

Vale S.A.
Form 6-K
April 26, 2018
Table of Contents

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

April 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)

Edgar Filing: Vale S.A. - Form 6-K

(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 Form 40-F

(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 No

(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 No

(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 No

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

Table of Contents

Interim Financial Statements

March 31, 2018

BRGAAP in R\$ (English)

Table of Contents

Vale S.A. Interim Financial Statements

Contents

	Page
<u>Report on the review of the quarterly information - ITR</u>	3
<u>Consolidated and Parent Company Income Statement</u>	4
<u>Consolidated and Parent Company Statement of Comprehensive Income</u>	5
<u>Consolidated and Parent Company Statement of Cash Flows</u>	6
<u>Consolidated and Parent Company Statement of Financial Position</u>	7
<u>Consolidated Statement of Changes in Equity</u>	8
<u>Consolidated and Parent Company Value Added Statement</u>	9
<u>Selected Notes to the Interim Financial Statements</u>	10
<u>1. Corporate information</u>	10
<u>2. Basis for preparation of the interim financial statements</u>	10
<u>3. Information by business segment and by geographic area</u>	13
<u>4. Special events occurred during the period</u>	15
<u>5. Costs and expenses by nature</u>	16
<u>6. Financial results</u>	16
<u>7. Income taxes</u>	17
<u>8. Basic and diluted earnings (loss) per share</u>	18
<u>9. Accounts receivable</u>	18
<u>10. Inventories</u>	18
<u>11. Other financial assets and liabilities</u>	19
<u>12. Non-current assets and liabilities held for sale and discontinued operations</u>	19
<u>13. Investments in associates and joint ventures</u>	21
<u>14. Intangibles</u>	23
<u>15. Property, plant and equipment</u>	23
<u>16. Loans, borrowings, cash and cash equivalents and financial investments</u>	24
<u>17. Liabilities related to associates and joint ventures</u>	26
<u>18. Financial instruments classification</u>	26
<u>19. Fair value estimate</u>	27
<u>20. Derivative financial instruments</u>	28
<u>21. Provisions</u>	33
<u>22. Litigation</u>	33
<u>23. Employee postretirement obligations</u>	37
<u>24. Stockholders' equity</u>	37
<u>25. Related parties</u>	38
<u>26. Parent Company information (individual interim information)</u>	39
<u>27. Additional information about derivatives financial instruments</u>	42

KPMG Auditores Independentes

Rua do Passeio, 38 - Setor 2 - 17º andar - Centro

20021-290 - Rio de Janeiro/RJ - Brasil

Caixa Postal 2888 - CEP 20001-970 - Rio de Janeiro/RJ - Brasil

Telefone +55 (21) 2207-9400, Fax +55 (21) 2207-9000

www.kpmg.com.br

Report on the review of quarterly information ITR

(A free translation of the original report in Portuguese, as filed with the Brazilian Securities and Exchange Commission (CVM), prepared in accordance with the accounting practices adopted in Brazil, rules of the CVM and of the International Financial Reporting Standards - IFRS)

To the Board of Directors and Stockholders of

Vale S.A.

Rio de Janeiro - RJ

Introduction

1. We have reviewed the interim financial information, individual and consolidated, of Vale S.A. (the Company), identified as Parent Company and Consolidated, respectively, included in the quarterly information form - ITR for the quarter ended March 31, 2018, which comprises the statement of financial position as of March 31, 2018 and the respective statements of income and comprehensive income, statements of changes in equity and of cash flows for the three-month period then ended, including the explanatory notes.

2. The Company`s Management is responsible for the preparation of these interim financial information in accordance with the CPC 21(R1) and the IAS 34 - Interim Financial Reporting, issued by the International Accounting Standards Board IASB, as well as the presentation of these information in accordance with the standards issued by the Brazilian Securities and Exchange Commission, applicable to the preparation of quarterly information - ITR. Our

responsibility is to express our conclusion on this interim financial information based on our review.

Scope of the review

3. We conducted our review in accordance with Brazilian and International Interim Information Review Standards (NBC TR 2410 - Revisão de Informações Intermediárias Executada pelo Auditor da Entidade and ISRE 2410 - Review of Interim Financial Information Performed by the Independent Auditor of the Entity, respectively). A review of interim information consists of making inquiries primarily of the management responsible for financial and accounting matters and applying analytical procedures and other review procedures. The scope of a review is significantly less than an audit conducted in accordance with auditing standards and, accordingly, it did not enable us to obtain assurance that we were aware of all the material matters that would have been identified in an audit. Therefore, we do not express an audit opinion.

Conclusion on the interim financial information

4. Based on our review, we are not aware of any fact that might lead us to believe that the individual and consolidated interim financial information included in the aforementioned quarterly information was not prepared, in all material respects, in accordance with CPC 21(R1) and IAS 34, issued by the IASB, applicable to the preparation of the quarterly review - ITR, and presented in accordance with the standards issued by the Brazilian Securities and Exchange Commission.

Other matters

Statements of added value

5. The individual and consolidated interim financial information related to the statement of value added for the three-month period ended March 31, 2018, prepared under the responsibility of the Company's management, and presented as supplementary information for the purposes of IAS 34, was submitted to the same review procedures followed together with the review of the Company's interim financial information. In order to form our conclusion, we evaluated whether this statement was reconciliated to the interim financial information and to the accounting records, as applicable, and whether their form and content are in accordance with the criteria set on Technical Pronouncement CPC 09 - Statement of Value Added. Based on our review, nothing has come to our attention that causes us to believe that the accompanying statement of value added was not prepared, in all material respects, in accordance with the individual and consolidated interim financial information taken as a whole.

Rio de Janeiro, April 25, 2018

Edgar Filing: Vale S.A. - Form 6-K

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

KPMG Auditores Independentes, uma sociedade simples brasileira e firma-membro da rede KPMG de firmas-membro independentes e afiliadas à KPMG International Cooperative (KPMG International), uma entidade suíça.

KPMG Auditores Independentes, a Brazilian entity and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (KPMG International), a Swiss entity.

Table of Contents**Income Statement**

In millions of Brazilian reais, except earnings per share data

	Notes	Consolidated		Parent company	
		Three-month period ended March 31,			
		2018	2017	2018	2017
Continuing operations					
Net operating revenue	3(c)	27,932	26,742	15,705	17,162
Cost of goods sold and services rendered	5(a)	(16,970)	(14,865)	(8,376)	(7,751)
Gross profit		10,962	11,877	7,329	9,411
Operating (expenses) income					
Selling and administrative expenses	5(b)	(402)	(388)	(226)	(226)
Research and evaluation expenses		(223)	(206)	(147)	(121)
Pre operating and operational stoppage		(253)	(364)	(201)	(192)
Equity results from subsidiaries				2,227	3,065
Other operating revenues (expenses), net	5(c)	(406)	(247)	(263)	172
		(1,284)	(1,205)	1,390	2,698
Impairment and other results on non-current assets	4	(52)	1,603	(80)	(41)
Operating income		9,626	12,275	8,639	12,068
Financial income (expenses)					
Financial income	6	759	1,203	319	845
Financial expenses	6	(2,202)	(3,615)	(1,924)	(3,281)
Other financial items	6	(628)	518	(560)	528
Equity results in associates and joint ventures	13	273	225	273	225
Impairment and other results in associates and joint ventures	17	(44)	(191)	(44)	(191)
Income before income taxes		7,784	10,415	6,703	10,194
Income taxes					
	7				
Current tax		(295)	(1,585)	(1)	(1,232)
Deferred tax		(2,044)	(631)	(1,319)	(811)
		(2,339)	(2,216)	(1,320)	(2,043)
Net income from continuing operations		5,445	8,199	5,383	8,151
Net income attributable to noncontrolling interests		62	48		
Net income from continuing operations attributable to Vale's stockholders		5,383	8,151	5,383	8,151
Discontinued operations					
	12				
Loss from discontinued operations		(271)	(257)	(271)	(260)
Net income attributable to noncontrolling interests			3		
Loss from discontinued operations attributable to Vale's stockholders		(271)	(260)	(271)	(260)
Net income		5,174	7,942	5,112	7,891
Net income attributable to noncontrolling interests		62	51		

Edgar Filing: Vale S.A. - Form 6-K

Net income attributable to Vale's stockholders	5,112	7,891	5,112	7,891
Earnings per share attributable to Vale's stockholders:				
Basic and diluted earnings per share (restated):	8			
Common share (R\$)	0.98	1.52	0.98	1.52

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

Table of Contents**Statement of Comprehensive Income**

In millions of Brazilian reais

	Consolidated		Parent company	
	2018	2017	2018	2017
Net income	5,174	7,942	5,112	7,891
Other comprehensive income (loss):				
Items that will not be reclassified subsequently to the income statement				
Retirement benefit obligations	176	(71)	(9)	(13)
Fair value adjustment to investment in equity securities	(114)		(86)	
Equity results in associates and joint ventures			157	(58)
Transfer to retained earnings	(67)		(67)	
Total items that will not be reclassified subsequently to the income statement, net of tax	(5)	(71)	(5)	(71)
Items that may be reclassified subsequently to the income statement				
Translation adjustments	61	(2,175)	(100)	(2,101)
Net investments hedge	(96)	499	(96)	559
Transfer of realized results to net income	(257)		(112)	
Total of items that may be reclassified subsequently to the income statement, net of tax	(292)	(1,676)	(308)	(1,542)
Total comprehensive income	4,877	6,195	4,799	6,278
Comprehensive income (loss) attributable to noncontrolling interests	78	(83)		
Comprehensive income attributable to Vale's stockholders	4,799	6,278		
From continuing operations	4,783	6,306		
From discontinued operations	16	(28)		
	4,799	6,278		

Items above are stated net of tax and the related taxes are disclosed in note 7.

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

Table of Contents**Statement of Cash Flows**

In millions of Brazilian reais

	Consolidated		Parent company	
	Three-month period ended March 31,			
	2018	2017	2018	2017 restated
Cash flow from operating activities:				
Income before income taxes from continuing operations	7,784	10,415	6,703	10,194
Continuing operations adjustments for:				
Equity results in investees	(273)	(225)	(2,500)	(3,290)
Impairment and other results on non-current assets and associates and joint ventures	96	(1,412)	124	232
Depreciation, amortization and depletion	2,834	2,851	1,403	1,317
Financial results, net	2,071	1,894	2,165	1,908
Changes in assets and liabilities:				
Accounts receivable	41	970	(1,844)	(2,494)
Inventories	153	(708)	(403)	(263)
Suppliers and contractors	(1,172)	310	(981)	(152)
Provision - Payroll, related charges and others remunerations	(1,653)	(721)	(1,122)	(606)
Other assets and liabilities, net	(303)	(604)	183	(69)
	9,578	12,770	3,728	6,777
Interest on loans and borrowings paid	(1,237)	(1,595)	(1,085)	(1,290)
Derivatives paid, net	(80)	(338)	(116)	(192)
Income taxes	(773)	(1,156)	(35)	(652)
Income taxes - Settlement program	(404)	(379)	(396)	(371)
Net cash provided by operating activities from continuing operations	7,084	9,302	2,096	4,272
Cash flow from investing activities:				
Financial investments redeemed (invested)	(52)	(167)	(58)	(1)
Loans and advances - net receipts (payments) (note 25)	8,651	(455)	4,623	1,515
Additions to property, plant and equipment, intangibles and investments	(2,943)	(3,516)	(1,782)	(2,626)
Proceeds from disposal of assets and investments (note 12)	3,536	1,614	6	4
Dividends and interest on capital received from associates and joint ventures	33		454	
Others investments activities	51	(4)	26	(71)
Net cash provided by (used in) investing activities from continuing operations	9,276	(2,528)	3,269	(1,179)
Cash flow from financing activities:				
Loans and borrowings				
Additions		3,576		321
Repayments	(7,448)	(3,533)	(960)	(3,140)
Transactions with stockholders:				

Edgar Filing: Vale S.A. - Form 6-K

Dividends and interest on capital paid to stockholders	(4,721)		(4,721)	
Dividends and interest on capital paid to noncontrolling interest	(290)	(9)		
Transactions with noncontrolling stockholders	(56)	799	(56)	
Net cash provided by (used in) financing activities from continuing operations	(12,515)	833	(5,737)	(2,819)
Net cash used in discontinued operations (note 12)	(150)	(15)		
Increase (decrease) in cash and cash equivalents	3,695	7,592	(372)	274
Cash and cash equivalents in the beginning of the period	14,318	13,891	1,876	1,203
Effect of exchange rate changes on cash and cash equivalents	159	(160)		
Effects of disposals of subsidiaries and merger, net on cash and cash equivalents	(331)	(44)		
Cash and cash equivalents at end of the period	17,841	21,279	1,504	1,477
Non-cash transactions:				
Additions to property, plant and equipment - capitalized loans and borrowing costs	194	322	194	322

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

Table of Contents**Statement of Financial Position**

In millions of Brazilian reais

		Consolidated		Parent company	
	Notes	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
Assets					
Current assets					
Cash and cash equivalents	16	17,841	14,318	1,504	1,876
Accounts receivable	9	8,939	8,602	11,897	9,560
Other financial assets	11	1,249	6,689	372	409
Inventories	10	13,184	12,987	4,714	4,601
Prepaid income taxes		2,401	2,584	2,200	2,378
Recoverable taxes		3,507	3,876	1,777	2,091
Others		2,001	1,780	1,210	1,542
		49,122	50,836	23,674	22,457
Non-current assets held for sale	12	1,528	11,865	893	7,082
		50,650	62,701	24,567	29,539
Non-current assets					
Judicial deposits	22(c)	6,625	6,571	6,227	6,110
Other financial assets	11	10,128	10,690	4,268	1,865
Prepaid income taxes		1,952	1,754		
Recoverable taxes		2,217	2,109	2,170	2,062
Deferred income taxes	7(a)	20,298	21,959	13,064	14,200
Others		931	882	1,233	810
		42,151	43,965	26,962	25,047
Investments	13	12,367	11,802	123,970	117,387
Intangibles	14	28,560	28,094	14,088	13,471
Property, plant and equipment	15	179,979	181,535	102,528	102,978
		263,057	265,396	267,548	258,883
Total assets		313,707	328,097	292,115	288,422
Liabilities					
Current liabilities					
Suppliers and contractors		11,960	13,367	6,634	7,503
Loans and borrowings	16	6,535	5,633	5,291	4,378
Other financial liabilities	11	3,349	3,260	3,968	4,413
Taxes payable	7(c)	2,337	2,307	2,031	1,991
Provision for income taxes		755	1,175		
Liabilities related to associates and joint ventures	17	1,227	1,080	1,227	1,080
Provisions	21	2,886	4,610	1,594	2,904
Dividends and interest on capital			4,742		4,439
Others		3,449	3,284	2,725	2,552

Edgar Filing: Vale S.A. - Form 6-K

		32,498	39,458	23,470	29,260
Liabilities associated with non-current assets held for sale	12	707	3,899		
		33,205	43,357	23,470	29,260
Non-current liabilities					
Loans and borrowings	16	60,859	68,759	27,118	28,966
Other financial liabilities	11	9,642	9,575	60,850	54,955
Taxes payable	7(c)	15,942	16,176	15,623	15,853
Deferred income taxes	7(a)	5,665	5,687		
Provisions	21	23,212	23,243	7,704	6,900
Liabilities related to associates and joint ventures	17	2,104	2,216	2,104	2,216
Deferred revenue - Gold stream		5,960	6,117		
Others		4,891	4,861	6,689	6,514
		128,275	136,634	120,088	115,404
Total liabilities		161,480	179,991	143,558	144,664
Stockholders equity					
	24				
Equity attributable to Vale's stockholders		148,557	143,758	148,557	143,758
Equity attributable to noncontrolling interests		3,670	4,348		
Total stockholders equity		152,227	148,106	148,557	143,758
Total liabilities and stockholders equity		313,707	328,097	292,115	288,422

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

Table of Contents

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 stockholders	Equity attributable to noncontrolling interest
Balance at December 31, 2017	77,300	50	3,634	(2,663)	24,539	(2,746)	(3,912)	47,556		143,758	
Net income									5,112	5,112	
Other comprehensive income:											
Retirement benefit obligations							176		(67)		109
Net investments hedge (note 20c)								(96)			(96)
Translation adjustments							(7)	(205)			(212)
Fair value adjustment to investment in equity securities							(114)				(114)
Transactions with stockholders:											
Dividends of noncontrolling interest											
Acquisitions and disposal of noncontrolling interest											
Balance at March 31, 2018	77,300	50	3,634	(2,663)	24,539	(2,746)	(3,857)	47,255	5,045	148,557	
Balance at December 31, 2016		77,300		50			(1,870)	13,698	(2,746)	(3,739)	44,548
Net income											
Other comprehensive income:											

Edgar Filing: Vale S.A. - Form 6-K

Retirement benefit obligations						(71)		
Net investments hedge (note 20c)							559	
Translation adjustments						45	(2,146)	
Transactions with stockholders:								
Dividends of noncontrolling interest								
Acquisitions and disposal of noncontrolling interest						(329)		
Capitalization of noncontrolling interest advances								
Balance at March 31, 2017	77,300	50	(2,199)	13,698	(2,746)	(3,765)	42,961	7

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

Table of Contents**Value Added Statement**

In millions of Brazilian Reais

	Consolidated		Parent company	
	Three-month period ended March 31,			
	2018	2017	2018	2017
Generation of value added from continuing operations				
Gross revenue				
Revenue from products and services	28,251	27,092	15,964	17,427
Results on measurement or sale of non-current assets	(54)	1,603		(41)
Revenue from the construction of own assets	2,407	1,822	1,695	1,583
Allowance for doubtful accounts	5		3	5
Other revenues	6,265	138	2,665	108
Less:				
Acquisition of products	(338)	(514)	(179)	(201)
Material, service and maintenance	(7,263)	(6,102)	(4,244)	(4,027)
Oil and gas	(1,164)	(970)	(776)	(657)
Energy	(795)	(677)	(386)	(304)
Freight	(2,931)	(2,066)	(29)	(23)
Impairment of non-current assets and others results	(42)	(191)	(124)	(191)
Other costs and expenses	(7,570)	(1,253)	(4,112)	(436)
Gross value added	16,771	18,882	10,477	13,243
Depreciation, amortization and depletion	(2,834)	(2,851)	(1,403)	(1,317)
Net value added	13,937	16,031	9,074	11,926
Received from third parties				
Equity results from entities	273	225	2,500	3,290
Financial income	382	200	59	92
Monetary and exchange variation of assets	169	(571)	226	(760)
Total value added from continuing operations to be distributed	14,761	15,885	11,859	14,548
Value added from discontinued operations to be distributed	63	311		
Total value added to be distributed	14,824	16,196	11,859	14,548
Personnel	2,038	1,805	981	823
Taxes and contributions	1,859	2,688	854	1,653
Current income tax	295	1,585	1	1,232
Deferred income tax	2,044	631	1,319	811
Financial expense (excludes capitalized interest)	1,792	2,420	1,646	3,415
Monetary and exchange variation of liabilities	797	(1,089)	786	(1,518)
Other remunerations of third party funds	762	(97)	1,160	241
Reinvested net income	5,112	7,891	5,112	7,891
Net income attributable to noncontrolling interest	62	51		
Distributed value added from continuing operations	14,761	15,885	11,859	14,548
Distributed value added from discontinued operations	63	311		
Distributed value added	14,824	16,196	11,859	14,548

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

Table of Contents

Selected Notes to the Interim 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.

2. Basis for preparation of the interim financial statements

a) Statement of compliance

The condensed consolidated and individual interim financial statements of the Company (interim financial statements) have been prepared 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 interim financial statements, and only this information, are being presented and correspond to those used by the Company's Management.

The selected notes of the Parent Company are presented in a summarized form in note 26.

b) Basis of presentation

Edgar Filing: Vale S.A. - Form 6-K

The interim financial statements have been prepared to update users about relevant events and transactions occurred in the period and should be read in conjunction with the financial statements for the year ended December 31, 2017. The accounting policies, accounting estimates and judgments, risk management and measurement methods are the same as those applied when preparing the last annual financial statements, except for new accounting policies related to the application of IFRS 9 Financial instrument and IFRS 15 Revenue from contracts with customers, which are described in note 2(c). The accounting policy for recognizing and measuring income taxes in the interim period is described in note 7.

The interim 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.

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

	Closing rate		Average rate Three-month period ended	
	March 31, 2018	December 31, 2017	March 31, 2018	March 31, 2017
US Dollar (US\$)	3.3238	3.3080	3.2433	3.1451
Canadian dollar (CAD)	2.5778	2.6344	2.5649	2.3760
Australian dollar (AUD)	2.5497	2.5849	2.5505	2.3824
Euro (EUR or)	4.0850	3.9693	3.9866	3.3510

The issue of these interim financial statements was authorized by the Board of Directors on April 25, 2018.

Table of Contents

c) Changes in significant accounting policies

(i) IFRS 9 Financial instrument The Company has adopted IFRS 9 *Financial Instruments* starting January 1, 2018. This standard addresses the classification and measurement of financial assets and liabilities, new impairment model and new rules for hedge accounting. The main changes are described below:

- **Classification and measurement** - Under IFRS 9, the Company's financial assets are initially measured at fair value (plus transaction costs if is not measured at fair value through profit or loss).

The investments in debt financial instruments are subsequently measured at fair value through profit or loss (FVTPL), amortized cost, or fair value through other comprehensive income (FVOCI). The classification is based on two conditions: the Company's business model in which the asset is held; and whether the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI).

The FVOCI category only includes equity instruments, which is not held for trading and the Company has irrevocably elected to designate upon initial recognition. The gains or losses from equity instruments at FVOCI are not recycled to income statement on derecognition and these financial assets are not subject to an impairment assessment under IFRS 9.

The Company has assessed its business models as of the date of IFRS 9 initial application, 1 January 2018, and no significant impact were identified in the financial statements.

- **Impairment** - IFRS 9 has replaced the IAS 39's incurred loss approach with a forward-looking expected credit loss (ECL) approach.

For accounts receivables, the Company has applied the standard's simplified approach and has calculated ECLs based on lifetime expected credit losses. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the economic environment and by any financial guarantees related to these accounts receivables.

Edgar Filing: Vale S.A. - Form 6-K

For other financial assets, the ECL is based on the 12-month ECL. The 12-month ECL is the proportion of lifetime ECLs that results from default events on a financial instrument that are possible within 12 months after the reporting date. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment including forward-looking information.

At each reporting date, the Company assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

There is no significant impact on its financial statements resulting from this new impairment approach given Vale's credit rating and risk management policies in place.

- **Hedge accounting** - The Company has elected to adopt the new general hedge accounting model in IFRS 9. The changes introduced by IFRS 9 relating to hedge accounting currently 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 for which there are no changes introduced by this new standard.

(ii) IFRS 15 Revenue from contracts with customers - The Company has adopted IFRS 15 *Revenue from contracts with customers* starting January 1, 2018. IFRS 15 establishes a comprehensive framework for revenue recognition and replaced IAS 18 Revenue, IAS 11 Construction Contracts and related interpretations. The Company has adopted IFRS 15 using the modified retrospective method. Accordingly, the information presented for 2017 has not been restated.

- **Sales of commodities** - IFRS 15 introduced 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.

Table of Contents

There is 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.

The disaggregated revenue information is disclosed in note 3.

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

Under IFRS 15, the provision of shipping services for CFR and CIF contracts should be considered as a separate performance obligation in which a proportion of the transaction price would 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 not significant to the Company's quarter-end results ended March 31, 2018. Therefore, such revenue has not been presented separately in these interim financial statements.

- Provisionally priced commodities sales - Under IFRS 9 and 15, the treatment of the provisional pricing mechanisms embedded within the provisionally priced commodities sales remains unmodified. Therefore, these revenues are 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.

The Company is mostly exposed to the fluctuations in the iron ore and copper price.

The selling price of these products can be measured reliably at each period, since the price is quoted on an active market. The fair value of the sales price adjustment, in the amount of R\$525 in the period ended March 31, 2018, were recognized as operational revenue in the income statement.

d) Accounting standards issued but not yet effective

Edgar Filing: Vale S.A. - Form 6-K

The standards and interpretations issued by IASB relevant to the Company but not yet effective are the same as those applicable when preparing the financial statements for the year ended December 31, 2017. The other new standards effective from January 1, 2018 do not have a material effect on the Company's interim financial statements.

e) Restatement of corresponding figures

The amounts corresponding to the Parent Company's statements of cash flows, for the period ended March 31, 2017, originally presented in the interim financial statements for that period, have been restated for reclassification from financing activities in the amount of R\$2,291 to investing activities. This amount relates to intercompany loans between the Parent Company and its subsidiary and was presented as cash flows from financing activities in the aforementioned period. This reclassification aligns the Company's accounting practice with its cash management policy, which aims to manage at the Parent Company the cash generated by its subsidiaries, including sale of investments and planning for future investments.

In addition, the cash outflows in the amount of R\$2,819 originally presented as transactions with stockholders were reclassified in cash flow from financing activities, from Related Parties to Additions and Repayments of loans and borrowings with third parties.

The effects of these restatements are as follows:

	Parent company		Restated
	Original balance	Three-month period ended March 31, 2017 Reclassification	
Statement of cash flows			
Net cash provided by operating activities	4,272		4,272
Cash flow from investing activities			
Loans and advances - net receipts (payments)	(776)	2,291	1,515
Net cash provided by (used in) investing activities	(3,470)	2,291	(1,179)
Cash flow from financing activities			
Loans and borrowings			
Additions	6,421	(6,100)	321
Repayments	(4,130)	990	(3,140)
Transactions with stockholders			
Related parties	(2,819)	2,819	
Net cash used in financing activities	(528)	(2,291)	(2,819)
Increase in cash and cash equivalents	274		274

Table of Contents**3. Information by business segment and by geographic area**

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

a) Adjusted LAJIDA (EBITDA)

Management uses adjusted EBITDA to assess each segment's contribution to the Company's performance and to support the decision making process. Adjusted EBITDA is calculated for each segment using operating income or loss plus dividends received and interest from associates and joint ventures, and adding back the amounts charged as (i) depreciation, depletion and amortization and (ii) special events (additional information can be found in note 4).

In 2018, the Company has allocated general and corporate expenses to Others as these expenses are not directly related to the performance of each business segment. Therefore, Others includes unallocated corporate expenses. The comparative period was restated in order to reflect this change in the criteria for allocation.

	Consolidated						Adjusted LAJIDA (EBITDA)
	Three-month period ended March 31, 2018						
Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses (i)	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures		
Ferrous minerals							
Iron ore	15,278	(6,756)	(41)	(65)	(113)		8,303
Iron ore Pellets	5,142	(2,638)	(5)	(16)	(10)		2,473
Ferroalloys and manganese	406	(242)	(3)	(1)			160
Other ferrous products and services	372	(237)	(9)				126
	21,198	(9,873)	(58)	(82)	(123)		11,062
Coal	1,234	(1,086)	6	(11)		193	336
Base metals							
Nickel and other products	3,675	(2,291)	(48)	(29)	(27)		1,280
Copper	1,627	(804)	(3)	(12)			808

Edgar Filing: Vale S.A. - Form 6-K

	5,302	(3,095)	(51)	(41)	(27)		2,088
Others	198	(225)	(501)	(89)	(18)	33	(602)
Total of continuing operations	27,932	(14,279)	(604)	(223)	(168)	226	12,884
Discontinued operations (Fertilizers)	288	(272)	(4)				12
Total	28,220	(14,551)	(608)	(223)	(168)	226	12,896

(i) Adjusted for the special events occurred in the period.

	Consolidated Three-month period ended March 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	Adjusted LAJIDA (EBITDA)
Ferrous minerals						
Iron ore	15,145	(5,257)	212	(51)	(127)	9,922
Iron ore Pellets	4,585	(2,050)		(10)	(4)	2,521
Ferroalloys and manganese	273	(139)	(3)		(9)	122
Other ferrous products and services	395	(239)	(10)	(1)		145
	20,398	(7,685)	199	(62)	(140)	12,710
Coal	1,020	(779)	(12)	(10)		219
Base metals						
Nickel and other products	3,558	(2,712)	(41)	(29)	(121)	655
Copper	1,464	(721)	(2)	(5)		736
	5,022	(3,433)	(43)	(34)	(121)	1,391
Others	302	(307)	(689)	(100)	(3)	(797)
Total of continuing operations	26,742	(12,204)	(545)	(206)	(264)	13,523
Discontinued operations (Fertilizers)	1,162	(1,066)	(49)	(5)	(33)	9
Total	27,904	(13,270)	(594)	(211)	(297)	13,532

Table of Contents

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

From Continuing operations

	Consolidated Three-month period ended March 31,	
	2018	2017
Net income from continuing operations	5,445	8,199
Depreciation, depletion and amortization	2,834	2,851
Income taxes	2,339	2,216
Financial results, net	2,071	1,894
LAJIDA (EBITDA)	12,689	15,160
Items to reconciled adjusted LAJIDA (EBITDA)		
Special events (note 4)	198	(1,603)
Equity results in associates and joint ventures	(273)	(225)
Impairment and other results in associates and joint ventures	44	191
Dividends received and interest from associates and joint ventures	226	
Adjusted LAJIDA (EBITDA) from continuing operations	12,884	13,523

From Discontinued operations

	Consolidated Three-month period ended March 31,	
	2018	2017
Loss from discontinued operations	(271)	(257)
Income taxes	(104)	(95)
Financial results, net	12	14
LAJIDA (EBITDA)	(363)	(338)
Items to reconciled adjusted LAJIDA (EBITDA)		
Impairment of non-current assets	375	347
Adjusted LAJIDA (EBITDA) from discontinued operations	12	9

b) Assets by segment

March 31, 2018

Consolidated

Three-month period ended March 31, 2018

	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	5,728	6,607	119,915	2,121	1,406
Coal	233	1,116	5,594	108	212
Base metals	3,808	45	76,901	637	1,137
Others	51	4,599	6,129	19	79
Total	9,820	12,367	208,539	2,885	2,834

	Consolidated				
	December 31, 2017			Three-month period ended March 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	6,357	119,429	2,615	1,308
Coal	271	1,048	5,686	177	329
Base metals	3,336	43	78,080	664	1,198
Others	20	4,354	6,434	31	16
Total	9,486	11,802	209,629	3,487	2,851

(i) Goodwill is allocated mainly to ferrous minerals and base metals segments in the amount of R\$7,133 and R\$6,334 in March 31, 2018 and R\$7,133 and R\$6,460 in December 31, 2017, respectively.

(ii) Includes only cash outflows.

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

In September 2017, the Federal Court granted an injunction suspending certain of nickel mining operations at Onça Puma (base metals segment). The Company has appealed this decision to seek a suspension of this injunction, but it is not possible to anticipate when Onça Puma activities will resume. The Company has assessed the impairment risk related to this specific cash-generating unit and concluded that no loss should be recognized in the income statement for the period ended March 31, 2018.

Table of Contentsc) **Net operating revenue by geographic area**

	Consolidated				
	Three-month period ended March 31, 2018				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	711		509		1,220
United States of America	267		792	24	1,083
Germany	1,053		229		1,282
Europe, except Germany	1,528	331	1,620		3,479
Middle East/Africa/Oceania	1,924	140	14		2,078
Japan	1,483	107	373		1,963
China	11,006		677		11,683
Asia, except Japan and China	1,124	487	806		2,417
Brazil	2,102	169	282	174	2,727
Net operating revenue	21,198	1,234	5,302	198	27,932

	Consolidated				
	Three-month period ended March 31, 2017				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	442		956		1,398
United States of America	166		584	140	890
Germany	969		164	51	1,184
Europe, except Germany	1,826	282	1,426		3,534
Middle East/Africa/Oceania	1,344	162	9		1,515
Japan	1,227	104	277		1,608
China	11,482		503		11,985
Asia, except Japan and China	799	316	977		2,092
Brazil	2,143	156	126	111	2,536
Net operating revenue	20,398	1,020	5,022	302	26,742

Provisionally priced commodities sales As at March 31, 2018, there were 29 million metric tons of iron ore (2017: 33 million metric tons) and 73 thousand metric tons of copper (2017: 106 thousand metric tons) provisionally priced based on forward prices. The final price of these sales will be determined during the second quarter of 2018. A 10% change in the realized prices compared to the provisionally priced sales, all other factors held constant, would increase or reduce iron ore net income by R\$607 and copper net income by R\$191.

4. **Special events occurred during the period**

Edgar Filing: Vale S.A. - Form 6-K

The special events occurred during the period are those that, in the Company's judgment, have non-operational effect on the performance of the period 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:

	Three-month period ended March 31,	
	2018	2017
Disposals of assets	(52)	(7)
Provision for litigation	(146)	
Nacala Logistic Corridor		1,610
Total	(198)	1,603

Disposals of assets - The Company recognized a loss of R\$52 in the income statement during the period ended March 31, 2018 as Impairment and other results on noncurrent assets due to non-viable projects and operating assets written off through sale or obsolescence.

Provision for litigation - During the period ended March 31, 2018, the Company's assessment of the likelihood of loss for various labor litigations have been updated and a net impact of R\$146 was charged to the income statement.

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\$1,610.

Table of Contents5. **Costs and expenses by nature**a) **Cost of goods sold and services rendered**

	Consolidated	
	Three-month period ended March 31,	
	2018	2017
Personnel	1,794	1,721
Materials and services	2,869	2,456
Fuel oil and gas	1,147	969
Maintenance	2,393	2,270
Energy	774	676
Acquisition of products	399	515
Depreciation and depletion	2,691	2,661
Freight	2,931	2,066
Others	1,972	1,531
Total	16,970	14,865
Cost of goods sold	16,491	14,427
Cost of services rendered	479	438
Total	16,970	14,865

b) **Selling and administrative expenses**

	Consolidated	
	Three-month period ended March 31,	
	2018	2017
Personnel	202	168
Services	63	39
Depreciation and amortization	57	90
Others	80	91
Total	402	388

c) **Other operating expenses, net**

Consolidated
Three-month period ended March 31,

	2018	2017
Provision for litigation	146	38
Profit sharing program	154	123
Others	106	86
Total	406	247

6. Financial result

	Consolidated	
	Three-month period ended March 31,	
	2018	2017
Financial income		
Short-term investments	82	111
Derivative financial instruments	377	1,003
Others	300	89
	759	1,203
Financial expenses		
Loans and borrowings gross interest	(1,090)	(1,411)
Capitalized loans and borrowing costs	194	322
Derivative financial instruments	(92)	(339)
Participative stockholders' debentures	(590)	(1,296)
Expenses of REFIS	(187)	(395)
Others	(437)	(496)
	(2,202)	(3,615)
Other financial items		
Net foreign exchange gains (losses) on loans and borrowings	(416)	1,607
Other net foreign exchange gains (losses)	182	(849)
Net indexation losses	(394)	(240)
	(628)	518
Financial results, net	(2,071)	(1,894)

Table of Contents**7. Income taxes****a) Deferred income tax assets and liabilities**

Changes in deferred tax are as follows:

	Assets	Consolidated Liabilities	Total
Balance at December 31, 2017	21,959	5,687	16,272
Effect in income statement	(2,044)		(2,044)
Transfers between asset and liabilities	27	27	
Translation adjustment	(17)	(77)	60
Other comprehensive income	288	28	260
Effect of discontinued operations			
Effect in income statement	104		104
Transfer to net assets held for sale	(19)		(19)
Balance at March 31, 2018	20,298	5,665	14,633

	Assets	Consolidated Liabilities	Total
Balance at December 31, 2016	23,931	5,540	18,391
Effect in income statement	(720)	(89)	(631)
Translation adjustment	(292)	(126)	(166)
Other comprehensive income	(337)	(11)	(326)
Effect of discontinued operations			
Effect in income statement	95		95
Transfer to net assets held for sale	(95)		(95)
Balance at March 31, 2017	22,582	5,314	17,268

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:

Consolidated
Three-month period ended March 31,

	2018	2017
Income before income taxes	7,784	10,415
Income taxes at statutory rates - 34%	(2,647)	(3,541)
Adjustments that affect the basis of taxes:		
Income tax benefit from interest on stockholders' equity	216	397
Tax incentives	88	558
Equity results	93	77
Unrecognized tax losses of the period	(477)	(554)
Gain on sale of subsidiaries (note 4)		548
Others	388	299
Income taxes	(2,339)	(2,216)

Income tax expense is recognized at an amount determined by the estimated tax rate, adjusted for the tax effect of certain items recognized in full in the interim period. Therefore, the effective tax rate in the interim financial statement may differ from management's estimate of the effective tax rate for the annual financial statement.

c) 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 March 31, 2018, the balance of R\$17.563 (R\$1.621 as current and R\$15.942 as non-current) is due in 127 remaining monthly installments, bearing interest at the SELIC rate (Special System for Settlement and Custody).

Table of Contents**8. Basic and diluted earnings (loss) per share**

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

	Three-month period ended March 31,	
	2018	2017 (i)
Net income attributable to Vale's stockholders:		
Net income from continuing operations	5,383	8,151
Loss from discontinued operations	(271)	(260)
Net income	5,112	7,891
Thousands of shares		
Weighted average number of shares outstanding - common shares	5,197,432	5,197,432
Basic and diluted earnings per share from continuing operations:		
Common share (R\$)	1.03	1.57
Basic and diluted loss per share from discontinued operations:		
Common share (R\$)	(0.05)	(0.05)
Basic and diluted earnings per share:		
Common share (R\$)	0.98	1.52

(i) Restated to reflect the conversion of the class A preferred shares into common shares.

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

9. Accounts receivable

	Consolidated	
	March 31, 2018	December 31, 2017
Accounts receivable	9,257	8,802
Impairment of accounts receivable	(318)	(200)
	8,939	8,602
Accounts receivable related to the steel sector - %	77.80%	82.90%

Edgar Filing: Vale S.A. - Form 6-K

There are no significant amounts recognized in the income statement related to impairment of accounts receivables for the three-month period ended March 31, 2018 and 2017.

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

10. Inventories

	March 31, 2018	Consolidated December 31, 2017
Product inventory	7,351	7,324
Work in progress	2,469	2,162
Consumable inventory	3,364	3,501
Total	13,184	12,987

There are no significant amounts recognized in income statement related as a provision in respect of the net realizable value of product inventory for the three-month period ended on March 31, 2018 (reversal of R\$135 for the three-month period ended March 31, 2017).

Product inventory by segments is presented in note 3(b).

Table of Contents**11. Other financial assets and liabilities**

	Consolidated			
	March 31, 2018	Current December 31, 2017	March 31, 2018	Non-Current December 31, 2017
Other financial assets				
Financial investments	22	61		
Loans			499	498
Derivative financial instruments (note 20)	247	351	1,619	1,497
Investments in equity securities (note 12)			2,759	
Related parties - Loans (note 25)	980	6,277	5,251	8,695
	1,249	6,689	10,128	10,690
Other financial liabilities				
Derivative financial instruments (note 20)	529	344	1,733	2,269
Related parties - Loans (note 25)	2,820	2,916	3,239	3,226
Participative stockholders' debentures			4,670	4,080
	3,349	3,260	9,642	9,575

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

	Consolidated	
	March 31, 2018 Fertilizers	December 31, 2017 Fertilizers
Assets		
Accounts receivable	89	297
Inventories	285	1,522
Other current assets	55	363
Investments in associates and joint ventures		274
Property, plant and equipment and Intangible	1,071	7,110
Other non-current assets	28	2,299
Total assets	1,528	11,865
Liabilities		
Suppliers and contractors	230	1,070
Other current liabilities	97	711
Other non-current liabilities	380	2,118
Total liabilities	707	3,899
Net non-current assets held for sale	821	7,966

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.

In January 2018, the Company and Mosaic concluded the transaction and the Company received R\$3,495 (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\$2,907 (US\$899 million), based on the Mosaic s quotation at closing date of the transaction) and a loss of R\$184 was recognized in the income statement from discontinued operations.

Mosaic shares received was accounted for an equity investment measured at fair value through other comprehensive income. For the three-month period ended March 31, 2018 a loss of R\$113 was recognized in other comprehensive income as Fair value adjustment to investment in equity securities .

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\$848 (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 their fair value less cost to sell and a loss of R\$191 was recognized for the three-month period ended March 31, 2018, in the income statement from discontinued operations.

Table of Contents

The results and cash flows of discontinued operations of the Fertilizer segment for the three-month period ended March 31, 2018 and 2017 are presented as follows:

Income statement

	Consolidated	
	Three-month period ended March 31,	
	2018	2017
Discontinued operations		
Net operating revenue	288	1,162
Cost of goods sold and services rendered	(272)	(1,066)
Operating expenses	(4)	(87)
Impairment of non-current assets	(375)	(347)
Operating loss	(363)	(338)
Financial Results, net	(12)	(14)
Loss before income taxes	(375)	(352)
Income taxes	104	95
Loss from discontinued operations	(271)	(257)
Net income attributable to noncontrolling interests		3
Loss attributable to Vale's stockholders	(271)	(260)

Statement of cash flow

	Consolidated	
	Three-month period ended March 31,	
	2018	2017
Discontinued operations		
Cash flow from operating activities		
Loss before income taxes	(375)	(352)
Adjustments:		
Impairment of non-current assets	375	347
Increase (decrease) in assets and liabilities	(114)	295
Net cash provided by (used in) operating activities	(114)	290
Cash flow from investing activities		
Additions to property, plant and equipment	(36)	(197)
Net cash used in investing activities	(36)	(197)
Cash flow from financing activities		
Loans and borrowings		
Repayments		(108)
Net cash used in financing activities		(108)

Net cash used in discontinued operations	(150)	(15)
---	--------------	-------------

20

Table of Contents**13. Investments in associates and joint ventures****a) Changes during the period**

Changes in investments in associates and joint ventures are as follows:

	Associates	Consolidated Joint ventures	Total
Balance at December 31, 2017	4,774	7,028	11,802
Additions		58	58
Translation adjustment	55	5	60
Equity results in income statement	(10)	283	273
Dividends declared		(89)	(89)
Transfer from non-current assets held for sale (i)	280	(17)	263
Balance at March 31, 2018	5,099	7,268	12,367

(i) Refers to 18% interest held by Vale Fertilizantes at Ultrafertil which was transferred to Vale as part of the final settlement occurred in January 2018 (note 12).

	Associates	Consolidated Joint ventures	Total
Balance at December 31, 2016	4,683	7,363	12,046
Additions		96	96
Translation adjustment	(23)	(16)	(39)
Equity results in income statement	(16)	241	225
Dividends declared	(25)		(25)
Balance at March 31, 2017	4,619	7,684	12,303

b) Guarantees provided

As of March 31, 2018, corporate guarantees provided by Vale (within the limit of its direct or indirect interest) for the companies Norte Energia S.A. and Companhia Siderúrgica do Pecém S.A. were R\$1,263 and R\$4,896, respectively.

The investments by segments are presented in note 3(b).

Table of Contents**Investments in associates and joint ventures (continued)**

Associates and joint ventures	% ownership	% voting capital	Consolidated				
			Investments in associates and joint ventures	Equity results in the income statement	Dividends received	Three-month period ended March 31, 2018	Three-month period ended March 31, 2017
Ferrous minerals							
Baovale Mineração S.A. Companhia Coreano-Brasileira de Pelotização	50.00	50.00	92	87	5	6	
Companhia Hispano-Brasileira de Pelotização (i)	50.89	51.00	317	270	48	33	
Companhia Ítalo-Brasileira de Pelotização (i)	50.90	51.00	315	263	52	21	
Companhia Nipo-Brasileira de Pelotização (i)	51.00	51.11	551	453	98	69	
MRS Logística S.A.	48.16	46.75	1,748	1,711	38	49	
VLI S.A.	37.60	37.60	3,159	3,202	(43)	(40)	
Zhuhai YPM Pellet Co.	25.00	25.00	80	76			
			6,607	6,357	248	175	
Coal							
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	1,116	1,048	13	31	
			1,116	1,048	13	31	
Base metals							
Korea Nickel Corp.	25.00	25.00	45	43	3	2	
			45	43	3	2	
Others							
Aliança Geração de Energia S.A. (i)	55.00	55.00	1,863	1,889	62	21	33
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	575	529	22	10	
California Steel Industries, Inc.	50.00	50.00	735	663	67	27	
Companhia Siderúrgica do Pecém	50.00	50.00	727	867	(140)	(33)	
Mineração Rio do Norte S.A.	40.00	40.00	343	333	10	(2)	
Others			356	73	(12)	(6)	
			4,599	4,354	9	17	33
Total			12,367	11,802	273	225	33

(i) Although the Company held a majority of the voting capital, the entities are accounted under equity method due to the stockholders agreement where relevant decisions are shared with other parties.

Table of Contents**14. Intangibles**

Changes in intangibles are as follows:

	Goodwill	Concessions	Consolidated Right of use	Software	Total
Balance at December 31, 2017	13,593	13,236	506	759	28,094
Additions		829		1	830
Disposals		(22)			(22)
Amortization		(108)	(11)	(99)	(218)
Translation adjustment	(126)	3		(1)	(124)
Balance at March 31, 2018	13,467	13,938	495	660	28,560
Cost	13,467	17,534	767	5,147	36,915
Accumulated amortization		(3,596)	(272)	(4,487)	(8,355)
Balance at March 31, 2018	13,467	13,938	495	660	28,560

	Goodwill	Concessions	Consolidated Right of use	Software	Total
Balance at December 31, 2016	10,041	10,759	480	1,115	22,395
Additions		1,147		27	1,174
Disposals		(2)			(2)
Amortization		(155)	(2)	(117)	(274)
Translation adjustment	(121)	(14)	(6)	(4)	(145)
Balance at March 31, 2017	9,920	11,735	472	1,021	23,148
Cost	9,920	15,647	715	5,046	31,328
Accumulated amortization		(3,912)	(243)	(4,025)	(8,180)
Balance at March 31, 2017	9,920	11,735	472	1,021	23,148

15. Property, plant and equipment

Changes in property, plant and equipment are as follows:

	Land	Building	Facilities	Equipment	Consolidated Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2017	2,375	40,028	38,986	22,803	29,999	27,104	20,240	181,535
Additions (i)							1,685	1,685

Edgar Filing: Vale S.A. - Form 6-K

Disposals	(118)	(50)	(8)	(14)	(5)	(9)	(204)
Assets retirement obligation				124			124
Depreciation, amortization and depletion	(505)	(598)	(763)	(455)	(613)		(2,934)
Translation adjustment	(54)	(65)	13	(351)	(72)	302	(227)
Transfers	12	(4)	1,179	587	653	690	(3,117)
Balance at March 31, 2018	2,387	39,347	39,452	22,632	29,956	27,104	179,979
Cost	2,387	62,976	61,276	42,949	57,752	41,558	287,999
Accumulated depreciation	(23,629)	(21,824)	(20,317)	(27,796)	(14,454)		(108,020)
Balance at March 31, 2018	2,387	39,347	39,452	22,632	29,956	27,104	179,979

	Consolidated							
	Land	Building	Facilities	Equipment	Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2016	2,360	34,790	30,866	22,141	27,312	24,494	38,653	180,616
Additions (i)							1,581	1,581
Disposals			(19)	(10)		(5)	(17)	(51)
Assets retirement obligation					113			113
Depreciation, amortization and depletion		(462)	(526)	(606)	(482)	(544)		(2,620)
Translation adjustment	(14)	(229)	(213)	(309)	(398)	(54)	(126)	(1,343)
Transfers	45	2,615	4,503	859	2,008	2,426	(12,456)	
Balance at March 31, 2017	2,391	36,714	34,611	22,075	28,553	26,317	27,635	178,296
Cost	2,391	56,227	55,171	39,363	53,240	39,003	27,635	273,030
Accumulated depreciation		(19,513)	(20,560)	(17,288)	(24,687)	(12,686)		(94,734)
Balance at March 31, 2017	2,391	36,714	34,611	22,075	28,553	26,317	27,635	178,296

(i) Includes capitalized borrowing costs.

There are no material changes to the net book value of consolidated property, plant and equipment pledged to secure judicial claims and loans and borrowings (note 16(c)) compared to those disclosed in the financial statements as at December 31, 2017.

Table of Contents**16. Loans, borrowings, cash and cash equivalents and financial investments****a) Net debt**

The Company evaluates the net debt with the objective of ensuring the continuity of its business in the long term, being able to generate value to its stockholders, through the payment of dividends and capital gain.

	Consolidated	
	March 31, 2018	December 31, 2017
Debt contracts in the international markets	50,977	57,187
Debt contracts in Brazil	16,417	17,205
Total of loans and borrowings	67,394	74,392
(-) Cash and cash equivalents	17,841	14,318
(-) Financial investments	22	61
Net debt	49,531	60,013

b) Cash and cash equivalents

Cash and cash equivalents includes cash, immediately redeemable deposits and short-term investments with an insignificant risk of change in value. They are readily convertible to cash, part in R\$, indexed to the Brazilian Interbank Interest rate (DI Rate or CDI) and part denominated in US\$, mainly time deposits.

c) Loans and borrowings**i) Total debt**

	Consolidated			
	Current liabilities		Non-current liabilities	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
Debt contracts in the international markets				

Floating rates in:				
US\$	2,068	1,027	7,666	9,142
EUR			817	794
Fixed rates in:				
US\$	16		36,027	41,642
EUR			3,064	2,977
Other currencies	84	57	601	682
Accrued charges	634	866		
	2,802	1,950	48,175	55,237
Debt contracts in Brazil				
Floating rates in:				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	1,489	1,478	10,096	10,570
Basket of currencies and US\$ indexed to LIBOR	1,126	1,121	2,071	2,341
Fixed rates in:				
R\$	223	225	517	572
Accrued charges	895	859		39
	3,733	3,683	12,684	13,522
	6,535	5,633	60,859	68,759

The future flows of debt payments principal, per nature of funding and interest are as follows:

	Consolidated			Total	Estimated future interest payments (i)
	Bank loans	Capital markets	Principal Development agencies		
2018	105		2,351	2,456	4,053
2019	2,623		3,013	5,636	3,638
2020	2,670	2,758	2,955	8,383	3,409
2021	1,373	1,275	2,863	5,511	3,004
Between 2022 and 2025	2,167	16,246	3,295	21,708	11,090
2026 onwards	291	21,508	372	22,171	17,680
	9,229	41,787	14,849	65,865	42,874

(i) Estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at March 31, 2018 and considering that all amortization payments and payments at maturity on loans and borrowings will be made on their contracted payments dates. The amount includes the estimated values of future interest payments (not yet accrued), in addition to interest already recognized in the financial statements.

Table of Contents

At March 31, 2018, the average annual interest rates by currency are as follows:

Loans and borrowings	Consolidated Average interest rate (i)	Total debt
US\$	5.60%	49,595
R\$ (ii)	8.13%	13,195
EUR (iii)	3.33%	3,909
Other currencies	3.31%	695
		67,394

(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable at March 31, 2018.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of R\$6,373 the Company entered into derivative transactions to mitigate the exposure to the cash flow variations of the floating rate debt denominated in R\$, resulting in an average cost of 2.08% per year in US\$.

(iii) Eurobonds, for which the Company entered into derivatives to mitigate the exposure to the cash flow variations of the debt denominated in EUR, resulting in an average cost of 4.29% per year in US\$.

ii) Reconciliation of debt to cash flows arising from financing activities

	December 31, 2017	Additions	Cash flow		Consolidated		Non-cash changes Effect of exchange rate	Interest accretion	March 31, 2018
			Repayments	Interest paid	Transferences				
Loans and borrowings									
Current	5,633		(7,448)	(1,237)	8,129		55	1,403	6,535
Non-current	68,759				(8,129)		229		60,859
Total	74,392		(7,448)	(1,237)			284	1,403	67,394

iii) Credit and financing lines

Edgar Filing: Vale S.A. - Form 6-K

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Available amount March 31, 2018
Credit lines					
Revolving credit facilities	US\$	May 2015	5 years	9,971	9,971
Revolving credit facilities	US\$	June 2017	5 years	6,648	6,648
Financing lines					
BNDES - CLN 150	R\$	September 2012	10 years	3,883	
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	6,163	1,008

iv) Funding (Repayments)

In March 2018, the Company conducted a cash tender offer for Vale Overseas 5.875% guaranteed notes due 2021 and 4.375% guaranteed notes due 2022 and repurchased in a cash tender offer a total of R\$3,178 (US\$969 million) in aggregate principal amount of its 2021 Notes and repurchased R\$2,561 (US\$781 million) in aggregate principal amount of its 2022 Notes.

On April 17, 2018 (event subsequent), the Company redeemed all of Vale Overseas 4.625% guaranteed notes due 2020 totaling R\$1,698 (US\$499 million).

v) Guarantees

As at March 31, 2018 and December 31, 2017, loans and borrowings are secured by property, plant and equipment in the amount of R\$927 and R\$910, respectively.

The securities issued through Vale's 100%-owned finance subsidiary Vale Overseas Limited are fully and unconditionally guaranteed by Vale.

vi) Covenants

Some of the Company's debt agreements with lenders contain financial covenants. The primary financial covenants in those agreements require maintaining certain ratios, such as debt to EBITDA (Earnings before Interest Taxes, Depreciation and Amortization) and interest coverage. The Company has not identified any instances of noncompliance as at March 31, 2018 and December 31, 2017.

Table of Contents**17. Liabilities related to associates and joint ventures**

The movements of the provision to comply with the obligations under the agreement related to the dam failure of Samarco Mineração S.A. (Samarco), which is a Brazilian joint venture between Vale S.A. and BHP Billiton Brasil Ltda. (BHPB), in the three-month period ended March 31, 2018 and 2017 are as follows:

	2018	2017
Balance at January 01,	3,296	3,511
Payments	(191)	(262)
Interest accretion	226	147
Balance at March 31,	3,331	3,396
Current liabilities	1,227	901
Non-current liabilities	2,104	2,495
Liabilities	3,331	3,396

In addition to the provision above, Vale S.A. made available in the three-month period ended March 31, 2018 the amount of R\$44, which was fully used to fund Samarco's working capital and was recognized in Vale's income statement as Impairment and other results in associates and joint ventures. Vale S.A intends to make available until the second quarter of 2018 up to R\$115 to Samarco to support its working capital requirements, without any binding obligation to Samarco in this regard. Such amounts will be released by the shareholders, simultaneously and pursuant to the same terms and conditions, subject to the fulfillment of certain milestones.

Under Brazilian legislation and the terms of the joint venture agreement, Vale does not have an obligation to provide funding to Samarco. Therefore, Vale's investment in Samarco was impaired in full and no provision was recognized in relation to the Samarco's negative reserves.

The contingencies related to the Samarco dam failure are disclosed in note 22.

18. Financial instruments classification

Financial assets	Consolidated				Amortized cost	December 31, 2017		Total
	March 31, 2018		At fair value through profit or loss			At fair value through profit or loss		
Amortized cost	At fair value through OCI	At fair value through OCI	At fair value through profit or loss	At fair value through profit or loss	Amortized cost	At fair value through profit or loss	At fair value through profit or loss	Total
Current								

Edgar Filing: Vale S.A. - Form 6-K

Cash and cash equivalents	17,841		17,841	14,318		14,318
Financial investments	22		22	61		61
Derivative financial instruments		247	247		351	351
Accounts receivable	9,283	(344)	8,939	8,025	577	8,602
Related parties	980		980	6,277		6,277
	28,126	(97)	28,029	28,681	928	29,609
Non-current						
Derivative financial instruments		1,619	1,619		1,497	1,497
Investments in equity securities		2,758	2,758			
Loans	499		499	498		498
Related parties	5,251		5,251	8,695		8,695
	5,750	2,758	1,619	10,127	1,497	10,690
Total of financial assets	33,876	2,758	1,522	38,156	37,874	2,425
40,299						
Financial liabilities						
Current						
Suppliers and contractors	11,960		11,960	13,367		13,367
Derivative financial instruments		529	529		344	344
Loans and borrowings	6,535		6,535	5,633		5,633
Related parties	2,820		2,820	2,916		2,916
	21,315	529	21,844	21,916	344	22,260
Non-current						
Derivative financial instruments		1,733	1,733		2,269	2,269
Loans and borrowings	60,859		60,859	68,759		68,759
Related parties	3,239		3,239	3,226		3,226
Participative stockholders debentures		4,670	4,670		4,080	4,080
	64,098	6,403	70,501	71,985	6,349	78,334
Total of financial liabilities	85,413	6,932	92,345	93,901	6,693	100,594

Table of Contents**19. Fair value estimate****a) Assets and liabilities measured and recognized at fair value:**

	March 31, 2018			Consolidated		December 31, 2017		Total
	Level 1	Level 2	Level 3	Total	Level 2	Level 3		
Financial assets								
Derivative financial instruments		997	869	1,866	954	894		1,848
Investments in equity securities	2,758			2,758				
Total	2,758	997	869	4,624	954	894		1,848
Financial liabilities								
Derivative financial instruments		1,588	674	2,262	1,923	690		2,613
Participative stockholders debentures		4,670		4,670	4,080			4,080
Total		6,258	674	6,932	6,003	690		6,693

The Company changed its accounting estimate on the calculation of the participative stockholders debentures from January 1, 2018. The Company has replaced the assumption of spot price at the reporting date used on the calculation to the weighted average price traded on the market within the last month of the quarter.

There were no transfers between Level 1 and Level 2, or between Level 2 and Level 3 for the three-month period ended in March 31, 2018.

The following table presents the changes in Level 3 assets and liabilities for the three-month period ended in March 31, 2018:

	Consolidated	
	Financial assets	Financial liabilities
Balance at December 31, 2017	894	690
Gain and losses recognized in income statement	(25)	(16)
Balance at March 31, 2018	869	674

Methods and techniques of evaluation

Derivative financial instruments

Financial instruments are evaluated by calculating their present value through the use of instrument yield curves at the closing dates. The curves and prices used in the calculation for each group of instruments are detailed in the market curves .

The pricing method used for European options is the Black & Scholes model. In this model, the fair value of the derivative is a function of the volatility in the price of the underlying asset, the exercise price of the option, the interest rate and period to maturity. In the case of options which income is a function of the average price of the underlying asset over the period of the option, the Company uses Turnbull & Wakeman model. In this model, in addition to the factors that influence the option price in the Black-Scholes model, the formation period of the average price is also considered.

In the case of swaps, both the present value of the assets and liability are estimated by discounting the cash flow by the interest rate of the currency in which the swap is denominated. The difference between the present value of assets and liability of the swap generates its fair value.

For the TJLP swaps, the calculation of the fair value assumes that TJLP is constant, that is the projections of future cash flow in Brazilian Reais are made on the basis of the last TJLP disclosed.

Contracts for the purchase or sale of products, inputs and costs of selling with future settlement are priced using the forward yield curves for each product. Typically, these curves are obtained on the stock exchanges where the products are traded, such as the London Metals Exchange (LME), the Commodity Exchange (COMEX) or other providers of market prices. When there is no price for the desired maturity, Vale uses an interpolation between the available maturities.

The fair value for derivatives are within level 3 are measured using discounted cash flows and option model valuation techniques with main unobservable inputs discount rates, stock prices and commodities prices.

Table of Contents**b) Fair value of financial instruments not measured at fair value**

The fair values and carrying amounts of loans and borrowings (net of interest) are as follows:

	Balance	Consolidated		
		Fair value	Level 1	Level 2
Financial liabilities				
March 31, 2018				
Debt principal	65,865	69,195	43,492	25,703
December 31, 2017				
Debt principal	72,628	76,377	49,406	26,971

Due to the short-term cycle, the fair value of cash and cash equivalents balances, financial investments, accounts receivable and accounts payable approximate their book values.

20. Derivative financial instruments**a) Derivatives effects on statement of financial position**

	Consolidated Assets			
	March 31, 2018		December 31, 2017	
	Current	Non-current	Current	Non-current
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	73		125	
IPCA swap	24	314	30	271
Eurobonds swap		192		89
Pré-dolar swap	73	153	73	106
	170	659	228	466
Commodities price risk				
Nickel	56	4	73	10
Bunker oil	21		50	

Edgar Filing: Vale S.A. - Form 6-K

	77	4	123	10
Others		956		1,021
		956		1,021
Total	247	1,619	351	1,497

	March 31, 2018		December 31, 2017	
	Current	Non-current	Current	Non-current
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	440	931	314	1,356
IPCA swap	61	55		136
Eurobonds swap	10		13	
Pré-dolar swap	18	65	17	79
	529	1,051	344	1,571
Others		682		698
		682		698
Total	529	1,733	344	2,269

Table of Contents**b) Effects of derivatives on the income statement and cash flow**

	Consolidated			
	Gain (loss) recognized in the income		Financial settlement inflows	
	statement		(outflows)	
	2018	2017	2018	2017
Derivatives not designated as hedge accounting				
Foreign exchange and interest rate risk				
CDI & TJLP vs. US\$ fixed and floating rate swap	107	580	(144)	(138)
IPCA swap	57	76		
Eurobonds swap	101	(83)		(121)
Euro forward		144		
Pré-dolar swap	61	75	(3)	
	326	792	(147)	(259)
Commodities price risk				
Nickel	13		38	(4)
Bunker oil		(237)	29	(75)
	13	(237)	67	(79)
Others	(54)	109		
Total	285	664	(80)	(338)

The maturity dates of the derivative financial instruments are as follows:

	Last maturity dates
Currencies and interest rates	January 2024
Bunker oil	September 2018
Nickel	December 2019
Others	December 2027

c) Hedge in foreign operations

As at March 31, 2018 the carrying value of the debts designated as instrument hedge of the Company's investment in foreign operations (Vale International S.A. and Vale International Holding GmbH; hedging objects) are R\$16,963 (US\$5,103 million) and R\$3,064 (EUR750 million). The foreign exchange gain of R\$146 (R\$96, net of taxes), was recognized in the Cumulative translation adjustments in stockholders' equity for the three month period ended March 31, 2018. This hedge was highly effective throughout the period ended March 31, 2018.

Table of Contents

Additional information about derivatives financial instruments

In millions of Brazilian reais, except as otherwise stated

The risk of the derivatives portfolio is measured using the delta-Normal parametric approach, and considers that the future distribution of the risk factors and its correlations tends to present the same statistical properties verified in the historical data. The value at risk estimate considers a 95% confidence level for a one-business day time horizon.

The following tables detail the derivatives positions for Vale and its controlled companies as of March 31, 2018, with the following information: notional amount, fair value including credit risk, gains or losses in the period, value at risk and the fair value breakdown by year of maturity.

a) **Foreign exchange and interest rates derivative positions**

(i) **Protection programs for the R\$ denominated debt instruments**

In order to reduce cash flow volatility, swap transactions were implemented to convert into US\$ the cash flows from certain debt instruments denominated in R\$ with interest rates linked mainly to CDI, TJLP and IPCA. In those swaps, Vale pays fixed or floating rates in US\$ and receives payments in R\$ linked to the interest rates of the protected debt instruments.

The swap transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments linked to R\$. These programs transform into US\$ the obligations linked to R\$ to achieve a currency offset in the Company's cash flows, by matching its receivables - mainly linked to US\$ - with its payables.

Flow	Notional			Index	Average rate	Fair value		Financial settlement	Value at Risk	Fair value by year			
	March 31, 2018	December 31, 2017	December 31, 2017			Inflows (Outflows)	March 31, 2018	March 31, 2018		2018	2019	2020+	(81)
CDI vs. US\$ fixed rate swap						1	(105)	(71)	21	64	18	(81)	
Receivable	R\$ 2,000	R\$ 3,540		CDI	99.47%								
Payable	US\$ 612	US\$ 1,104		Fix	3.18%								

Edgar Filing: Vale S.A. - Form 6-K

TJLP vs. US\$ fixed rate swap						(1,123)	(1,258)	(68)	101	(171)	(779)	(173)
Receivable			TJLP									
	R\$ 2,767	R\$ 2,982	+		1.23%							
Payable	US\$ 1,243	US\$ 1,323	Fix		1.53%							

TJLP vs. US\$ floating rate swap						(172)	(175)	(2)	9	(13)	(159)	
Receivable			TJLP									
	R\$ 214	R\$ 216	+		0.87%							
Payable	US\$ 122	US\$ 123	Libor									
			+		-1.23%							

R\$ fixed rate vs. US\$ fixed rate swap						142	80	(1)	83	63	47	32
Receivable	R\$ 1,138	R\$ 1,158	Fix		7.96%							
Payable	US\$ 377	US\$ 385	Fix		-0.61%							

IPCA vs. US\$ fixed rate swap						(98)	(113)	23	25	(44)	(54)	
Receivable			IPCA									
	R\$ 1,000	R\$ 1,000	+		6.55%							
Payable	US\$ 434	US\$ 434	Fix		3.98%							

IPCA vs. CDI swap						324	281		1	10	16	297
Receivable			IPCA									
	R\$ 1,350	R\$ 1,350	+		6.62%							
Payable	R\$ 1,350	R\$ 1,350	CDI		98.58%							

(ii) Protection program for EUR denominated debt instruments

In order to reduce the cash flow volatility, swap transactions were implemented to convert into US\$ the cash flows from certain debt instruments issued in Euros by Vale. In those swaps, Vale receives fixed rates in EUR and pays fixed rates in US\$.

The swap transactions were negotiated over-the-counter and the protected items are the cash flows from debt instruments linked to EUR. The financial settlement inflows/outflows are offset by the protected items losses/gains due to EUR/US\$ exchange rate.

Flow	Notional		Average rate	Fair value		Financial settlement	Value at Risk	Fair value by year		
	March 31, 2018	December 31, 2017		Inflows (Outflows)	March 31, 2018	2018		2019	2020+	
EUR fixed rate vs. US\$ fixed rate swap										
				182	76	(14)	19	(10)	192	
Receivable	500	500	Fix		3.75%					
Payable	US\$ 613	US\$ 613	Fix		4.29%					

Table of Contents**b) Commodities derivative positions****(i) Bunker Oil purchase cash flows protection program**

In order to reduce the impact of bunker oil price fluctuation on maritime freight hiring/supply and, consequently, reducing the Company's cash flow volatility, bunker oil hedging transactions were implemented, through options contracts.

The derivative transactions were negotiated over-the-counter and the protected item is part of the Vale's costs linked to bunker oil prices. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to bunker oil prices changes.

Flow	Notional (ton)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows) March 31, 2018	Value at Risk March 31, 2018	Fair value by year 2018
	March 31, 2018	December 31, 2017			March 31, 2018	December 31, 2017			
Call options	1,405,000		B	408	21		9	21	
Put options	1,405,000		S	280	(0)		1	(0)	
Total					21		9	21	

(ii) Protection programs for base metals raw materials and products

In the operational protection program for nickel sales at fixed prices, derivatives transactions were implemented to convert into floating prices the contracts with clients that required a fixed price, in order to keep nickel revenues exposed to nickel price fluctuations. Those operations are usually implemented through the purchase of nickel forwards.

In the operational protection program for the purchase of raw materials and products, derivatives transactions were implemented, usually through the sale of nickel and copper forward or futures, in order to reduce the mismatch between the pricing period of purchases (concentrate, cathode, sinter, scrap and others) and the pricing period of the final product sales to the clients.

Edgar Filing: Vale S.A. - Form 6-K

The derivative transactions are negotiated at London Metal Exchange or over-the-counter and the protected item is part of Vale's revenues and costs linked to nickel and copper prices. The financial settlement inflows/outflows are offset by the protected items' losses/gains due to nickel and copper prices changes.

Flow	Notional (ton)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk		Fair value by year
	March 31, 2018	December 31, 2017			March 31, 2018	December 31, 2017		March 31, 2018	March 31, 2018	
Fixed prices sales protection										
Nickel forwards	8,331	9,621	B	11,283	56	80	39	11	44	12
Raw materials purchase protection										
Nickel forwards	176	292	S	12,977	(0.2)	(1.1)	(1.4)	0.2	(0.2)	
Copper forwards	55	79	S	7,014	0.1	(0.1)	(0.0)	0.0	0.1	
Total					(0.1)	(1.2)	(1.4)	0.3	(0.1)	

c) Freight derivative positions

In order to reduce the impact of maritime freight price volatility on the Company's cash flow, freight hedging transactions were implemented, through Forward Freight Agreements (FFAs). The protected item is part of Vale's costs linked to maritime freight spot prices. The financial settlement inflows/outflows of the FFAs are offset by the protected items' losses/gains due to freight prices changes.

The Forward Freight Agreements (FFAs) are contracts traded over the counter and can be cleared through a Clearing House, in this case subject to margin requirements deposited at Singapore Exchange as initial margin.

Flow	Notional (days)		Bought / Sold	Average strike (US\$/day)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
	March 31, 2018	December 31, 2017			March 31, 2018	December 31, 2017			
Freight forwards	120	0	B	16,413	(1.2)			0.4	(1.2)

Table of Contents**d) Wheaton Precious Metals Corp. warrants**

The Company owns warrants of Wheaton Precious Metals Corp. (WPM), a Canadian company and traded on the Toronto Stock Exchange and New York Stock Exchange. These warrants configure American call options and were received as part of the payment regarding the sale of part of the gold payable flows produced as a sub product from the Salobo copper mine and some nickel mines in Sudbury.

Flow	Notional (quantity)		Bought / Average strike		Fair value		Financial Settlement	Value at Risk	Fair value
	March 31, 2018	December 31, 2017	Sold	(US\$/share)	March 31, 2018	December 31, 2017	Inflows (Outflows) March 31, 2018	March 31, 2018	by year 2023
Call options	10,000,000	10,000,000	B	44	87	126		9	87

e) Debentures convertible into shares of Valor da Logística Integrada (VLI)

The Company has debentures in which lenders have the option to convert the outstanding debt into a specified quantity of shares of VLI owned by the Company.

Flow	Notional (quantity)		Bought / Average strike		Fair value		Financial Settlement	Value at Risk	Fair value
	March 31, 2018	December 31, 2017	Sold	(R\$/share)	March 31, 2018	December 31, 2017	Inflows (Outflows) March 31, 2018	March 31, 2018	by year 2027
Conversion options	140,239	140,239	S	8,545	(175)	(188)		10	(175)

f) Options related to Minerações Brasileiras Reunidas S.A. (MBR) shares

The Company entered into a stock sale and purchase agreement that has options related to MBR shares. The Company has the right to buy back this non-controlling interest in the subsidiary. Moreover, under certain restricted and contingent conditions, which are beyond the buyer's control, such as illegality due to changes in the law. The contract has a clause that gives the buyer the right to sell back its stake to the Company. In this case, the Company could settle through cash or shares.

Edgar Filing: Vale S.A. - Form 6-K

Flow	Notional (quantity, in millions)				March 31, 2018	Fair value		Financial Settlement	Value at Risk	Fair value
	March 31, 2018	December 31, 2017	Bought / Sold	Average strike (R\$/ação)		December 31, 2017	March 31, 2018	March 31, 2018	March 31, 2018	by year 2018+
Options	2,139	2,139	B/S	1.6	794	831			46	794

g) **Embedded derivatives in contracts**

The Company has some nickel concentrate and raw materials purchase agreements in which there are provisions based on nickel and copper future prices behavior. These provisions are considered as embedded derivatives.

Flow	Notional (ton)				March 31, 2018	Fair value		Financial Settlement	Value at Risk	Fair value
	March 31, 2018	December 31, 2017	Bought / Sold	Average strike (US\$/ton)		December 31, 2017	March 31, 2018	March 31, 2018	March 31, 2018	by year 2018
Nickel Forward	4,047	2,627	S	13,360	(1)	3			5	(1)
Copper Forward	2,471	2,718	S	6,986	1.6	0			1	1.6
Total					1	3			6	1

The Company has a natural gas purchase agreement containing a clause that defines that a premium can be charged if the Company's pellet sales prices trade above a pre-defined level. This clause is considered an embedded derivative.

Flow	Notional (volume/month)				March 31, 2018	Fair value		Financial Settlement	Value at Risk	Fair value	
	March 31, 2018	December 31, 2017	Bought / Sold	Average strike (US\$/ton)		December 31, 2017	March 31, 2018	March 31, 2018	March 31, 2018	2018	2019+
Call options	746,667	746,667	S	233	(9)	(6)			6	(0)	(9)

Table of Contents

In August 2014 the Company sold part of its stake in Valor da Logística Integrada (VLI) to an investment fund managed by Brookfield Asset Management (Brookfield). The sales contract includes a clause that establishes, under certain conditions, a minimum return guarantee on Brookfield's investment. This clause is considered an embedded derivative, with payoff equivalent to that of a put option.

Flow	Notional (quantity)		Bought / Sold	Average strike (R\$/share)	March 31, 2018	Fair value December 31, 2017	Financial Settlement Inflows (Outflows) March 31, 2018	Value at Risk March 31, 2018	Fair value by year 2018+
	March 31, 2018	December 31, 2017							
Put option	1,105,070,863	1,105,070,863	S	3.86	(424)	(438)		34	(424)

For sensitivity analysis of derivative financial instruments, Financial counterparties ratings and market curves please see note 27.

21. Provisions

	Current liabilities		Consolidated		Non-current liabilities	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
Payroll, related charges and other remunerations (i)	1,873	3,641				
Onerous contracts	301	337	1,166		1,203	
Environment Restoration	90	99	277		262	
Asset retirement obligations	276	289	10,294		10,191	
Provisions for litigation (note 22)			5,059		4,873	
Employee postretirement obligations (note 23)	346	244	6,416		6,714	
Provisions	2,886	4,610	23,212		23,243	

(i) Change mainly due to payment of profit sharing program.

22. Litigation

a) Provision for litigation

Vale is party to labor, civil, tax and other ongoing lawsuits, at administrative and court levels. Provisions for losses resulting from lawsuits are estimated and updated by the Company, based on analysis from the Company's legal consultants.

Changes in provision for litigation are as follows:

	Consolidated			Environmental litigation	Total of litigation provision
	Tax litigation	Civil litigation	Labor litigation		
Balance at December 31, 2017	2,483	432	1,924	34	4,873
Additions/Reversals	1	5	139	1	146
Payments		(1)	(58)		(59)
Additions - discontinued operations	97	2	43		142
Indexation and interest	23	7	(67)	1	(36)
Translation adjustment	(7)				(7)
Balance at March 31, 2018	2,597	445	1,981	36	5,059

	Consolidated			Environmental litigation	Total of litigation provision
	Tax litigation	Civil litigation	Labor litigation		
Balance at December 31, 2016	695	272	1,742	25	2,734
Additions/Reversals	(1)	(22)	58	3	38
Payments	5	(18)	(60)		(73)
Indexation and interest	22	24	34	(5)	75
Translation adjustment	(10)				(10)
Balance at March 31, 2017	711	256	1,774	23	2,764

Table of Contents**b) Contingent liabilities**

Contingent liabilities of administrative and judicial claims, with expectation of loss classified as possible, and for which the recognition of a provision is not considered necessary by the Company, based on legal advice are as follows:

	Consolidated	
	March 31, 2018	December 31, 2017
Tax litigation	32,802	29,244
Civil litigation	5,535	5,371
Labor litigation	6,443	6,455
Environmental litigation	7,419	7,242
Total	52,199	48,312

i - Tax litigation - Our most significant tax-related contingent liabilities result from disputes related to (i) the deductibility of our payments of social security contributions on the net income (CSLL) from our taxable income, (ii) challenges of certain tax credits we deducted from our PIS and COFINS payments, (iii) assessments of CFEM (royalties), and (iv) charges of value-added tax on services and circulation of goods (ICMS), especially relating to certain tax credits we claimed from the sale and transmission of energy, ICMS charges to anticipate the payment in the entrance of goods to Pará State and ICMS/penalty charges on our own transportation. The changes reported in the period resulted, mainly, from new proceedings related to PIS, COFINS, ICMS, CFEM, ISS and the application interest and inflation adjustments to the disputed amounts.

ii - Civil litigation - Most of those claims have been filed by suppliers for indemnification under construction contracts, primarily relating to certain alleged damages, payments and contractual penalties. A number of other claims related to contractual disputes regarding inflation index.

iii - Labor litigation - Represents individual claims by employees and service providers, primarily involving demands for additional compensation for overtime work, time spent commuting or health and safety conditions; and the Brazilian federal social security administration (INSS) regarding contributions on compensation programs based on profits.

iv - Environmental litigation - The most significant claims concern alleged procedural deficiencies in licensing processes, non-compliance with existing environmental licenses or damage to the environment.

c) Judicial deposits

In addition to the provisions and contingent liabilities, the Company is required by law to make judicial deposits to secure a potential adverse outcome of certain lawsuits. These court-ordered deposits are monetarily adjusted and reported as non-current assets until a judicial decision to draw the deposit occurs.

	Consolidated	
	March 31, 2018	December 31, 2017
Tax litigation	3,975	3,971
Civil litigation	192	199
Labor litigation	2,413	2,359
Environmental litigation	45	42
Total	6,625	6,571

d) Contingencies related to Samarco accident

(i) Public civil claim filed by the Federal Government and others

The federal government, the two Brazilian states affected by the failure (Espírito Santo and Minas Gerais) and other governmental authorities have initiated a public civil lawsuit against Samarco and its shareholders, Vale S.A. and BHPB, with an estimated value indicated by the plaintiffs of R\$20.2 billion.

The Framework Agreement signed in March 2016, was ratified by the Federal Regional Court (TRF) in May 2016. This ratification was suspended by the Superior Court of Justice (STJ) in June 2016 and resulted in the restoration of the public civil claim, and maintained other measures, such as: (a) the prohibition of the defendants from transferring or conveying any of their interest in its Brazilian iron ore concessions, without, however, limiting their production and commercial activities and; (b) the order of the deposit with the court of R\$1.2 billion by January 2017, which was provisionally replaced by the guarantees provided for under the agreements with Federal Prosecution Office (MPF), as detailed in the item (ii) below. This public civil action is currently suspended by the abovementioned agreement with the MPF.

Table of Contents

(ii) Public civil action filed by Federal Prosecution Office

On May 3, 2016, the Federal Prosecution Office (MPF) filed a public civil lawsuit against Samarco and its shareholders and presented several demands, including: (i) the adoption of measures for mitigating the social, economic and environmental impacts resulting from the dam failure and other emergency measures; (ii) the payment of compensation to the community; and (iii) payments for the collective moral damage. The action value indicated by the MPF is R\$155 billion.

In January 2017 Samarco, Vale S.A. and BHPB (together the Companies) entered into two preliminary agreements with the MPF.

The first agreement (First Agreement) aims to outline the process and timeline for negotiations of a Final Agreement (Final Agreement), initially expected to occur by June 30, 2017 which was, nevertheless, extended by the parties to late June 2018. This First Agreement establishes a timeline and actions to set the ground for conciliation of two public civil lawsuits in the amounts of R\$20.2 billion and R\$155 billion, mentioned above, which are currently suspended.

In addition, the First Agreement provides for: (a) the appointment of experts to give support to the Federal Prosecutors and paid for by the companies to conduct a diagnosis and monitor the progress of the programs under the Framework Agreement, and (b) holding at public hearings and the engagement of technical assistance to the affected people, in order to allow these communities to take part in the definition of the content of the Final Agreement.

Samarco, Vale S.A. and BHPB has agreed to provide a guarantee for fulfillment of the obligations regarding the financing and payment of the socio-environmental and socio-economic remediation programs resulting from the Fundão dam failure, pursuant to the two public civil actions, until the signing of the Final Agreement, amounting to R\$2.2 billion, of which (i) R\$100 in financial investments; (ii) R\$1.3 billion in insurance bonds; and (iii) R\$800 in assets of Samarco. If, by the deadline negotiated by the parties, the negotiations have not been completed, the Federal Prosecutor's Office may require that the Court re-institute the order for the deposit of R\$1.2 billion in relation to the R\$20.2 billion public civil action and R\$7.7 billion related R\$155 billion, mentioned above, which are currently suspended.

On March 16, 2017, the 12th Judicial Federal Court of Belo Horizonte partially ratified the First Agreement, which decision includes: (i) ratification of the engagement of experts to perform a socio-environmental impact assessment and assessment of programs under the Framework Agreement and a period for the companies to engage an expert to perform the socio-economic impact assessment; (ii) the consolidation and suspension of related claims aiming to avoid contradictory or conflicting decisions and to establish a unified judicial procedure in order for the parties to be able to reach a final agreement; (iii) accepted the guarantees proposed by Samarco and its shareholders under the Preliminary Agreement on a temporary basis.

Edgar Filing: Vale S.A. - Form 6-K

In addition, the Second Agreement (Second Agreement) was signed on January 19, 2017, which establishes a timetable to make funds available to remediate the social, economic and environmental damages caused by the Fundão dam failure in the municipalities of Barra Longa, Rio Doce, Santa Cruz do Escalvado and Ponte Nova, amounting to R\$200. The 12th Judicial Federal Court of Belo Horizonte ratified this Second Agreement.

Parties are still negotiating an agreement regarding the choice of the expert to perform the socio-economic impact assessment. In this regard, on November 16th, 2017, they signed an addendum to the First Agreement, in which the parties defined matters related to the socio-economic impact assessment, its institutional structure and the respective experts, which, in the period of 90 days from the signing of the addendum, shall present their technical and commercial proposals. As the deadline already expired, the proposals are being negotiated for service agreements.

Alongside, the parties, together with the plaintiffs of the R\$20.2 billion public civil lawsuit, the State Prosecutors and the Public Defenders, are conducting the discussions regarding the Final Agreement.

(iii) U.S. Securities class action suits

Related to the Vale's American Depositary Receipts

Vale S.A. and certain of its officers were named as defendants in securities class action suits in the Federal Court in New York brought by holders of Vale's American Depositary Receipts under U.S. federal securities laws. The lawsuits allege that Vale S.A. made false and misleading statements or did not make disclosures concerning the risks and dangers of the operations of Samarco's Fundão dam and the adequacy of related programs and procedures. The plaintiffs have not specified an amount of alleged damages or indemnities in these actions.

Table of Contents

On March 23, 2017 the judge issued a decision rejecting a significant portion of the claims against Vale S.A. and the individual defendants, and determining the prosecution of the action with respect to more limited claims. The portion of plaintiffs' case that remains is related to certain statements about procedures, policies and risk mitigation plans contained in Vale S.A.'s sustainability reports in 2013 and 2014, and certain statements regarding to the responsibility of Vale S.A. for the Fundão dam failure made in a conference call in November 2015.

This lawsuit is currently ongoing under discovery with the gathering of documents to be provided to the plaintiffs. In addition, depositions of some custodians indicated by the parties should take place in the next few months.

Vale S.A. continues to contest the outstanding points related to this lawsuit.

Related to the Samarco bonds

In March 2017, holders of bonds issued by Samarco filed a class action suit in the Federal Court in New York against Samarco, Vale S.A. and BHPB under U.S. federal securities laws demanding for indemnification for alleged violation of U.S. federal securities laws. The plaintiffs allege that false and misleading statements were made or disclosures omitted concerning the risks and dangers of the operations of Samarco's Fundão dam and the adequacy of related programs and procedures. It is alleged that with the Fundão dam collapse, the securities have dramatically decreased, in order that the investors who have purchased such securities in a misleading way should be compensated, without, however, specifying an amount for the alleged damages or indemnities in this action.

In June 2017 the defendants presented a joint motion to dismiss the claims requested by the plaintiffs. In March 2018, the Judge issued an order dismissing defendant's motion to dismiss without prejudice and ordering leading plaintiff to submit a final amended complaint. A new schedule was proposed by the parties to the Judge. A decision regarding such new proposed schedule is expected by the parties.

Vale S.A. continues to contest this lawsuit.

(iv) Criminal lawsuit

On October 20, 2016, the MPF brought a criminal lawsuit in the Brazilian Federal Justice Court against Vale S.A., BHPB, Samarco, VogBr Recursos Hídricos e Geotecnia Ltda. and 22 individuals for alleged crimes against the environment, urban planning and cultural heritage, flooding, landslide, as well as for alleged crimes against the victims of the Fundão dam failure.

In November 2016 it was published a decision by means of the Federal Lower Court of Ponte Nova established the resume of the criminal lawsuit and determined the beginning of the Discovery phase. Nevertheless, there has not been any decisions scheduling any hearings since then.

(v) Other lawsuits

In addition, Samarco and its shareholders were named as a defendant in several other lawsuits brought by individuals, corporations, governmental entities or public prosecutor seeking personal and property damages.

Given the status of these lawsuits, it is not possible at this time to provide a range of possible outcomes or a reliable estimates of potential exposures for Vale S.A. Consequently, no contingent liability has been quantified and no provision was recognized for lawsuits related to Samarco's dam failure.

e) Other

In 2015, the Company filed an enforceable action in the amount of R\$524 referring to the final court decision in favor of the Company of the accrued interest of compulsory deposits from 1987 to 1993. Currently it is not possible to estimate the economic benefit inflow as the counterparty can appeal on the calculation. Consequently, the asset was not recognized in the financial statements.

Table of Contents**23. Employee postretirement obligations****Reconciliation of net liabilities recognized in the statement of financial position**

	Consolidated					
	Overfunded pension plans	March 31, 2018 Underfunded pension plans	Other benefits	Overfunded pension plans	December 31, 2017 Underfunded pension plans	Other benefits
Amount recognized in the statement of financial position						
Present value of actuarial liabilities	(11,161)	(14,383)	(4,553)	(11,239)	(14,789)	(4,661)
Fair value of assets	16,427	12,174		15,972	12,492	
Effect of the asset ceiling	(5,266)			(4,733)		
Liabilities		(2,209)	(4,553)		(2,297)	(4,661)
Current liabilities		(153)	(193)		(54)	(190)
Non-current liabilities		(2,056)	(4,360)		(2,243)	(4,471)
Liabilities		(2,209)	(4,553)		(2,297)	(4,661)

24. Stockholders equity**a) Share capital**

As at March 31, 2018, the share capital was R\$77,300 corresponding to 5,284,474,782 shares issued and fully paid without par value.

	ON	March 31, 2018 PNE	Total
Stockholders			
Litel Participações S.A. and Litela Participações S.A.	1,108,483,410		1,108,483,410
BNDES Participações S.A.	401,457,757		401,457,757
Bradespar S.A.	332,965,266		332,965,266
Mitsui & Co., Ltd	286,347,055		286,347,055
Brazilian Government (Golden Share)		12	12
Foreign investors - ADRs	1,256,064,074		1,256,064,074

Edgar Filing: Vale S.A. - Form 6-K

Foreign institutional investors in local market	1,161,021,106		1,161,021,106
FMP - FGTS	60,235,237		60,235,237
PIBB - Fund	2,764,928		2,764,928
Institutional investors	276,918,019		276,918,019
Retail investors in Brazil	311,175,229		311,175,229
Shares outstanding	5,197,432,081	12	5,197,432,093
Shares in treasury	87,042,689		87,042,689
Total issued shares	5,284,474,770	12	5,284,474,782
Share capital per class of shares (in millions)	77,300		77,300
Total authorized shares	7,000,000,000		7,000,000,000

b) Remuneration to the Company's stockholders

On March 15, 2018, the Company paid to stockholders the minimum mandatory remuneration for the year ended December 31, 2017 based on the interest on capital in the gross amount of R\$4,721.

Table of Contents**25. Related parties**

The Company's related parties are predominantly subsidiaries, joint ventures, associates, shareholders and its related entities and key management personnel of the Company. Transactions between the parent company and its subsidiaries are eliminated on consolidation and are not disclosed in this note.

Related party transactions were made by the Company on terms equivalent to those that prevail in arm's-length transactions, with respect to price and market conditions that are no less favorable to the Company than those arranged with third parties.

Purchases, accounts receivable and other assets, and accounts payable and other liabilities relates largely to amounts charged by joint ventures and associates related to the pelletizing plants lease and railway transportation services.

Information about related party transactions and effects on the interim financial statements is set out below:

a) Transactions with related parties

	Consolidated Three-month period ended March 31,				2017			
	2018		Major stockholders	Total	2017		Major stockholders	Total
Joint Ventures	Associates	Joint Ventures			Associates			
Net operating revenue	338	252	157	747	407	258	90	755
Cost and operating expenses	(1,635)	(67)		(1,702)	(1,036)	(27)	(17)	(1,080)
Financial result	129	1	(171)	(41)	(38)	(27)	(267)	(332)

Net operating revenue relates to sale of iron ore to the steelmakers and right to use capacity on railroads. Cost and operating expenses mostly relates to the operational leases of the pelletizing plants.

b) Outstanding balances with related parties

Edgar Filing: Vale S.A. - Form 6-K

	March 31, 2018					December 31, 2017				
	Joint Ventures	Associates	Major stockholders	Others	Total	Joint Ventures	Associates	Major stockholders	Others	Total
Assets										
Cash and cash equivalents			2,147		2,147			2,716		2,716
Accounts receivable	305	538	10	56	909	242	125	10	57	434
Dividends receivable	424	48			472	371	48			419
Loans	6,231				6,231	14,972				14,972
Derivatives financial instruments			894		894			944		944
Other assets	55				55	57				57
Liabilities										
Supplier and contractors	838	129	287	52	1,306	636	67	667	50	1,420
Loans	1,868	4,191	14,146		20,205	2,023	4,119	14,984		21,126
Derivatives financial instruments			296		296			361		361
Other liabilities		341			341			53		53

Major stockholders

Refers to regular financial instruments with large financial institutions of which the stockholders are part of the controlling shareholders agreement .

Table of Contents**Coal segment transactions**

In March 2018, Nacala BV, a joint venture between Vale and Mitsui on the Nacala's logistic corridor, closed the project financing and repaid a portion of the shareholders loans from Vale, in the amount of R\$8,434 (US\$2,572 million). The outstanding receivable of R\$6,231 carries interest at 7.44% p.a. The Company has issued a financial guarantee in connection with the Project Finance of Nacala, in the proportion equivalent to its share in the Concessionaires (50%) and the fair value of this instrument is R\$133 as at March 31, 2018.

The loan from related parties mainly relates to the loan from Pangea Emirates Ltd, part of the group of shareholders which owns 15% interest on Vale Moçambique, in the amount of R\$3,929 (R\$3,856 as at December 31, 2017), which carries interest at 6.54% p.a.

26. Select notes to Parent Company information (individual interim information)**a) Investments**

	2018	Parent company	2017
Balance at January 1st,	117,387		107,539
Additions/Capitalizations	707		537
Translation adjustment	(100)		(2,101)
Equity results in income statement	2,500		3,290
Equity results in statement of comprehensive income	90		(58)
Equity results in statement of non controlling			(329)
Dividends declared	(99)		(40)
Others (i)	3,485		849
Balance at March 31,	123,970		109,687

(i) Includes assets held for sale (Vale Fertilizantes) that were indirectly sold by the Parent Company.

b) Intangibles

Parent company

Edgar Filing: Vale S.A. - Form 6-K

	Concessions	Right of use	Software	Total
Balance at December 31, 2017	12,773	111	587	13,471
Additions	829		1	830
Disposals	(19)			(19)
Amortization	(106)	(1)	(87)	(194)
Balance at March 31, 2018	13,477	110	501	14,088
Cost	17,008	223	4,111	21,342
Accumulated amortization	(3,531)	(113)	(3,610)	(7,254)
Balance at March 31, 2018	13,477	110	501	14,088

	Concessions	Parent company Right of use	Software	Total
Balance at December 31, 2016	10,278	118	918	11,314
Additions	1,143		26	1,169
Disposals	(2)			(2)
Amortization	(105)	(2)	(103)	(210)
Balance at March 31, 2017	11,314	116	841	12,271
Cost	14,778	223	4,067	19,068
Accumulated amortization	(3,464)	(107)	(3,226)	(6,797)
Balance at March 31, 2017	11,314	116	841	12,271

Table of Contents

c) Property, plant and equipment

	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2017	1,739	25,315	27,204	9,716	5,367	18,205	15,432	102,978
Additions (i)							842	842
Disposals			(49)	(8)		(5)	(6)	(68)
Assets retirement obligation					96			96
Depreciation, amortization and depletion		(201)	(291)	(305)	(71)	(452)		(1,320)
Transfers	13	2	967	287	366	651	(2,286)	
Balance at March 31, 2018	1,752	25,116	27,831	9,690	5,758	18,399	13,982	102,528
Cost	1,752	30,433	34,824	16,727	7,580	28,290	13,982	133,588
Accumulated depreciation		(5,317)	(6,993)	(7,037)	(1,822)	(9,891)		(31,060)
Balance at March 31, 2018	1,752	25,116	27,831	9,690	5,758	18,399	13,982	102,528

	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
Balance at December 31, 2016	1,684	20,945	20,416	8,479	4,122	16,499	29,911	102,056
Additions (i)							1,052	1,052
Disposals			(18)	(8)		(1)	(17)	(44)
Assets retirement obligation					86			86
Depreciation, amortization and depletion		(177)	(259)	(282)	(64)	(375)		(1,157)
Transfers	39	2,177	3,975	626	1,413	415	(8,645)	
Balance at March 31, 2017	1,723	22,945	24,114	8,815	5,557	16,538	22,301	101,993
Cost	1,723	26,416	31,267	14,804	7,075	25,025	22,301	128,611
Accumulated depreciation		(3,471)	(7,153)	(5,989)	(1,518)	(8,487)		(26,618)
Balance at March 31, 2017	1,723	22,945	24,114	8,815	5,557	16,538	22,301	101,993

(i) Includes capitalized borrowing costs.

d) Loans and borrowings

	Current liabilities		Parent company	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
Debt contracts in the international markets				
Floating rates in:				
US\$	1,759	708	7,021	8,410
Fixed rates in:				
US\$			4,986	4,962
EUR-		3,064	2,977	
Accrued charges	118	298		
	1,877	1,006	15,071	16,349
Debt contracts in Brazil				
Floating rates in:				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	1,205	1,214	9,529	9,781
Basket of currencies and US\$ indexed to LIBOR	1,126	1,121	2,071	2,341
Fixed rates in:				
R\$	189	190	447	495
Accrued charges	894	847		
	3,414	3,372	12,047	12,617
	5,291	4,378	27,118	28,966

The future flows of debt payments (principal) are as follows:

	Parent company Debt principal
2018	2,160
2019	4,877
2020	6,106
2021	3,977
Between 2022 and 2025	8,908
2026 onwards	5,369
	31,397

Table of Contentse) **Provisions**

	Parent company			
	Current liabilities		Non-current liabilities	
	March 31, 2018	December 31, 2017	March 31, 2018	December 31, 2017
Payroll, related charges and other remunerations	1,140	2,541		
Environment Restoration	72	80	128	106
Asset retirement obligations	205	210	1,939	1,793
Provisions for litigation			4,408	4,219
Employee postretirement obligations	177	73	1,229	782
Provisions	1,594	2,904	7,704	6,908

f) **Provisions for litigation**

	Parent company				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance at December 31, 2017	2,117	308	1,770	24	4,219
Additions - Reversals	2	4	120	1	127
Payments	(5)	(1)	(49)		(55)
Additions of disposals of subsidiaries	97	2	43		142
Indexation and interest	22	1	(48)		(25)
Balance at March 31, 2018	2,233	314	1,836	25	4,408

	Parent company				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
Balance at December 31, 2016	53	247	1,621	23	1,944
Additions - Reversals	1	(28)	54	3	30
Payments	(6)	(17)	(59)		(82)
Indexation and interest		24	31	(5)	50
Balance at March 31, 2017	48	226	1,647	21	1,942

g) **Contingent liabilities**

	Parent company	
	March 31, 2018	December 31, 2017
Tax litigation	30,008	26,510
Civil litigation	4,079	3,957
Labor litigation	6,097	6,118
Environmental litigation	7,230	7,058
Total	47,414	43,643

h) Income taxes

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

	Parent company	
	Three-month period ended March 31, 2018	2017
Income before income taxes	6,703	10,194
Income taxes at statutory rates - 34%	(2,279)	(3,466)
Adjustments that affect the basis of taxes:		
Income tax benefit from interest on stockholders' equity	216	397
Tax incentives		521
Equity results	850	1,118
Others	(106)	(613)
Income taxes	(1,319)	(2,043)

Table of Contents**27. Additional information about derivatives financial instruments****a) Sensitivity analysis of derivative financial instruments.**

The following tables present the potential value of the instruments given hypothetical stress scenarios for the main market risk factors that impact the derivatives positions. The scenarios were defined as follows:

- *Probable*: The Probable scenario was based on the estimated risk variable that were used on pricing the derivative instruments as at March 31, 2018.

- *Scenario I*: fair value estimated considering a 25% deterioration in the associated risk variables

- *Scenario II*: fair value estimated considering a 50% deterioration in the associated risk variables

The curves used on the pricing of derivative instruments were developed based on data from B3, Central Bank of Brazil, London Metals Exchange and Bloomberg.

CDI vs. US\$ fixed rate swap	R\$depreciation	1	(374)	(750)
	Brazilian interest rate increase	1	2	2
	US\$interest rate inside Brazil decrease	(1,123)	(1,167)	(1,212)
	TJLP interest rate decrease	(1,123)	(1,182)	(1,242)

Edgar Filing: Vale S.A. - Form 6-K

	US\$interest rate inside Brazil decrease	(172)	(177)	(182)
	TJLP interest rate decrease	(172)	(177)	(182)
	US\$interest rate inside Brazil decrease	142	103	60
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
IPCA vs. US\$ fixed rate swap	R\$depreciation	(98)	(468)	(837)
	Brazilian interest rate increase	(98)	(141)	(181)
Protected item: R\$ denominated debt	R\$depreciation	n.a.		
IPCA vs. CDI swap	Brazilian interest rate increase	324	233	150
Protected item: R\$ denominated debt linked to IPCA	IPCA index decrease	n.a.	(271)	(221)
EUR fixed rate vs. US\$ fixed rate swap	EUR depreciation	182	(415)	(1,013)
	US\$Libor decrease	182	118	51

Table of Contents

Bunker Oil protection				
Protected item: Part of costs linked to bunker oil prices	Bunker Oil price decrease	n.a.	68	448
Maritime Freight protection				
Protected item: Part of costs linked to maritime freight prices	Freight price decrease	n.a.	2	4
Nickel sales fixed price protection				
Protected item: Part of nickel revenues with fixed prices	Nickel price fluctuation	n.a.	35	127
Purchase protection program				
Protected item: Part of costs linked to nickel prices	Nickel price increase	n.a.	2	4
Copper forwards	Copper price increase	0.1	(0.2)	(0.6)

Embedded derivatives - Raw material purchase (nickel)	Nickel price increase	(1)	(46)	(91)
Embedded derivatives - Gas purchase	Pellet price increase	(9)	(20)	(35)

b) Financial counterparties ratings

The transactions of derivative instruments, cash and cash equivalents as well as investments are held with financial institutions whose exposure limits are periodically reviewed and approved by the delegated authority. The financial institutions credit risk is performed through a methodology that considers, among other information, ratings provided by international rating agencies.

The table below presents the ratings in foreign currency published by agencies Moody's and S&P regarding the main financial institutions that we had outstanding positions as of March 31, 2018.

Table of Contents

Long term ratings by counterparty	Moody s	S&P
ANZ Australia and New Zealand Banking	Aa3	AA-
Banco ABC	Ba2	BB-
Banco Bradesco	Ba2	BB-
Banco do Brasil	Ba2	BB-
Banco de Credito del Peru	Baa1	BBB+
Banco do Nordeste	Ba2	BB-
Banco Safra	Ba2	BB-
Banco Santander	A3	A-
Banco Votorantim	Ba2	BB-
Bank of America	A3	A-
Bank of China	A1	A
Bank of Mandiri	Baa3	BB+
Bank of Nova Scotia	A1	A+
Bank Rakyat	Baa3	BB+
Bank of Tokyo Mitsubishi UFJ	A1	A-
Banpará		BB-
Barclays	Baa2	BBB
BBVA	Baa1	BBB+
BNP Paribas	Aa3	A
BTG Pactual	Ba2	BB-
Caixa Economica Federal	Ba2	BB-
Canadian Imperial Bank	A1	A+
China Construction Bank	A1	A
CIMB Bank	A3	A-

Long term ratings by counterparty	Moody s	S&P
Citigroup	Baa1	BBB+
Credit Agricole	A1	A
Credit Suisse	Baa2	BBB+
Deutsche Bank	Baa2	A-
Goldman Sachs	A3	BBB+
HSBC	A2	A
Intesa Sanpaolo Spa	Baa1	BBB
Itaú Unibanco	Ba3	BB-
JP Morgan Chase & Co	A3	A-
Macquarie Group Ltd	A3	BBB
Mega Int. Commercial Bank	A1	A
Mizuho Financial	A1	A-
Morgan Stanley	A3	BBB+
National Australia Bank NAB	Aa3	AA-
National Bank of Oman	Baa3	
Rabobank	Aa3	A+
Royal Bank of Canada	A1	AA-
Societe Generale	A2	A
Standard Bank Group	Ba1	
Standard Chartered	A2	BBB+
Sumitomo Mitsui Financial	A1	A-
UBS	A1	A-

Unicredit	Baa1	BBB
-----------	------	-----

c) **Market curves**

(i) **Products**

Nickel

Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)
SPOT	13,245	SEP18	13,355	MAR19	13,456
APR18	13,266	OCT18	13,374	MAR20	13,622
MAY18	13,283	NOV18	13,390	MAR21	13,768
JUN18	13,303	DEC18	13,406	MAR22	13,906
JUL18	13,321	JAN19	13,424		
AUG18	13,339	FEB19	13,440		

Copper

Maturity	Price (US\$/lb)	Maturity	Price (US\$/lb)	Maturity	Price (US\$/lb)
SPOT	3.03	SEP18	3.06	MAR19	3.09
APR18	3.04	OCT18	3.07	MAR20	3.11
MAY18	3.04	NOV18	3.07	MAR21	3.12
JUN18	3.05	DEC18	3.08	MAR22	3.12
JUL18	3.05	JAN19	3.08		
AUG18	3.06	FEB19	3.08		

Bunker Oil

Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)
SPOT	366	SEP18	364	MAR19	350
APR18	367	OCT18	362	MAR20	260
MAY18	368	NOV18	361	MAR21	245
JUN18	368	DEC18	359	MAR22	215
JUL18	367	JAN19	356		
AUG18	365	FEB19	353		

Table of Contents**Maritime Freight (Capesize 5TC)**

Maturity	Price (US\$/day)	Maturity	Price (US\$/day)	Maturity	Price (US\$/day)
SPOT	8,339	SEP18	18,050	MAR19	13,970
APR18	10,920	OCT18	21,150	Cal 2019	16,850
MAY18	14,020	NOV18	21,150	Cal 2020	16,270
JUN18	15,640	DEC18	21,150	Cal 2021	15,260
JUL18	16,350	JAN19	13,970	Cal 2022	15,240
AUG18	17,020	FEB19	13,970		

(ii) Foreign exchange and interest rates**US\$-Brazil Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
05/02/18	3.27	03/01/19	3.18	07/01/21	3.85
06/01/18	3.10	04/01/19	3.19	10/01/21	3.90
07/02/18	2.95	07/01/19	3.30	01/03/22	3.95
08/01/18	2.95	10/01/19	3.40	04/01/22	4.00
09/03/18	2.91	01/02/20	3.52	07/01/22	4.03
10/01/18	2.97	04/01/20	3.61	10/03/22	4.04
11/01/18	3.04	07/01/20	3.69	01/02/23	4.09
12/03/18	3.03	10/01/20	3.77	07/03/23	4.18
01/02/19	3.11	01/04/21	3.81	01/02/24	4.28
02/01/19	3.16	04/01/21	3.81	07/01/24	4.33

US\$ Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	1.88	6M	2.39	11M	2.43
2M	2.03	7M	2.41	12M	2.43
3M	2.31	8M	2.41	2Y	2.63
4M	2.35	9M	2.42	3Y	2.76
5M	2.38	10M	2.43	4Y	2.82

TJLP

Edgar Filing: Vale S.A. - Form 6-K

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
05/02/18	6.75	03/01/19	6.75	07/01/21	6.75
06/01/18	6.75	04/01/19	6.75	10/01/21	6.75
07/02/18	6.75	07/01/19	6.75	01/03/22	6.75
08/01/18	6.75	10/01/19	6.75	04/01/22	6.75
09/03/18	6.75	01/02/20	6.75	07/01/22	6.75
10/01/18	6.75	04/01/20	6.75	10/03/22	6.75
11/01/18	6.75	07/01/20	6.75	01/02/23	6.75
12/03/18	6.75	10/01/20	6.75	07/03/23	6.75
01/02/19	6.75	01/04/21	6.75	01/02/24	6.75
02/01/19	6.75	04/01/21	6.75	07/01/24	6.75

BRL Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
05/02/18	6.39	03/01/19	6.27	07/01/21	8.29
06/01/18	6.35	04/01/19	6.30	10/01/21	8.46
07/02/18	6.30	07/01/19	6.48	01/03/22	8.58
08/01/18	6.25	10/01/19	6.75	04/01/22	8.70
09/03/18	6.22	01/02/20	7.03	07/01/22	8.80
10/01/18	6.22	04/01/20	7.29	10/03/22	8.90
11/01/18	6.21	07/01/20	7.53	01/02/23	8.96
12/03/18	6.21	10/01/20	7.78	07/03/23	9.12
01/02/19	6.22	01/04/21	7.96	01/02/24	9.25
02/01/19	6.24	04/01/21	8.14	07/01/24	9.36

Table of Contents**Implicit Inflation (IPCA)**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
05/02/18	4.26	03/01/19	4.13	07/01/21	4.43
06/01/18	4.21	04/01/19	4.16	10/01/21	4.48
07/02/18	4.16	07/01/19	4.10	01/03/22	4.50
08/01/18	4.12	10/01/19	4.19	04/01/22	4.52
09/03/18	4.09	01/02/20	4.20	07/01/22	4.55
10/01/18	4.09	04/01/20	4.26	10/03/22	4.57
11/01/18	4.07	07/01/20	4.29	01/02/23	4.56
12/03/18	4.07	10/01/20	4.35	07/03/23	4.60
01/02/19	4.09	01/04/21	4.36	01/02/24	4.63
02/01/19	4.11	04/01/21	4.41	07/01/24	4.65

EUR Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	-0.41	6M	-0.30	11M	-0.27
2M	-0.38	7M	-0.29	12M	-0.26
3M	-0.37	8M	-0.28	2Y	-0.16
4M	-0.33	9M	-0.27	3Y	0.02
5M	-0.31	10M	-0.27	4Y	0.21

CAD Interest Rate

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	1.63	6M	1.89	11M	1.07
2M	1.68	7M	1.64	12M	0.98
3M	1.73	8M	1.44	2Y	2.19
4M	1.81	9M	1.28	3Y	2.35
5M	1.86	10M	1.16	4Y	2.45

Currencies - Ending rates

CAD/US\$	0.7752	US\$/BRL	3.3238	EUR/US\$	1.2291
----------	--------	----------	--------	----------	--------

Table of Contents

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Vale S.A.
(Registrant)

By:

/s/ André Figueiredo
Director of Investor Relations

Date: April 25, 2018
