 2017 as detailed in Note (1.1 (c)).

(b) Capital increase

On June 30, 2017, the parent company Votorantim S.A. increased the capital of the Company in the amount of R$ 1,237,623, through the transfer of 25.80% of its stake in Votorantim Investimentos Latino-Americanos S.A. (VILA).

(c) Compensation and lieu of payment

On June 30, 2017, the related party balances between CBA and VMZ were offset, including prepayment debt in the amount of R$ 1,215,489 (Note 1.1 (a)) and other related party balances with VMZ in the amount of R$ 33,889. In consideration for this payment, the Company assigned its interest of 25.80% in VILA in the amount of R$ 1,237,623 (Note 1.1 (b)), as well as property, plant and equipment in the amount of R$ 9,487 and intangible assets in the amount of R$ 2,268. The net assets transferred were valued at book value.

(d) Capital increase and sale of the common shares of Pollarix

On June 30, 2017, the Company carried out a capital increase in the investee Pollarix SA in the amount of R$ 283,240 through the transfer of a 20.98% interest in the jointly-owned subsidiary Enercan - Campos Novos Energia SA After this transaction, the Company mantained to hold a 23.78% stake in Enercan - Campos Novos Energia SA, which continued to be proportionally consolidated.

Also on June 30, 2017, the Company sold to VMZ 100% of its common shares related to the investee Pollarix SA, which represented 33.33% of the total shares of this investee, for the amount of R$ 270,000, of which R$ 197,000 was paid in local currency on June 30, 2017 and the remaining balance was settled in the second half of 2017. This operation generated a net gain of R$ 168,011, recorded under "Other operating income (expenses), liquid ".

With the sale of the common shares to VMZ on June 30, 2017, the Company ceased to consolidate the investee Pollarix S.A., as it no longer hold control of this investee.

In September 2017, the Company sold to Votorantim Geração de Energia S.A. ("VGE") preferred shares of the investee Pollarix S.A., which represented 66.67% of the total invested, for the amount of R$ 420,000, which will be settled up to September 2018. This operation generated a net gain of R$ 210,202, recorded in "Other operating income (expenses) liquid ".

(e) Capital increase in the investee CBA Energia Participações S.A. (formerly called MSDC Participações S.A.)

In July 2017, the Company carried out a capital increase in the investee CBA Energia Participações S.A. in the amount of R$ 154,497, through the contribution of all of the fixed assets related to the Machadinho Consortium.

In September 2017, the Company increased the capital in the investee CBA Energia Participações S.A., in the amount of R$ 120,990, through contribution of the entire investment held (15%) in the investee Barra Grande Energética S.A. ("BAESA").

In December 2017, the investee CBA Energia Participações S.A. split its investment in CBA Machadinho Geração de Energia Ltda., in the amount of R $ 152,019, which is now a direct investment in the Company.

In December 2017, the Company carried out a capital increase in the investee CBA Energia Participações S.A., in the amount of R$ 130.764, through the delivery of a 23.78% stake in the jointly-owned subsidiary Enercan - Campos Novos Energia S.A. and dividends previously owed by Enercan in the amount of R$ 7.144.

In December 2017, the Company sold to Votorantim Geração de Energia S.A. ("VGE") 65% of preferred shares of the investee Pollarix S.A., which represented 43.33% of the total invested, for the amount of R$ 318,500. This operation generated a net gain of R$ 211,139, recorded in "Other operating income (expenses) liquid ".

(f) Settlement of export prepayment operations

In December 2017, the Company entered into a purchase agreement for export, in order to settle export prepayment agreements with Votorantim Finco GmbH, in the amount of R $ 231,629 (USD 70,000,000). Purchases and exports related to the agreement will be settled during the first half of 2018.

2 Presentation of the parent company and consolidated financial statement

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 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.

(a) Approval of the financial statements

The Board of Directors approved these consolidated financial statements for issue on March 6, 2018.

2.1 Consolidation

The Company consolidates all the entities in which it holds control, that is, when it is exposed or it is entitled to variable returns from its engagement with the investees and also to direct the meaningful activities of the investees.

The controlled companies included in the consolidation are described on Note 2.1 (c).

(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) 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.

In thousands of Reais, unless otherwise indicated

(c) Main companies included in the consolidated financial statements

		Ownership interest %		Capital interest %			
	Note	2017	2016	2017	2016	Headquarters	Main activities
Campos Novos Energia S.A.	1.1 (e)		44.76		44.76	Santa Catarina - Brazil	Electricity generation
Energética Barra Grande S.A.	1.1 (e)		15.00		15.00	Rio Grande do Sul -	Electricity generation
Metalex Ltda.		100.00	100.00	100.00	100.00	São Paulo - Brazil	Production of aluminium and its alloys in primary forms
CBA Energia Participações S.A.	1.1 (e)	57.88	100.00	33.33	100.00	São Paulo - Brazil	Participation in energy generation companies
CBA Machadinho Geração de Energia Ltda.	1.1 (e)	100.00		100.00		São Paulo - Brazil	Participation in energy generation companies
Pollarix S.A.	1.1 (d)		100.00		100.00	São Paulo - Brazil	Participation in energy generation companies
Exclusive financial investments funds							
Investments fund Pentágono CBA Multimercado - Crédito Privado		100.00	100.00	100.00	100.00	Brazil	Management of financial resources

2.2 Foreign currency translation

(a) Functional and presentation currency of the financial statements

The functional currency and presentation of the Company is the Brazilian Real (“R$”, “Real” or “Reais”).

(a) 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 operational hedges.

3 Changes in accounting policies and disclosures

(a) 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.

(i) CPC 48 / IFRS 9 - "Financial instruments: Recognition and measurement"

In July 2014, the IASB issued the final version of IFRS 9 - Financial Instruments, replacing IAS 39 - Financial Instruments: Recognition and Measurement. This new standard brings together the three aspects of accounting for financial instruments, as well as the classification and recognition of financial assets and liabilities.

Among the changes, the Company presents the following items:

Classification and measurement of financial assets: the classification of financial assets should depend on two criteria: the entity's business model for the management of its financial assets and the characteristics of the contractual cash flow of financial assets;

Impairment: The new standards introduced the expected loss approach.

Hedge Accounting: Hedge accounting requirements are closed and aligned with risk management and should be applied prospectively.

The adoption of the expected loss in relation to the incurred loss approach is likely to require an increase in the provision for commercial receivables, since the recognition of losses will be anticipated. The finance, risk and technology departments as well as the Administration are involved in the implementation process.

IFRS 9 is effective as of January 1, 2018. However, the Company plans to adopt this new standard only on the effective date of its entry into force. The estimated impact of the analysis was an increase in the provision for doubtful accounts in the amount of R$ 792, to be accounted for on January 1, 2018.

(ii) CPC 47 / IFRS 15 – “Revenue from contracts with customers”

In May 2014, the IASB issued IFRS 15, which replaces IAS 11 - (CPC 17) - Construction contracts, and IAS 18 - (CPC 30) - Revenues and corresponding interpretations. IRFS 15 presents the five-step model for customer contract revenue recognition. The new standard is based on the principle that revenue is recognized when the company transfers the benefits, risks and control of the goods and or services to the customer. This standard will come into effect as of January 1, 2018

The Company will adopt the new standard using the prospective adoption method as from January 1, 2018. During the year 2017, the evaluation related to the accounting effect of IFRS 15 was subject to changes resulting from a more detailed analysis of the contracts in force. It was concluded that there are no material impacts due to the adoption of the new standard.

(iii) IFRS 16 – “Leases”

(a) Main points introduced by the standard – effective on January 1, 2019

IFRS 16 establishes principles for the recognition, measurement, presentation and disclosure of leases for both the lessee and the lessor. The standard introduces a unique model for accounting for leases in the balance sheet for tenants where 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 short-term leases and low-value assets. The lessor's accounting remains similar to the current standard, that is, the lessors continue to classify the leases as financial or operating.

This standard replaces existing lease standards, including CPC 06 (IAS 17) - Leasing Operations and ICPC 03 (IFRIC 4, SIC 15 and SIC 27) - Complementary Aspects of Leasing Operations

(b) Impacts

The Company began evaluating the potential impact on its financial statements. This initial analysis identified the need to recognize new assets and liabilities for operating leases of machinery and equipment, real estate and land. In addition, the nature of the expenses related to these leases will be changed, since IFRS 16 replaces the line operating lease expense due to depreciation of the right of use and interest expense for the restatement of the lease liabilities.

The Company has not yet quantified the impact of the adoption of IFRS 16 on its assets and liabilities.

The Company will apply IFRS 16 initially on January 1, 2019 and expects to disclose the quantitative effect of the adoption and its transition approach prior to this date.

4 Critical accounting estimates and judgments

Based on assumptions, the Company makes estimates concerning the future. The resulting accounting estimates and judgments are continually reviewed and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Accounting estimates will seldom match the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are included in the respective notes.

5 Social and environmental risk management

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

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

6 Capital 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 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 proposals submitted to comply with the policies are discussed and approved by the Finance Committee, according to the governance structure described in the Financial Risks Management Policy.

In thousands of Reais, unless otherwise indicated

The following financial instruments may be used 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.

Since the Brazilian Real is the Company's functional currency, market risk management is focused on protecting cash flow in this currency and ensuring the Company's ability to settle its financial obligations and maintain adequate liquidity and indebtedness levels, as defined by Management.

		Parent company		Consolidated	
	Note	2017	2016	2017	2016
Assets in foreign currency					
Cash and cash equivalents	10	14,971	43,727	14,971	43,727
Derivative financial instruments	0	19,713	64,706	19,713	64,706
Trade receivables		49,585	37,338	49,585	37,338
		84,269	145,771	84,269	145,771
Liabilities in foreign currency					
Borrowing (i)	0	2,148,028	2,133,141	2,151,041	2,147,487
Derivative financial instruments	0	175,989	17,546	175,989	17,546
Trade payables		101,609	50,110	101,609	50,110
Related parties			1,552,692		1,552,692
		2,425,626	3,753,489	2,428,639	3,767,835
Net exposure		(2,341,357)	(3,607,718)	(2,344,370)	(3,622,064)

(i) Funding costs are not considered in this amount.

(ii) Cash flow and fair value interest rate risk

The Company's interest rate risk arises from long-term borrowing. Borrowing at variable rates exposes the Company to cash flow interest rate risk. Borrowing at fixed rates exposes the Company to fair value interest rate risk.

The Financial Risks Policy establishes guidelines and rules for mitigating risk of fluctuations in interest rates that have an impact on the cash flow of the Company and its business units. Based on the exposure to each interest rate index (mainly the Interbank Deposit Certificate ("CDI"), London Interbank Offered Rate ("LIBOR") and Long-Term Interest Rate ("TJLP")), the Cash Management prepares proposals for entering into hedge transactions and submits them to the recommendation of the Finance Committee and subsequent approval of the Board of Directors.

(iii) Commodity price risk

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

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

(iii.1) 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;;

(iii.2) 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;

(iii.3) Hedges for operating margin hedges intended to set the operating margin for a portion of the production of certain operating subsidiaries.

(b) Credit risk

Derivative financial instruments, time deposits, bank deposit certificates and repurchase agreements backed by debentures and federal government securities create exposure to counterparty and issuer credit risk. The Company adopts the policy of working with issuers that have been assessed by at least two of the following three rating agencies: Fitch, 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 9. 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 has been approved by the Finance Committee.

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

(c) Liquidity risk

Liquidity risk is managed in accordance with the Liquidity and Indebtedness Management Policy, aimed at ensuring that there are sufficient net funds to meet the Company's financial commitments within its maturity schedules, with no additional costs. The main method for the measurement and monitoring of liquidity is cash flow forecasting, with a minimum projection period of 12 months from the reference date.

In thousands of Reais, unless otherwise indicated

With regard to liquidity and financial indebtedness Management adopts comparable metrics provided by reputable global credit rating agencies for a stable BBB credit risk or equivalent.

The table below separates the Company's non-derivative financial liabilities and the main derivative financial assets and liabilities to be settled by the Company by maturity (the remaining period from the balance sheet up to the contractual maturity date). Derivative financial liabilities are included if their contractual maturities are essential to understanding the timing of cash flows. The amounts disclosed in the table represent the undiscounted cash flows, which include interest to be incurred, and, accordingly, do not reconcile directly with the amounts in the balance sheet for borrowing and the Use of Public Assets.

Consolidated

	Up to 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total
At December 31, 2017						
Borrowing	369,948	524,262	1,134,105	1,502,850		3,531,165
Derivative financial instruments	175,989					175,989
Trade payables	422,663					422,663
Confirming payable	38,433					38,433
Related parties	261,575	313,874				575,449
Use of public assets	42,103	91,907	103,593	318,284	863,145	1,419,032
Dividends payable	12,796					12,796
	1,323,507	930,043	1,237,698	1,821,134	863,145	6,175,527
At December 31, 2016						
Borrowing	452,328	602,215	1,152,770	1,603,100		3,810,413
Derivative financial instruments	18,837	177				19,014
Trade payables	328,563					328,563
Confirming payable	1,115					1,115
Related parties	346,436	1,444,137	58,945	634,461		2,483,979
Use of public assets	42,236	92,399	104,147	320,480	997,469	1,556,730
Dividends payable	10,371					10,371
	1,199,886	2,138,928	1,315,862	2,558,041	997,469	8,210,185

6.2 Derivative financial instruments and hedging activities

Accounting policy

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, in the case of adoption of hedge accounting, and if so, the nature of the item being hedged. The Company adopts the hedge accounting procedure and designates certain derivatives as either:

(a) *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 on sales of certain commodities combined with the sale of US Dollar forward contracts. There is also a hedge of a period of interest, in which the equalization of the periods between purchase of concentrate and sale of the final product of non-integrated plants is sought, in order to mitigate the exposure. 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 other operating income (expenses). The amounts recognized in equity are recorded in the statement of income upon the realization of the exports and/or sales referenced to the London Metal Exchange (“LME”) prices.

(b) *Fair value hedge*

With the objective of maintaining the flow of operating revenue pegged to LME prices, the Company enters into hedging transactions that 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)".

6.2.1 Derivatives contracted

The fair value of financial instruments that are not traded in active markets is determined through established pricing models. The Company uses its judgment to choose several methods and to establish assumptions that are based mainly on the market conditions existing at the date of the balance sheet:

All derivative transactions were carried out in the over-the-counter market.

Hedging program for sales of aluminum at a fixed price - hedging transactions that convert sales at fixed prices to floating prices in commercial transactions with customers interested in purchasing products at fixed prices. The purpose of this strategy is to maintain the revenue flow of the business units linked to the LME prices. These operations usually relate to purchases of aluminum for future settlement in the over-the-counter market.

Hedging program for mismatches of quotation periods - hedges of the different quotation periods between the purchases of certain inputs (metal concentrate) and sales of products arising from the processing of these inputs. These operations usually relate to purchases and sales of aluminum for future trading in the over-the-counter market.

Hedging program for the operating margins of metals - derivatives contracted to reduce the volatility of the cash flows from zinc, nickel and aluminum operations. With a view to ensuring a fixed operating margin in Reais for a portion of the production of metals, the mitigation of risks is carried out through the sale of forward contracts for each commodity, combined with the sale of US Dollar forward contracts.

Hedging program for foreign exchange exposure - hedging instruments entered into to adjust the foreign exchange exposure according to the limits defined by the Finance Committee. The mitigation of these risks is carried out through the purchase of US Dollar and Euro forward contracts.

Instruments to hedge Real-denominated debts - derivative financial instruments contracted to transform the fixed rates of Real-denominated debts into CDI floating rates. Risk mitigation is carried out by means of swaps. Changes in fair value are recognized in the statement of income.

In thousands of Reais, unless otherwise indicated

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

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

	Principal amount						Fair value		Parent company and consolidated 2017	2016
Program	**2017**	**2016**	**Unit**	**Purchase/ Sale**	**Average rate/FWD**	**Average period (days)**	**Current assets**	**Current liabilities**	**Total (net between assets and liabilities)**	**Total (net between assets and liabilities)**
Hedging for mismatches of quotation periods										
Aluminum forward	6,850	1,497	Metric ton	P/S		29	170	(389)	(219)	10
							170	(389)	(219)	10
Hedging for the operating margin of metals					1.722 US$/ton					
Aluminum forward	18,970	5,165	Metric ton	S	3,57 R$/US$	1	27	(21,887)	(21,860)	(1,939)
US Dollar forward	32,674	8,344	USD	S		1	8,951	(14)	8,937	5,604
							8,978	(21,901)	(12,923)	3,665
Hedging for debts										
Fixed rate in reais vs. CDI floating rate swaps		100,000	BRL							(1,041)
TJLP vs. CDI floating rate swaps	28,000	28,000	BRL mil		97% CDI	197	1,035		1,035	954
							1,035		1,035	(87)
							10,183	(22,290)	(12,107)	3,588

	Principal amount						Fair value			Parent company and consolidated 2017	2016
Program	**2017**	**2016**	**Unit**	**Purchase/ Sale**	**Average rate/FWD**	**Average period (days)**	**Current assets**	**Current liabilities**	**Non-current liabilities**	**Total (net between assets and liabilities)**	**Total (net between assets and liabilities)**
Hedge accounting - cash flow hedge											
Protection of Metal's operational result											
Aluminum forward	165,175	225,000	ton	S	2,019 US$/ton	198		(133,597)	(9,607)	(143,204)	(10,570)
US Dollar forward	333,501	379,200	USD	S	3,38 R$/US$	200	10,565	(9,353)	(1,142)	70	54,054
							10,565	(142,950)	(10,749)	(143,134)	43,484

In thousands of Reais, unless otherwise indicated

(b) Maturity profile

	Parent company and consolidated		
	Fair value per maturity		
Programs	**2018**	**2019**	**Total**
Hedging for mismatches of quotation period			
Aluminum forward	(219)		(219)
Hedging for the operating margin of metals			
Aluminum forward	(21,860)		(21,860)
US Dollar forward	8,937		8,937
	(12,923)		(12,923)
Hedging for debts			
TJLP vs. CDI floating rate swaps	1,035		1,035
	(12,107)		(12,107)
Hedge accounting - cash flow hedge			
Aluminum forward	(133,597)	(9,607)	(143,204)
US Dollar forward	1,212	(1,142)	70
	(132,385)	(10,749)	(143,134)
	(144,492)	(10,749)	(155,241)

In thousands of Reais, unless otherwise indicated

(c) Effect of derivative financial instruments on financial results and cash flow

Parent company and consolidated

		2017				2016			
Program	Unit	Principal amount	Fair value adjustment	Realized gain (loss)	Total	Principal amount	Fair value adjustment	Realized gain (loss)	Total
Hedging for mismatches of quotation period									
Aluminum forward	Metric ton	6,850	(229)	(2,826)	(3,055)	1,550	(48)	(2,794)	(2,842)
Hedging for the operating margin of metals									
Aluminum forward	Metric ton	18,970	(19,921)	(184,046)	(203,967)	5,808	497	10,138	10,635
US Dollar forward	USD	32,674	3,333	123,372	126,705	9,388	6,690	(14,305)	(7,615)
			(16,588)	(60,674)	(77,262)		7,187	(4,167)	3,020
Hedging for debts									
Fixed rate in reais vs. CDI floating rate swaps	BRL		1,041	(875)	166	128,000	(983)	(2,591)	(3,574)
TJLP vs. CDI floating rate swaps	BRL	28,000	81	(255)	(174)				
			(15,695)	(64,630)	(80,325)		6,156	(9,552)	(3,396)

6.3 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 in the following fair value measurement hierarchy:

- Prices quoted (unadjusted) in active markets for identical assets and liabilities (level 1).
- 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 2).
- Inputs for the assets or liabilities that are not based on observable market data (that is, unobservable inputs) (level 3).

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.

In thousands of Reais, unless otherwise indicated

			Parent company
	Fair value measure based on		2017
	Prices quoted in an active market	Valuation technique supported by prices	
	(Level 1)	(Level 2)	Fair value
Assets			
Cash and cash equivalents	18,191		18,191
Financial investments	766,761	155,651	922,412
Derivative financial instruments		20,748	20,748
Financial instruments - firm commitment		233,790	233,790
	784,952	410,189	1,195,141
Liabilities			
Borrowing	2,213,727	511,311	2,725,038
Derivative financial instruments		175,989	175,989
	2,213,727	687,300	2,901,027

			Parent company
	Fair value measure based on		2016
	Prices quoted in an active market	Valuation technique supported by prices	
	(Level 1)	(Level 2)	Fair value
Assets			
Cash and cash equivalents	44,076		44,076
Financial investments	698,130	68,246	766,376
Derivative financial instruments		66,086	66,086
Financial instruments - firm commitment		452,236	452,236
	742,206	586,568	1,328,774
Liabilities			
Borrowing	2,029,649	665,442	2,695,091
Derivative financial instruments		19,014	19,014
	2,029,649	684,456	2,714,105

In thousands of Reais, unless otherwise indicated

	Fair value measure based on		Consolidated 2017
	Prices quoted in an active market (Level 1)	Valuation technique supported by prices (Level 2)	Fair value
Assets			
Cash and cash equivalents	18,854		18,854
Financial investments	803,400	171,319	974,719
Derivative financial instruments		20,748	20,748
Financial instruments - firm commitment		233,790	233,790
	822,254	425,857	1,248,111
Liabilities			
Borrowing	2,213,727	676,086	2,889,813
Derivative financial instruments		175,989	175,989
	2,213,727	852,075	3,065,802

	Fair value measure based on		Consolidated 2016
	Prices quoted in an active market (Level 1)	Valuation technique supported by prices (Level 2)	Fair value
Assets			
Cash and cash equivalents	44,511		44,511
Financial investments	721,130	235,004	956,134
Derivative financial instruments		66,086	66,086
Financial instruments - firm commitment		452,236	452,236
	765,641	753,326	1,518,967
Liabilities			
Borrowing	2,029,649	800,818	2,830,467
Derivative financial instruments		19,014	19,014
	2,029,649	819,832	2,849,481

In thousands of Reais, unless otherwise indicated

6.3.1 Sensitivity analysis

Presented below is a sensitivity analysis of the main risk factors that affect the pricing of the outstanding financial instruments relating to cash and cash equivalents, financial investments, borrowing, and derivative financial instruments. The main risk factors are exposure to the fluctuations of the US Dollar exchanges rates, LIBOR and CDI interest rates, US Dollar coupons and commodity prices. The scenarios for these factors were prepared using market and specialized sources, following the Company's systems of governance.

The scenarios at December 31, 2017, are described below:

Scenario I - is based on the market forward curves and quotations at December 31, 2016, and represents a probable scenario in Management's opinion as at March 31, 2018.

Scenario II - considers a stress factor of + / – 25% applied to the market forward curves and quotations as at December 31, 2017.

Scenario III - considers a stress factor of + / – 50% applied to the market forward curves and quotations as at December 31, 2017.

															Parent company and consolidated
					Impacts on profit (loss)						Impacts on comprehensive income (loss)				
					Scenario I		Scenarios II & III				Scenario I	Scenarios II & III			
Risk factors	Cash and cash equivalents	Borrowing	Derivative financial instruments	Unit	Impact on curves for 6/30/2016	Results of Scenario I	-25%	-50%	+25%	+50%	Results of Scenario I	-25%	-50%	+25%	+50%
Foreign exchange rate															
USD	14,971	2,141,658	366,175	USD	-3.81%	81,964	537,191	1,074,382	(537,191)	(1,074,382)	46,904	307,367	614,734	(307,367)	(614,734)
Interest rate															
BRL - CDI	975,308	152,202	1,239,306	BRL	0 bps		(14,185)	(28,370)	14,185	28,370		8,696	17,639	(8,459)	(16,690)
USD - LIBOR			401,284	USD	-2 bps		4	8	(4)	(8)	110	2,477	4,971	(2,461)	(4,905)
US dollar coupon			366,175	USD	3 bps						166	(3,438)	(6,906)	3,409	6,789
Price - commodities															
Aluminum			190,995	ton	-0.05%	427	1,693	3,386	(1,693)	(3,386)	77,988	308,853	617,705	(308,853)	(617,705)
Firm commitment - Electric energy															
Purchase and sale contract			180,405	BRL			1,426	2,871	(1,407)	(2,794)					

(i) The balances presented do not reconcile with the explanatory notes of "Cash and cash equivalents", "Financial investments" and "Loans and financing", since the analysis carried out contemplated only the most significant currencies.

6.3.2 Capital management

The Company's objectives when managing capital are to safeguard its ability to continue as a going concern in order to consistently provide returns to stockholders and benefits for other stakeholders, as well as maintaining an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust its capital structure, the Company can make, or propose to the Board of Directors when their approval is required, adjustments to the amounts of dividends paid to stockholders, return capital to stockholders, issue new shares or sell assets.

7 Financial instruments by category

Accounting policy

The Company and its subsidiaries classify their financial assets depending on the purpose for which the financial assets were acquired. Management determines the classification of financial assets 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) Loan 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) *Impairment of financial assets carried at amortized cost*

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

An asset or a group of financial assets is deteriorated when its losses for impairment are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial asset recognition (a “loss event”) and that event (or events) has an impact on the future cash flows estimated of the financial assets or group of financial assets that may be estimated reliably.

In thousands of Reais, unless otherwise indicated

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.

Parent company

	Note	Loans and receivables	Assets held for trading	Total
December 31, 2017				
Assets as per balance sheet				
Cash and cash equivalents	10	18,191		18,191
Financial investments	11		922,412	922,412
Trade receivables	12	381,417		381,417
Financial instruments - firm commitment	15		233,790	233,790
Derivative financial instruments	6.2 (d)		20,748	20,748
Related parties	15	1,222,219		1,222,219
Dividends receivable	15	5,377		5,377
		1,627,204	1,176,950	2,804,154
December 31, 2016				
Assets as per balance sheet		816,426	1,284,698	2,101,124

Parent company

	Note	Liabilities at fair value through profit or loss	Other financial liabilities	Total
December 31, 2017				
Liabilities as per balance sheet				
Borrowing	19		2,653,192	2,653,192
Trade payables			451,818	451,818
Confirming payable			38,433	38,433
Derivative financial instruments	6.2 (d)	175,989		175,989
Dividends payable	15		12,796	12,796
Related parties	15		563,252	563,252
		175,989	3,719,491	3,895,480
December 31, 2016				
Liabilities as per balance sheet		19,014	5,525,881	5,544,895

In thousands of Reais, unless otherwise indicated

Consolidated

	Note	Loans and receivables	Assets held for trading	Total
December 31, 2017				
Assets as per balance sheet				
Cash and cash equivalents	10	18,854		18,854
Financial investments	11		974,719	974,719
Trade receivables	12	383,718		383,718
Financial instruments - firm commitment	15		233,790	233,790
Derivative financial instruments	6.2 (d)		20,748	20,748
Related parties	15	1,222,074		1,222,074
Dividends receivable	15	5,311		5,311
		1,629,957	1,229,257	2,859,214
December 31, 2016				
Assets as per balance sheet		788,097	1,474,456	2,262,553

Consolidated

	Note	Liabilities at fair value through profit or loss	Other financial liabilities	Total
December 31, 2017				
Liabilities as per balance sheet				
Borrowing	19		2,817,485	2,817,485
Trade payables			422,663	422,663
Confirming payable			38,433	38,433
Derivative financial instruments	6.2 (d)	175,989		175,989
Dividends payable	15		12,796	12,796
Related parties	15		563,035	563,035
		175,989	3,854,412	4,030,401
December 31, 2016				
Liabilities as per balance sheet		19,014	5,608,414	5,627,428

7.1.1 Offsetting of financial instruments

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

8 Financial instruments – firm commitment

Accounting policy

The Company is authorized to commercialize energy in both the free and regulatory markets.

Part of these transactions is carried out under contracts that have been entered into and continue to be performed for the purpose of receiving or delivering energy for own use, according to the production demands of the Company and, therefore, do not meet the definition of a financial instrument.

Another portion of these transactions refers to the purchase and sale of surplus energy, not used in the Group's production process and which is, therefore, sold in an active market and meets the definition of a financial instrument because such instruments are settled in energy readily convertible into cash. These contracts are accounted for as derivatives pursuant to 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 re-measured at fair value at the end of the reporting period.

The fair value of such derivatives is estimated partly based on price quotations published in an active market, to the extent that observable market inputs exist, and partly by using valuation techniques, the inputs of which include data that is not based on or derived from |observable market inputs: (i) prices set in purchase and sale transactions, (ii) risk margin in the supply and (iii) market price projected in the availability period. Whenever the fair value at the initial recognition of these contracts differs from the transaction price a fair value gain or a fair value loss arises.

In thousands of Reais, unless otherwise indicated

9 Credit quality of financial assets

The table below summarizes the credit quality of issuers and counterparties in transactions involving cash and cash equivalents, financial investments and derivatives:

	Parent company						Consolidated					
	2017			2016			2017			2016		
	Local rating	Global rating	Total	Local rating	Global rating	Total	Local rating	Global rating	Total	Local rating	Global rating	Total
Cash and cash equivalents												
AA+	3,098		3,098				3,701		3,701			
AA-	45		45	239		239	100		100	665		665
A+	4		4	32,554		32,554	4		4	32,554		32,554
A-				6		6				6		6
BB				7		7				15		15
No rating (i)	73	14,971	15,044	72	43,727	43,799	78	14,971	15,049	73	43,727	43,800
	3,220	14,971	18,191	32,878	43,727	76,605	3,883	14,971	18,854	33,313	43,727	77,040
Financial investments												
AA+	7,198		7,198				45,955		45,955			
A+										47822		47822
AA-	860,006		860,006	756,181		756,181	873,556		873,556	875,848		875,848
BB										22,270		22,270
No rating (ii)	55,208		55,208	10,195		10,195	55,208		55,208	10,194		10,194
	922,412		922,412	766,376		766,376	974,719		974,719	956,134		956,134
Derivative financial instruments												
AA+	6,900		6,900				6,900		6,900			
AA-	13,729	19	13,748	38,927		38,927	13,729	19	13,748	38,927		38,927
A+		98	98	5,197	289	5,486		98	98	5,197	289	5,486
A		2	2		3,974	3,974		2	2		3,974	3,974
A-				1,380	16,319	17,699				1,380	16,319	17,699
	20,629	119	20,748	45,504	20,582	66,086	20,629	119	20,748	45,504	20,582	66,086
	946,261	15,090	961,351	844,758	64,309	909,067	999,231	15,090	1,014,321	1,034,951	64,309	1,099,260

The local and global ratings were obtained from ratings agencies (Standard&Poor's, Moody's and Fitch). The Company considered the ratings of S&P and Fitch for presentation purposes.

(i) Refers mainly to amounts invested in an overseas bank that has no rating with rating agencies.

(ii) Refers mainly to the Credit Right Investments Fund ("FIDC") exclusive of the Votorantim Group that has no rating with rating agencies.

In thousands of Reais, unless otherwise indicated

10 Cash and cash equivalents

Accounting policy

Cash and cash equivalents include cash on hand, deposits with banks and other short-term highly liquid investments with original maturities of three months or less, which are readily convertible into a known amount of cash and subject to immaterial risk of change in value.

	Parent company		Consolidated	
	2017	2016	2017	2016
Local currency				
Cash and banks	3,220	349	3,883	784
Repurchase agreements		32,529		32,529
	3,220	32,878	3,883	33,313
Foreign currency				
Cash and banks	14,971	43,727	14,971	43,727
	18,191	76,605	18,854	77,040

Investments in local currency comprise government and financial institutional bonds, indexed to the interbank deposit rate. Investments in foreign currency are mainly composed of fixed income financial instruments (time deposits).

11 Financial investments

	Parent company		Consolidated	
	2017	2016	2017	2016
Held for trading				
Investment fund quotas (i)	150,671	122,031	182,800	157,351
Repurchase agreements - Federal securities	54,374	144,829	54,374	144,829
Repurchase agreements - Private securities	93,246		93,246	
Bank Deposit Certificate ("CDB")	634		14,924	132,168
Credit Rights Investment Fund ("FIDC")	55,144	24,982	55,144	24,982
Financial Treasury Bills ("LFT")	568,279	474,470	568,279	474,470
	922,348	766,312	968,767	933,800
Held to maturity				
Bank Deposit Certificate ("CDB")				22,270
Financial Treasury Bills ("LFT")			5,888	
Others	64	64	64	64
	922,412	766,376	974,719	956,134
Current	922,348	766,312	968,767	933,800
Non-current	64	64	5,952	22,334
	922,412	766,376	974,719	956,134

The financial investments have, for the most part, immediate liquidity. Investments in local currency comprise government and financial institutional bonds, indexed to the interbank deposit rate. Foreign currency-denominated investments consist mainly of fixed-income financial instruments in local currency (time deposits).

In thousands of Reais, unless otherwise indicated

(i) The Company has investment fund quotas in an exclusive fund of Votorantim Group:

	Parent company		Consolidated	
	2017	2016	12/31/2017	12/31/2016
Financial investments				
Repurchase agreements - Federal securities	142,958	77,692	173,466	100,366
Financial Treasury Bills ("LFT")	1,150	1,139	1,393	1,465
Repurchase agreements	6,563	26,573	7,941	34,045
Credit Rights Investment Fund ("FIDC")		5		7
Bank Deposit Certificate ("CDB")		16,622		21,468
	150,671	122,031	182,800	157,351

12 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

	Parent company		Consolidated	
	2017	2016	12/31/2017	12/31/2016
Domestic	241,531	198,787	224,104	209,296
Foreign	49,473	37,226	49,473	37,226
Related parties (Note 15)	125,789	148,690	145,517	147,279
	416,793	384,703	419,094	393,801
Impairment of trade receivables	(35,376)	(50,633)	(35,376)	(50,633)
	381,417	334,070	383,718	343,168

(b) Breakdown by currency

	Parent company		Consolidated	
	2017	2016	2017	2016
Reais	331,832	296,732	334,133	305,830
US Dollar	49,585	37,338	49,585	37,338
	381,417	334,070	383,718	343,168

(c) Changes in estimated loss for doubtful accounts

The estimated loss for doubtful accounts is recorded in an amount considered sufficient to cover probable losses in its realization. The accounting policy to establish the estimated loss requires the individual analysis of the invoices of defaulting clients in relation to the collection measures adopted by the responsible department and, according to the stage of collection, the amount of provision to be constituted is estimated.

In thousands of Reais, unless otherwise indicated

	Parent company		Consolidated	
	2017	2016	2017	2016
At the beginning of the year	(50,633)	(26,936)	(50,633)	(28,037)
Additions, net of reversals	15,085	(21,238)	15,085	(20,137)
VMSA incorporation		(2,459)		(2,459)
Decrease in provision for impairment of trade receivables	172		172	
At the end of the year	(35,376)	(50,633)	(35,376)	(50,633)

The constitution of the provision for the impairment of trade receivables was recorded in the income for the year. The values registered in the provision account are generally written off when deemed uncollectible.

13 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.

Net realizable value is the estimated selling price in the ordinary course of business, less 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 verification. Inventory adjustments are recorded under “Cost of goods sold and services rendered”.

(a) Breakdown

	Parent company		Consolidated	
	2017	2016	2017	2016
Finished products	198,596	190,534	204,846	192,003
Semi-finished products	341,060	292,422	341,515	293,221
Raw materials	26,116	38,337	39,779	65,284
Auxiliary and consumption materials	88,752	109,364	89,074	109,693
Imports in transit	38,769	5,485	38,769	5,485
Other	6,484	12	6,525	47
Provision for losses (i)	(60,922)	(61,239)	(60,922)	(61,239)
	638,855	574,915	659,586	604,494

The Company had no inventory pledged as collateral for any of its liabilities

(i) Mainly refers to the obsolescence of inventory the value of which has a limited expectation of realization.

(b) Changes in the provision for inventory losses

	Parent company and consolidated					
					2017	2016
	Finished products	Semi-finished products	Raw materials	Auxiliary materials	Total	Total
At the beginning of the year	(11,139)	(19,348)	(2,535)	(28,217)	(61,239)	(38,141)
Additions net of reversals	1,063	(2,055)	909	400	317	(2,115)
VMSA incorporation						(20,983)
At the end of the year	(10,076)	(21,403)	(1,626)	(27,817)	(60,922)	(61,239)

In thousands of Reais, unless otherwise indicated

14 Taxes recoverable

(a) Breakdown

	Parent company		Consolidated	
	2017	2016	2017	2016
Income tax and social contribution	395,408	412,780	395,516	413,354
Value-added Tax on Sales and Services (ICMS)	380,317	377,121	381,528	377,376
Social Contribution on Revenue (COFINS)	144,080	136,765	144,952	137,237
Corporate Income Tax (IRPJ)/Social Contribution on Net Income (CSLL) tax credit - Plano Verão (i)		50,671		50,671
ICMS on property, plant and equipment	17,792	19,622	17,792	19,622
Social Integration Program (PIS)	31,373	26,480	31,562	26,583
Others	25,972	26,458	28,779	27,059
	994,942	1,049,897	1,000,129	1,051,902
Current	428,568	322,186	433,698	324,045
Non-current	566,374	727,711	566,431	727,857
	994,942	1,049,897	1,000,129	1,051,902

(i) On March 23, 2016, the Company obtained the approval of the tax credit habilitation application recognized by the court's final decision, concerning the recognition of the index applicable to the restatement of the financial statements of the base year 1989, for the purpose of calculating the basis of the calculation of IRPJ and CSLL – "Plano Verão". This credit was compensated with tax debts of the company under the management of the Internal Revenue Service of Brazil.

In thousands of Reais, unless otherwise indicated

15 Related parties

Accounting policy

Transactions with related parties are carried out by the Company under strictly commutative conditions, observing the usual market prices and conditions and, therefore, do not generate any undue benefit to its counterparties or losses to the Company. In the normal course of operations, the Company enters into agreements with related parties (affiliates, joint ventures and shareholders) regarding the purchase and sale of products and services, loans, leasing of goods, sale of raw materials and services.

(a) Parent company

													Statement of operations					
	Trade receivables		Dividends receivable		Current and non-current assets		Trade payables		Current and non-current liabilities		Dividends payable		Sales		Purchase		Finance income and costs	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Parent company																		
Votorantim S.A. (i)	4,331	3,837			357,859	357,859	1,371	1,300	75,090	75,090	12,717	10,246				5		
Subsidiaries																		
BAESA - Energética Barra Grande S.A.			66	65			11,378	3,203	152	99			11,429	4,684				
ENERCAN - Campos Novos Energia S.A.				37,652			25,197	45,489					95,810	88,170				
Metalex Ltda.	7,049														247,690	89,331	(2,841)	
Associates																		
Mineração Rio do Norte S.A.			5,311	6,713														
Votener - Votorantim Comercializadora de Energia Ltda. (ii)	111,874	93,902			233,790	452,237	76,334	75,134	484,563	688,242			940,129	639,162	1,109,878	838,718	(90,625)	(90,625)
Votorantim Cimentos S.A. (iii)	813	214			122,813				3	3			1,626	1,082	3,257	1,361		
Votorantim Energia Ltda.		670			1,499	1,499								2,281				
Votorantim Finco GmbH (iv)										282,429								(3,486)
Votorantim Geração de Energia (v)					738,500													
Votorantim GmbH (vi)	112	112								942,240							(10,707)	(15,447)
Nexa Resources S.A. (vi)										328,023							(811)	(4,288)
Nexa Recursos Minerais S.A. (iv)	684	45,127				373	576	35,437	5	5				158	135,073	68,381		
Votorantim Siderurgia S.A.		2,749																
Others	926	2,079			1,548	1,589	1,501	46	3,439	1,871	79	77		68	278	1,152		
	125,789	148,690	5,377	44,430	1,456,009	813,557	116,357	160,609	563,252	2,318,002	12,796	10,323	1,048,994	735,605	1,496,176	998,948	(104,984)	(113,846)
Current	125,789	148,690	5,377	44,430	114,885	161,020	116,357	160,609	249,378	221,019	12,796	10,323						
Non-current					1,341,124	652,537			313,874	2,096,983								
	125,789	148,690	5,377	44,430	1,456,009	813,557	116,357	160,609	563,252	2,318,002	12,796	10,323						

In thousands of Reais, unless otherwise indicated

(b) Consolidated

	Trade receivables		Dividends receivable		Current and non-current assets		Trade payables		Current and non-current liabilities		Dividends payable		Statement of operations: Sales		Purchase		Finance income and costs	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Parent company																		
Votorantim S.A. (i)	4,331	3,837			357,859	357,859	1,371	1,300	75,090	75,090	12,717	10,246						
Associates																		
Mineração Rio do Norte S.A.			5,311	6,713														
Votener - Votorantim Comercializadora de Energia Ltda. (ii)	111,874	93,902			233,790	452,237	76,334	75,134	484,563	688,242			940,129	411,616	1,109,878	838,718	(90,625)	(90,625)
Votorantim Cimentos S.A. (iii)	813	214			122,813				3	3			1,626	1,082	3,257	136		
Votorantim Energia Ltda.					1,499	1,499								2,281				
Votorantim Finco GmbH (iv)										282,429								(3,486)
Votorantim Geração de Energia (v)					738,500													
Nexa Resources S.A. (vi)										328,023							(811)	(4,288)
Votorantim GmbH (vi)	112	112								942,240							(10,707)	(15,447)
Nexa Recursos Minerais S.A.	26,877	45,127				373	576	35,437	5	5				158	135,073	31,302		
Votorantim Siderurgia S.A.		2,749														682		
Others	1,510	1,338			1,403	1,444	1,502	203	3,374	1,808	79	125		126	278	7,164		
	145,517	147,279	5,311	6,713	1,455,864	813,412	79,783	112,074	563,035	2,317,840	12,796	10,371	941,755	415,263	1,248,486	878,002	(102,143)	(113,846)
Current	145,517	147,279	5,311	6,713	114,885	161,020	79,783	112,074	249,161	220,857	12,796	10,371						
Non-current					1,340,979	652,392			313,874	2,096,983								
	145,517	147,279	5,311	6,713	1,455,864	813,412	79,783	112,074	563,035	2,317,840	12,796	10,371						

(i) Refers to the balance arising from the merger of VMSA, substantially related to the accounts receivable originating from the sale of deferred tax on tax losses. This tax was used by related parties to make payment to the Tax Recovery Program ("REFIS").

(ii) Current and non-current liabilities relate to the advance receipt, in 2014 and 2015, of the rights originating from the free ambient commercialization of electric energy contracts. The sales and purchases relate to sales of own and/or third parties' energy, where Votener acts as the ultimate commercialization vehicle in the regulated market. Financial expenses relate to interest to appropriate the power supply sales credit assignment operation by December 2019, and interest is recognized pro-rata as income over the term of the contract.

(iii) Refers to the sale of tax losses on income tax and social contribution for the payment of tax debts through REFIS by the related company. The realization will be made according to the approval of the credit by the Federal Revenue.

(iv) Export prepayment settled, as detailed in Note 1.1 (f).

(v) Sale of the preferred shares in relation to the investee Pollarix S.A., in the percentage of 66.67%, as detailed in Note 1.1 (d) and sale of the preferred shares in relation to the investee CBA Energia Participações S.A., in the percentage of 43.33%, as detailed in Note 1.1 (f).

(vi) Transfer export prepayments, in which the Company received the anticipation of receivables in the transactions brokered by Nexa Resources S.A. and Votorantim GmbH. In February 2017, the prepayments were transferred to NEXA BR and in June 2017, the settlements of the balances of related parties occurred, as detailed in Note 1.1 (a).

In thousands of Reais, unless otherwise indicated

(c) Guarantees of the indebtedness of the Company and its consolidated entities granted by related parties

Instrument	Guarantor	2017	2016
BNDES	Hejoassu S.A./VSA	408,923	500,189
Development promotion agency BRL	VSA (100%)	42,350	48,701
Eurobonds - USD (Voto 21)	VSA (100%) e VCSA (50%)	806,781	794,855
Eurobonds - USD (Voto 24)	VSA (100%)	1,325,470	1,305,876
		2,583,523	2,649,621

(d) Guarantees of the indebtedness of related parties granted by the Company and its subsidiaries

				2017		2016	
Instrument	Debtor	Guarantor	Percentage guaranteed by the Company	Debt	Amount guaranteed	Debt	Amount guaranteed
Eurobonds - USD (Voto 19)	VSA	VSA (100%), VCSA (50%) e CBA (50%)	50%	695,272	347,636	684,994	342,497

16 Investments

Accounting policy

The Company's investments in entities accounted for using the equity method comprise its interests in affiliates and 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.

Such investments are initially recognized at cost, which includes transaction costs. After initial recognition, the financial statements include the Company's interest in the net profit or loss for the year and other comprehensive income of the investee until the date when significant influence or joint control ceases to exist. In the Company's individual financial statements, investments in subsidiaries are also accounted for using this method

In thousands of Reais, unless otherwise indicated

(a) Breakdown

Parent company

	Information on investees at December 31, 2017				Equity in the results		Investment balance	
	Equity	Profit (loss) for the quarter	Voting ownership interest and total (%)	Voting ownership interest and total (%)	2017	2016	2017	2016
Investments valued under the equity method								
Subsidiaries								
Metalex Ltda.	70,732	23,746	100.00	100.00	23,746	25,844	70,732	72,986
Nazca Participações Ltda.						(1,368)		
CBA Energia Participações S.A.	260,899	(1,282)	57.88	33.33	(181)	15	151,010	1,008
CBA Machadinho Geração de Energia Ltda.	151,431	(3,586)	100.00	100.00	(588)		151,431	
Associates								
Alunorte - Alumina do Norte S.A.	4,462,348	57,819	3.03	3.03	1,754	24,221	135,405	150,284
Mineração Rio do Norte S.A.	832,131	106,339	10.00	10.00	10,634	42,957	83,213	105,168
Others					(7)		45	1,670
Joint operations								
ENERCAN - Campos Novos Energia S.A.					69,648	96,517		535,025
BAESA - Energética Barra Grande S.A.					3,774	5,648		110,605
Goodwill								
Metalex Ltda.							49,430	49,430
ENERCAN - Campos Novos Energia S.A.								57,408
BAESA - Energética Barra Grande S.A.								6,612
Pollarix S.A.								1,599
					108,780	193,834	641,266	1,091,795

Consolidated

	Information on investees at December 31, 2017				Equity in the results		Investment balance	
	Equity	Profit for the quarter	Voting ownership interest and total (%)	Voting ownership interest and total (%)	2017	2016	2017	2016
Investments valued under the equity method								
Subsidiaries								
Alunorte - Alumina do Norte S.A.	4,462,348	57,819	3.03	3.03	1,754	24,221	135,405	150,284
Mineração Rio do Norte S.A.	832,131	106,339	10.00	10.00	10,634	42,957	83,213	105,168
Others					(8)		77	1,724
					12,380	67,178	218,695	257,176

In thousands of Reais, unless otherwise indicated

(b) Information on investees

The Company's interest in the results of the direct and indirect subsidiaries, as well as the total of its assets, liabilities, equity, operating results and income for the year, are presented below:

2017

	Percentual total	Voting ownership interest and total (%)	Current Assets	Non-Current Assets	Current Liabilities	Non-current liabilities	Equity	Net revenue	Operating profit	Finance income (cost)	Profit for the year
Subsidiaries											
Metalex Ltda.	100.00	100.00	63,182.00	33,193.00	25,213.00	430.00	70,732.00	291,575.00	36,408.00	347.00	23,746.00
CBA Energia Participações S.A.	57.88	33.33	10,866	250,033			260,899		(11)	(75)	(1,282)
CBA Machadinho Geração de Energia Ltda.	100.00	100.00	100	151,331			151,431		(3,592)	(6)	(3,586)
Associates											
Alunorte - Alumina do Norte S.A.	3.03	3.03	8,234,276	-	2,296,091	1,475,837	4,462,348	5,542,769	201,153	160,775	57,819
Mineração Rio do Norte S.A.	10.00	10.00	399,315	2,390,302	726,288	1,231,198	832,131	1,163,599	196,850	71,930	106,339

2016

	Percentual total	Voting ownership interest and total (%)	Current Assets	Non-Current Assets	Current Liabilities	Non-current liabilities	Equity	Net revenue	Operating profit	Finance income (cost)	Profit for the year
Subsidiaries											
Metalex Ltda.	100	100	72,284	31,598	30,409	487	72,986	194,451	35,445	3,619	25,844
CBA Energia Participações S.A.	100.00	100.00	1,014		6		1,008		6	12	15
Pollarix S.A.	100.00	100.00	1				1				
Associates											
Alunorte - Alumina do Norte S.A.	3.03	3.03	1,325,262	6,776,994	1,814,134	1,335,431	4,952,691	5,699,539	787,203	373,590	798,221
Mineração Rio do Norte S.A.	10.00	10.00	276,957	1,980,396	567,637	638,034	1,051,682	1,352,463	471,989	36,797	429,565
Joint operations											
ENERCAN - Campos Novos Energia S.A.	44.76	44.76	405,874	1,182,199	196,760	196,069	1,251,808	511,404	332,859	(8,759)	238,162
BAESA - Energética Barra Grande S.A.	15.00	15.00	54,703	1,150,996	116,192	352,142	737,365	243,633	108,667	(51,516)	37,652

In thousands of Reais, unless otherwise indicated

(c) Changes in investments

	Parent company		Consolidated	
	2017	**2016**	**2017**	**2016**
At the beginning of the year	1,091,795	825,092	257,176	221,215
Equity in the results	108,780	193,834	12,380	67,178
Investment acquisition (Note 1.1 (e))	565,414	24,321		
Low by investment sale (Note 1.1 (d) and 1.1 (e))	(419,148)			
Low by investment acquisition (Note 1.1 (e))	(403,773)			
Dividends received	(257,481)	(84,073)	(49,224)	(32,754)
Loss in capital increase in investee	(44,692)			
Increase of interest - Enercan		151,511		
Incorporation - Nazca		1,165		
Loss in capital increase in investee with negative equity		(24,119)		
Investment acquisition		2,599		
Others	371	1,465	(1,637)	1,537
At the end of the year	641,266	1,091,795	218,695	257,176

17 Property, plant and equipment

Accounting policy

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 proceeds with the carrying amount and are recognized within "Other operating income, net" in the statement of income.

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

The recoverability of the assets that are used in the Company's activities is evaluated whenever events or changes in circumstances indicate that the carrying amount 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.

In 2017, the Company based on qualitative analyzes did not identify any indications of impairment.

In thousands of Reais, unless otherwise indicated

(a) Breakdown and changes

									Parent company	
									2017	2016
	Land and improvements	Buildings and constructions	Machinery, equipment and facilities	Vehicles	Furniture and fittings	Construction in progress	ARO (i)	Other	Total	Total
At the beginning of the year										
Cost	104,967	2,425,991	5,831,035	114,424	26,730	254,690	103,135	327,105	9,188,077	8,228,217
Accumulated depreciation	(1,781)	(832,028)	(3,468,218)	(102,798)	(15,041)		(66,576)	(281,281)	(4,767,723)	(3,703,753)
Net balance	103,186	1,593,963	2,362,817	11,626	11,689	254,690	36,559	45,824	4,420,354	4,524,464
Purchases		1,506	19,552	1,248	9	190,218			212,533	140,256
Disposals	(220)	(595)	(27,710)	(130)					(28,655)	(5,085)
Depreciation		(55,339)	(199,305)	(4,421)	(2,154)		(7,988)	(253)	(269,460)	(326,301)
Lieu in payment (Note 1.1(c))			(5,548)	(859)	(936)	(2,144)			(9,487)	
Increase of assets (note 1.1 (e))	(5,324)	(49,985)	(96,566)	(2,622)					(154,497)	
VMSA incorporation										725,877
Nazca incorporation										381
Reversal (provision) for impairment of fixed assets	(1,163)	72,891	7,086	223	(670)	(5,940)		(549)	71,878	(671,824)
Revision of cash flow							32,260		32,260	22,542
Transfers	220	15,478	48,039	1,132	1,430	(70,505)	139	533	(3,534)	10,044
At the end of the year	96,699	1,577,919	2,108,365	6,197	9,368	366,319	60,970	45,555	4,271,392	4,420,354
Cost	98,480	2,449,228	5,716,429	106,379	25,374	366,319	135,395	326,648	9,224,252	9,208,587
Accumulated depreciation	(1,781)	(871,309)	(3,608,064)	(100,182)	(16,006)		(74,425)	(281,093)	(4,952,860)	(4,788,233)
Net balance at the end of the year	96,699	1,577,919	2,108,365	6,197	9,368	366,319	60,970	45,555	4,271,392	4,420,354
Annual average depreciation rate - %		2	4	18	10		6	1		

In thousands of Reais, unless otherwise indicated

									Consolidated	
									2017	2016
	Land and improvements	Buildings and constructions	Machinery, equipment and facilities	Vehicles	Furniture and fittings	Construction in progress	ARO (i)	Other	Total	Total
At the beginning of the year										
Cost	115,710	3,028,435	6,142,328	114,495	27,165	256,689	103,135	327,108	10,115,065	8,979,902
Accumulated depreciation	(2,865)	(1,003,850)	(3,572,531)	(102,810)	(15,341)		(66,576)	(281,281)	(5,045,254)	(3,901,565)
Net balance	112,845	2,024,585	2,569,797	11,685	11,824	256,689	36,559	45,827	5,069,811	5,078,337
Purchases		1,701	19,639	1,249	6	193,994			216,589	143,089
Disposals	(220)	(595)	(27,827)	(130)					(28,772)	(5,673)
Depreciation	(116)	(76,114)	(211,635)	(4,430)	(2,171)		(7,988)	(253)	(302,707)	(359,325)
Lieu of payment (Note 1.1(c))			(5,548)	(859)	(936)	(2,144)			(9,487)	
Participation of joint operation excluded from consolidation (ii)	(1,267)	(123,002)	(90,465)	(2,643)	(24)	2,341			(215,060)	
Reversal (provision) for impairment of fixed assets	(1,163)	72,891	7,086	223	(670)	(5,940)		(549)	71,878	(671,824)
VMSA incorporation										725,877
Nazca incorporation										381
Ownership interest increase - Enercan										126,378
Revision of cash flow							32,260		32,260	22,542
Transfers	221	17,135	52,693	1,138	1,430	(76,820)	139	530	(3,534)	10,029
At the end of the year	110,300	1,916,601	2,313,740	6,233	9,459	368,120	60,970	45,555	4,830,978	5,069,811
Cost	112,737	2,934,356	6,026,737	106,430	25,707	368,120	135,395	326,648	10,036,130	10,135,575
Accumulated depreciation	(2,437)	(1,017,755)	(3,712,997)	(100,197)	(16,248)		(74,425)	(281,093)	(5,205,152)	(5,065,764)
Net balance at the end of the year	110,300	1,916,601	2,313,740	6,233	9,459	368,120	60,970	45,555	4,830,978	5,069,811
Annual average depreciation rate - %		2	4	18	10		6	1		

(i) *Asset Retirement Obligation*

(ii) Refers to the exclusion of 20.98% of the proportionate consolidated stake of Campos Novos Energia S.A., which was contributed to the subsidiary Pollarix S.A., as described in Note 1.1 (d).

In thousands of Reais, unless otherwise indicated

(b) Constrution in progress

The balance of construction in progress consisted mainly of the expansion and optimization projects of the Company's industrial units, as follows::

						Consolidated
			2017			2016
	Gross balance	Provision for asset impairment	Net balance	Gross balance	Provision for asset impairment	Net balance
Ferro Níquel Project	569,605	(569,605)		569,605	(569,605)	
Bauxita Rondon Project	110,916		110,916	107,565		107,565
Furnace of calcined	92,096	(92,096)		92,096	(86,759)	5,337
Renovation of furnace	74,984	(441)	74,543	26,993	(11,468)	15,525
Tijuco Alto Project	52,374	(52,374)		52,313	(52,313)	
Revitalization and adaptation of plant	50,952		50,952	39,208		39,208
Renovation of furnace	37,924	(12,587)	25,337	35,646	(12,595)	23,051
Modernization of Automation System	32,221		32,221	25,404		25,404
Plastic Transformation and Casting Projects	25,781		25,781	19,385		19,385
Furnace Room Projects	17,760		17,760	15,114		15,114
Others	55,750	(25,140)	30,610	58,152	(52,052)	6,100
	1,120,363	(752,243)	368,120	1,041,481	(784,792)	256,689

The balances above are presented net of provision for impairment. The Company assesses its assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

Halted projects are continuously assessed, and if there is any indication of impairment, provision is recognized. As regards the remaining balance presented above, which was not provided for as an impairment loss, the Company believes that it will resume the project and/or use this asset in other production lines.

During the year, borrowing charges capitalized as part of construction in progress totaled R$ 8.891 (December 31, 2016 – R$ 8.702). The capitalization rate used was 0.53% per month (December 31, 2016 – 0.52% per month).

18 Intangible assets

Accounting policy

18.1 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 “Intangible assets” in the consolidated financial statements. Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

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

18.2 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.

18.3 Expenses with mineral studies and research

Expenses with mineral studies and research are considered as operating expenses until the economic viability of the mineral exploration of a certain field is effectively proven. From this evidence, the expenses incurred begin to be capitalized as the cost of mine development.

18.4 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).

Costs associated with maintaining computer software programs are recognized as an expense as incurred.

18.5 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 using the effective interest method and reduced by the payments contracted.

18.6 *Impairment* of non-financial assets

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

Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized when the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value-in-use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (CGUs). Non-financial assets other than goodwill that are adjusted due to impairment are subsequently reviewed for possible reversal of the impairment at the balance sheet date.

In thousands of Reais, unless otherwise indicated

(a) Breakdown and changes

							Parent company
						2017	2016
	Goodwill	Rights over natural resources	Software	Use of public assets	Other	Total	Total
At the beginning of the year							
Cost	79,722	201,066	67,340	281,829	9,536	639,493	617,624
Accumulated amortization		(37,409)	(57,008)	(66,728)	(1,882)	(163,027)	(124,217)
Net balance	79,722	163,657	10,332	215,101	7,654	476,466	493,407
Addition			13			13	30
Amortization and depletion		(45)	(3,611)	(10,805)	(17)	(14,478)	(13,502)
Lieu of payment (note 1.1(c))			(2,268)			(2,268)	
VMSA incorporation							180,260
Reversal (provision) for impairment of fixed assets		(28,079)	(59)			(28,138)	(173,685)
Transfers			3,534			3,534	(10,044)
At the end of the year	79,722	135,533	7,941	204,296	7,637	435,129	476,466
Cost	79,722	172,486	25,253	281,829	9,536	568,826	639,493
Accumulated amortization		(36,953)	(17,312)	(77,533)	(1,899)	(133,697)	(163,027)
Net balance at the end of the year	79,722	135,533	7,941	204,296	7,637	435,129	476,466
Annual average amortization rate - %		1	20	3	1		

In thousands of Reais, unless otherwise indicated

							Consolidated
						2017	2016
	Goodwill	Rights over natural resources	Software	Use of public assets	Other	Total	Total
At the beginning of the year							
Cost	194,771	201,066	67,665	306,581	41,078	811,161	761,188
Accumulated amortization		(37,409)	(57,279)	(72,441)	(29,890)	(197,019)	(155,033)
Net balance	194,771	163,657	10,386	234,140	11,188	614,142	606,155
Addition			13			13	1,629
Amortization and depletion		(46)	(3,641)	(11,740)	(63)	(15,490)	(15,156)
Lieu of payment (note 1.1(c))			(2,268)			(2,268)	
Participation of subsidiary excluded from consolidation (i)			(14)	(2,145)	(41)	(2,200)	
Disposal by sale of goodwill (note 1.1 (d))	(28,506)					(28,506)	
Reversal (provision) for impairment of fixed assets		(28,079)	(59)			(28,138)	(173,685)
VMSA incorporation							203,840
Ownership interest increase - Enercan							1,389
Transfers			3,534			3,534	(10,030)
At the end of the year	166,265	135,532	7,951	220,255	11,084	541,087	614,142
Cost	166,265	172,485	25,486	303,774	38,714	706,724	811,161
Accumulated amortization		(36,953)	(17,535)	(83,519)	(27,630)	(165,637)	(197,019)
Net balance at the end of the year	166,265	135,532	7,951	220,255	11,084	541,087	614,142
Annual average amortization rate - %		1	20	3	1		

(i) Refers to the exclusion of 20.98% of the proportionate consolidated stake of Campos Novos Energia S.A., which was contributed to the subsidiary Pollarix S.A., as described in Note 1.1 (d).

(b) Impairment test for goodwill

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

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

The Company has determined gross margin based on past performance and expectations of market development. The discount rates used are pre-taxes and reflect specific risks related to each CGUs being tested.

In thousands of Reais, unless otherwise indicated

19 Borrowings

Accounting policy

Borrowings are initially recognized at fair value, net of transaction costs incurred, and subsequently carried at amortized cost. Any difference between the proceeds (net of transaction costs) and the total amount payable is recognized in the statement of income over the period of the borrowings using the effective interest rate method.

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

(a) Breakdown and fair value

Parent company

		Current		Non-current		Total		Fair value	
Categories	Annual average charges (i)	2017	2016	2017	2016	2017	2016	2017	2016
Local currency									
BNDES	TJLP + 2.44% / 5.63% Pré BRL / SELIC + 2.86%	145,763	101,891	289,172	406,124	434,935	508,015	417,221	452,769
FINAME	5.41% Pré BRL	1,312	1,339	5,155	6,453	6,467	7,792	5,828	6,455
Export credit note			100,859		-		100,859		98,556
Development agency	10.0% Pré BRL / TJLP + 1.07%	14,098	13,063	58,450	67,662	72,548	80,725	71,359	73,599
Other				598	597	598	597	598	591
		161,173	217,152	353,375	480,836	514,548	697,988	495,006	631,970
Foreign currency									
BNDES	UMBNDES + 2.45%	11,170	16,913	4,607	15,496	15,777	32,409	16,305	33,472
Eurobonds - USD	5.52% Pré USD	13,482	13,262	2,109,385	2,076,642	2,122,867	2,089,904	2,213,727	2,029,649
		24,652	30,175	2,113,992	2,092,138	2,138,644	2,122,313	2,230,032	2,063,121
		185,825	247,327	2,467,367	2,572,974	2,653,192	2,820,301	2,725,038	2,695,091
Interest on borrowing		17,318	18,672						
Current portion of long-term borrowing		168,507	228,655						
		185,825	247,327						

In thousands of Reais, unless otherwise indicated

Consolidated

		Current		Non-current		Total		Fair value	
Categories	Annual average charges (i)	2017	2016	2017	2016	2017	2016	2017	2016
Local currency									
BNDES	5.63% Pré BRL / TJLP + 2.46% / SELIC + 2.86%	152,222	143,698	289,172	450,111	441,394	593,809	423,739	544,796
FINAME	5.41% Pré BRL	1,312	1,339	5,155	6,453	6,467	7,792	5,828	6,455
Debentures	107.77% CDI	33,318	3,507	121,502	26,577	154,820	30,084	155,224	29,450
Export credit note			100,859		-		100,859		98,556
Development agency	10.0% Pré BRL / TJLP + 1.07%	14,098	13,063	58,450	67,662	72,548	80,725	71,359	73,599
Other				598	597	598	597	598	591
		200,950	262,466	474,877	551,400	675,827	813,866	656,748	753,447
Foreign currency									
BNDES	UMBNDES + 2.56%	14,184	23,848	4,607	22,907	18,791	46,755	19,338	47,371
Eurobonds - USD	5.52% Pré USD	13,482	13,262	2,109,385	2,076,642	2,122,867	2,089,904	2,213,727	2,029,649
		27,666	37,110	2,113,992	2,099,549	2,141,658	2,136,659	2,233,065	2,077,020
		228,616	299,576	2,588,869	2,650,949	2,817,485	2,950,525	2,889,813	2,830,467
Interest on borrowing		20,345	20,782						
Current portion of long-term borrowing		208,271	278,794						
		228,616	299,576						

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

BNDES	Brazilian Economic and Social Development Bank.
BRL	Brazilian currency (Real).
CDI	Interbank Deposit Certificate.
FINAME	Financing of new machinery and equipment manufactured in Brazil through subsidized rates.
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.
UMBNDES	Monetary unit of the BNDES reflecting the weighted basket of currencies of foreign currency debt obligations. At December 31, 2017, 99.59 % of the basket comprised US Dollars.
USD	US Dollar.

In thousands of Reais, unless otherwise indicated

(b) Maturity

Parent company

	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Local currency										
BNDES	145,763	80,855	61,897	51,713	29,320	17,437	17,437	17,437	13,076	434,935
FINAME	1,312	1,277	1,248	992	781	781	76			6,467
Export credit note	-									
Development promotion agency	14,098	13,676	13,676	13,676	6,917	6,303	4,202			72,548
Other		598								598
	161,173	96,406	76,821	66,381	37,018	24,521	21,715	17,437	13,076	514,548
	31.32%	18.74%	14.93%	12.90%	7.19%	4.77%	4.22%	3.39%	2.53%	100.00%
Foreign currency										
BNDES	11,170	3,465	1,142	-	-	-				15,777
Eurobonds - USD (i)	13,482	(1,444)	(1,444)	792,681	(1,444)	(1,444)	1,322,480			2,122,867
	24,652	2,021	(302)	792,681	(1,444)	(1,444)	1,322,480			2,138,644
	1.15%	0.09%	-0.01%	37.06%	-0.07%	-0.07%	61.85%			100.00%
	185,825	98,427	76,519	859,062	35,574	23,077	1,344,195	17,437	13,076	2,653,192
	7.00%	3.71%	2.88%	32.38%	1.34%	0.87%	50.67%	0.66%	0.49%	100.00%

Consolidated

	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Local currency										
BNDES	152,222	80,855	61,897	51,713	29,320	17,437	17,437	17,437	13,076	441,394
FINAME	1,312	1,277	1,248	992	781	781	76			6,467
Debentures	33,318	30,327	30,347	30,409	30,419	-	-	-		154,820
Export credit note										
Development promotion agency	14,098	13,676	13,676	13,676	6,917	6,303	4,202			72,548
Other		598								598
	200,950	126,733	107,168	96,790	67,437	24,521	21,715	17,437	13,076	675,827
	29.73%	18.75%	15.86%	14.32%	10.00%	3.63%	3.21%	2.58%	1.93%	100.00%
Foreign currency										
BNDES	14,184	3,465	1,142							18,791
Eurobonds - USD (i)	13,482	(1,444)	(1,444)	792,681	(1,444)	(1,444)	1,322,480			2,122,867
	27,666	2,021	(302)	792,681	(1,444)	(1,444)	1,322,480			2,141,658
	1.29%	0.09%	-0.01%	37.01%	-0.07%	-0.07%	61.76%	0.00%		100.00%
	228,616	128,754	106,866	889,471	65,993	23,077	1,344,195	17,437	13,076	2,817,485
	8.11%	4.57%	3.79%	31.57%	2.34%	0.82%	47.72%	0.62%	0.46%	100.00%

(i) The negative balances relate to borrowing costs amortized on a straight-line basis.

In thousands of Reais, unless otherwise indicated

(c) Changes

	Parent company		Consolidated	
	2017	2016	2017	2016
At the beginning of the year	2,820,301	3,304,404	2,950,525	3,452,871
New borrowing	22,110	101,676	174,322	101,676
Addition of borrowing fees, net of amortization	1,410	1,730	1,145	1,754
Foreign exchange variation	32,522	(426,687)	32,295	(430,177)
Participation of joint operation excluded from consolidation (i)			(41,792)	
Provision for interest	169,257	188,701	179,882	204,569
Interest paid	(161,028)	(175,113)	(168,459)	(189,837)
Repayment	(231,380)	(256,682)	(310,433)	(305,365)
VMSA incorporation		82,272		82,272
Ownership interest increase - Enercan				32,762
At the end of the year	2,653,192	2,820,301	2,817,485	2,950,525

(i) Refers to the exclusion of 20.98% of the proportionate consolidated stake of Campos Novos Energia S.A., which was contributed to the subsidiary Polarix S.A., as described in Note 1.1 (d).

(d) Breakdown by currency

	Parent company					
	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
Real	161,173	217,152	353,375	480,836	514,548	697,988
US Dollar	24,385	28,860	2,113,992	2,091,875	2,138,377	2,120,735
Currency basket	267	1,315		263	267	1,578
	185,825	247,327	2,467,367	2,572,974	2,653,192	2,820,301

	Consolidated					
	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
Real	200,950	262,466	474,877	551,400	675,827	813,866
US Dollar	24,385	28,860	2,113,992	2,091,875	2,138,377	2,120,735
Currency basket	3,281	8,250		7,674	3,281	15,924
	228,616	299,576	2,588,869	2,650,949	2,817,485	2,950,525

In thousands of Reais, unless otherwise indicated

(e) Breakdown by index

Parent company

	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
Local currency						
TJLP	115,621	92,186	266,530	363,701	382,151	455,887
Fixed rate	13,490	116,490	48,300	61,415	61,790	177,905
BNDES	32,062	8,476	38,545	55,720	70,607	64,196
	161,173	217,152	353,375	480,836	514,548	697,988
Foreign currency						
UMBNDES	11,170	16,913	4,607	15,496	15,777	32,409
Fixed rate	13,482	13,262	2,109,385	2,076,642	2,122,867	2,089,904
	24,652	30,175	2,113,992	2,092,138	2,138,644	2,122,313
	185,825	247,327	2,467,367	2,572,974	2,653,192	2,820,301

Consolidated

	Current		Non-current		Total	
	2017	2016	2017	2016	2017	2016
Local currency						
CDI	33,318	3,507	121,501	26,577	154,819	30,084
TJLP	122,080	133,993	266,531	407,689	388,611	541,682
Fixed rate	13,490	116,490	48,300	61,415	61,790	177,905
BNDES	32,062	8,476	38,545	55,719	70,607	64,195
	200,950	262,466	474,877	551,400	675,827	813,866
Foreign currency						
UMBNDES	14,184	23,848	4,607	22,907	18,791	46,755
Fixed rate	13,482	13,262	2,109,385	2,076,642	2,122,867	2,089,904
	27,666	37,110	2,113,992	2,099,549	2,141,658	2,136,659
	228,616	299,576	2,588,869	2,650,949	2,817,485	2,950,525

(f) Collateral

At December31, 2017, R$ 2,583,523 (December 31, 2016 - R$ 2,649,621) of the borrowing was guaranteed by sureties (Note 15 (c)) and R$ 6,468 (December 31, 2016 - R$ 7,791) by liens on company's assets.

(g) Covenants / financial indexes

Certain borrowing agreements are subject to compliance with financial ratio rules (covenants) controlled by the parent VSA, such as: (i) the gearing ratio (net debt/adjusted EBITDA); (ii) the capitalization ratio (total debt/total debt + equity or equity/total assets); and (iii) interest coverage ratio (cash + adjusted EBITDA/interest + short-term debt). When applicable, these obligations are standardized for all borrowing agreements.

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

(h) New borrowing

During the year ended December 31, 2017, the Company received R$ 17,923 from BNDES and Finame, at the main average cost of TJLP + 2.48%/ SELIC Fixed + 2.56%.

20 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.

The Company and its subsidiaries use the taxable income method, and calculate and record their income tax and social contribution based on the effective rates at the end of the reporting period.
Deferred income tax and social contribution tax assets arise from tax losses and temporary differences related substantially to (a) the effect of foreign exchange gains (losses tax calculated on a cash basis for loans); (b) the adjustment of derivatives to their fair values; (c) temporarily non-deductible provision; (d) temporary differences arising from the adoption of pronouncements of CPCs.

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

In thousands of Reais, unless otherwise indicated

	Parent company		Consolidated	
	2017	2016	2017	2016
Profit before income tax and social contribution	452,981	(647,766)	502,085	(583,059)
Statutory rates	34%	34%	34%	34%
IRPJ and CSLL at the statutory rates	(154,014)	220,240	(170,709)	198,240
Adjustments for the calculation of the effective IRPJ and CSLL				
Equity in the results	36,985	65,904	4,209	22,841
Reversal of IRPJ/CSLL tax credit - Plano Verão		(12,892)		(12,892)
Loss on investment		(8,200)		(8,200)
Recognition of deferred tax on tax losses (i)	186,711		186,711	
Recognition of deferred tax on exchange variation of VMSA (ii)		175,935		175,935
Non-recognition of deferred tax on tax losses			(1,219)	
Other permanent deductions, net	(4,899)	(10,021)	(4,616)	(9,665)
Calculated IRPJ and CSLL	64,783	430,966	14,376	366,259
Current	(29)	(12,805)	(53,721)	(67,412)
Deferred	64,812	443,771	68,097	433,671
IRPJ and CSLL in the statement of operations	64,783	430,966	14,376	366,259

(i) During 2017, according to the changes to the projections made by the Company, an amount of R$ 186,711 related to the Tax Loss and Negative Base was recorded, which had not been accounted for in prior years.

(ii) Exchange variation on export prepayments.

(b) Breakdown of deferred tax balances

	Parent company		Consolidated	
	2017	2016	12/31/2017	12/31/2016
Assets (Liabilities)				
Tax credits on income tax and social contribution losses	354,413	147,085	354,413	147,085
Temporary differences				
Foreign exchange variation	272,864	672,397	272,864	672,397
Provision (impairment and others)	702,735	717,607	702,735	717,607
Use of public assets	73,333	75,099	73,333	75,099
Tax, civil, labor and environmental provision	134,255	138,714	140,179	143,737
Asset retirement obligation	50,540	46,930	50,540	46,930
Provision for inventory losses	20,794	20,902	20,794	20,902
Environmental liabilities	20,249	16,317	20,249	16,317
Provision for profit sharing	32,278	22,324	32,278	22,324
Provision for impairment of trade receivables	10,716	10,419	10,716	10,419
Capitalized interest	(28,181)	(27,361)	(28,181)	(27,361)
Adjustment to present value	(16,665)	(17,689)	(16,665)	(17,689)
Deferred gains (loss) on derivative agreements	52,782	(16,004)	52,782	(16,004)
Financial instruments - firm commitment	(61,338)	(153,769)	(61,338)	(153,769)
Adjusted useful lives of PP&E (depreciation)	(685,232)	(666,241)	(685,232)	(666,241)
Other	(21,752)	(18,444)	(21,752)	(18,444)
Net (assets - liabilities)	911,791	968,286	917,715	973,309

(i) The deferred tax credits arising from tax losses and negative basis of social contribution are recognized only to the extent that their realization is probable, based on the previous history of profitability and the projections of future results.

(ii) The variation refers substantially to the realization of the deferred exchange variations on export prepayment contracts, assigned to Nexa Recursos Minerais S.A. ("Nexa BR") in February 2017, as detailed in Note 1.1 (a).

In thousands of Reais, unless otherwise indicated

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

	Parent company		Consolidated	
	2017	2016	2017	2016
At the beginning of the year	968,286	539,577	973,309	553,448
Effects on the results	64,812	443,771	68,097	433,671
Effects of other components of comprehensive income - *Hedge accounting*	63,419	(15,058)	63,419	(15,058)
Sale of income tax and social contribution (i)	(122,813)		(122,813)	
Recalculation of deferred exchange variation (ii)	(61,913)		(61,913)	
Participation of subsidiary excluded from consolidation (iii)			(2,386)	
Other		(4)	2	1,248
At the end of the year	911,791	968,286	917,715	973,309

(i) Sale of tax loss to the related company Votorantim Cimentos S.A. relating to the Special Tax Regularization Program ("PERT").

(ii) Credit available for recalculation of deferred exchange variation.

(iii) Refers to the exclusion of 20.98% of the proportional consolidated stake of Campos Novos Energia S.A., which was contributed to the subsidiary Pollarix S.A., as described in Note 1.1 (d).

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

	2017	Percentual
In 2018		0.00%
In 2019	26,353	7.44%
In 2020	31,252	8.82%
In 2021	36,535	10.31%
After 2022	260,273	73.44%
	354,413	100.00%

21 Provision

Accounting policy

The Company is 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.

(a) Judicial deposits

Judicial deposits are monetarily restated and presented net in "Provision", when there is a corresponding provision. The deposits without corresponding provision are presented in non-current assets.

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

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. Provision does not include future operating losses.

In thousands of Reais, unless otherwise indicated

The provision is measured at the present value of the expenditure expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in provision due to time elapsing is recognized as interest expense.

(b) Asset retirement obligations

Expenditure relating to mine retirement is recorded as asset retirement obligations. These obligations consist mainly of costs associated with the termination of activities. The asset retirement cost, equivalent to the present value of the obligation (liability), is capitalized as part of the carrying amount of the asset, which is depreciated over its useful life. These liabilities are recorded as provision.

(b) Breakdown and changes

							Parent company
						2017	2016
		Legal process					
	ARO (i)	Tax	Labor	Civil	Environment	Total	Total
At the beginning of the year	204,915	166,109	83,042	159,133	782	613,981	229,676
Additions		13,611	67,616	16,786	39	98,052	189,219
Reversals		(28,331)	(50,903)	(2,774)		(82,008)	(71,611)
Judicial deposits, net of write-offs		5,410	(94,742)	(101,006)		(190,338)	7,008
VMSA incorporation							206,036
Nazca incorporation							5,532
Settlement with cash	(6,842)	(1,187)	(33,836)	(5,381)		(47,246)	(36,377)
Monetary adjustments		8,731	14,349	12,623	72	35,775	52,659
Adjustment to present value	16,598					16,598	8,886
Reclassification to related liability			12,043	(29,580)		(17,537)	(221)
Revision of cash flow	32,260					32,260	23,174
At the end of the year	246,931	164,343	(2,431)	49,801	893	459,537	613,981

							Consolidated
						2017	2016
		Legal process					
	ARO (i)	Tax	Labor	Civil	Environment	Total	Total
At the beginning of the year	204,915	166,109	83,042	159,221	782	614,069	229,925
Additions		13,611	67,616	17,696	39	98,962	189,257
Reversals		(28,331)	(50,903)	(2,774)		(82,008)	(71,612)
Judicial deposits, net of write-offs		5,410	(94,742)	(101,006)		(190,338)	7,008
VMSA incorporation							206,036
Nazca incorporation							5,532
Settlement with cash	(6,842)	(1,187)	(33,836)	(5,381)		(47,246)	(36,567)
Monetary adjustments		8,731	14,349	12,623	72	35,775	52,659
Adjustment to present value	16,598					16,598	8,886
Reclassification to related liability			12,043	(29,580)		(17,537)	
Settlement with compensation of judicial deposits							(229)
Revision of cash flow	32,260					32,260	23,174
At the end of the year	246,931	164,343	(2,431)	50,799	893	460,535	614,069

(i) *Asset Retirement Obligation*

(c) ARO – *"Asset retirement obligation"*

The calculation of asset retirement obligations involves judgment and certain assumptions. In environmental terms, they relate to the future obligation to restore 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 pre-existing conditions.

In thousands of Reais, unless otherwise indicated

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.

Since these are long-term obligations, they are adjusted to the present value at the current interest rate and periodically restated based on the inflation rate. On December 31, 2017, the interest rate forecast to 2018 was increased to 5.49% p.a. (2017 – 8.47% p.a.).

(d) Provision for tax, civil, labor, environmental contingencies and outstanding judicial deposits

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 losses regarded as probable arising from contingent liabilities is recorded in the books. Contingent liabilities classified as possible losses are not recorded in the books and are only disclosed in the notes to the financial statements. Contingent liabilities classified as remotely likely losses are neither accrued nor disclosed, except when, due to the visibility of the lawsuit, the Company considers their disclosure justified.

The amounts of contingencies are periodically estimated and updated. The classification of losses as possible, probable or remotely likely is supported by the advice of the Company's legal counsel.

The provision and the corresponding judicial deposits are as follows:

								Parent company
				2017				2016
	Judicial deposits	Provision	Total, net	Outstanding judicial deposits(i)	Judicial deposits	Provision	Total, net	Outstanding judicial deposits(i)
Tax	(15,568)	179,911	164,343	14,180	(20,978)	187,087	166,109	12,938
Labor	(122,413)	119,982	(2,431)	579	(27,671)	110,713	83,042	18,442
Civil	(101,006)	150,807	49,801	1,706		159,133	159,133	95,836
Environmental		893	893	6		782	782	
	(238,987)	451,593	212,606	16,471	(48,649)	457,715	409,066	127,216

								Consolidated
				2017				2016
	Judicial deposits	Provision	Total, net	Outstanding judicial deposits(i)	Judicial deposits	Provision	Total, net	Outstanding judicial deposits(i)
Tax	(15,568)	179,911	164,343	13,131	(20,978)	187,087	166,109	24,358
Labor	(122,413)	119,982	(2,431)	624	(27,671)	110,713	83,042	18,486
Civil	(101,006)	151,805	50,799	1,706		159,221	159,221	95,836
Environmental		893	893	6		782	782	
	(238,987)	452,591	213,604	15,467	(48,649)	457,803	409,154	138,680

(i) The Company has outstanding judicial deposits with the courts in relation to proceedings classified by its legal advisors as having a possibility or remote possibility of loss, and which are, therefore, without the respective provision.

In thousands of Reais, unless otherwise indicated

(e) Comments on provision with likelihood of loss considered probable

(i) Provision for tax contingencies

Tax proceedings with probable likelihood of loss are represented by discussions related to federal, state and municipal taxes, being these in the judicial or administrative sphere, having as main cases provisioned discussions related to IRPJ, IPTU, and Financial Compensation for the Exploration of Mineral Resources ("CFEM"), among others.

(ii) Provision for labor contingencies

Labor claims the likelihood of loss of which is classified as probable are those filed by former employees, third parties and unions, most of which are claims for severance pay, health and safety premiums and overtime, in addition to indemnity claims filed by former employees or third parties based on alleged occupational illnesses, labor accidents and pain and suffering, arising from general jurisdictional courts pursuant to Constitutional Amendment 45. When it is certain than an outflow of resources from the Company will be necessary, these lawsuits are provided for in accordance with the Company's provision policy. Lawsuits of this type are pending in the Regional Labor Courts of the States of Minas Gerais, Goiás and São Paulo

(iii) Provision for civil contingencies

Civil provision relates mainly to lawsuits filed by former employees and outsourced employees based on alleged occupational illnesses, work accidents and pain and suffering, in addition to those issued by service providers in relation to contractual terminations.

(iv) Provision for environmental contingencies

The Company has established environmental policies and procedures to comply with environmental and other laws. Management performs analyses on a regular basis to identify environmental risks and ensure that the systems in place are appropriate to manage these risks.

The environmental, administrative and judicial litigation of the Company basically refers to the determination of alleged infractions in violation of specific legislation, either through administrative procedures or lawsuits.

(f) Litigation with likelihood of loss considered possible

The Company has actions involving risks of loss classified by Management as possible, based on the assessment of their legal advisors, for which there is no provision made.

	Parent company		Consolidated	
	2017	2016	2017	2016
Tax	2,314,848	1,536,103	2,348,809	1,596,594
Labor	246,692	142,243	248,095	142,386
Civil	193,917	318,250	194,105	318,525
Environmental	6,355	16,400	6,355	16,400
	2,761,812	2,012,996	2,797,364	2,073,905

In thousands of Reais, unless otherwise indicated

Comments on contingent a liabilities with likelihood of loss considered possible

In the table below we present the analysis of the relevance of these processes:

	Parent company	
	2017	**2016**
ICMS divergences regarding the destination of the property	90,400	
ICMS - Transfer cost	208,166	224,708
ICMS – Credits	105,654	79,634
ICMS on TUSD	20,895	23,457
Tax Execution - Failure to pay ICMS tax on TUSD	112,698	126,149
Infraction Notice - Electric Energy tariff in the ICMS calculation base	57,850	57,526
PIS and COFINS credit process	536,705	424,624
Financial Compensation for the Exploration of Mineral Resources - CFEM	85,766	78,093
Tax Classification Error - Import	162,605	
IRPJ Negative Balance Glossary	96,410	57,124
Outros	837,699	464,788
	2,314,848	1,536,103

(i) Collection of ICMS due to divergences regarding the destination of the property

Collection of ICMS due to the interpretation of credits and Aliquot Differential due to goods that do not belong to the productive processes, in the amount of R$ 90,400, in December

(ii) ICMS – Transfer costs

The Company was notified based on alleged ICMS not paid on the transfer operations of nickel carbonate to its subsidiary located in the State of São Paulo, during the periods from January 2003 to December 2003, April 2004 to March 2005, April 2005 to March 2006, April 2006 to March 2007 and April 2007 to March 2008. The amounts related to these assessment notices at December 31, 2017 totaled R$ 208,166. Currently, the cases are awaiting an administrative court decision.

In the opinion of Management and independent legal advisors, the criteria adopted by the Company for the formation of the calculation basis are in compliance with the pertinent legislation. The likelihood of loss in this matter is considered possible.

(iii) ICMS – Credits

At December 31, 2017, the Company had some assessment notices relating to ICMS tax credits relating to items applied in the production process, which, in the opinion of the State of Goiás, would not give rise to a right to the tax credit. The amount at December 31, 2017 corresponded to R$ 105,654.

In the opinion of Management and its independent legal advisors, the criteria adopted by the Company in the formation of the calculation basis are in compliance with the pertinent legislation. The likelihood of loss in this matter is considered possible.

(iv) ICMS on TUSD (Distribution System Usage Tariff)

The Company received an Infraction Notice issued by the State of Goiás for the alleged failure to pay or underpayment of ICMS related to the Distribution System Usage Tariff (“TUSD”), pertinent to the period from September 2005 to September 2010. At December 31, 2017, the amount under dispute of this assessment totaled R$ 20,895.

In the opinion of Management and its independent legal advisors, these notifications are not warranted, which is why the likelihood of loss of the process is considered possible.

(v) Tax execution – Non-payment of ICMS tax in TUSD (Distribution System Usage Tariff)

In December 2012, the Company was notified of the tax foreclosure proceeding that seeks to collect amounts allegedly due to ICMS levied on TUSD. The amount of said enforcement process, as at December 31, 2017, totaled R$ 112,698.

The Company presented an insurance guarantee aimed at guaranteeing the tax execution, as well as filed a foreclosure proceeding, demonstrating that the amounts required by the Internal Revenue Service of Brazil are undue.

In addition, it is worth noting that the Superior Court of Justice has precedents in the sense that ICMS should not be levied on TUSD. After the Company obtained favorable decisions in the first and second instances, the process awaits the appraisal of the Special Appeal filed by the Internal Revenue Service of Brazil.

In the opinion of Management and in the opinion of its independent legal advisors, in view of precedents and favorable jurisprudence, the likelihood of loss of the process is considered possible.

(vi) Tax Assessment – Non-inclusion of the Electric Energy tariff charges in the ICMS calculation basis

In April 2015, the Company received a tax assessment notice for the collection of ICMS due to the alleged non-inclusion of amounts paid as electric energy charges, based on the tax calculation. The amount under discussion amounted to R$ 57,850, in December 2017.

Currently, this process awaits judgment of the Special Appeal presented by the Company in the administrative scope.

In the opinion of Management and in the opinion of its independent legal advisors, in view of precedents and favorable jurisprudence, the likelihood of loss of the process is considered possible.

(vii) Proceedings related to PIS and COFINS credits

The Company has in progress Decisions and Tax Offenses related to the credits of PIS and COFINS credits and isolated fines related to the items applied in the production process, which, in the understanding of the Brazilian Federal Revenue, would not generate the right to the credit of said contributions. The amount restated as at December 31, 2017 corresponded to R$ 536,705. Currently, this process awaits judgment of the Special Appeal presented by the Company in the administrative scope.

(viii) Financial Compensation for Mineral Resources Exploration – CFEM

The Company received assessments drawn up by the National Department of Mineral Production for alleged failure to pay or lower collection of CFEM for the period from January 2007 to December 2015. As at December 31, 2017, the amount in controversy of these assessments totaled of R$ 85,766. Currently, the cases are in the administrative phase.

In the opinion of Management and in the opinion of its independent legal advisors, in view of precedents and favorable jurisprudence, the likelihood of loss of the process is considered possible.

(ix) Tax classification error – Import

In March 2017, the Company was assessed as a result of an alleged error in the tax classification on the importation of inputs, resulting in a tax demand (IPI, PIS, COFINS and II) the value of which at June 2017 amounted to R$ 162,605.

Because it disagreed with the assessment, the Company filed a challenge, which is currently awaiting an administrative decision in the first instance.

In the opinion of Management and its independent legal advisors, there has been a misconception on the part of the Internal Revenue Service of Brazil when assessing the amounts presented by the Company, which is why the probability of loss on this lawsuits is considered possible.

(x) IRPJ negative balance claims

The Company received two decisions issued by the Internal Revenue Service of Brazil in which the amounts calculated as a negative balance of IRPJ are questioned. The amount under discussion in the lawsuits totaled R$ 96,410, at December 2017.

Currently, the cases are in the administrative phase.

In the opinion of Management and in the opinion of its independent legal advisors, in view of precedents and favorable jurisprudence, the likelihood of loss of the process is considered possible.

(xi) Municipal property tax (IPTU)

The Company received IPTU charges related to divergences in the calculation basis. The amount restated as at December 31, 2017 corresponded to R$ 13,885. In the opinion of Management, and in the opinion of independent legal advisors, the likelihood of loss of the proceedings is considered possible.

In thousands of Reais, unless otherwise indicated

22 Use of public assets

Accounting policy

The amount is originally recognized as a financial liability (obligation) and as an intangible asset (the 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 (the present value of the future payment cash flows).

The Company owns or invests in companies that have concession contracts in the electrical power industry. Most of these contracts provide for annual payments from the start-up 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:

						Parent company			
						2017			2016
Plants/companies	Beginning of concession	End of concession	Initial payment date	Interest	Intangible asset	Liabilities	Interest	Intangible asset	Liabilities
Salto Pilão	apr-02	apr-37	jan-10	60%	193,765	492,603	60%	203,965	515,807
Salto do Rio Verdinho	dec-02	dec-37	oct-10	100%	7,781	19,612	100%	8,170	20,509
Itupararanga	feb-04	feb-24	jan-04	100%	508	1,949	100%	591	2,250
Piraju	dec-98	dec-33	feb-03	100%	1,015	5,784	100%	1,079	6,146
Ourinhos	jul-00	jul-35	sep-05	100%	1,227	4,596	100%	1,296	4,847
					204,296	524,544		215,101	549,559
Current						36,337			28,230
Non - current					204,296	488,207		215,101	521,329
					204,296	524,544		215,101	549,559

In thousands of Reais, unless otherwise indicated

									Consolidated
						2017			2016
Plants/companies	Beginning of concession	End of concession	Initial payment date	Interest	Intangible asset	Liabilities	Interest	Intangible asset	Liabilities
Salto Pilão	apr-02	apr-37	jan-10	60%	193,765	492,603	60%	203,965	515,807
Salto do Rio Verdinho	dec-02	dec-37	oct-10	100%	7,781	19,612	100%	8,170	20,509
Itupararanga	feb-04	feb-24	jan-04	100%	508	1,949	100%	591	2,250
Piraju	dec-98	dec-33	feb-03	100%	1,015	5,784	100%	1,079	6,146
Ourinhos	jul-00	jul-35	sep-05	100%	1,227	4,596	100%	1,296	4,847
Baesa - Energética Barra Grande	may-01	may-36	jun-07	15%	13,596	42,061	15%	14,334	43,670
Enercan - Campos Novos Energia	may-00	may-35	jun-06	24%	2,363	6,335	33%	4,705	12,423
					220,255	572,940		234,140	605,652
Current						38,972			31,141
Non - current					220,255	533,968		234,140	574,511
					220,255	572,940		234,140	605,652

In thousands of Reais, unless otherwise indicated

23 Equity

(a) Share capital

This is represented exclusively by common shares that are classified in shareholders' equity

On December 31, 2017, the Company’s fully subscribed and paid-up capital amounted to R$ 5,637,299 (December 31, 2016 – R$ 4,399,676), consisting of 1,610,129,535 (December 31, 2016 – 1,205,677,386) registered common shares.

On June 2017, a capital contribution was made to CBA in the form of an investment by Votorantim Investimentos Latino-Americanos S.A., in the amount of R$ 1,237,623, represented by an increase of 404,452,149 CBA shares, as detailed in Note 1.1 (b).

(b) Dividends

According to the Company's bylaws, dividends are calculated based on 25% of net income for the year deducted from the legal reserve.

	2017
Net income for the year	517,764
Absorption of accumulated losses	(507,351)
Basis of calculation of legal reserve	10,413
Legal reserve - 5%	(521)
Basis of calculation of dividends	9,892
Minimum dividends - 25% in accordance with bylaws	2,473
Total number of shares - thousand	1,410,673
Dividends per share - R$	0.002

(c) Legal reserve and profits retention

The legal reserve is constituted through the appropriation of 5% of the net income for the year or the remaining balance, limited to 20% of the capital stock, and may be used only to increase capital or absorb accumulated losses.

In thousands of Reais, unless otherwise indicated

(d) Carrying value adjustments

	Foreign exchange variation on investments abroad	Remeasurements of retirement benefits	Operating hedge accounting	Interest in comprehensive income of investees	Total
At January 1, 2016	4,532	(7,248)	1,912	6,327	5,523
Operating hedge accounting			44,289		44,289
Interest in comprehensive income of investees				44	44
Deferred tax			(15,058)		(15,058)
At December 31, 2016	4,532	(7,248)	31,143	6,371	34,798
Operating hedge accounting			(186,527)		(186,527)
Deferred tax			63,419		63,419
Realization of nterest in comprehensive income of investees	(4,532)	7,248	(2,503)	(6,371)	(6,158)
At December 31, 2017			(94,468)		(94,468)

24 Revenue

Accounting policy

Represents the fair value of the consideration received or receivable from the sale of assets in the ordinary course of business of the Company. Revenue is shown net of value added tax, returns and rebates, after the elimination of sales between the consolidated companies.

(a) Revenue recognition

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.

(b) Sales of products and services

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.

(c) Sale of surplus of energy

The electric energy purchase and sale transactions entered into by the Company and its subsidiaries for the purpose of the purchase of energy for own consumption or the supply of own-generation energy do not meet the definition of a financial instrument. The other energy purchase and sale transactions are recognized in the Company's financial statements at their fair value as "Other operational income (expenses), net".

In thousands of Reais, unless otherwise indicated

(d) Reconciliation of revenue

The reconciliation of gross and net sales revenue for the year ended was as follows:

	Parent company		Consolidated	
	2017	2016	2017	2016
Gross sales revenue				
Domestic sales	3,533,759	3,071,851	3,621,198	3,206,158
Foreign sales	469,224	442,407	469,224	442,588
Electricity sales	1,244,205	1,236,719	1,421,809	1,418,180
	5,247,188	4,750,977	5,512,231	5,066,926
Taxes on sales and other deductions	(775,378)	(672,491)	(839,547)	(721,474)
Net revenue	4,471,810	4,078,486	4,672,684	4,345,452

(e) Information on geographical areas

The analysis of net revenue by destination is based on the location of the customer. The Company's net revenue classified by destination and currency is as follows:

(i) Revenue by country of destination

	Parent company		Consolidated	
	2017	2016	2017	2016
Brazil	4,002,586	3,636,079	4,203,460	3,902,864
United States	179,498	183,863	179,498	183,863
Argentina	15,608	106,349	15,608	106,531
Switzerland	198,444	54,629	198,444	54,629
Mexico	12,200	12,778	12,200	12,778
Others	63,474	84,788	63,474	84,787
	4,471,810	4,078,486	4,672,684	4,345,452

(ii) Revenue by currency

	Controladora		Consolidado	
	2017	2016	2017	2016
Real	4,002,586	3,636,079	4,203,460	3,902,864
US Dollar	469,224	442,407	469,224	442,588
	4,471,810	4,078,486	4,672,684	4,345,452

In thousands of Reais, unless otherwise indicated

25 Expenses by nature

	Parent company		Consolidated	
	2017	2016	2017	2016
Raw materials, inputs and consumables	2,987,246	2,664,939	2,972,992	2,671,676
Employee benefits	618,746	584,756	632,131	597,264
Depreciation, amortization and depletion	283,938	339,803	318,197	374,481
Outsourced services	192,296	172,450	199,344	181,081
Freight expenses	80,574	72,998	80,615	73,337
Other expenses, net	36,916	61,528	49,107	65,152
	4,199,716	3,896,474	4,252,386	3,962,991
Reconciliation				
Cost of products sold and services rendered (i)	3,938,009	3,627,853	3,973,179	3,685,151
Selling	73,450	95,247	73,641	98,024
General and administrative	188,257	173,374	205,566	179,816
	4,199,716	3,896,474	4,252,386	3,962,991

(i) In the Company's accumulated balance as at December 31, 2017, the Company recorded the amount of R$ 17,470 (December, 31, 2016 – R$ 56,572) related to the idle production costs of Niquelândia and São Miguel Paulista plants located in Niquelândia State of Goiás and São Paulo State of São Paulo, respectively.

26 Employee benefit expenses

(a) Retirement obligation

The Company participates in pension plans, managed by a closed private pension entity, which provide its employees with defined contribution post-employment benefits. A defined contribution plan is the pension plan under which the Company pays fixed contributions to a separate entity. The Company has no legal or constructive obligation to pay additional contributions if the fund does not hold sufficient assets to pay all employees the benefits related to its services in the current or previous period.

(b) Employee profit sharing

Accounting policy

Provisions are recorded to recognize the expense related to employees' participation in the results. This provision is calculated based on qualitative and quantitative targets defined by Management and recorded in the income statement as "Employee benefits".

	Parent company		Consolidated	
	2017	2016	2017	2016
Salaries and bonuses	348,789	320,625	356,556	328,015
Social charges	193,183	188,486	196,934	191,923
Social benefits	76,774	75,645	78,641	77,326
	618,746	584,756	632,131	597,264

In thousands of Reais, unless otherwise indicated

27 Other operating income, net

	Parent company		Consolidated	
	2017	2016	2017	2016
ACR - Realization financial instrument - firm commitment (i)	(133,790)	(178,891)	(133,790)	(178,891)
ACL - Realization financial instrument - firm commitment (i)	(13,669)	(5,032)	(13,669)	(5,032)
ACL - Recognition financial instrument - firm commitment (ii)	(37,020)	62,739	(37,020)	62,739
ACR - Decrease of volume of financial instrument - firm commitment (iii)	(87,353)	(10,383)	(87,353)	(10,383)
Loss (gain) with investment (Note 1.1 (d) Nota 1.1 (e))	589,352	(24,119)	589,352	(24,119)
Reversal for asset impairment (iv)	43,740	(845,509)	43,740	(845,509)
Environmental liabilities	(32,135)		(32,135)	
Expenditures with non-activatable projects	(13,627)	(36,161)	(13,627)	(36,161)
Judicial provision (reversals)	(16,044)	(117,608)	(16,954)	(117,608)
Net loss on sale of property, plant and equipment	(1,050)	(3,383)	(1,050)	(3,383)
Provision for obsolete and slow-moving inventories (note 10)	317	(2,115)	317	(2,115)
Other expenses, net	(15,983)	(17,008)	(18,488)	(17,908)
	282,738	(1,177,470)	279,323	(1,178,370)

(i) The realization of the financial instrument is recognized against revenue from energy sales, according to the physical delivery of energy.

(ii) The Company purchased energy according to its consumption needs until December 2020, through firm commitments. These agreements resulted in gains due to the excess of energy, which were recognized at their fair value.

(iii) The reduction in volume was caused by the exit of distributors from the regulated trade environment, which migrated to the free trade environment.

(iv) In 2016, the Company recognized impairment losses on the fixed and intangible assets of UGC Nickel, in the amounts of R $ 671,824 and R $ 173,685, respectively.

28 Finance results, net

Accounting policy

The Company and its subsidiaries recognize a 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 Company's and its subsidiaries' activities.

Revenue is presented net of taxes, refunds, as well as sales eliminations between consolidated companies.

The revenue amount will not be considered measurable until all conditions related to the sale have been resolved. The Company and its subsidiaries base their estimates on historical results, taking into account the type of customer, the type of transaction and the specifications of each sale.

In thousands of Reais, unless otherwise indicated

	Parent company		Consolidated	
	2017	2016	2017	2016
Finance income				
Gains on financial investments	84,352	104,332	100,631	121,267
Monetary adjustment to assets	42,459	22,863	42,459	22,866
Interest on taxes and financial assets	27,000	15,928	27,160	16,024
Interest and monetary adjustment - Use of public assets	3,226		3,226	-
Other finance income, net	678	3,915	3,519	6,100
	157,715	147,038	176,995	166,257
Finance cost				
Interest on borrowing	(160,366)	(179,987)	(171,065)	(195,243)
Interest on prepayment of receivables with related parties (Note 15)	(90,625)	(90,625)	(90,625)	(90,625)
Monetary adjustment of provision	(44,739)	(23,174)	(44,739)	(23,174)
Adjustment to present value CPC 12	(31,989)	(25,853)	(31,989)	(25,853)
Interest and monetary adjustment - Use of public assets		(48,194)	(3,330)	(56,401)
Borrowing costs	(4,860)	(5,539)	(4,860)	(5,539)
Interest on transactions with related parties (Note 15)	(14,359)	(23,221)	(11,518)	(23,221)
Income tax on remittances of interest abroad	(17,800)	(18,695)	(17,800)	(18,695)
PIS and COFINS on financial results	(5,479)	(6,547)	(5,483)	(6,746)
Other finance costs, net	(15,480)	(40,166)	(23,063)	(47,824)
	(385,697)	(462,001)	(404,472)	(493,321)
Derivative financial instruments				
Income	175	2,844	175	2,844
Expenses	(183)		(183)	
	(8)	2,844	(8)	2,844
Foreign exchange and monetary variations, net	17,359	465,977	17,569	469,892
	(210,631)	153,858	(209,916)	145,672

(i) During the period ended in December 31, 2017, the Company recognized a monetary restatement revenue of BP - Use of Public Property, as a result of the index used for updating it (IGP-M "General Market Price Index") being negative.

29 Defined contribution plan

The Company is a sponsor of private pension plans administered by Fundação Senador José Ermírio de Moraes (“FUNSEJEM”), a not-for-profit private pension fund available to all employees. According to the fund regulations, the contributions made to FUNSEJEM by the employees are based on their remuneration. For employees with remuneration below the limits established in the regulations, the defined contribution will not exceed 1.5% of their monthly remuneration. For employees with remuneration above those limits, the defined contribution will be of up to 6% of their monthly remuneration. Voluntary contributions can also be made to FUNSEJEM. The Company is not required to make additional payments after the contributions to the plan are made.

30 Insurance

The Company contracts different types of insurance, such as property risk and civil liability, to protect its assets against losses with production interruption and damages caused to third parties. Such policies have coverage and conditions considered by management to be appropriate to the risks involved.