Vale S.A.
Form 6-K
April 02, 2018
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United States

Securities and Exchange Commission

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16

of the

Securities Exchange Act of 1934

For the month of

March 2018

Vale S.A.

Avenida das Américas, No. 700 Bloco 8, Sala 218
22640-100 Rio de Janeiro, RJ, Brazil

(Address of principal executive office)

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

(Check One) Form 20-F x Form 40-F o

(Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1))

(Check One) Yes o No x

(Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7))

(Check One) Yes o No x

(Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.)

(Check One) Yes o No x

(If Yes is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b). 82- .)

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Financial Statements

December 31, 2017

BRGAAP in R$ (English)

Vale S.A. Financial Statements

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KPMG Auditores Independentes

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Independent auditor s report on the financial statements

To The Stockholders, Board Members and Management of

Vale S.A.

Rio de Janeiro - RJ

Opinion

We have audited the individual and consolidated financial statements of Vale S.A. (the Company), identified as Parent Company and Consolidated, respectively, which comprise the individual and consolidated balance sheet as of December 31, 2017, the statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes comprising significant accounting policies and other explanatory information. In our opinion, the aforementioned financial statements present fairly, in all material respects, the individual and consolidated financial position of Vale S.A. as of December 31, 2017, and of its individual and consolidated financial performance and its individual and consolidated cash flows for the year then ended in accordance with accounting practices adopted in Brazil and in accordance with 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 Auditors Responsibilities for the Audit of the individual and consolidated Financial Statements section of our report. We are independent of the Company and its subsidiaries in accordance with the ethical requirements of Ethics Standards Boards for Accountants and Professional Standard issued by Federal Accounting Council, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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Key Audit Matters

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

1. Impairment - Individual and consolidated financial statements

As per Notes 17,18 and 19 to the financial statements

Matter

The assessment with respect to the recoverability of property, plant and equipment (PP&E), intangible assets and goodwill, and definition of Cash-Generating Units (CGUs) encompasses significant judgments concerning factors related to the level of future production, commodities price, production cost and economic assumptions such as discount rates, inflation rates and exchange rates of the countries where the Company operates. Due to the materiality of PP&E, intangible assets and goodwill, and to the level of uncertainty for determining the related impairment, which may impact the value of those assets in the individual and consolidated financial statements and the value of the investment recorded under the equity pick-up method in the parent company s financial statements, we considered this subject as a significant matter for the audit.

Our procedures included, among others:

- Design, implementation and operating effectiveness testing of the relevant internal controls on the valuation of the Company s assets, including those aimed at identifying the need for recording or reversing impairment;

- Assessment of the Company s assumptions and estimates to determine the recoverable value of its assets, including the ones related to production, production cost, capital investments, discount rates and exchange rates;

- Assessment of the definition and identification criteria for Cash-Generating Units (CGUs);

- Assessment, with the support of our specialists in economic and financial assumptions, of the cash flow forecast, reasonableness and consistency of the assumptions used in the preparation of the cash flow forecasts and comparison of those assumptions with market information. Based on our knowledge of the Company and Industry, preparation of sensitivity analysis;

- Arithmetic checking of the economic models regarding future cash flows and forecast results, combining them with accounting information and management reports and approved business plans; and

- Appropriateness assessment of the disclosure in relation to the testing of the value in use and the comparison of the latter with the fair value, net of costs to sell, in the applicable cases.

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Based on the evidence obtained through the summarized procedures above, we considered acceptable the balances presented for property, plant and equipment, intangible assets and goodwill, as well as the respective disclosures in the accompanying notes, in the context of the individual and consolidated financial statements taken as a whole, for the year ended December 31, 2017.

2. Asset Retirement Obligation (ARO) - Individual and consolidated financial statements

As per Notes 25 and 26 to the financial statements

Matter

As a result of its operations, the Company incurs in obligations to restore and rehabilitate the environment on retiring the areas. The areas and environment rehabilitation is required by the combination of both the legislation in force and the Company s policies. Estimating costs related to those future activities requires considerable judgment in relation to factors such as how long a certain area will be used, the time required to rehabilitate and certain economic assumptions such as the discount rate and foreign currency exchange rates. Due to the relevance of the asset retirement obligations and the level of uncertainty for the determination of its estimate, which may impact the amount of this provision in the individual and consolidated financial statements and the amount of the investment recorded under the equity pick-up method in the financial statements of the parent company, we consider this subject as a significant matter for the audit.

Our procedures included, among others:

- Design, implementation and operating effectiveness testing of the relevant internal controls related to the determination of estimates for the asset retirement obligation provision to restore and rehabilitate areas commercially exploited by the Company;

- Analysis of assumptions used, including the base cost of the areas to be left, inflation rates, discount rates and risk rates;

- Analysis of the provision movement for the year related to the retired, restored/rehabilitated areas, and the relevant environmental obligation, aiming at verifying the primary inputs such as costs, inflation and discount rates, as well as an approved retirement plan; and

- Evaluate, with the support of our corporate finance specialists, the reasonableness and consistency of the assumptions used in preparation of the estimative of the asset retirement obligation provision in the areas commercially exploited by the Company;

- Arithmetic review of the estimative results, comparing them with the accounting information and management reports; and

- Appropriateness assessment of the disclosure in relation to the obligations to rehabilitate the environment on retiring the areas.

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Based on the evidence obtained through the procedures described above, we considered acceptable the balance of the asset retirement obligation provision to restore and rehabilitate areas commercially exploited by the Company, in the context of the individual and consolidated financial statements taken as a whole, for the year ended December 31, 2017.

3. Income taxes - Individual and consolidated financial statements

As per Note 8 to the financial statements.

Matter

The Company has operations in various countries, each one with its own taxation regime. The nature of the Company s activities triggers various tax liabilities, including tax on income, and social contributions. The nature of the Company s commodities export operations also create complexities related to international transfer pricing issues. Applying tax legislation is a complex and highly specialized activity, which requires judgment for the assessment of tax exposure estimates and for quantification of contingent liabilities. Due to the level of uncertainty and judgment involved in determining this estimate that may impact the amount recorded in the individual and consolidated financial statements and the amount of the investment recorded under the equity pick-up method in the parent company s financial statements, we consider this subject as a significant matter for the audit.

Our procedures included, among others:

- Design, implementation and operating effectiveness testing of the relevant internal controls related to the determination of estimates for recording the amounts of provisions for taxes and contributions payable and taxes to be offset by the Company;

- With the support of our specialists from the tax department, we assess the criteria used for determining and paying taxes and contributions and the assumptions used by the Company to determine the provisions and amounts disclosed as tax exposure and contingencies;

- We compare the assumptions used by the Company with the tax legislation applicable to each jurisdiction, and in relation to market practices and assessments performed by ourselves, based on our knowledge of and experience in the Company s operations in the use of the aforementioned legislation and on applicable precedents and sentences; and

• Assessment of the appropriateness of the Company s disclosures, particularly disclosures regarding current and deferred taxes and contributions and possible tax exposure.

Based on the evidence obtained through the summarized procedures above, we considered acceptable the balance of deferred taxes and contributions payable on income in the context of the individual and consolidated financial statements taken as a whole, for the year ended December 31, 2017.

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4. Provisions for litigation and disclosures of contingent liabilities - Individual and consolidated financial statements

As per Note 27 to the financial statements

Matter

The Company is a party (as defendant) to various litigation of tax, civil and labor nature deriving from the ordinary course of its activities. The measurement, accounting recognition of a provision, and the disclosures of Provisions and Contingent Liabilities, related to the aforementioned litigation, require judgment from the Company s professionals and from its legal advisors with respect to the integrity of the existing cases, the appropriateness of the provisions recorded and their corresponding disclosures. Due to the materiality, complexity and judgment involved in the assessment and measurement of the Provisions and Contingent Liabilities, which may impact the amount recorded in the individual and consolidated financial statements and the amount of the investment recorded under the equity pick-up method in the financial statements of the parent company and, the disclosures of contingent liabilities, we consider this subject as a significant matter for the audit.

Our procedures included, among others:

- Design, implementation and operating effectiveness testing of the internal control related to the determination of estimates for recording the amounts in accordance with the loss prognosis for the lawsuits;

- Assessment of the sufficiency of provisions recognized and the amount of contingent liabilities disclosed, by means of analysis of criteria and assumptions used for measuring amounts recorded as provision and/or amounts disclosed, and took into account the assessments prepared by the Company s internal and external legal advisors, and comparison with the existing precedents;

- Assess the analysis of chances of loss regarding existing documentation and information related to the principal proceedings and complaints involving the Company through external confirmation of balances with their internal and external legal advisors;

- Assessment of the appropriateness of the Company s disclosures in relation to lawsuits provision and contingent liabilities.

Based on the evidence obtained through the procedures summarized above, we considered acceptable the balances of the provision for litigation and disclosures of contingent liabilities in the context of the individual and consolidated financial statements taken as a whole for the year ended December 31, 2017.

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5. Financial Instruments - Individual and consolidated financial statements

As per Notes 22, 23, 24 and 33 to the financial statements.

Matter

The Company contracts financial instruments which much be measured and assessed at their fair value - including derivative financial instruments, forward operations, swap operations, futures operations and zero cost-collars - as a strategy to hedge equity. Additionally, beginning on January 1st, 2017, the Company adopted hedge accounting for investments in foreign operations, designating its foreign currency loans as an instrument in a hedge transaction for its net investments in foreign operations, in order to mitigate exchange rate risk in its individual and consolidated financial statements.Estimating the fair value of financial instruments not traded on active markets requires considerable judgment from the Company when determining prices or parameters and assumptions such as the classification of fair value hierarchy, discount rates for calculating present value, taking the existing market conditions into account as of the reporting date. Due to the materiality, complexity and judgment involved in assessing and measuring the financial instruments, whether derivative financial instruments or not, which may impact the amount recorded in the individual and consolidated financial statements and the amount of the investment recorded under the equity pick-up method in the financial statements of the parent company, we consider this subject as a significant matter for the audit.

Our procedures included, among others:

- Design, implementation and operating effectiveness testing of the relevant internal controls related to the process of identifying and valuing financial instruments;

- We tested the models developed by the Company, with the support of our specialists in financial instruments, to determine fair values and reasonableness of data, parameters and information included in the pricing models used, recalculated the amount of operations, and compared the assumptions used to determine fair values with similar operations performed in the marketplace;

- With support of our specialists, we obtained an understanding of the hedge strategies adopted by the Company including those related to hedge accounting for net investments in foreign operations. We evaluated the adequacy of the documentation prepared by the Company that supports the designation as hedge accounting, specifically the formal designations containing the descriptions of all strategies and methodologies used to measure effectiveness. We also recalculated the effectiveness test of prospective and retrospective coverage prepared by the Company. In addition, we compared the amounts measured with those presented in the note disclosures.

- Assessment of the appropriateness of the Company s disclosures, regarding sensitivity analyses, interest rate risk and foreign exchange risk, and the classification of instruments, among others.

Based on the evidence obtained through the procedures described above, we considered acceptable the balances of financial instruments including hedge accounting for net investments in foreign operations, in the context of the individual and consolidated financial statements taken as a whole, for the year ended December 31, 2017.

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Other Information - Statement of Added Value

The individual and consolidated statements of value added (DVA) for the year ended December 31, 2017, prepared under the responsibility of the Company s management, and presented as supplementary information for IFRS purposes, was submitted for the auditing procedures jointly with audit of the Company s financial statements. For the purposes of forming our opinion, we evaluate 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 as defined in Technical Pronouncement CPC 09 - Statement of Added Value. In our opinion, this statement of value added have been properly prepared, in all material respects, in accordance with the criteria defined in this Technical Pronouncement and is consistent with the individual and consolidated financial statements taken as a whole.

Other information accompanying the individual and consolidated financial statements and the auditor s report

Management is responsible for the other information, which comprises the Management report.

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

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

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

Management is responsible for the preparation and fair presentation of the individual and consolidated financial statements in accordance with accounting practices adopted in Brazil and in accordance with 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 individual and consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the individual 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 and subsidiaries or to cease operations, or has no realistic alternative but to do so.

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

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Auditors responsibilities for the audit of the individual and consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the individual and consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors 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 individual and consolidated 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 individual 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 Company s internal control.

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

- Conclude on the appropriateness of management s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors report to the related disclosures in the individual 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 auditors 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 financial statements, including the disclosures, and whether the individual and consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

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

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

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the (consolidated) financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors 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.

Rio de Janeiro, February 27, 2018

KPMG Auditores Independentes

CRC SP-014428/O-6 F-RJ

(Original report in Portuguese signed by)

Manuel Fernandes Rodrigues de Sousa

Accountant CRC RJ-052428/O-2

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Income Statement

In millions of Brazilian reais, except earnings per share data

		Year ended December 31				
			Consolidated		Parent company	
	Notes	2017	2016	2015	2017	2016
Continuing operations						
Net operating revenue	3(d)	108,532	94,633	78,057	64,037	46,424
Cost of goods sold and services rendered	5(a)	(67,257)	(61,143)	(62,780)	(33,327)	(29,663)
Gross profit		**41,275**	**33,490**	**15,277**	**30,710**	**16,761**
Operating (expenses) income						
Selling and administrative expenses	5(b)	(1,697)	(1,755)	(2,009)	(959)	(1,021)
Research and evaluation expenses		(1,086)	(1,098)	(1,326)	(679)	(677)
Pre operating and operational stoppage		(1,317)	(1,570)	(3,127)	(941)	(684)
Equity results from subsidiaries					5,277	6,503
Other operating expenses, net	5(c)	(1,338)	(937)	(588)	(893)	(1,166)
		(5,438)	**(5,360)**	**(7,050)**	**1,805**	**2,955**
Impairment and other results on non-current assets	15, 18 and 19	(1,025)	(4,168)	(33,893)	(549)	205
Operating income (loss)		**34,812**	**23,962**	**(25,666)**	**31,966**	**19,921**
Financial income	6	11,074	27,657	25,968	8,864	25,656
Financial expenses	6	(20,724)	(21,355)	(62,021)	(18,225)	(19,900)
Equity results in associates and joint ventures	15	302	1,111	(1,526)	302	1,111
Impairment and other results in associates and joint ventures	15, 19 and 21	(579)	(4,353)	(1,431)	(579)	(4,233)
Income (loss) before income taxes		**24,885**	**27,022**	**(64,676)**	**22,328**	**22,555**
Income taxes	8					
Current tax		(2,664)	(3,307)	(1,148)	(1,158)	(2,186)
Deferred tax		(1,943)	(6,260)	20,487	(957)	(2,908)
		(4,607)	**(9,567)**	**19,339**	**(2,115)**	**(5,094)**
Net income (loss) from continuing operations		**20,278**	**17,455**	**(45,337)**	**20,213**	**17,461**
Net income (loss) attributable to noncontrolling interests		65	(6)	(1,815)		
Net income (loss) from continuing operations attributable to Vale s stockholders		**20,213**	**17,461**	**(43,522)**	**20,213**	**17,461**
Discontinued operations	14					
Loss from discontinued operations		(2,608)	(4,159)	(660)	(2,586)	(4,150)
Net income (loss) attributable to noncontrolling interests		(22)	(9)	31		
Loss from discontinued operations attributable to Vale s stockholders		**(2,586)**	**(4,150)**	**(691)**	**(2,586)**	**(4,150)**

Net income (loss)		**17,670**	**13,296**	**(45,997)**	**17,627**	**13,311**
Net income (loss) attributable to noncontrolling interests		43	(15)	(1,784)		
Net income (loss) attributable to Vale s stockholders		**17,627**	**13,311**	**(44,213)**	**17,627**	**13,311**
Earnings (loss) per share attributable to Vale s stockholders:						
Basic and diluted earnings (loss) per share (restated):	9					
Common share (R$)		3.39	2.56	(8.51)	3.39	2.56

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

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Statement of Comprehensive Income

In millions of Brazilian reais

	Year ended December 31				
		Consolidated		Parent company	
	2017	2016	2015	2017	2016
Net income (loss)	**17,670**	**13,296**	**(45,997)**	**17,627**	**13,311**
Other comprehensive income (loss):					
Items that will not be reclassified subsequently to the income statement					
Retirement benefit obligations	(164)	(266)	257	(125)	(107)
Equity results in associates and joint ventures				(39)	(156)
Total items that will not be reclassified subsequently to the income statement, net of tax	**(164)**	**(266)**	**257**	**(164)**	**(263)**
Items that may be reclassified subsequently to the income statement					
Translation adjustments	3,337	(14,188)	35,944	3,309	(13,283)
Cash flow hedge		20	2,632		
Net investments hedge	(310)	4	2	(310)	
Equity results in associates and joint ventures		16	(17)		30
Transfer of realized results to net income	(34)	(276)	(1,157)		(266)
Total of items that may be reclassified subsequently to the income statement, net of tax	**2,993**	**(14,424)**	**37,404**	**2,999**	**(13,519)**
Total comprehensive income (loss)	**20,499**	**(1,394)**	**(8,336)**	**20,462**	**(471)**
Comprehensive income (loss) attributable to noncontrolling interests	37	(923)	(252)		
Comprehensive income (loss) attributable to Vale s stockholders	**20,462**	**(471)**	**(8,084)**		
From continuing operations	20,568	(13)	(8,439)		
From discontinued operations	(106)	(458)	355		
	20,462	**(471)**	**(8,084)**		

Items above are stated net of tax and the related taxes are disclosed in note 8.

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

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Statement of Cash Flows

In millions of Brazilian reais

	Year ended December 31				
	Consolidated			Parent company	
	2017	**2016**	**2015**	**2017**	**2016**
Cash flow from operating activities:					
Income (loss) before income taxes from continuing operations	24,885	27,022	(64,676)	22,328	22,555
Continuing operations adjustments for:					
Equity results in investees	(302)	(1,111)	1,526	(5,579)	(7,614)
Impairment and other results on non-current assets	1,025	4,168	33,893	549	(205)
Impairment and other results in associates and joint ventures	587	4,353	1,431	579	4,233
Depreciation, amortization and depletion	11,842	12,107	12,450	5,604	5,209
Financial results, net	9,650	(6,302)	36,053	9,361	(5,756)
Changes in assets and liabilities:					
Accounts receivable	3,983	(9,863)	5,212	15,301	4,503
Inventories	(1,030)	616	(749)	(612)	(135)
Suppliers and contractors	691	768	2,143	670	243
Provision - Payroll, related charges and others remunerations	1,236	435	(1,713)	980	714
Other taxes assets and liabilities, net	(976)	(371)	(687)	(514)	(227)
Deferred revenue - Gold stream		1,683	1,670		
Other assets and liabilities, net	(1,734)	2,225	(896)	677	(1,923)
	49,857	**35,730**	**25,657**	**49,344**	**21,597**
Interest on loans and borrowings paid	(5,373)	(5,894)	(4,812)	(5,911)	(5,905)
Derivatives paid, net	(763)	(5,604)	(3,771)	(577)	(2,215)
Interest on participative stockholders debentures paid	(428)	(268)	(209)	(428)	(268)
Income taxes	(1,763)	(1,401)	(1,790)	(824)	(69)
Income taxes - Settlement program	(1,559)	(1,426)	(1,284)	(1,527)	(1,397)
Net cash provided by operating activities from continuing operations	**39,971**	**21,137**	**13,791**	**40,077**	**11,743**
Cash flow from investing activities:					
Financial investments redeemed (invested)	(256)	45	932	(255)	15
Loans and advances - net receipts (payments) (note 21)	(1,421)	(698)	(34)	(8,037)	3,069
Guarantees and deposits - net receipts (payments)	(150)	(141)	(246)	(143)	(127)
Additions to investments	(292)	(875)	(332)	(1,895)	(1,918)
Additions to property, plant and equipment and intangible	(12,236)	(17,343)	(26,931)	(8,413)	(11,494)
Proceeds from disposal of assets and investments (note 15)	2,926	1,785	5,211	23	169
Dividends and interest on capital received from associates and joint ventures	739	669	1,064	2,645	1,591
Proceeds from gold stream transaction		885	1,156		
Net cash used in investing activities from continuing operations	**(10,690)**	**(15,673)**	**(19,180)**	**(16,075)**	**(8,695)**

Cash flow from financing activities:					
Loans and borrowings					
Additions	6,223	25,667	16,603	2,014	10,126
Repayments	(28,878)	(26,630)	(9,949)	(21,058)	(11,651)
Transactions with stockholders:					
Dividends and interest on capital attributed to stockholders	(4,667)	(857)	(5,026)	(4,667)	(857)
Dividends and interest on capital paid to noncontrolling interest	(404)	(972)	(46)		
Transactions with noncontrolling stockholders (note 15)	(305)	(69)	3,875		19
Net cash provided by (used in) financing activities from continuing operations	**(28,031)**	**(2,861)**	**5,457**	**(23,711)**	**(2,363)**
Net cash provided by (used in) discontinued operations (note 14)	**(817)**	**(527)**	**785**		
Increase in cash and cash equivalents	**433**	**2,076**	**853**	**291**	**685**
Cash and cash equivalents in the beginning of the period	13,891	14,022	10,555	1,203	518
Effect of exchange rate changes on cash and cash equivalents	38	(2,207)	2,614		
Effects of disposals of subsidiaries and merger, net on cash and cash equivalents	(44)			382	
Cash and cash equivalents at end of the period	**14,318**	**13,891**	**14,022**	**1,876**	**1,203**
Non-cash transactions:					
Additions to property, plant and equipment - capitalized loans and borrowing costs	1,179	2,291	2,531	1,176	1,679

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

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Statement of Financial Position

In millions of Brazilian reais

	Notes	Consolidated December 31, 2017	December 31, 2016	Parent company December 31, 2017	December 31, 2016
Assets					
Current assets					
Cash and cash equivalents	20	14,318	13,891	1,876	1,203
Accounts receivable	10	8,602	11,937	9,560	26,223
Other financial assets	13	6,689	951	409	665
Inventories	11	12,987	10,913	4,601	3,982
Prepaid income taxes		2,584	518	2,378	312
Recoverable taxes	12	3,876	5,296	2,091	3,962
Others		1,780	2,047	1,542	972
		50,836	**45,553**	**22,457**	**37,319**
Non-current assets held for sale	14	11,865	27,994	7,082	8,936
		62,701	**73,547**	**29,539**	**46,255**
Non-current assets					
Judicial deposits	27(c)	6,571	3,135	6,110	2,681
Other financial assets	13	10,690	2,041	1,865	2,178
Prepaid income taxes		1,754	1,718		
Recoverable taxes	12	2,109	2,368	2,062	2,223
Deferred income taxes	8(a)	21,959	23,931	14,200	15,299
Others		882	899	810	618
		43,965	**34,092**	**25,047**	**22,999**
Investments	15	11,802	12,046	117,387	107,539
Intangibles	17	28,094	22,395	13,471	11,314
Property, plant and equipment	18	181,535	180,616	102,978	102,056
		265,396	**249,149**	**258,883**	**243,908**
Total assets		**328,097**	**322,696**	**288,422**	**290,163**
Liabilities					
Current liabilities					
Suppliers and contractors		13,367	11,830	7,503	7,116
Loans and borrowings	20	5,633	5,410	4,378	4,171
Other financial liabilities	13	1,237	2,499	4,413	9,956
Taxes payable	8(d)	2,307	2,144	1,991	1,883
Provision for income taxes		1,175	556		
Liabilities related to associates and joint ventures	21	1,080	951	1,080	951
Provisions	25	4,610	3,103	2,904	1,792
Dividends and interest on capital	29(d)	4,742	2,660	4,439	2,602
Others		5,307	3,903	2,552	1,242
		39,458	**33,056**	**29,260**	**29,713**
Liabilities associated with non-current assets held for sale	14	3,899	3,554		

		43,357	**36,610**	**29,260**	**29,713**
Non-current liabilities					
Loans and borrowings	20	68,759	90,154	28,966	47,877
Other financial liabilities	13	9,575	6,804	54,955	56,802
Taxes payable	8(d)	16,176	16,170	15,853	15,838
Deferred income taxes	8(a)	5,687	5,540		
Provisions	25	23,243	18,730	6,900	4,396
Liabilities related to associates and joint ventures	21	2,216	2,560	2,216	2,560
Deferred revenue - Gold stream		6,117	6,811		
Others		4,861	5,615	6,514	5,736
		136,634	**152,384**	**115,404**	**133,209**
Total liabilities		**179,991**	**188,994**	**144,664**	**162,922**
Stockholders equity	29				
Equity attributable to Vale s stockholders		143,758	127,241	143,758	127,241
Equity attributable to noncontrolling interests		4,348	6,461		
Total stockholders equity		**148,106**	**133,702**	**143,758**	**127,241**
Total liabilities and stockholders equity		**328,097**	**322,696**	**288,422**	**290,163**

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

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Statement of Changes in Equity

In millions of Brazilian reais

	Share capital	Results on conversion of shares	Capital reserve	Results from operation with noncontrolling interest	Profit reserves	Treasury stocks	Unrealized fair value gain (losses)	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale s stockholders	Equ attribut noncont inter
Balance at December 31, 2014	**77,300**	**50**		**(970)**	**53,085**	**(2,746)**	**(4,553)**	**24,248**		**146,414**	
Loss									**(44,213)**	**(44,213)**	
Other comprehensive income:											
Retirement benefit obligations							260			260	
Cash flow hedge							1,458			1,458	
Available-for-sale financial instruments							2			2	
Translation adjustments							(1,040)	35,449		34,409	
Transactions with stockholders:											
Dividends and interest on capital of Vale s stockholders					(5,026)					(5,026)	
Dividends of noncontrolling interest											
Acquisitions and disposal of noncontrolling interest (note 15)				(911)				(1,233)		(2,144)	
Capitalization of noncontrolling interest advances											
Appropriation to undistributed retained earnings					(44,213)				44,213		
Balance at December 31, 2015	**77,300**	**50**		**(1,881)**	**3,846**	**(2,746)**	**(3,873)**	**58,464**		**131,160**	
									13,311	**13,311**	

Net income (loss)									
Other comprehensive income:									
Retirement benefit obligations						(263)			(263)
Cash flow hedge						26			26
Available-for-sale financial instruments						4			4
Translation adjustments						367	(13,916)		(13,549)
Transactions with stockholders:									
Dividends and interest on capital of Vale s stockholders								(3,459)	(3,459)
Dividends of noncontrolling interest									
Acquisitions and disposal of noncontrolling interest (note 15)			11						11
Capitalization of noncontrolling interest advances									
Appropriation to undistributed retained earnings				9,852				(9,852)	
Balance at December 31, 2016	**77,300**	**50**	**(1,870)**	**13,698**	**(2,746)**	**(3,739)**	**44,548**		**127,241**
Net income								**17,627**	**17,627**
Other comprehensive income:									
Retirement benefit obligations						(164)			(164)
Net investments hedge (note 24b)							(310)		(310)
Translation adjustments						(9)	3,318		3,309
Transactions with stockholders:									
Dividends and interest on capital of Vale s stockholders				(2,065)				(4,721)	(6,786)
Dividends of noncontrolling interest									
Acquisitions and disposal of noncontrolling interest (note 15)			(793)						(793)

Capitalization of noncontrolling interest advances										
Appropriation to undistributed retained earnings					12,906				(12,906)	
Merger of Valepar (note 29)			3,634							3,634
Balance at December 31, 2017	**77,300**	**50**	**3,634**	**(2,663)**	**24,539**	**(2,746)**	**(3,912)**	**47,556**		**143,758**

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

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Value Added Statement

In millions of Brazilian Reais

	Year ended December 31			
	Consolidated		Parent company	
	2017	2016	2017	2016
Generation of value added from continuing operations				
Gross revenue				
Revenue from products and services	110,007	95,915	65,049	47,173
Results on measurement or sale of non-current assets	(1,706)	(1,074)	(549)	(597)
Revenue from the construction of own assets	6,449	12,721	5,857	10,185
Allowance for doubtful accounts	(14)	(9)	4	(3)
Other revenues	663	1,459	419	387
Less:				
Acquisition of products	(1,728)	(1,758)	(652)	(821)
Material, service and maintenance	(27,022)	(29,819)	(16,796)	(19,328)
Oil and gas	(4,199)	(4,284)	(2,872)	(2,720)
Energy	(3,108)	(2,414)	(1,470)	(1,040)
Freight	(10,717)	(8,641)	(106)	(71)
Impairment of non-current assets and others results	102	(7,447)	(579)	(3,431)
Other costs and expenses	(7,681)	(12,118)	(3,027)	(1,390)
Gross value added	**61,046**	**42,531**	**45,278**	**28,344**
Depreciation, amortization and depletion	(11,842)	(12,107)	(5,604)	(5,209)
Net value added	**49,204**	**30,424**	**39,674**	**23,135**
Received from third parties				
Equity results from entities	302	1,111	5,945	6,754
Equity results from descontinued operations			(2,952)	(3,290)
Financial income	1,532	606	364	345
Monetary and exchange variation of assets	500	(6,791)	443	(6,398)
Total value added from continuing operations to be distributed	**51,538**	**25,350**	**43,474**	**20,546**
Value added from discontinued operations to be distributed	1,534	2,439		
Total value added to be distributed	**53,072**	**27,789**	**43,474**	**20,546**
Personnel	7,673	7,699	3,702	3,082
Taxes and contributions	6,553	4,835	6,528	7,124
Current income tax	2,664	3,307	1,158	2,186
Deferred income tax	1,943	6,260	957	2,908
Financial expense (excludes capitalized interest)	11,325	10,169	8,483	9,987
Monetary and exchange variation of liabilities	2,630	(17,610)	1,950	(17,807)
Other remunerations of third party funds	1,058	(2,615)	3,069	(245)
Reinvested net income (absorbed loss)	17,627	13,311	17,627	13,311
Net income (loss) attributable to noncontrolling interest	65	(6)		
Distributed value added from continuing operations	**51,538**	**25,350**	**43,474**	**20,546**
Distributed value added from discontinued operations	1,534	2,439		
Distributed value added	**53,072**	**27,789**	**43,474**	**20,546**

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

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Notes to the Financial Statements

Expressed in millions of Brazilian reais, unless otherwise stated

1. Corporate information

Vale S.A. (the Parent Company) is a public company headquartered in the city of Rio de Janeiro, Brazil with securities traded on the stock exchanges of São Paulo - B3 S.A. (Vale3), New York - NYSE (VALE), Paris - NYSE Euronext (Vale3) and Madrid - LATIBEX (XVALO).

Vale S.A. and its direct and indirect subsidiaries (Vale or Company) are global producers of iron ore and iron ore pellets, key raw materials for steelmaking, and producers of nickel, which is used to produce stainless steel and metal alloys employed in the production of several products. The Company also produces copper, metallurgical and thermal coal, manganese ore, ferroalloys, platinum group metals, gold, silver and cobalt. The information by segment is presented in note 3.

On December 22, 2017 after the conversion of the class A preferred shares into common shares, the Company migrated to the special listing segment of B3 S.A. (Novo Mercado), and became a company with no defined controlling shareholder (further details in the notes 4 and 29). As of this date, Vale s common shares are traded in the Novo Mercado.

2. Basis for preparation of the financial statements

a) Statement of compliance

The consolidated and individual financial statements of the Company (financial statements) have been prepared and are being presented in accordance with the International Financial Reporting Standards (IFRS) as implemented in Brazil by the Brazilian Accountant Pronouncements Committee (CPC), approved by the Brazilian Securities Exchange Commission (CVM) and by the Brazilian Federal Accounting Council (CFC). All relevant information from its own financial statements, and only this information, are being presented and correspond to those used by the Company s Management.

b) Basis of presentation

The financial statements have been prepared under the historical cost convention as adjusted to reflect: (i) the fair value of financial instruments measured at fair value through income statement or available-for-sale financial instruments measured at fair value through the statement of comprehensive income; and (ii) impairment of assets.

The issue of these financial statements was authorized by the Board of Directors on February 27, 2018.

c) Consolidation and investments

The financial statements reflect the assets, liabilities and transactions of the Parent Company and its direct and indirect controlled entities (subsidiaries). These subsidiaries are consolidated when the Company is exposed or has rights to variable returns from its involvement with the investee and has the ability to direct the significant activities of the investee. The Company also consolidates subsidiaries that Vale does not own the majority of the voting capital, but has control through other means, such as a stockholder s agreement. Intercompany balances and transactions, which include unrealized profits, are eliminated.

The entities over which the Company has joint control (joint ventures) or significant influence, but not control (associates) are presented in note 15. Those investments are accounted for using the equity method. For interests in joint arrangements not classified as joint ventures (joint operations), the Company recognizes its share of assets, liabilities and net income.

Unrealized gains on downstream or upstream transactions between the Company and its associates and joint ventures are eliminated fully or proportionately to the Company s interest.

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The material consolidated entities in each business segment are as follows:

	Location	Main activity/Business	% Ownership	% Voting capital	% Noncontrolling interest
Direct and indirect subsidiaries					
Companhia Portuária da Baía de Sepetiba	Brazil	Iron ore	100.0%	100.0%	0.0%
Mineração Corumbaense Reunida S.A.	Brazil	Iron ore and manganese	100.0%	100.0%	0.0%
Minerações Brasileiras Reunidas S.A. (MBR)	Brazil	Iron ore	62.5%	98.3%	37.5%
Salobo Metais S.A.	Brazil	Copper	100.0%	100.0%	0.0%
PT Vale Indonesia	Indonesia	Nickel	59.2%	59.2%	40.8%
Vale International Holdings GmbH	Austria	Holding and research	100.0%	100.0%	0.0%
Vale Canada Limited	Canada	Nickel	100.0%	100.0%	0.0%
Vale International S.A.	Switzerland	Trading and holding	100.0%	100.0%	0.0%
Vale Malaysia Minerals Sdn.Bhd.	Malaysia	Iron ore	100.0%	100.0%	0.0%
Vale Manganês S.A.	Brazil	Manganese and ferroalloys	100.0%	100.0%	0.0%
Vale Moçambique S.A.	Mozambique	Coal	81.0%	81.0%	19.0%
Vale Nouvelle Caledonie S.A.S.	New Caledonia	Nickel	95.0%	95.0%	5.0%
Vale Oman Distribution Center LLC	Oman	Iron ore and pelletizing	100.0%	100.0%	0.0%
Vale Oman Pelletizing Company LLC	Oman	Pelletizing	70.0%	70.0%	30.0%

Investments held by investors in Vale s subsidiaries are classified as noncontrolling interests. The Company treats transactions with noncontrolling interests as transactions with equity owners of the Company as described in note 16.

For purchases from noncontrolling interests, the difference between any consideration paid and the proportion acquired of the carrying value of net assets of the subsidiary is recorded in stockholders equity. Gains or losses on disposals to noncontrolling interest are also directly recorded in stockholders equity in Results from operation with noncontrolling interest .

As explained in note 14, the Fertilizer Segment is presented as discontinued operations, which includes the following subsidiaries:

	Location	Main activity/Business	% Ownership	% Voting capital	% Noncontrolling interest
Direct and indirect subsidiaries					
Compañia Minera Miski Mayo S.A.C.	Peru	Fertilizers	40.0%	51.0%	60.0%

Vale Fertilizantes S.A.	Brazil	Fertilizers	100.0%	100.0%	0.0%
Vale Cubatão Fertilizantes Ltda	Brazil	Fertilizers	100.0%	100.0%	0.0%

d) Functional currency and presentation currency

The financial statements of the Company and its associates and joint ventures are measured using the currency of the primary economic environment in which the entity operates (functional currency), which in the case of the Parent Company is the Brazilian real (R$). For presentation purposes, these financial statements are presented in Brazilian Reais.

Transactions in foreign currencies are translated into the functional currency using the exchange rate prevailing at the transaction date. The foreign exchange gains and losses resulting from the translation at the exchange rates prevailing at the end of the year are recognized in the income statement as financial income or expense . The exceptions are transactions for which gains and losses are recognized in the statement of comprehensive income.

The income statement and statement of financial position of the subsidiaries for which the functional currency is different from the presentation currency are translated into the presentation currency as follows: (i) assets, liabilities and stockholders equity, except for the components described in item (iii) are translated at the closing rate at the statement of financial position date; (ii) income and expenses are translated at the average exchange rates, except for specific significant transactions that, are translated at the rate at the transaction date and; (iii) capital, capital reserves and treasury stock are translated at the rate at each transaction date. All resulting exchange differences are recognized directly in the comprehensive income as translation adjustments . When a foreign operation is partially disposed of or sold, foreign exchanges differences that were recognized in equity are recognized in the income of statement.

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The exchange rates used by the Company to translate its foreign operations are as follows:

	Closing rate			Average rate for the year ended		
	2017	2016	2015	2017	2016	2015
US Dollar (US$)	3.3080	3.2591	3.9048	3.1925	3.4833	3.3387
Canadian dollar (CAD)	2.6344	2.4258	2.8171	2.4618	2.6280	2.6020
Australian dollar (AUD)	2.5849	2.3560	2.8532	2.4474	2.5876	2.4979
Euro (EUR or)	3.9693	3.4384	4.2504	3.6088	3.8543	3.6999

e) Significant accounting policies

Significant and relevant accounting policies for the understanding of the recognition and measurement basis used on the preparation of these financial statements were included in the respective notes. The accounting policies applied in the preparation of these financial statements are consistent with those adopted and disclosed in the financial statements of prior years.

The Company has not early adopted any standards and interpretations that have been issued or amended but are not yet effective for the year ended December 31, 2017.

The following new accounting standards were issued by IASB, but are not yet effective for 2017. The Company has performed an assessment on the Company s financial statements and the current expected impacts are detailed below:

- IFRS 9 Financial instrument - In July 2014, the IASB issued the final version of IFRS 9 that replaces IAS 39 Financial Instruments: Recognition and Measurement. This standard addresses the classification and measurement of financial assets and liabilities, new impairment model and new rules for hedge accounting. This standard shall apply for annual periods beginning on or after January 1, 2018. The Company has reviewed its financial assets and liabilities and is expecting the following impact from the adoption of the new standard on 1 January 2018:

- Classification and measurement - IFRS 9 establishes a new approach to determine whether a financial asset should be measured at amortized cost or fair value, based on the cash flow characteristics and the business model in which an asset is held. The Company does not currently expect the impact of these changes to be significant.

- Impairment - IFRS 9 requires expected credit loss impairment model for accounts receivables measured at amortized cost, on either a 12-month or the lifetime basis, rather than only incurred credit losses as is the case under IAS 39. Given that Vale s account receivables are short-term in nature and considering its credit rating and risk management policies in place, the Company does not expect these changes will have a significant impact on its financial statements.

- Hedge accounting - the changes in IFRS 9 relating to hedge accounting will have no impact as the Company does not currently apply cash flow or fair value hedge accounting. The Company currently applies the net investment hedge, which there is no changes introduced by this new standard.

- **IFRS 15 Revenue from Contracts with Customers** - In May 2014, the IASB issued IFRS 15, which replaces IAS 18 Revenues and the related interpretations. IFRS 15 introduces the five-step model for revenue recognition from contracts with customers. The new standard is based on the core principle that revenue is recognized when the control of a good or service transfers to a customer of an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This standard shall apply for annual periods beginning on or after January 1, 2018.

The Company will adopt this new standard on the required effective date using the modified retrospective method. Accordingly, the Company will not be required to restate the comparative figures.

During 2017, the Company performed a detailed assessment of IFRS 15, based on the contractual arrangements across the Company s main revenue streams. The result of this assessment and the impacts identified in relation to the IFRS 15 first adoption are summarized as follows:

Vale s revenue is predominantly derived from commodities sales, where the point of recognition is dependent on the sales arrangement, which is governed by parameters established by the International Commercial Terms (Incoterms). There will be no significant impact on the timing of commodities revenue recognition under IFRS 15, since usually the transfer of risks and rewards and the transfer of control under the sales contracts are at the same point in time.

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However, a significant proportion of Vale s sales are under CFR (Cost and Freight) or CIF (Cost, Insurance and Freight) Incoterms, in which the Company is responsible for providing shipping services after the date that Vale transfers control of the goods to the customers. Currently, the revenue from shipping services are recognized upon loading, as well as the related costs, and are not considered a separate service under IAS 18.

Under IFRS 15, the provision of shipping services for CFR and CIF contracts will be a distinct service and, therefore, a separate performance obligation to which a proportion of the transaction price should be allocated and recognized over time as the shipping services are provided. The impact on the timing of revenue recognition of the proportion allocated to the shipping service is deemed not significant to the Company s year-end results. Therefore, such revenue will not be presented separately in the Company s financial statements.

The accounting treatment for contracts with provisional pricing features that are currently considered as an embedded derivative in accordance with IAS 39 - Financial Instruments, shall remain unmodified in accordance with IFRS 15 and IFRS 9 - Financial Instruments. In addition, IFRS 15 introduces a new disclosure requirement for the provisional prices impact on the financial statements. When applicable, systems and processes will be amended to allow the disclosure of this information in the Company s financial statements.

IFRS 15 also requires the Company to treat deferred revenue related to the gold stream transaction as variable and, therefore must be adjusted each time there is a change in the underlying production profile. The Company does not expect to record a significant adjustment upon transition to this new standard.

- **IFRS 16 Lease** - In January 2016, the IASB issued IFRS 16, which replaces IAS 17 Leases and related interpretations. The IFRS 16 set forth that the lessee must recognize all leases on the statement of financial position, as the distinction between operating and finance leases is removed. The standard provides certain exemptions from recognizing leases on the statement of financial position, including where the underlying asset is of low value or the lease term is 12 months or less. Under the new standard, the Company will be required to recognize right of use lease assets and lease liabilities on the statement of financial position. Liabilities are measured based on the present value of future lease payments over the lease term. The right of use lease asset generally reflects the lease liability. This standard shall apply for annual periods beginning on or after January 1, 2019.

The Company has commenced the qualitative analysis of its main contracts and will continue to assess the quantitative potential effect of IFRS 16 during 2018, which depends on the decision regarding the transition method and the use of practical expedients and/or exemptions. It is therefore not yet possible to estimate the amount of right-of-use assets and lease liabilities that will have to be recognised on adoption of the new standard and how this may affect the Company s income statement.

The information on the main operating leases is presented in note 31.

f) Critical accounting estimates and judgments

The preparation of financial statements requires the use of certain critical accounting estimates and the application of judgment by management in applying the Company s accounting policies. These estimates are based on the experience, best knowledge, information available at the statement of financial position date and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Changes in facts and circumstances may lead to the revision of these estimates. Actual future results may differ from the estimates.

The significant estimates and judgments applied by Company in the preparation of these financial statements are as follows:

Note	Significant estimates and judgments
7	Deferred revenue - Gold stream transaction
8	Deferred income taxes
15	Consolidation
18	Mineral reserves and mine useful life
19	Impairment of non-current assets
21	Liabilities related to associates and joint ventures
23	Fair values estimate
26	Asset retirement obligation
27	Litigation
28	Employee postretirement obligations

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3. Information by business segment and by geographic area

The Company operated five reportable segments during this year: Ferrous Minerals, Coal, Base Metals, Fertilizers (presented as discontinued operations) and Others. The segments are aligned with products and reflect the structure used by Management to evaluate Company performance. The responsible bodies for making operational decisions, allocating resources and evaluating performance are the Executive Boards and the Board of Directors. The performance of the operating segments is assessed based on a measure of adjusted LAJIDA (EBITDA).

The information presented to the Executive Board on the performance of each segment is derived from the accounting records, adjusted for reallocations between segments.

The main activities of the operating segments are as follows:

Ferrous minerals - Ferrous minerals comprises the production and extraction of iron ore, iron ore pellets and its logistic services (railroads, ports and terminals), manganese, ferroalloys and others ferrous products and services.

Coal - Coal comprises the extraction of metallurgical and thermal coal and its logistic services (railroads, ports and terminals).

Base metals - Base metals include the production and extraction of non-ferrous minerals, and are presented as nickel and its by-products (ferro-nickel, copper, gold, precious metals and others) and copper (copper concentrated).

Fertilizers (Discontinued operations) - Fertilizers include the production of the three major groups of nutrients (potash, phosphate and nitrogen) and other fertilizers products. The group of assets related to this segment is classified as Non-current assets and liabilities associated with non-current assets held for sale (note 14).

Others - Other comprises sales and expenses of other products, services, research and evaluation, investments in joint ventures and associates of other business and contingencies not directly related to the core business.

a) Adjusted LAJIDA (EBITDA)

The definition of adjusted LAJIDA (EBITDA) for the Company is the operating income or loss excluding (i) the depreciation, depletion and amortization, (ii) results on measurement or sales of non-current assets, (iii) impairment, (iv) onerous contracts and plus (v) dividends received and interest from associates and joint ventures.

	Consolidated Year ended December 31, 2017						
	Net operating revenue	**Cost of goods sold and services rendered**	**Sales, administrative and other operating expenses**	**Research and evaluation**	**Pre operating and operational stoppage**	**Dividends received and interest from associates and joint ventures**	**Adjusted LAJIDA (EBITDA)**
Ferrous minerals							
Iron ore	59,206	(25,438)	(911)	(281)	(576)	100	32,100
Iron ore Pellets	18,043	(9,191)	(208)	(62)	(23)	263	8,822
Ferroalloys and manganese	1,501	(890)	(38)		(12)		561
Other ferrous products and services	1,541	(978)	18	(6)	(2)	63	636
	80,291	**(36,497)**	**(1,139)**	**(349)**	**(613)**	**426**	**42,119**
Coal	**5,003**	**(4,326)**	**(142)**	**(45)**	**(14)**	**574**	**1,050**
Base metals							
Nickel and other products	14,914	(10,985)	(484)	(155)	(238)		3,052
Copper	7,052	(3,126)	(86)	(43)			3,797
	21,966	**(14,111)**	**(570)**	**(198)**	**(238)**		**6,849**
Others	**1,272**	**(1,197)**	**(892)**	**(494)**	**(28)**	**313**	**(1,026)**
Total of continuing operations	**108,532**	**(56,131)**	**(2,743)**	**(1,086)**	**(893)**	**1,313**	**48,992**
Discontinued operations (Fertilizers)	**5,572**	**(5,124)**	**(327)**	**(39)**	**(80)**	**10**	12
Total	**114,104**	**(61,255)**	**(3,070)**	**(1,125)**	**(973)**	**1,323**	**49,004**

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Consolidated
Year ended December 31, 2016

	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted LAJIDA (EBITDA)
Ferrous minerals							
Iron ore	54,187	(22,817)	(1,712)	(308)	(521)	35	28,864
Iron ore Pellets	13,198	(6,932)	(251)	(45)	(77)	359	6,252
Ferroalloys and manganese	1,031	(793)	(11)	(1)	(39)		187
Other ferrous products and services	1,513	(933)	(26)	(5)	(12)		537
	69,929	**(31,475)**	**(2,000)**	**(359)**	**(649)**	**394**	**35,840**
Coal	**2,882**	**(3,090)**	**150**	**(50)**	**(137)**		**(245)**
Base metals							
Nickel and other products	15,504	(11,145)	(331)	(268)	(399)	13	3,374
Copper	5,770	(3,198)	(82)	(17)			2,473
Other base metals products			480				480
	21,274	**(14,343)**	**67**	**(285)**	**(399)**	**13**	**6,327**
Others	**548**	**(889)**	**(529)**	**(404)**	**(4)**	**262**	(1,016)
Total of continuing operations	**94,633**	**(49,797)**	**(2,312)**	**(1,098)**	**(1,189)**	**669**	**40,906**
Discontinued operations (Fertilizers)	**6,470**	**(5,315)**	**(298)**	**(75)**	**(58)**	**12**	**736**
Total	**101,103**	**(55,112)**	**(2,610)**	**(1,173)**	**(1,247)**	**681**	**41,642**

Consolidated
Year ended December 31, 2015

	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted LAJIDA (EBITDA)
Ferrous minerals							
Iron ore	41,427	(25,505)	(1,140)	(395)	(417)	87	14,057
Iron ore Pellets	11,916	(7,008)	34	(13)	(81)	708	5,556
Ferroalloys and manganese	518	(583)	1	(1)	(61)		(126)
Other ferrous products and services	1,552	(1,115)	22	(9)	(6)	25	469
	55,413	**(34,211)**	**(1,083)**	**(418)**	**(565)**	**820**	**19,956**
Coal	**1,739**	**(2,857)**	**(435)**	**(73)**	**(208)**	**109**	**(1,725)**

Base metals							
Nickel and other products	15,534	(11,378)	(506)	(348)	(1,359)		1,943
Copper	4,957	(3,049)	(114)	(31)	(2)		1,761
Other base metals products			722				722
	20,491	**(14,427)**	**102**	**(379)**	**(1,361)**		**4,426**
Others	**414**	**(464)**	**(543)**	**(456)**	**(2)**	**135**	**(916)**
Total of continuing operations	**78,057**	**(51,959)**	**(1,959)**	**(1,326)**	**(2,136)**	**1,064**	**21,741**
Discontinued operations (Fertilizers)	**7,442**	**(4,896)**	**(124)**	**(277)**	**(232)**		**1,913**
Total	**85,499**	**(56,855)**	**(2,083)**	**(1,603)**	**(2,368)**	**1,064**	**23,654**

Adjusted LAJIDA (EBITDA) is reconciled to net income (loss) as follows:

From Continuing operations

		Consolidated Year ended December 31	
	2017	**2016**	**2015**
Net income (loss) from continuing operations	**20,278**	**17,455**	**(45,337)**
Depreciation, depletion and amortization	11,842	12,107	12,450
Income taxes	4,607	9,567	(19,339)
Financial results, net	9,650	(6,302)	36,053
LAJIDA (EBITDA)	**46,377**	**32,827**	**(16,173)**
Items to reconciled LAJIDA (EBITDA) adjusted			
Impairment and other results on non-current assets	1,025	4,168	33,893
Equity results in associates and joint ventures	(302)	(1,111)	1,526
Impairment and other results in associates and joint ventures	579	4,353	1,431
Dividends received and interest from associates and joint ventures	1,313	669	1,064
Adjusted LAJIDA (EBITDA) from continuing operations	**48,992**	**40,906**	**21,741**

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From Discontinued operations

	Consolidated Year ended December 31		
	2017	2016	2015
Loss from discontinued operations	**(2,608)**	**(4,159)**	**(660)**
Depreciation, depletion and amortization	4	1,197	1,039
Income taxes	(324)	(2,134)	460
Financial results, net	89	(69)	485
LAJIDA (EBITDA)	**(2,839)**	**(5,165)**	**1,324**
Items to reconciled LAJIDA (EBITDA) adjusted			
Impairment of non-current assets	2,833	5,899	608
Equity results in associates and joint ventures	8	(10)	(19)
Dividends received and interest from associates and joint ventures	10	12	
Adjusted LAJIDA (EBITDA) from discontinued operations	**12**	**736**	**1,913**

b) Assets by segment

	Consolidated Year ended December 31, 2017				
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	5,859	6,358	119,429	8,553	5,643
Coal	271	1,048	5,686	376	947
Base metals	3,336	43	78,080	3,231	5,157
Others	20	4,353	6,434	76	95
Total	**9,486**	**11,802**	**209,629**	**12,236**	**11,842**

	Consolidated Year ended December 31, 2016				
	Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	3,697	5,894	113,526	11,384	5,593
Coal	412	929	6,216	2,136	652
Base metals	3,617	40	76,173	3,673	5,791
Others	7	5,183	7,096	150	71
Total	**7,733**	**12,046**	**203,011**	**17,343**	**12,107**

(i) Goodwill is allocated mainly in ferrous minerals and base metals segments in the amount of R$7,133 and R$6,460 in December 31, 2017 and R$4,060 and R$5,981 in December 31, 2016, respectively.

(ii) Includes only cash effect.

(iii) Refers to amounts recognized in the income statement.

c) Investment in associates and joint ventures, intangible and property, plant and equipment by geographic area

	Consolidated							
	December 31, 2017				December 31, 2016			
	Investments in associates and joint ventures	Intangible	Property, plant and equipment	Total	Investments in associates and joint ventures	Intangible	Property, plant and equipment	Total
Brazil	9,900	20,615	111,750	142,265	10,338	15,387	112,468	138,193
Canada		7,005	36,277	43,282		6,524	33,460	39,984
Americas, except Brazil and Canada	663		1,412	2,075	604		98	702
Europe			1,303	1,303			2,084	2,084
Indonesia			9,220	9,220			9,687	9,687
Asia, except Indonesia	1,229		3,638	4,867	1,104		3,912	5,016
Australia			149	149			139	139
New Caledonia			9,809	9,809			10,062	10,062
Mozambique		472	5,067	5,539		484	5,589	6,073
Oman		2	2,873	2,875			3,117	3,117
Other regions	10		37	47				
Total	**11,802**	**28,094**	**181,535**	**221,431**	**12,046**	**22,395**	**180,616**	**215,057**

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d) Net operating revenue by geographic area

	Consolidated Year ended December 31, 2017				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	1,896		3,218	221	5,335
United States of America	1,137		2,784	262	4,183
Germany	3,481		933		4,414
Europe, except Germany	5,499	1,275	6,347	35	13,156
Middle East/Africa/Oceania	5,640	543	41		6,224
Japan	6,150	409	1,277		7,836
China	43,005		1,842		44,847
Asia, except Japan and China	4,251	2,268	4,927		11,446
Brazil	9,232	508	597	754	11,091
Net operating revenue	**80,291**	5,003	21,966	**1,272**	**108,532**

	Consolidated Year ended December 31, 2016				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	1,167	72	4,079		5,318
United States of America	792		2,602	81	3,475
Germany	3,719		1,053		4,772
Europe, except Germany	5,107	723	5,381	59	11,270
Middle East/Africa/Oceania	4,266	329	72	1	4,668
Japan	4,464	432	1,123		6,019
China	41,135	223	2,420		43,778
Asia, except Japan and China	3,125	1,052	4,053		8,230
Brazil	6,154	51	491	407	7,103
Net operating revenue	**69,929**	**2,882**	**21,274**	**548**	**94,633**

	Consolidated Year ended December 31, 2015				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	1,185	64	3,697		4,946
United States of America	95		2,640	69	2,804
Germany	3,420		1,327		4,747
Europe, except Germany	4,873	347	5,137		10,357
Middle East/Africa/Oceania	3,323	314	273		3,910
Japan	5,038	237	1,223		6,498
China	28,477	149	2,186		30,812
Asia, except Japan and China	3,545	553	3,325		7,423
Brazil	5,457	75	683	345	6,560
Net operating revenue	**55,413**	**1,739**	**20,491**	**414**	**78,057**

Accounting policy

Revenue is recognized when Vale transfers to its customers all of the significant risks and rewards of ownership of the product sold or when the services are rendered. Net revenue excludes any applicable sales taxes and is recognized at the fair value of the consideration received or receivable to the extent that it is probable that economic benefits will flow to Vale and the revenues can be reliably measured.

Depending on the contract, revenue sales can be recognized when the product is available at the loading port, loaded on the ship, at the port of discharge or at the custumer s warehouse. Service revenues are recognized in the amount by which the services are rendered and accepted by the customer.

In some cases, the sale price is determined on a provisional basis at the date of sale and adjustments to the sales price subsequently occur based on movements in the quoted market or contractual prices up to the date of final pricing. Revenue is recognized based on the estimated fair value of the total consideration receivable, and the provisionally priced sales mechanism embedded within these sale arrangements has the character of a derivative. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously and changes in fair value are recognized as operational revenue in the income statement.

Amounts billed to customers for shipping related to products sold by the Company are recognized as revenue when the Company is responsible for shipping. Shipping costs are recognized as operating costs.

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Commodity price risk - The commodity price risk arises from volatility of iron ore, nickel, copper and coal prices. The Company is mostly exposed to the fluctuations in the iron ore and copper price. The selling price these products can be measured reliably at each period, since the price is quoted on an active market.

As of December 31, 2017, the Company had 33 million tons (2016: 36 million tons) provisionally priced based on iron ore forward prices and 106 thousand tons (2016:116 thousand tons) provisionally priced based on copper forward prices. The final price of these sales will be determined during the first quarter of 2018. A 10% change in the price of iron ore realized on the provisionally priced sales, all other factors held constant, would increase or reduce net income by R$751. A 10% change in the price of copper realized on the provisionally priced sales, all other factors held constant, would increase or reduce net income by R$284.

4. Special events occurred during the year

The special events occurred in the consolidated financial statements during the year are those that, in the Company s judgment, have significant effect on: (i) its operations; and/or (ii) corporate governance structure; and/or (iii) the income statement due to their size and nature. To determine whether an event or transaction should be disclosed as special events , the Company considers quantitative and qualitative factors, such as frequency and magnitude.

The special events identified by the Company are as follows:

a) Vale s corporate governance restructuring

At the General Extraordinary Shareholders Meeting, held on June 27, 2017, shareholders approved the corporate restructuring of the Company proposed by Valepar S.A. (former controlling shareholder). The corporate restructuring was based on (i) conversion of Vale class A preferred shares into common shares; (ii) amendment of Vale s by-laws, so as to adjust to *Novo Mercado* rules; and (iii) the merger of Valepar S.A. into Vale.

The transaction was concluded on November 21, 2017 and the restructuring was approved at the General Extraordinary Shareholder s Meeting on December 21, 2017. Further details are disclosed in note 29.

b) Events with significant effect on the income statement

	Year ended December 31 Consolidated		
	2017	2016	2015
Nacala Logistic Corridor	1,438		
Samarco Provision	(580)	(3,967)	
Impairment of non-current assets - Fertilizers business	(2,833)	(5,899)	(608)
Impairment of non-current assets and onerous contracts	(883)	(3,940)	(33,945)
Gold stream transaction		480	722
Deferred income tax in foreign jurisdiction			11,729
Total	**(2,858)**	**(13,326)**	**(22,102)**

Nacala Logistic Corridor - In March 2017, the Company concluded the transaction with Mitsui to sell 15% of its stake in Vale Moçambique and 50% of its stake in the Nacala Logistics Corridor and recognized a gain in the income statement of R$1,438 (US$458 million). Further details are disclosed in note 15.

Samarco - In 2017, the Company recognized in the income statement the amount of R$128 (2016: R$3,733) in respect of additions to the provision to comply with the reparation and compensation programs related to the dam failure of Samarco Mineração S.A. The Company also expensed an amount of R$452 (2016: R$234) applied by Samarco to funds its working capital requirements. Further details are disclosed in note 21.

Fertilizers - In December 2016, the Company approved the sale of fertilizers assets and the acquisition of a noncontrolling interest in The Mosaic Company (Mosaic). The Company assessed the fair value less cost of sell of the fertilizer business segment and an impairment loss of R$5,899 was recognized in the income statement from discontinued operations in the year ended December 31, 2016. In January 2018 (subsequent event), the Company and Mosaic concluded the transaction, which was preceded by final adjustments agreed by the parties under the original terms and conditions of the negotiation. As consequence of these adjustments, an impairment loss of R$2,325 was recognized in the income statement from discontinued operations in December 2017. Additionally, in November 2017, the Company entered into an agreement with Yara International ASA to sell its nitrogen assets located in Cubatão, Brazil and an impairment loss of R$508 was recognized in the income statement from discontinued operations in the year ended December 31, 2017. Further details are disclosed in note 14.

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Impairment of non-current assets and onerous contracts - In 2017, the Company placed an underground mine in Sudbury in care and maintenance and an impairment of R$428 was recognized in the income statement. In 2016, the Company recognized an impairment loss of R$3,940 mainly by the reduction in the nickel price projections. In 2015, the Company recognized an impairment loss of R$33,945 mainly by: (i) the reduction in estimated future coal prices combined with the increase of logistics costs and (ii) the reduction the recoverable values of the VNL and VNC CGUs. Further details are disclosed in note 19.

Gold stream transaction - In March 2015 and August 2016, a gold transaction with Wheaton Precious Metals Corp. (WPW) entered into 2013, was amended to include in each contract an additional 25% of the gold extracted as by-product of the Salobo copper mine. Furthermore, the Company recognized a gain of the result on sale of mineral rights in the amount of R$480 and R$722 in the year ended December 31, 2016 and 2015, respectively, see note 7.

Deferred income tax - In 2015, in the first adoption of the Law 12.973, the Company recognized assets deferred income tax related to accumulated losses of subsidiaries abroad in the amount of R$11,729, see note 8.

5. Costs and expenses by nature

a) Cost of goods sold and services rendered

	Year ended December 31				
		Consolidated		Parent company	
	2017	2016	2015	2017	2016
Personnel	7,332	7,222	7,030	3,986	3,445
Materials and services	12,183	10,808	9,827	5,504	5,438
Fuel oil and gas	4,197	4,280	4,037	2,869	2,714
Maintenance	9,899	9,487	8,520	6,926	6,068
Energy	3,078	2,406	1,602	1,463	1,028
Acquisition of products	1,728	1,762	2,531	652	821
Depreciation and depletion	11,126	11,346	10,821	5,078	4,808
Freight	10,717	8,641	11,877	106	71
Others	6,997	5,191	6,535	6,743	5,270
Total	**67,257**	**61,143**	**62,780**	**33,327**	**29,663**
Cost of goods sold	65,300	59,409	61,072	31,991	28,601
Cost of services rendered	1,957	1,734	1,708	1,336	1,062

Total	**67,257**	**61,143**	**62,780**	**33,327**	**29,663**

b) Selling and administrative expenses

	Year ended December 31				
	Consolidated			Parent company	
	2017	**2016**	**2015**	**2017**	**2016**
Personnel	747	727	822	514	473
Services	259	248	354	152	148
Depreciation and amortization	292	414	437	185	300
Travel expenses	28	29	36	19	17
Taxes and rents	37	46	52	8	18
Others	334	291	308	81	65
Total	**1,697**	**1,755**	**2,009**	**959**	**1,021**

c) Others operational expenses (incomes), net

	Year ended December 31				
	Consolidated			Parent company	
	2017	**2016**	**2015**	**2017**	**2016**
Provision for litigation	540	487	46	423	524
Profit sharing program	476	252	52	307	137
Disposals (reversals) of materials and inventories	52	(86)	224	43	(56)
Others	270	284	266	120	561
Total	**1,338**	**937**	**588**	**893**	**1,166**

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6. Financial result

	Year ended December 31				
		Consolidated		Parent company	
	2017	2016	2015	2017	2016
Financial expenses					
Loans and borrowings gross interest	(5,418)	(6,152)	(5,503)	(5,606)	(6,330)
Capitalized loans and borrowing costs	1,179	2,291	2,531	1,176	1,679
Derivative financial instruments	(1,780)	(1,655)	(11,969)	(1,257)	(957)
Indexation and exchange rate variation (a)	(8,432)	(10,405)	(46,346)	(7,465)	(9,612)
Participative stockholders debentures	(1,982)	(1,456)	3,039	(1,982)	(1,456)
Expenses of REFIS	(1,262)	(1,787)	(1,795)	(1,236)	(1,751)
Others	(3,029)	(2,191)	(1,978)	(1,855)	(1,473)
	(20,724)	**(21,355)**	**(62,021)**	**(18,225)**	**(19,900)**
Financial income					
Short-term investments	560	336	492	208	209
Derivative financial instruments	3,240	5,827	3,885	2,542	4,290
Indexation and exchange rate variation (b)	6,302	21,224	21,237	5,958	21,021
Others	972	270	354	156	136
	11,074	**27,657**	**25,968**	**8,864**	**25,656**
Financial results, net	**(9,650)**	**6,302**	**(36,053)**	**(9,361)**	**5,756**
Summary of indexation and exchange rate variation					
Loans and borrowings	(731)	17,885	(34,625)	(662)	17,715
Others	(1,399)	(7,066)	9,516	**(845)**	(6,306)
Net (a) + (b)	**(2,130)**	**10,819**	**(25,109)**	**(1,507)**	**11,409**

As from January 1, 2017, the Company applies net investment hedge accounting in foreign operation. Further details are disclosed in note 24.

7. Deferred revenue - Gold stream transaction

In 2013, the Company entered into a gold transaction with Wheaton Precious Metals Corp. (WPM), and amended in March 2015 and August 2016, to sell 75% of the gold extracted as a by-product of the Salobo copper mine and 70% of the gold extracted as a by-product of Sudbury nickel mines.

The transactions were bifurcated into two identifiable components (i) the sale of the mineral rights and, (ii) the services for gold extraction on the portion in which Vale operates as an agent for WPM gold extraction.

The result on sale of mineral rights from the additional transactions of R$480 and R$722 was recognized in the years ended December 31, 2016 and 2015, respectively, under Other operating expenses, net .

Critical accounting estimates and judgments

Defining the gain on sale of mineral interest and the deferred revenue portion of the transaction requires the use of critical accounting estimates as follows:

• Discount rates used to measure the present value of future inflows and outflows;

• Allocation of costs between nickel or copper and gold based on relative prices;

• Expected margin for the independent elements (sale of mineral rights and service for gold extraction) based on Company s best estimate.

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8. Income taxes

a) Deferred income tax assets and liabilities

	Consolidated		Parent company	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Taxes losses carryforward	**14,791**	**20,188**	**6,994**	**10,310**
Temporary differences:				
Employee post retirement obligations	2,263	2,022	586	483
Provision for litigation	1,510	702	1,435	661
Timing differences arising on assets	4,195	4,119	3,319	3,264
Fair value of financial instruments	1,816	546	1,816	1,921
Allocated goodwill	(8,048)	(7,325)		
Others	(255)	(1,861)	50	(1,340)
	1,481	**(1,797)**	**7,206**	**4,989**
Total	**16,272**	**18,391**	**14,200**	**15,299**
Assets	21,959	23,931	14,200	15,299
Liabilities	(5,687)	(5,540)		
	16,272	**18,391**	**14,200**	**15,299**

Changes in deferred tax are as follows:

	Consolidated			Parent company
	Assets	Liabilities	Total	Total
Balance at December 31, 2015	**30,867**	**6,520**	**24,347**	**17,292**
Taxes losses carryforward	(4,800)		(4,800)	(1,983)
Timing differences arising on assets	1,025		1,025	925
Fair value of financial instruments	(2,722)		(2,722)	(1,294)
Allocated goodwill		(1,206)	1,206	
Others	(969)		(969)	(556)
Effect in income statement	**(7,466)**	**(1,206)**	**(6,260)**	**(2,908)**
Transfers between asset and liabilities	1,087	1,087		
Translation adjustment	(1,876)	(899)	(977)	
Other comprehensive income	(121)	38	(159)	55
Effect of discontinued operations				
Income tax	2,127		2,127	860
Transfer to net assets held for sale	(687)		(687)	
Balance at December 31, 2016	**23,931**	**5,540**	**18,391**	**15,299**
Taxes losses carryforward	(6,615)		(6,615)	(3,316)
Timing differences arising on assets	335		335	421
Fair value of financial instruments	1,222		1,222	(105)

Allocated goodwill		(369)	369	
Others	2,746		2,746	2,043
Effect in income statement	**(2,312)**	**(369)**	**(1,943)**	**(957)**
Transfers between asset and liabilities	131	131		
Translation adjustment	118	350	(232)	
Other comprehensive income	(233)	35	(268)	224
Effect of discontinued operations				
Income tax	324		324	(366)
Balance at December 31, 2017	**21,959**	**5,687**	**16,272**	**14,200**

Law 12.973 - The Brazilian corporate tax law was amended at the end of 2014 and became effective as from fiscal year 2015. The change provided that profits from foreign subsidiaries are taxable in Brazil, on an accrual basis, applying the differential between the nominal local tax rate and the Brazilian tax rates (34%) considering the profit before tax in local GAAP (Generally Accepted Accounting Principles) and local currency. Accordingly, from January 1st, 2015 the results from foreign subsidiaries are recognized on that basis.

In accordance with article 77 of law 12.973, the losses generated by the foreign subsidiaries, before income taxes and the equity results, may be offset against their future profits, subject to certain conditions.

In 2015, in the first adoption, the Company recognized deferred income tax assets related to accumulated losses of subsidiaries abroad in the amount of R$11,729. Based on Company s projections, the deferred tax assets are expected to be utilized up to 5 years.

The tax loss carryforward does not expire in the Brazilian jurisdiction and the compensation is limited to 30% of the taxable income for the year. For local results taxable in Brazil, there is no restriction to compensated profits from foreign subsidiaries against previously recorded deferred tax assets.

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b) Income tax reconciliation - Income statement

The total amount presented as income taxes in the income statement is reconciled to the rate established by law, as follows:

	Year ended December 31				
	Consolidated			Parent company	
	2017	2016	2015	2017	2016
Income (loss) before income taxes	**24,885**	**27,022**	**(64,676)**	**22,328**	**22,555**
Income taxes at statutory rates - 34%	**(8,461)**	**(9,187)**	**21,990**	**(7,592)**	**(7,669)**
Adjustments that affect the basis of taxes:					
Income tax benefit from interest on stockholders equity	2,329	291	1,054	2,329	291
Tax incentives	1,175	1,130	204	750	953
Equity results	99	378	(518)	1,903	2,589
Unrecognized tax losses of the year	(1,389)	(2,465)	(3,021)		
Nondeductible effect of impairment	(138)	(325)	(7,222)		
Others	1,778	611	6,852	495	(1,258)
Income taxes	**(4,607)**	**(9,567)**	**19,339**	**(2,115)**	**(5,094)**

c) Tax incentives

In Brazil, Vale has tax incentives to partially reduce the income tax generated by the operations conducted in the North and Northeast regions that includes iron ore, manganese, copper and nickel. The incentive is calculated based on the taxable income of the incentive activity (tax operating income) and takes into account the allocation of tax operating income into different incentives applicable to different tranches of production during the periods specified for each product, generally 10 years. Most of our incentives are expected to expire up to 2024. An amount equal to that obtained with the tax saving must be appropriated in retained earnings reserve account in stockholders equity, and cannot be distributed as dividends to stockholders.

In addition to those incentives, 30% of the income tax due based on the tax operating income can be reinvested on the purchase of machinery and equipment, subject to subsequent approval by the regulatory agency responsible, Superintendência do Desenvolvimento da Amazonia (SUDAM) and the Superintendência do Desenvolvimento do Nordeste (SUDENE). The reinvestment is accounted in retained earnings reserve account, which restricts the distribution as dividends to stockholders.

Vale is subject to the revision of income tax by local tax authorities in a range up to 10 years depending on jurisdiction where the Company operates.

d) **Income taxes - Settlement program (REFIS)**

The balance mainly relates to REFIS to settle most of the claims related to the collection of income tax and social contribution on equity gains of foreign subsidiaries and affiliates from 2003 to 2012. As at December 31, 2017, the balance of R$17,780 (R$1,604 as current and R$16,176 as non-current) is due in 130 remaining monthly installments, bearing interest at the SELIC rate (Special System for Settlement and Custody), while at December 31, 2016, the balance was R$17,662 (R$1,492 as current and R$16,170 as non-current).

As at December 31, 2017, the SELIC rate was 7,0% per annum (13.75% per annum at December 31, 2016).

Accounting policy

The recognition of income taxes as deferred taxes is based on temporary differences between carrying amount and the tax basis of assets and liabilities as well as taxes losses carryforwards. The deferred income taxes assets and liabilities are offset when there is a legally enforceable right on the same taxable entity.

The deferred taxes assets arising from taxes losses and temporary differences are not recognized when is not probable that future taxable profit will be available against which temporary differences and/or tax losses can be utilized.

Income taxes are recognized in the income statement, except for items recognized directly in stockholders equity. The provision for income tax is calculated individually for each entity of the Company based on Brazilian tax rates, on an accrual basis, by applying the differential between the nominal local tax rates (based on rules enacted in the location of the entity) and the Brazilian tax rate.

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Critical accounting estimates and judgments

Deferred tax assets arising from tax losses, negative social contribution basis and temporary differences are registered taking into account the analysis of future performance, considering economic and financial projections, prepared based on internal assumptions and macroeconomic environment, trade and tax scenarios that may be subject to changes in the future. The assumptions of future profits are based on production and sales planning, commodity prices, operational costs, restructuring plans, reclamation and planned capital costs.

9. Basic and diluted earnings (loss) per share

As disclosed in note 29, the Company converted its class A preferred shares into common shares, without changing the amount of share capital. Therefore, the weighted average number of shares was restated as if the conversion had occurred at the beginning of the last comparative year presented.

The basic and diluted earnings (loss) per share are presented below:

	Year ended December 31		
	2017	**2016**	**2015**
Net income (loss) attributable to Vale s stockholders:			
Net income (loss) from continuing operations	20,213	17,461	(43,522)
Loss from discontinued operations	(2,586)	(4,150)	(691)
Net income (loss)	**17,627**	**13,311**	**(44,213)**
Thousands of shares (restated)			
Weighted average number of shares outstanding - common shares	5,197,432	5,197,432	5,197,432
Basic and diluted earnings (loss) per share from continuing operations (restated):			
Common share (R$)	3.89	3.36	(8.37)
Basic and diluted loss per share from discontinued operations (restated):			
Common share (R$)	(0.50)	(0.80)	(0.14)
Basic and diluted earnings (loss) per share (restated):			
Common share (R$)	3.39	2.56	(8.51)

The Company does not have potential outstanding shares with dilutive effect on the earnings (loss) per share.

10. Accounts receivable

	Consolidated		Parent company	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Accounts receivable	8,802	12,131	9,627	26,305
Impairment of accounts receivable	(200)	(194)	(67)	(82)
	8,602	**11,937**	**9,560**	**26,223**
Accounts receivable related to the steel sector - %	**82.90%**	**83.44%**	**79.48%**	**90.55%**

	Year ended December 31				
	Consolidated			Parent company	
	2017	2016	2015	2017	2016
Impairment of accounts receivable recorded in the income statement	(14)	(16)	44	4	3

There is no customer that individually represents over 10% of accounts receivable or revenues.

Accounting policy

Accounts receivable are financial instruments classified in the category loan and receivables and are the total amount due from sale of products and services rendered by the Company. Accounts receivable are initially recognized at fair value and subsequently measured at amortized cost, less provision for impairment of accounts receivable, when applicable.

Commercial credit risk management - For the commercial credit exposure, which arises from sales to final customers, the risk management area, in accordance with the current delegation level, approves or request the approval of credit risk limits for each counterparty.

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Vale attributes an internal credit risk rating for each counterparty using its own quantitative methodology for credit risk analysis, which is based on market prices, external credit ratings and financial information of the counterparty, as well as qualitative information regarding the counterparty s strategic position and history of commercial relations.

Based on the counterparty s credit risk, risk mitigation strategies may be used to manage the Company s credit risk. The main credit risk mitigation strategies include non-recourse sale of receivables, insurance instruments, letters of credit, corporate and bank guarantees, mortgages, among others.

Vale has a diversified accounts receivable portfolio from a geographical standpoint, with Asia, Europe and Brazil the regions with more significant exposures. According to each region, different guarantees can be used to enhance the credit quality of the receivables.

11. Inventories

	Consolidated		Parent company	
	December 31, 2017	**December 31, 2016**	**December 31, 2017**	**December 31, 2016**
Product inventory	7,324	5,107	2,796	2,443
Work in progress	2,162	2,626	273	272
Consumable inventory	3,501	3,180	1,532	1,267
Total	**12,987**	**10,913**	**4,601**	**3,982**

In 2017, the Company recognized in the consolidated income statement a provision in respect of the net realizable value of product inventory, in the amount of R$284 (2016: R$649 and 2015: R$2,026). The provision recognized in the 2017 income statement of the Parent Company was R$170 (2016: R$208).

Product inventories by segments are presented in note 3(b).

Accounting policy

Inventories are stated at the lower of cost or the net realizable value. The inventory production cost is determined on the basis of variable and fixed costs, direct and indirect costs of production, using the average cost method. At each statement of financial position date, inventories are assessed for impairment and a provision for losses on obsolete or slow-moving inventory may be recognized. The write-downs and reversals are included in Cost of goods sold and services rendered .

12. Recoverable taxes

Recoverable taxes are presented net of provisions for losses on tax credits.

	Consolidated		Parent company	
	December 31, 2017	**December 31, 2016**	**December 31, 2017**	**December 31, 2016**
Value-added tax	2,934	2,361	1,561	1,293
Brazilian federal contributions	2,909	5,212	2,517	4,825
Others	142	91	75	67
Total	**5,985**	**7,664**	**4,153**	**6,185**
Current	3,876	5,296	2,091	3,962
Non-current	2,109	2,368	2,062	2,223
Total	**5,985**	**7,664**	**4,153**	**6,185**

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13. Other financial assets and liabilities

	Consolidated			
	Current		Non-Current	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Other financial assets				
Financial investments	61	59		
Loans			498	587
Derivative financial instruments (note 24)	351	892	1,497	1,454
Related parties (note 30)	6,277		8,695	
	6,689	**951**	**10,690**	**2,041**
Other financial liabilities				
Derivative financial instruments (note 24)	344	1,349	2,269	3,991
Related parties (note 30)	893	1,150	3,226	287
Participative stockholders debentures			4,080	2,526
	1,237	**2,499**	**9,575**	**6,804**

	Parent company			
	Current		Non-Current	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Other financial assets				
Financial investments	4	4		
Loans			18	114
Derivative financial instruments (note 24)	199	338	1,268	1,304
Related parties (note 30)	206	323	579	760
	409	**665**	**1,865**	**2,178**
Other financial liabilities				
Derivative financial instruments (note 24)	311	1,033	2,113	3,427
Related parties (note 30)	4,102	8,923	48,762	50,849
Participative stockholders debentures			4,080	2,526
	4,413	**9,956**	**54,955**	**56,802**

Participative stockholders debentures

At the time of its privatization in 1997, Vale issued debentures to then-existing stockholders, including the Brazilian Government. The debentures terms were set to ensure that pre-privatization stockholders would participate in potential future benefits that might be obtained from exploiting mineral resources.

A total of 388,559,056 debentures were issued with a par value of R$0.01 (one cent of Brazilian Real) and are inflation-indexed to the General Market Price Index (IGP-M), as set forth in the Issue Deed. The Company paid as remuneration the amount of R$428 and R$268, respectively, for the year ended December 31, 2017 and 2016.

14. Non-current assets and liabilities held for sale and discontinued operations

	Consolidated				
	December 31, 2017	December 31, 2016			
	Fertilizers	Fertilizers	Nacala	Shipping assets	Total
Assets					
Accounts receivable	297	279	21		300
Inventories	1,522	1,261	7		1,268
Other current assets	363	348	370		718
Investments in associates and joint ventures	274	295			295
Property, plant and equipment and Intangible	7,110	8,779	13,246	1,164	23,189
Other non-current assets	2,299	2,216	8		2,224
Total assets	**11,865**	**13,178**	**13,652**	**1,164**	**27,994**
Liabilities					
Suppliers and contractors	1,070	913	134		1,047
Other current liabilities	711	626	44		670
Other non-current liabilities	2,118	1,821	16		1,837
Total liabilities	**3,899**	**3,360**	**194**		**3,554**
Net non-current assets held for sale	**7,966**	**9,818**	**13,458**	**1,164**	**24,440**

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a) **Fertilizers (Discontinued operations)**

In December 2016, the Company entered into an agreement with The Mosaic Company (Mosaic) to sell (i) the phosphate assets located in Brazil, except for the assets located in Cubatão, Brazil; (ii) the control of Compañia Minera Miski Mayo S.A.C., in Peru; (iii) the potassium assets located in Brazil; and (iv) the potash projects in Canada. Originally, the agreed amount was R$8,158 (US$2,500 million), of which R$4,074 (US$1,250 million) would be paid in cash and the remaining consideration would be settled with 42.3 million common shares to be issued by Mosaic.

In January 2018 (subsequent event), the Company and Mosaic concluded the transaction, which was preceded by final adjustments agreed by the parties under the original terms and conditions of the negotiation. As consequence of these adjustments, the consideration has changed and the Company received R$3,573 (US$1,080 million) in cash and 34.2 million common shares, corresponding to 8.9% of Mosaic s equity after the issuance of these shares (R$2,901 (US$877 million), based on the Mosaic s quotation at closing date of the transaction).

Fertilizer s net assets were adjusted to reflect fair value less cost to sell and a loss of R$2,325 (R$5,899 in 2016) was recognized in the income statement from discontinued operations.

b) **Cubatão (part of the fertilizer segment)**

In November 2017, the Company entered into an agreement with Yara International ASA (Yara) to sell its assets located in Cubatão, Brazil. The agreed consideration is R$844 (US$255 million) to be paid in cash. The Company expects to complete the transaction by the end of 2018, subject to compliance with usual precedent conditions, including approval by the Brazilian anti-trust authority (CADE) and other authorities.

These assets were adjusted to reflect fair value less cost to sell and a loss of R$508 was recognized in the income statement from discontinued operations.

The results for the years and the cash flows of discontinued operations of the Fertilizer segment are presented as follows:

		Consolidated Year ended December 31	
	2017	**2016**	**2015**
Discontinued operations			

Net operating revenue	5,572	6,470	7,442
Cost of goods sold and services rendered	(5,124)	(6,495)	(5,878)
Operating expenses	(450)	(448)	(690)
Impairment of non-current assets	(2,833)	(5,899)	(608)
Operating income (loss)	**(2,835)**	**(6,372)**	**266**
Financial Results, net	(89)	69	(485)
Equity results in associates and joint ventures	(8)	10	19
Loss before income taxes	**(2,932)**	**(6,293)**	**(200)**
Income taxes	324	2,134	(460)
Loss from discontinued operations	**(2,608)**	**(4,159)**	**(660)**
Net income (loss) attributable to noncontrolling interests	(22)	(9)	31
Loss attributable to Vale s stockholders	**(2,586)**	**(4,150)**	**(691)**

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	Consolidated Year ended December 31 2017	2016	2015
Discontinued operations			
Cash flow from operating activities			
Loss before income taxes	(2,932)	(6,293)	(200)
Adjustments:			
Equity results in associates and joint ventures	8	(10)	(19)
Depreciation, amortization and depletion	4	1,197	1,039
Impairment of non-current assets	2,833	5,899	608
Others		(69)	485
Increase (decrease) in assets and liabilities	356	(226)	15
Net cash provided by operating activities	**269**	**498**	**1,928**
Cash flow from investing activities			
Additions to property, plant and equipment	(978)	(995)	(853)
Others	(1)	29	(83)
Net cash used in investing activities	**(979)**	**(966)**	**(936)**
Cash flow from financing activities			
Loans and borrowings			
Repayments	(107)	(59)	(207)
Net cash used in financing activities	**(107)**	**(59)**	**(207)**
Net cash provided (used) in discontinued operations	**(817)**	**(527)**	**785**

Accounting policy

A non-current asset is classified as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

The criteria for recognition the non-current assets as held for sale are only considered satisfied when the sale is highly probable and the asset (or disposal group of assets) is available for immediate sale in its present condition.

The Company measures the assets held for sale (or group of assets) at the lower of its carrying amount and fair value less costs to sell. If the carrying amount exceeds the fair value less costs to sell an impairment loss is recognized against income statement. Any subsequent reversal of impairment is recognized only to the extent of the loss previously recognized.

The assets and liabilities classified as held for sale are presented separately in the statement of financial position.

The classification as a discontinued operation occurs through disposal, or when the operation meets the criteria to be classified as held for sale if this occurs earlier. A discontinued operation is a component of a Company business comprising cash flows and operations that may be clearly distinct from the rest of the Company and that represents an important separate line of business or geographical area of operations.

The result of discontinued operations is presented in a single amount in the income statement, including the results after income tax of these operations less any impairment loss. Cash flows attributable to operating, investing and financing activities of discontinued operations are disclosed in a separate note.

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

Any noncontrolling interest relating to a group disposal held for sale is presented in the stockholders equity and are not reclassified in the statement of financial position.

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15. Investments

The material non-consolidated entities of the Company are as follows:

	Location	Main activity/Business	% Ownership	% Voting capital	% Noncontrolling interest
Joint ventures					
Aliança Geração de Energia S.A.	Brazil	Energy	55.0%	55.0%	45.0%
Companhia Coreano-Brasileira de Pelotização	Brazil				