

Vale S.A.  
Form 6-K  
October 26, 2017  
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**United States  
Securities and Exchange Commission**

Washington, D.C. 20549

**FORM 6-K**

**Report of Foreign Private Issuer  
Pursuant to Rule 13a-16 or 15d-16  
of the  
Securities Exchange Act of 1934**

**For the month of**

**October, 2017**

**Vale S.A.**

**Avenida das Américas, No. 700  
22640-100 Rio de Janeiro, RJ, Brazil**

(Address of principal executive office)

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

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(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- .

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**Interim Financial Statements**

**September 30, 2017**

BRGAAP in R\$ (English)

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**Vale S.A. Interim Financial Statements**

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**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 accounting 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 September 30, 2017, which comprises the individual and consolidated balance sheet as of September 30, 2017 and the respective statements of income and comprehensive income for three and nine month periods ended on September 30, 2017, the individual and consolidated statements of changes in equity for the nine-month period and the individual statment of cash flows for the nine-month period and the consolidated statement of cash flows for the three and nine month periods then ended, including the explanatory notes.

2. The Company`s Management is responsible for the preparation of these interim accounting information in accordance with the CPC 21(R1) *Demonstração Intermediária* 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 accounting 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.

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.*

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**Conclusion on the interim accounting 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 accounting 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 statements of value added for the quarter ended September 30, 2017, prepared under the responsibility of the Company's management, and presented as supplementary information for the purposes of IAS 34, were 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 these statements were 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 statements of value added were not prepared, in all material respects, in accordance with the individual and consolidated interim financial information taken as a whole.

Rio de Janeiro, October 25, 2017

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



Table of Contents**Income Statement**

In millions of Brazilian Reais, except earnings per share data

	Notes	Consolidated			
		Three-month period ended September 30,		Nine-month period ended September 30,	
		2017	2016 (i)	2017	2016 (i)
<b>Continuing operations</b>					
Net operating revenue	3(c)	28,600	21,831	78,705	63,981
Cost of goods sold and services rendered	5(a)	(17,099)	(14,100)	(48,426)	(44,271)
<b>Gross profit</b>		<b>11,501</b>	<b>7,731</b>	<b>30,279</b>	<b>19,710</b>
<b>Operating expenses</b>					
Selling and administrative expenses	5(b)	(409)	(444)	(1,223)	(1,309)
Research and evaluation expenses		(285)	(258)	(748)	(726)
Pre operating and operational stoppage		(265)	(377)	(915)	(1,144)
Other operating revenues (expenses), net	5(c)	(484)	218	(1,002)	(426)
		<b>(1,443)</b>	<b>(861)</b>	<b>(3,888)</b>	<b>(3,605)</b>
Impairment and other results on non-current assets	13 and 16	(532)	(110)	345	(338)
<b>Operating income</b>		<b>9,526</b>	<b>6,760</b>	<b>26,736</b>	<b>15,767</b>
Financial income	6	4,838	1,187	9,327	26,113
Financial expenses	6	(4,084)	(4,578)	(14,808)	(17,763)
Equity results in associates and joint ventures	14	367	144	509	1,386
Impairment and other results in associates and joint ventures	18	(78)	(106)	(379)	(4,105)
<b>Income before income taxes</b>		<b>10,569</b>	<b>3,407</b>	<b>21,385</b>	<b>21,398</b>
<b>Income taxes</b>					
	7				
Current tax		(1,654)	(203)	(3,461)	(2,895)
Deferred tax		(1,407)	(1,211)	(1,660)	(6,516)
		<b>(3,061)</b>	<b>(1,414)</b>	<b>(5,121)</b>	<b>(9,411)</b>
<b>Net income from continuing operations</b>		<b>7,508</b>	<b>1,993</b>	<b>16,264</b>	<b>11,987</b>
Net income attributable to noncontrolling interests		19	37	166	88
<b>Net income from continuing operations attributable to Vale's stockholders</b>		<b>7,489</b>	<b>1,956</b>	<b>16,098</b>	<b>11,899</b>
<b>Discontinued operations</b>					
	12				
Loss from discontinued operations		(338)	(127)	(983)	(154)
Net income attributable to noncontrolling interests		8	(13)	21	7
<b>Loss from discontinued operations attributable to Vale's stockholders</b>		<b>(346)</b>	<b>(114)</b>	<b>(1,004)</b>	<b>(161)</b>

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<b>Net income</b>	<b>7,170</b>	<b>1,866</b>	<b>15,281</b>	<b>11,833</b>
Net income attributable to noncontrolling interests	27	24	187	95
<b>Net income attributable to Vale's stockholders</b>	<b>7,143</b>	<b>1,842</b>	<b>15,094</b>	<b>11,738</b>
<b>Earnings per share attributable to Vale's stockholders:</b>				
<b>Basic and diluted earnings per share (restated in note 4):</b>				
	8			
Preferred share (R\$)	1.38	0.35	2.92	2.27
Common share (R\$)	1.38	0.35	2.92	2.27

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(i) Period restated according to Note 12.

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

Table of Contents**Income Statement**

In millions of Brazilian Reais, except earnings per share data

	Parent company		Parent company	
	Three-month period ended September 30, 2017	2016	Nine-month period ended September 30, 2017	2016
<b>Continuing operations</b>				
Net operating revenue	14,369	11,941	47,033	32,315
Cost of goods sold and services rendered	(8,335)	(7,552)	(24,424)	(21,599)
<b>Gross profit</b>	<b>6,034</b>	<b>4,389</b>	<b>22,609</b>	<b>10,716</b>
<b>Operating expenses</b>				
Selling and administrative expenses	(229)	(265)	(690)	(754)
Research and evaluation expenses	(171)	(162)	(444)	(417)
Pre operating and operational stoppage	(256)	(167)	(660)	(506)
Equity results from subsidiaries	3,224	1,288	4,840	4,745
Other operating expenses, net	(438)	(312)	(523)	(830)
	<b>2,130</b>	<b>382</b>	<b>2,523</b>	<b>2,238</b>
Impairment and other results on non-current assets	(258)		(326)	
<b>Operating income</b>	<b>7,906</b>	<b>4,771</b>	<b>24,806</b>	<b>12,954</b>
Financial income	4,278	1,296	7,793	25,006
Financial expenses	(3,169)	(4,464)	(12,848)	(17,122)
Equity results in associates and joint ventures	367	144	509	1,386
Impairment and other results in associates and joint ventures	(78)	(106)	(370)	(4,105)
<b>Income before income taxes</b>	<b>9,304</b>	<b>1,641</b>	<b>19,890</b>	<b>18,119</b>
<b>Income taxes</b>				
Current tax	(1,278)	137	(2,344)	(2,161)
Deferred tax	(537)	178	(1,448)	(4,059)
	<b>(1,815)</b>	<b>315</b>	<b>(3,792)</b>	<b>(6,220)</b>
<b>Net income from continuing operations</b>	<b>7,489</b>	<b>1,956</b>	<b>16,098</b>	<b>11,899</b>
<b>Discontinued operations</b>				
Loss from discontinued operations	(346)	(114)	(1,004)	(161)
<b>Net income</b>	<b>7,143</b>	<b>1,842</b>	<b>15,094</b>	<b>11,738</b>

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			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Net income</b>	<b>7,170</b>	<b>1,866</b>	<b>15,281</b>	<b>11,833</b>
<b>Other comprehensive income:</b>				
<b>Items that will not be reclassified subsequently to the income statement</b>				
Retirement benefit obligations	200	(128)	(826)	(1,100)
Tax recognized within other comprehensive income	(58)	43	253	340
<b>Total items that will not be reclassified subsequently to the income statement</b>	<b>142</b>	<b>(85)</b>	<b>(573)</b>	<b>(760)</b>
<b>Items that may be reclassified subsequently to the income statement</b>				
Cumulative translation adjustments	(2,260)	787	96	(13,435)
Cash flow hedge				23
Net investments hedge	935		515	
Equity results in associates and joint ventures, net of taxes				16
Transfer of realized results to net income, net of taxes				(276)
Tax recognized within other comprehensive income	(582)	55	(686)	(470)
<b>Total of items that may be reclassified subsequently to the income statement</b>	<b>(1,907)</b>	<b>842</b>	<b>(75)</b>	<b>(14,142)</b>
<b>Total comprehensive income (loss)</b>	<b>5,405</b>	<b>2,623</b>	<b>14,633</b>	<b>(3,069)</b>
Comprehensive income (loss) attributable to noncontrolling interests	(118)	66	74	(835)
<b>Comprehensive income (loss) attributable to Vale's stockholders</b>	<b>5,523</b>	<b>2,557</b>	<b>14,559</b>	<b>(2,234)</b>

	Parent company			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Net income</b>	<b>7,143</b>	<b>1,842</b>	<b>15,094</b>	<b>11,738</b>
<b>Other comprehensive income:</b>				
<b>Items that will not be reclassified subsequently to the income statement</b>				
Retirement benefit obligations	(40)	(26)	(80)	(66)
Tax recognized within other comprehensive income	14	10	27	23
Equity results in subsidiaries, associates and joint ventures, net of taxes	168	(69)	(520)	(717)
	<b>142</b>	<b>(85)</b>	<b>(573)</b>	<b>(760)</b>

**Total items that will not be reclassified subsequently to the income statement****Items that may be reclassified subsequently to the income statement**

Cumulative translation adjustments	(2,378)	800	(301)	(12,972)
Net investments hedge	935		515	
Equity results in associates and joint ventures, net of taxes				26
Transfer of realized results to net income, net of taxes				(266)
Tax recognized within other comprehensive income	(319)		(176)	
<b>Total of items that may be reclassified subsequently to the income statement</b>	<b>(1,762)</b>	<b>800</b>	<b>38</b>	<b>(13,212)</b>
<b>Total comprehensive income (loss)</b>	<b>5,523</b>	<b>2,557</b>	<b>14,559</b>	<b>(2,234)</b>

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			
	Three-month period ended September 30, 2017	2016 (i)	Nine-month period ended September 30, 2017	2016 (i)
<b>Cash flow from operating activities:</b>				
Income before income taxes from continuing operations	10,569	3,407	21,385	21,398
<b>Continuing operations adjustments for:</b>				
Equity results in associates and joint ventures	(367)	(144)	(509)	(1,386)
Impairment and other results on non-current assets	532	110	(345)	338
Impairment and other results in associates and joint ventures	78		379	3,999
Depreciation, amortization and depletion	2,916	2,766	8,674	8,764
Financial results, net	(754)	3,391	5,481	(8,350)
<b>Changes in assets and liabilities:</b>				
Accounts receivable	(3,075)	405	3,420	(2,854)
Inventories	(173)	(249)	(1,488)	(308)
Suppliers and contractors	113	1,425	1,162	1,464
Provision - Payroll, related charges and others remunerations	632	(51)	539	85
Deferred revenue - Gold stream		1,683		1,683
Other assets and liabilities, net	(855)	(2,342)	(2,824)	(1,222)
	<b>9,616</b>	<b>10,401</b>	<b>35,874</b>	<b>23,611</b>
Interest on loans and borrowings paid	(1,289)	(1,377)	(4,235)	(4,511)
Derivatives paid, net	(361)	(619)	(714)	(3,831)
Interest on participative stockholders debentures paid			(221)	(117)
Income taxes	(282)	(384)	(1,539)	(1,242)
Income taxes - Settlement program	(393)	(362)	(1,159)	(1,056)
<b>Net cash provided by operating activities from continuing operations</b>	<b>7,291</b>	<b>7,659</b>	<b>28,006</b>	<b>12,854</b>
Net cash provided by operating activities from discontinued operations	275	150	238	282
<b>Net cash provided by operating activities</b>	<b>7,566</b>	<b>7,809</b>	<b>28,244</b>	<b>13,136</b>
<b>Cash flow from investing activities:</b>				
Financial investments redeemed (invested)	(124)	227	(176)	181
Loans and advances - Net receipts (payments) (note 18)	(324)	(396)	(1,059)	(401)
Additions to investments	(217)	(14)	(223)	(837)
Additions to property, plant and equipment and intangible	(2,713)	(3,719)	(9,052)	(12,998)
Proceeds from disposal of assets and investments (note 13)	624	1,053	2,266	1,140
Dividends received from associates and joint ventures	64	1	330	406
Others investments activities	7	160	(95)	12
Proceeds from gold stream transaction		885		885
<b>Net cash used in investing activities from continuing operations</b>	<b>(2,683)</b>	<b>(1,803)</b>	<b>(8,009)</b>	<b>(11,612)</b>
	(224)	(348)	(684)	(741)

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Net cash used in investing activities from discontinued operations

<b>Net cash used in investing activities</b>	<b>(2,907)</b>	<b>(2,151)</b>	<b>(8,693)</b>	<b>(12,353)</b>
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**Cash flow from financing activities:**

**Loans and borrowings**

Additions	1,115	5,092	5,654	23,046
Repayments	(8,895)	(6,430)	(18,327)	(17,364)

**Transactions with stockholders:**

Dividends and interest on capital attributed to stockholders			(4,660)	
Dividends and interest on capital paid to noncontrolling interest	(372)	(433)	(395)	(702)
Transactions with noncontrolling stockholders (note 13)			(305)	(69)

**Net cash provided by (used in) financing activities from continuing operations**

<b>Net cash provided by (used in) financing activities from continuing operations</b>	<b>(8,152)</b>	<b>(1,771)</b>	<b>(18,033)</b>	<b>4,911</b>
Net cash used in financing activities from discontinued operations	(107)	(29)	(108)	(45)
<b>Net cash provided by (used in) financing activities</b>	<b>(8,259)</b>	<b>(1,800)</b>	<b>(18,141)</b>	<b>4,866</b>

<b>Increase (decrease) in cash and cash equivalents</b>	<b>(3,600)</b>	<b>3,858</b>	<b>1,410</b>	<b>5,649</b>
Cash and cash equivalents in the beginning of the period	18,922	13,377	13,891	14,022
Effect of exchange rate changes on cash and cash equivalents	(380)	193	(315)	(2,243)
Effects of disposals of subsidiaries and merger, net on cash and cash equivalents	7		(37)	
<b>Cash and cash equivalents at end of the period</b>	<b>14,949</b>	<b>17,428</b>	<b>14,949</b>	<b>17,428</b>

**Non-cash transactions:**

Additions to property, plant and equipment - capitalized loans and borrowing costs	351	556	938	1,995
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(i) Period restated according to Note 12.

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



Table of Contents**Statement of Cash Flows****In millions of Brazilian Reais**

	Parent company Nine-month period ended September 30,	
	2017	2016
<b>Cash flow from operating activities:</b>		
Income before income taxes from continuing operations	19,890	18,119
Equity results in associates, subsidiaries and joint ventures	(5,349)	(6,131)
Results on measurement or sale of non-current assets	326	
Impairment and other results in associates and joint ventures	370	4,105
Depreciation, amortization and depletion	4,124	3,717
Financial results, net	5,055	(7,884)
<b>Changes in assets and liabilities:</b>		
Accounts receivable	13,517	4,634
Inventories	(346)	87
Suppliers and contractors	81	333
Provision - Payroll, related charges and others remunerations	483	153
Other assets and liabilities, net	80	320
	<b>38,231</b>	<b>17,453</b>
Interest on loans and borrowings paid	(4,311)	(4,185)
Derivatives paid, net	(439)	(790)
Interest on participative stockholders debentures paid	(221)	(117)
Dividends received from interest on capital and associates	1,602	186
Income taxes	(735)	(60)
Income taxes - Settlement program	(1,136)	(1,035)
<b>Net cash provided by operating activities</b>	<b>32,991</b>	<b>11,452</b>
<b>Cash flow from investing activities:</b>		
Financial investments redeemed (invested)	(195)	(34)
Loans and advances - Net receipts (payments)	(482)	(341)
Additions to investments	(1,205)	(1,334)
Additions to property, plant and equipment and intangible	(6,306)	(9,070)
Proceeds from disposal of assets and investments	21	115
Dividends and interest on capital received from associates and joint ventures	300	403
Others investments activities	(87)	
<b>Net cash used in investing activities</b>	<b>(7,954)</b>	<b>(10,261)</b>
<b>Cash flow from financing activities:</b>		
<b>Loans and borrowings</b>		
Additions	7,875	11,590
Repayments	(26,114)	(12,803)
<b>Transactions with stockholders:</b>		
Dividends attributed to stockholders	(4,660)	
<b>Net cash used in financing activities</b>	<b>(22,899)</b>	<b>(1,213)</b>

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<b>Increase (decrease) in cash and cash equivalents</b>	2,138	(22)
Cash and cash equivalents in the beginning of the period	1,203	518
Effects of disposals of subsidiaries and merger, net on cash and cash equivalents	7	
<b>Cash and cash equivalents at end of the period</b>	<b>3,348</b>	<b>496</b>
<b>Non-cash transactions:</b>		
Additions to property, plant and equipment - capitalized loans and borrowing costs	938	827

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	September 30, 2017	December 31, 2016	September 30, 2017	December 31, 2016
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	17	14,949	13,891	3,348	1,203
Accounts receivable	9	8,592	11,937	12,156	26,223
Other financial assets	11	7,144	1,184	906	1,231
Inventories	10	12,934	10,913	4,429	3,982
Prepaid income taxes		1,054	518	894	312
Recoverable taxes		3,564	5,296	2,068	3,962
Others		1,068	1,814	393	406
		<b>49,305</b>	<b>45,553</b>	<b>24,194</b>	<b>37,319</b>
Non-current assets held for sale	12	13,700	27,994	8,406	8,936
		<b>63,005</b>	<b>73,547</b>	<b>32,600</b>	<b>46,255</b>
<b>Non-current assets</b>					
Judicial deposits	23(c)	6,352	3,135	5,933	2,681
Other financial assets	11	10,333	2,046	1,873	2,178
Prepaid income taxes		1,707	1,718		
Recoverable taxes		2,062	2,368	1,933	2,223
Deferred income taxes	7(a)	21,069	23,931	13,703	15,299
Others		980	894	698	618
		<b>42,503</b>	<b>34,092</b>	<b>24,140</b>	<b>22,999</b>
Investments	14	12,214	12,046	114,435	107,539
Intangibles	15	27,405	22,395	13,109	11,314
Property, plant and equipment	16	178,296	180,616	102,253	102,056
		<b>260,418</b>	<b>249,149</b>	<b>253,937</b>	<b>243,908</b>
<b>Total assets</b>		<b>323,423</b>	<b>322,696</b>	<b>286,537</b>	<b>290,163</b>
<b>Liabilities</b>					
<b>Current liabilities</b>					
Suppliers and contractors		12,712	11,830	7,431	7,116
Loans and borrowings	17	5,824	5,410	4,533	4,171
Other financial liabilities	11	2,008	3,539	5,045	10,845
Taxes payable	7(c)	2,312	2,144	1,935	1,883
Provision for income taxes		979	556		
Liabilities related to associates and joint ventures	18	954	951	954	951
Provisions	22	3,793	3,103	2,200	1,792
Dividends and interest on capital			2,602		2,602
Others		1,782	2,921	1,751	353
		<b>30,364</b>	<b>33,056</b>	<b>23,849</b>	<b>29,713</b>

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Liabilities associated with non-current assets held for sale	12	3,590	3,554		
		<b>33,954</b>	<b>36,610</b>	<b>23,849</b>	<b>29,713</b>
<b>Non-current liabilities</b>					
Loans and borrowings	17	75,878	90,154	35,661	47,877
Other financial liabilities	11	9,385	6,932	56,607	59,681
Taxes payable	7(c)	16,374	16,170	16,046	15,838
Deferred income taxes	7(a)	5,081	5,540		
Provisions	22	21,783	18,730	6,626	4,396
Liabilities related to associates and joint ventures	18	2,296	2,560	2,296	2,560
Deferred revenue - Gold stream		6,090	6,811		
Others		5,351	5,487	2,892	2,857
		<b>142,238</b>	<b>152,384</b>	<b>120,128</b>	<b>133,209</b>
<b>Total liabilities</b>		<b>176,192</b>	<b>188,994</b>	<b>143,977</b>	<b>162,922</b>
<b>Stockholders equity</b>	25				
Equity attributable to Vale's stockholders		142,560	127,241	142,560	127,241
Equity attributable to noncontrolling interests		4,671	6,461		
<b>Total stockholders equity</b>		<b>147,231</b>	<b>133,702</b>	<b>142,560</b>	<b>127,241</b>
<b>Total liabilities and stockholders equity</b>		<b>323,423</b>	<b>322,696</b>	<b>286,537</b>	<b>290,163</b>

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 reserves	Results from operation with noncontrolling interest	Profit reserves	Treasury stocks	Unrealized fair value gain (losses)	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale's stockholders	Equity attributable to noncontrolling interests
<b>Balance at December 31, 2016</b>	<b>77,300</b>	<b>50</b>		<b>(1,870)</b>	<b>13,698</b>	<b>(2,746)</b>	<b>(3,739)</b>	<b>44,548</b>		<b>127,241</b>	<b>6,411</b>
<b>Net income</b>									15,094	<b>15,094</b>	
<b>Other comprehensive income:</b>											
Retirement benefit obligations							(573)			(573)	
Net investments hedge (note 17 (vi))								339		339	
Translation adjustments							72	(373)		(301)	(1,000)
<b>Transactions with stockholders:</b>											
Dividends and interest on capital of Vale's stockholders					(2,064)					(2,064)	
Dividends of noncontrolling interest											(3,000)
Acquisitions and disposal of noncontrolling interest (note 13)				(868)						(868)	(1,600)
Capitalization of noncontrolling interest advances											1,000
Merger of Valepar - Note 4			3,692							3,692	
<b>Balance at September 30, 2017</b>	<b>77,300</b>	<b>50</b>	<b>3,692</b>	<b>(2,738)</b>	<b>11,634</b>	<b>(2,746)</b>	<b>(4,240)</b>	<b>44,514</b>	<b>15,094</b>	<b>142,560</b>	<b>4,611</b>

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	Share capital	Results on conversion of shares	Capital reserves	Results from operation with noncontrolling interest	Profit reserves	Treasury stocks	Unrealized fair value gain (losses)	Cumulative translation adjustments	Retained earnings	Equity attributable to Vale s stockholders	Equity attributable to noncontrolling interests
<b>Balance at December 31, 2015</b>	77,300	50		(1,881)	3,846	(2,746)	(3,873)	58,464		131,160	8,2
<b>Net income</b>									11,738	11,738	
<b>Other comprehensive income:</b>											
Retirement benefit obligations							(760)			(760)	
Cash flow hedge							26			26	
Translation adjustments							420	(13,658)		(13,238)	(9
<b>Transactions with stockholders:</b>											
Dividends of noncontrolling interest											(6
Acquisitions and disposal of noncontrolling interest (note 13)				8						8	
Capitalization of noncontrolling interest advances											
<b>Balance at September 30, 2016</b>	77,300	50		(1,873)	3,846	(2,746)	(4,187)	44,806	11,738	128,934	6,8

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

Table of Contents**Value Added Statement**

In millions of Brazilian Reais

Generation of value added from continuing operations	Consolidated		Parent company	
	2017	Nine-month period ended September 30, 2016 (i)	2017	2016
<b>Gross revenue</b>				
Revenue from products and services	79,771	64,911	47,793	32,841
Results on measurement or sale of non-current assets	345	(604)	(326)	(266)
Revenue from the construction of own assets	4,657	10,107	4,165	7,921
Allowance for doubtful accounts	(19)	(9)	6	(2)
Other revenues	396	1,237	313	315
<b>Less:</b>				
Acquisition of products	(1,483)	(1,264)	(516)	(572)
Material, service and maintenance	(19,353)	(22,380)	(12,183)	(14,576)
Oil and gas	(3,015)	(3,140)	(2,074)	(2,029)
Energy	(2,226)	(1,733)	(1,057)	(757)
Freight	(7,374)	(6,052)	(81)	(49)
Impairment of non-current assets and other results	(379)	(3,839)	(370)	(3,839)
Impairment of discontinued operations			(1,004)	(161)
Other costs and expenses	(4,582)	(4,828)	(763)	(1,315)
<b>Gross value added</b>	<b>46,738</b>	<b>32,406</b>	<b>33,903</b>	<b>17,511</b>
Depreciation, amortization and depletion	(8,674)	(8,764)	(4,124)	(3,717)
<b>Net value added</b>	<b>38,064</b>	<b>23,642</b>	<b>29,779</b>	<b>13,794</b>
<b>Received from third parties:</b>				
Equity results from entities	509	1,386	4,345	5,970
Equity results from discontinued operations			1,004	161
Financial income	1,054	432	302	241
Monetary and exchange variation of assets	(276)	(6,526)	(404)	(6,461)
<b>Total value added from continuing operations to be distributed</b>	<b>39,351</b>	<b>18,934</b>	<b>35,026</b>	<b>13,705</b>
Value added from discontinued operations to be distributed	482	1,985		
<b>Total value added to be distributed</b>	<b>39,833</b>	<b>20,919</b>	<b>35,026</b>	<b>13,705</b>
Personnel	5,502	5,481	2,648	2,141
Taxes and contributions	5,559	4,883	5,390	4,911
Current income tax	3,461	2,895	2,344	2,161
Deferred income tax	1,660	6,516	1,448	4,059
Financial expense (excludes capitalized interest)	6,866	3,559	6,335	4,415
Monetary and exchange variation of liabilities	(798)	(17,380)	(1,424)	(18,020)
Other remunerations of third party funds	1,841	1,154	3,191	2,300
Reinvested net income	15,094	11,738	15,094	11,738
Net income attributable to noncontrolling interest	166	88		
<b>Distributed value added from continuing operations</b>	<b>39,351</b>	<b>18,934</b>	<b>35,026</b>	<b>13,705</b>
Distributed value added from discontinued operations	482	1,985		

<b>Distributed value added</b>	<b>39,833</b>	<b>20,919</b>	<b>35,026</b>	<b>13,705</b>
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(i) Period restated according to Note 12.

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



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**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 and Vale5), New York - NYSE (VALE and VALE.P), Paris - NYSE Euronext (Vale3 and Vale5) and Madrid LATIBEX (XVALO and XVALP).

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 consolidated interim financial statements present the accounts of the Company.

The selected notes of the Parent Company are presented in a summarized form in note 28.

**b) Basis of presentation**

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

The accounting practices, accounting estimates and judgments, risk management and measurement methods are the same as those adopted when preparing the financial statements for the year ended December 31, 2016. The accounting policy for recognizing and measuring income taxes in the interim period is described in note 7. These interim financial statements were prepared to update users about relevant information presented in the period and should be read in conjunction with the financial statements for the year ended December 31, 2016.

The consolidated comparative information for the periods ended September 30, 2016 was restated for the purposes of applying IFRS 5 Non-current assets held for sale and discontinued operations after approval by the Board of Directors of the sale of the fertilizers assets, as presented in Note 12. Also earnings per share were restated as disclosed in note 4.

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 ( BRL or R\$ ). For presentation purposes, these interim financial statements are presented in R\$.

The exchange rates used by the Company for major currencies to translate its operations for R\$ are as follows:

	Closing rate		Average rate for the Three-month period ended		Average rate for the Nine-month period ended	
	September 30, 2017	December 31, 2016	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
US Dollar ( US\$ )	3.1680	3.2591	3.1639	3.2460	3.1750	3.5450
Canadian dollar ( CAD )	2.5334	2.4258	2.5235	2.4881	2.4319	2.6802
Australian dollar ( AUD )	2.4837	2.3560	2.4969	2.4616	2.4320	2.6273
Euro ( EUR or )	3.7430	3.4384	3.7162	3.6232	3.5392	3.9549

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Subsequent events were evaluated through October 25, 2017, which is the date the interim financial statements were approved by the Board of Directors.

c) **Accounting standards issued but not yet effective**

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, 2016.

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 reallocations between segments.

a) **Adjusted LAJIDA (EBITDA)**

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

	Consolidated						Adjusted LAJIDA (EBITDA)
	Three-month period ended September 30, 2017						
Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures		
<b>Ferrous minerals</b>							
Iron ore	16,212	(6,584)	(282)	(72)	(148)	3	9,129
Iron ore Pellets	4,556	(2,320)	(68)	(16)	(6)		2,146
Ferroalloys and manganese	416	(223)	(12)		2		183
Other ferrous products and	368	(243)	(5)	(1)	(1)	38	156

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services							
	21,552	(9,370)	(367)	(89)	(153)	41	11,614
<b>Coal</b>	<b>1,137</b>	<b>(1,164)</b>	<b>(25)</b>	<b>(14)</b>		<b>212</b>	<b>146</b>
<b>Base metals</b>							
Nickel and other products	3,688	(2,788)	(141)	(42)	(1)		716
Copper	1,881	(781)	(27)	(17)			1,056
	<b>5,569</b>	<b>(3,569)</b>	<b>(168)</b>	<b>(59)</b>	<b>(1)</b>		<b>1,772</b>
<b>Others</b>	<b>342</b>	<b>(248)</b>	<b>(274)</b>	<b>(123)</b>	<b>(2)</b>	<b>23</b>	<b>(282)</b>
<b>Total of continuing operations</b>	<b>28,600</b>	<b>(14,351)</b>	<b>(834)</b>	<b>(285)</b>	<b>(156)</b>	<b>276</b>	<b>13,250</b>
<b>Discontinued operations (Fertilizers)</b>	<b>1,685</b>	<b>(1,554)</b>	<b>(74)</b>	<b>(12)</b>	<b>(11)</b>		<b>34</b>
<b>Total</b>	<b>30,285</b>	<b>(15,905)</b>	<b>(908)</b>	<b>(297)</b>	<b>(167)</b>	<b>276</b>	<b>13,284</b>

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Consolidated Three-month period ended September 30, 2016							
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted LAJIDA (EBITDA)
<b>Ferrous minerals</b>							
Iron ore	12,275	(5,347)	(254)	(81)	(131)	1	6,463
Iron ore Pellets	3,217	(1,662)	(27)	(13)	(16)		1,499
Ferroalloys and manganese	245	(205)	(18)		(10)		12
Other ferrous products and services	358	(226)	(1)	(1)	(3)		127
	<b>16,095</b>	<b>(7,440)</b>	<b>(300)</b>	<b>(95)</b>	<b>(160)</b>	<b>1</b>	<b>8,101</b>
<b>Coal</b>	<b>530</b>	<b>(509)</b>	<b>20</b>	<b>(11)</b>	<b>(42)</b>		<b>(12)</b>
<b>Base metals</b>							
Nickel and other products	3,763	(2,573)	(89)	(67)	(86)		948
Copper	1,365	(825)	(8)	(6)			526
Other base metals products			481				481
	<b>5,128</b>	<b>(3,398)</b>	<b>384</b>	<b>(73)</b>	<b>(86)</b>		<b>1,955</b>
<b>Others</b>	<b>78</b>	<b>(190)</b>	<b>(215)</b>	<b>(79)</b>	<b>(1)</b>		<b>(407)</b>
<b>Total of continuing operations</b>	<b>21,831</b>	<b>(11,537)</b>	<b>(111)</b>	<b>(258)</b>	<b>(289)</b>	<b>1</b>	<b>9,637</b>
<b>Discontinued operations (Fertilizers)</b>	<b>1,941</b>	<b>(1,627)</b>	<b>(90)</b>	<b>(17)</b>	<b>(15)</b>		<b>192</b>
<b>Total</b>	<b>23,772</b>	<b>(13,164)</b>	<b>(201)</b>	<b>(275)</b>	<b>(304)</b>	<b>1</b>	<b>9,829</b>

Consolidated Nine-month period ended September 30, 2017							
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	Adjusted LAJIDA (EBITDA)
<b>Ferrous minerals</b>							
Iron ore	42,841	(17,945)	(578)	(195)	(405)	3	23,721
Iron ore Pellets	13,426	(6,663)	(137)	(42)	(14)	119	6,689
Ferroalloys and manganese	1,062	(620)	(26)		(10)		406
Other ferrous products and services	1,157	(728)	22	(4)	(2)	38	483
	<b>58,486</b>	<b>(25,956)</b>	<b>(719)</b>	<b>(241)</b>	<b>(431)</b>	<b>160</b>	<b>31,299</b>
<b>Coal</b>	<b>3,701</b>	<b>(2,923)</b>	<b>(97)</b>	<b>(35)</b>	<b>(15)</b>	<b>212</b>	<b>843</b>

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**Base metals**

Nickel and other products	10,497	(8,140)	(375)	(107)	(158)		1,717
Copper	4,967	(2,296)	(51)	(29)			2,591
	<b>15,464</b>	<b>(10,436)</b>	<b>(426)</b>	<b>(136)</b>	<b>(158)</b>		<b>4,308</b>
<b>Others</b>	<b>1,054</b>	<b>(962)</b>	<b>(761)</b>	<b>(336)</b>	<b>(8)</b>	<b>170</b>	<b>(843)</b>
<b>Total of continuing operations</b>	<b>78,705</b>	<b>(40,277)</b>	<b>(2,003)</b>	<b>(748)</b>	<b>(612)</b>	<b>542</b>	<b>35,607</b>
<b>Discontinued operations (Fertilizers)</b>	<b>4,138</b>	<b>(3,814)</b>	<b>(187)</b>	<b>(26)</b>	<b>(78)</b>		<b>33</b>
<b>Total</b>	<b>82,843</b>	<b>(44,091)</b>	<b>(2,190)</b>	<b>(774)</b>	<b>(690)</b>	<b>542</b>	<b>35,640</b>

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	Consolidated						Adjusted LAJIDA (EBITDA)
	Nine-month period ended September 30, 2016						
	Net operating revenue	Cost of goods sold and services rendered	Sales, administrative and other operating expenses	Research and evaluation	Pre operating and operational stoppage	Dividends received and interest from associates and joint ventures	
<b>Ferrous minerals</b>							
Iron ore	35,726	(16,151)	(1,379)	(180)	(376)	1	17,641
Iron ore Pellets	9,184	(4,971)	(153)	(27)	(61)	213	4,185
Ferroalloys and manganese	641	(566)	(9)		(31)		35
Other ferrous products and services	1,061	(680)	9	(4)	(9)		377
	<b>46,612</b>	<b>(22,368)</b>	<b>(1,532)</b>	<b>(211)</b>	<b>(477)</b>	<b>214</b>	<b>22,238</b>
<b>Coal</b>	<b>1,640</b>	<b>(2,476)</b>	<b>184</b>	<b>(29)</b>	<b>(80)</b>		<b>(761)</b>
<b>Base metals</b>							
Nickel and other products	11,328	(8,267)	(194)	(200)	(299)	1	2,369
Copper	4,129	(2,404)	(33)	(12)			1,680
Other base metals products			481				481
	<b>15,457</b>	<b>(10,671)</b>	<b>254</b>	<b>(212)</b>	<b>(299)</b>	<b>1</b>	<b>4,530</b>
<b>Others</b>	<b>272</b>	<b>(555)</b>	<b>(362)</b>	<b>(276)</b>	<b>(2)</b>	<b>191</b>	<b>(732)</b>
<b>Total of continuing operations</b>	<b>63,981</b>	<b>(36,070)</b>	<b>(1,456)</b>	<b>(728)</b>	<b>(858)</b>	<b>406</b>	<b>25,275</b>
<b>Discontinued operations (Fertilizers)</b>	<b>5,061</b>	<b>(4,156)</b>	<b>(234)</b>	<b>(55)</b>	<b>(46)</b>	<b>10</b>	<b>580</b>
<b>Total</b>	<b>69,042</b>	<b>(40,226)</b>	<b>(1,690)</b>	<b>(783)</b>	<b>(904)</b>	<b>416</b>	<b>25,855</b>

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

**From Continuing operations**

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Net income from continuing operations</b>	<b>7,508</b>	<b>1,993</b>	<b>16,264</b>	<b>11,987</b>
Depreciation, depletion and amortization	2,916	2,766	8,674	8,764
Income taxes	3,061	1,414	5,121	9,411

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Financial results, net	(754)	3,391	5,481	(8,350)
<b>LAJIDA (EBITDA)</b>	<b>12,731</b>	<b>9,564</b>	<b>35,540</b>	<b>21,812</b>

**Items to reconciled LAJIDA (EBITDA) adjusted**

Impairment and other results on non-current assets	532	110	(345)	338
Equity results in associates and joint ventures	(367)	(144)	(509)	(1,386)
Impairment and other results in associates and joint ventures	78	106	379	4,105
Dividends received and interest from associates and joint ventures	276	1	542	406
<b>Adjusted LAJIDA (EBITDA) from continuing operations</b>	<b>13,250</b>	<b>9,637</b>	<b>35,607</b>	<b>25,275</b>

**From Discontinued operations**

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Loss from discontinued operations</b>	<b>(338)</b>	<b>(127)</b>	<b>(983)</b>	<b>(154)</b>
Depreciation, depletion and amortization		361	3	930
Income taxes	(324)	(59)	(912)	(113)
Financial results, net	4	22	30	(83)
<b>LAJIDA (EBITDA)</b>	<b>(658)</b>	<b>197</b>	<b>(1,862)</b>	<b>580</b>

**Items to reconciled LAJIDA (EBITDA) adjusted**

Equity results in associates and joint ventures	(1)	(5)	(3)	(10)
Impairment of non-current assets (note 12a)	693		1,898	
Dividends received and interest from associates and joint ventures				10
<b>Adjusted LAJIDA (EBITDA) from discontinued operations</b>	<b>34</b>	<b>192</b>	<b>33</b>	<b>580</b>



Table of Contentsb) **Assets by segment**

	Consolidated					
	September 30, 2017			Three-month period ended		September 30, 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)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	5,566	6,479	118,353	1,745	1,442	4,126
Coal	466	965	5,443	44	178	745
Base metals	3,571	41	74,940	914	1,257	3,734
Others	75	4,729	6,965	10	39	69
<b>Total</b>	<b>9,678</b>	<b>12,214</b>	<b>205,701</b>	<b>2,713</b>	<b>2,916</b>	<b>8,674</b>

	Consolidated					
	December 31, 2016			Three-month period ended		September 30, 2016
Product inventory	Investments in associates and joint ventures	Property, plant and equipment and intangible (i)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)	Additions to property, plant and equipment and intangible (ii)	Depreciation, depletion and amortization (iii)
Ferrous minerals	3,697	5,894	113,526	2,586	1,301	3,979
Coal	412	929	6,216	494	133	283
Base metals	3,617	40	76,173	595	1,308	4,439
Others	7	5,183	7,096	44	24	63
<b>Total</b>	<b>7,733</b>	<b>12,046</b>	<b>203,011</b>	<b>3,719</b>	<b>2,766</b>	<b>8,764</b>

(i) Goodwill is allocated mainly in ferrous minerals and base metals segments in the amount of R\$7,133 and R\$6,210 in September 30, 2017 and R\$4,060 and R\$5,981 in December 31, 2016, respectively.

(ii) Includes only cash effect.

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

c) **Net operating revenue by geographic area**

	Consolidated				
	Three-month period ended September 30, 2017				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	435		780	46	1,261

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United States of America	261		769	81	1,111
Europe	2,401	131	1,922		4,454
Middle East/Africa/Oceania	1,671	176	12		1,859
Japan	1,901	109	320		2,330
China	11,630		432		12,062
Asia, except Japan and China	1,184	634	1,225		3,043
Brazil	2,069	87	109	215	2,480
<b>Net operating revenue</b>	<b>21,552</b>	<b>1,137</b>	<b>5,569</b>	<b>342</b>	<b>28,600</b>

	<b>Consolidated</b>				
	<b>Three-month period ended September 30, 2016</b>				
	<b>Ferrous minerals</b>	<b>Coal</b>	<b>Base metals</b>	<b>Others</b>	<b>Total</b>
Americas, except United States and Brazil	260		986		1,246
United States of America	177		597		774
Europe	2,028	180	1,448		3,656
Middle East/Africa/Oceania	1,083	43	14		1,140
Japan	1,207	56	302		1,565
China	8,827	53	557		9,437
Asia, except Japan and China	930	198	1,083		2,211
Brazil	1,583		141	78	1,802
<b>Net operating revenue</b>	<b>16,095</b>	<b>530</b>	<b>5,128</b>	<b>78</b>	<b>21,831</b>

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	Consolidated				
	Nine-month period ended September 30, 2017				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	1,322		2,345	220	3,887
United States of America	819		1,962	263	3,044
Europe	7,399	773	5,183	96	13,451
Middle East/Africa/Oceania	4,157	456	30		4,643
Japan	4,540	355	886		5,781
China	31,156		1,213		32,369
Asia, except Japan and China	2,943	1,740	3,467		8,150
Brazil	6,150	377	378	475	7,380
<b>Net operating revenue</b>	<b>58,486</b>	<b>3,701</b>	<b>15,464</b>	<b>1,054</b>	<b>78,705</b>

	Consolidated				
	Nine-month period ended September 30, 2016				
	Ferrous minerals	Coal	Base metals	Others	Total
Americas, except United States and Brazil	875	50	3,054		3,979
United States of America	493		1,887	14	2,394
Europe	5,996	283	4,818		11,097
Middle East/Africa/Oceania	2,720	195	62		2,977
Japan	3,260	303	762		4,325
China	26,514	172	1,566		28,252
Asia, except Japan and China	2,334	637	2,947		5,918
Brazil	4,420		361	258	5,039
<b>Net operating revenue</b>	<b>46,612</b>	<b>1,640</b>	<b>15,457</b>	<b>272</b>	<b>63,981</b>

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

At the General Extraordinary Shareholders Meeting, held on June 27, 2017, was approved the corporate reorganization of the Company proposed by Valepar (Controlling shareholder), with the purpose of enabling Vale to be listed at B3 S.A. Novo Mercado, the highest standard of corporate governance in Brazil, and Vale becoming a company with no controlling shareholder. The Proposal approved the following:

(i) Voluntary conversion of Vale class A preferred share into common share, based on the conversion rate of 0.9342 common shares for each Vale class A preferred share;

(ii) Amendment of Vale's bylaws, so as to adjust it to B3 S.A. Novo Mercado segment rules so Vale may be effectively listed on such special segment;

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(iii) The merger of Valepar into Vale at an exchange ratio that increased by 10% the number of shares held by the shareholders of Valepar compared to their indirect interest in Vale prior to the merger.

The items from (i) to (iii) above were considered a series of indivisible and interdependent steps, whose effectiveness was subject to the successful performance of the other steps and the voluntary conversion by at least 54.09% of class A preferred shares.

### **a) Voluntary conversion and merger of Valepar S.A.**

On August 11, 2017, the Voluntary Conversion date expired and an aggregate of 1,660,581,830 preferred shares (excluding treasury shares), corresponding to 84.4% of the total outstanding preferred shares, were converted.

At the Extraordinary shareholders meeting of Valepar S.A, held on August 14, 2017, the merger of Valepar with and into Vale was approved. Therefore, Valepar ceases to exist and, consequently, Valepar's shareholders hold direct interests in Vale and received 1.2065 Vale common shares for each Valepar share held by them. As a result, Vale issued 173,543,667 new common shares, all registered and without par value, in favor of Valepar's shareholders, which now own a total of 1,908,980,340 Vale common shares. There were no changes in the amounts of share capital. The Company's shareholding structure is shown in note 25.

On the date of the merger, August 14, 2017, based on the accounting appraisal report, Valepar's net assets amounting to R\$3,692 were incorporated in Vale's shareholders' equity as capital reserve.

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The Company's policy choice for combination of business where companies are under common control requires that assets and liabilities are reflected at the carrying amount.

The impacts arising from the Merger in the Company's assets and liabilities are as follows:

	August 14, 2017
<b>Current assets</b>	<b>77</b>
Judicial deposits (note 23(c))	3,034
Intangible (note 15)	3,073
<b>Current liabilities</b>	<b>64</b>
Provisions for litigation (note 23(a))	2,013
Taxes payable (note 7)	415
<b>Net assets</b>	<b>3,692</b>

**b) Shareholding structure**

After the conversion of the shares and merger of Valepar, the stockholders' equity is represented by 5,304,684,600 shares, of which 4,910,512,212 common shares, 87,032,292 common treasury shares and 307,140,096 preferred shares, with no change in the amounts of share capital.

	Share position before conversion	Voluntary conversion	Issue of new shares	Share position after conversion
<b>Shares outstanding</b>				
ON Common shares	3,185,653,000	1,551,315,545	173,543,667	4,910,512,212
PNA Preferred shares	1,967,721,926	(1,660,581,830)		307,140,096
	<b>5,153,374,926</b>	<b>(109,266,285)</b>	<b>173,543,667</b>	<b>5,217,652,308</b>
<b>Shares in treasury</b>				
ON Common shares	31,535,402	55,496,890		87,032,292
PNA Preferred shares	59,405,792	(59,405,792)		
<b>Total issued shares</b>	<b>5,244,316,120</b>	<b>(113,175,187)</b>	<b>173,543,667</b>	<b>5,304,684,600</b>

The calculation of basic and diluted earnings per share considered, retrospectively, the changes described above. The comparative information for the periods ended September 30, 2016 was restated, as presented in note 8.

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At the Extraordinary shareholders meeting and at the Special shareholders meeting, held on October 18, 2017 (subsequent event), preferred shareholders approved the conversion of all Class A preferred shares into common shares of the Company, in the proportion of 0.9342 common share for each class A preferred share.

During the period from October 20, 2017 until November 21, 2017, inclusive, the shareholders holding Vale's Class A preferred shares dissenting with regard to the resolution of the Special Meeting, will have the right to withdraw from the Company, receiving R\$24.26 per share which is the equivalent of Vale shareholders' equity per share at December 31, 2016.

Management bodies may call a shareholders general meeting to reconsider the resolution in function of the volume of the withdrawal exercised.

### c) **Shareholders Agreement**

On the date of the merger of Valepar into Vale, August 14, 2017, the former Controlling Shareholders of Valepar executed a new shareholders agreement ( Vale Agreement ) that binds only 20% of the totality of Vale's common shares issued by Vale, and will be in force until November 9, 2020, with no provision for renewal.

For 6 months from the date of entry into force of the Vale Agreement, the Shareholders will be obligated not to transfer, by any means, either directly or indirectly, Vale shares they receive as a result of the implementation of the Proposal ( Lock-Up ), except for (i) the transfer of Vale's shares by the Shareholders to their affiliates and their current shareholders, provided that such transferred shares shall remain subject to the Lock-Up, and (ii) the transfer of shares held by the Shareholders prior to the merger of Valepar.

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

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
Personnel	1,785	1,593	5,297	5,204
Materials and services	3,382	2,467	8,732	8,169
Fuel oil and gas	1,047	995	3,013	3,137
Maintenance	2,457	2,282	7,157	6,832
Energy	778	584	2,201	1,727
Acquisition of products	456	430	1,483	1,267
Depreciation and depletion	2,748	2,563	8,149	8,201
Freight	2,808	2,000	7,374	6,052
Others	1,638	1,186	5,020	3,682
<b>Total</b>	<b>17,099</b>	<b>14,100</b>	<b>48,426</b>	<b>44,271</b>
Cost of goods sold	16,606	13,661	46,993	43,005
Cost of services rendered	493	439	1,433	1,266
<b>Total</b>	<b>17,099</b>	<b>14,100</b>	<b>48,426</b>	<b>44,271</b>

b) **Selling and administrative expenses**

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
Personnel	179	183	546	556
Services	54	55	153	165
Depreciation and amortization	59	115	221	314
Taxes and rents	16	11	43	35
Selling expenses	50	32	156	96
Others	51	48	104	143
<b>Total</b>	<b>409</b>	<b>444</b>	<b>1,223</b>	<b>1,309</b>

c) **Others operational expenses (incomes), net**

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	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
Provision for litigation	187	99	280	417
Profit sharing program	107	36	328	70
Disposals (reversals) of materials and inventories	23	(29)	43	(61)
Others	167	(324)	351	
<b>Total</b>	<b>484</b>	<b>(218)</b>	<b>1,002</b>	<b>426</b>



Table of Contents**6. Financial result**

	Consolidated			
	Three-month period ended September 30, 2017	2016	Nine-month period ended September 30, 2017	2016
<b>Financial expenses</b>				
Loans and borrowings gross interest	(1,317)	(1,511)	(4,343)	(4,702)
Capitalized loans and borrowing costs	351	556	938	1,995
Derivative financial instruments	(459)	(329)	(1,311)	(1,132)
Indexation and exchange rate variation (a)	(1,018)	(1,956)	(4,894)	(9,829)
Participative stockholders debentures	(233)	(155)	(1,814)	(918)
Expenses of REFIS	(296)	(466)	(1,038)	(1,368)
Others	(1,112)	(717)	(2,346)	(1,809)
	<b>(4,084)</b>	<b>(4,578)</b>	<b>(14,808)</b>	<b>(17,763)</b>
<b>Financial income</b>				
Short-term investments	164	8	441	242
Derivative financial instruments	1,625	196	2,857	4,998
Indexation and exchange rate variation (b)	2,730	888	5,416	20,683
Others	319	95	613	190
	<b>4,838</b>	<b>1,187</b>	<b>9,327</b>	<b>26,113</b>
<b>Financial results, net</b>	<b>754</b>	<b>(3,391)</b>	<b>(5,481)</b>	<b>8,350</b>
<b>Summary of indexation and exchange rate variation</b>				
Loans and borrowings	2,175	(1,034)	1,421	18,067
Others	(463)	(34)	(899)	(7,213)
<b>Net (a) + (b)</b>	<b>1,712</b>	<b>(1,068)</b>	<b>522</b>	<b>10,854</b>

As from January 1, 2017, the Company applies net investment hedge accounting in foreign operation. For more information see note 17.

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

Changes in deferred tax are as follows:

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	Assets	Consolidated Liabilities	Total
<b>Balance at December 31, 2016</b>	<b>23,931</b>	<b>5,540</b>	<b>18,391</b>
Effect in income statement	(2,022)	(362)	(1,660)
Translation adjustment	(201)	109	(310)
Other comprehensive income	(639)	(206)	(433)
<b>Balance at September 30, 2017</b>	<b>21,069</b>	<b>5,081</b>	<b>15,988</b>

	Assets	Consolidated Liabilities	Total
<b>Balance at December 31, 2015</b>	<b>30,867</b>	<b>6,520</b>	<b>24,347</b>
Effect in income statement	(6,417)	99	(6,516)
Transfers between asset and liabilities	(14)	(14)	
Translation adjustment	(1,793)	(886)	(907)
Other comprehensive income	(409)	(279)	(130)
<b>Balance at September 30, 2016</b>	<b>22,234</b>	<b>5,440</b>	<b>16,794</b>

Table of Contents**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 September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Income before income taxes</b>	<b>10,569</b>	<b>3,407</b>	<b>21,385</b>	<b>21,398</b>
<b>Income taxes at statutory rates - 34%</b>	<b>(3,594)</b>	<b>(1,158)</b>	<b>(7,271)</b>	<b>(7,275)</b>
<b>Adjustments that affect the basis of taxes:</b>				
Income tax benefit from interest on stockholders' equity	397		1,190	
Tax incentives	415	269	976	616
Equity results	125	24	174	455
Unrecognized tax losses of the period	(557)	(540)	(1,409)	(1,831)
Gain on sale of subsidiaries (note 13)			548	
Others	153	(9)	671	(1,376)
<b>Income taxes</b>	<b>(3,061)</b>	<b>(1,414)</b>	<b>(5,121)</b>	<b>(9,411)</b>

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 )**

In 2013, the Company elected to participate in the REFIS, a federal tax settlement program, to settle most of the claims related to the collection of income tax and social contribution on equity gains of foreign subsidiaries and associates from 2003 to 2012.

At September 30, 2017, the balance of R\$17,957 (R\$1,583 as current and R\$16,374 as non-current) is due in 133 remaining monthly installments, bearing interest at the SELIC rate of 8.25% per year and at December 31, 2016, the balance of R\$17,662 (R\$1,492 as current and R\$16,170 as non-current) was due in 142 remaining monthly installments.



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

The values of basic and diluted earnings per share are presented below. The weighted average number of shares was recalculated retrospectively, considering the conversion of class A preferred share into common shares, as mentioned in note 4.

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Basic and diluted earnings per share from continuing operations:</b>				
Income available to preferred stockholders	1,616	422	5,242	3,875
Income available to common stockholders	5,873	1,534	10,856	8,024
<b>Total</b>	<b>7,489</b>	<b>1,956</b>	<b>16,098</b>	<b>11,899</b>
<b>Basic and diluted loss per share from discontinued operations:</b>				
Loss available to preferred stockholders	(75)	(25)	(327)	(52)
Loss available to common stockholders	(271)	(89)	(677)	(109)
<b>Total</b>	<b>(346)</b>	<b>(114)</b>	<b>(1,004)</b>	<b>(161)</b>
<b>Basic and diluted earnings per share:</b>				
Income available to preferred stockholders	1,541	397	4,915	3,823
Income available to common stockholders	5,602	1,445	10,179	7,915
<b>Total</b>	<b>7,143</b>	<b>1,842</b>	<b>15,094</b>	<b>11,738</b>
<b>Thousands of shares</b>				
Weighted average number of shares outstanding preferred shares	1,119,381	1,119,381	1,681,834	1,681,834
Weighted average number of shares outstanding common shares	4,066,831	4,066,831	3,482,607	3,482,607
<b>Total</b>	<b>5,186,212</b>	<b>5,186,212</b>	<b>5,164,441</b>	<b>5,164,441</b>
<b>Basic and diluted earnings per share from continuing operations:</b>				
Preferred share (R\$)	1.45	0.37	3.11	2.30
Common share (R\$)	1.45	0.37	3.11	2.30
<b>Basic and diluted loss per share from discontinued operations:</b>				
Preferred share (R\$)	(0.07)	(0.02)	(0.19)	(0.03)
Common share (R\$)	(0.07)	(0.02)	(0.19)	(0.03)
<b>Basic and diluted earnings per share:</b>				
Preferred share (R\$)	1.38	0.35	2.92	2.27
Common share (R\$)	1.38	0.35	2.92	2.27

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The Company does not have dilutive potential shares outstanding that could result in dilution of earnings (loss) per share.

9. Accounts receivable

	Consolidated	
	September 30, 2017	December 31, 2016
Trade receivables	8,798	12,131
Impairment of trade receivables	(206)	(194)
	<b>8,592</b>	<b>11,937</b>
<b>Trade receivables related to the steel sector - %</b>	<b>83.46%</b>	<b>83.44%</b>

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
Impairment of trade receivables recorded in the income statement	(5)	(7)	(19)	(15)

No individual customer represents over 10% of receivables or revenues.

Table of Contents**10. Inventories**

	Consolidated	
	September 30, 2017	December 31, 2016
Product inventory	9,678	7,733
Consumable inventory	3,256	3,180
<b>Total</b>	<b>12,934</b>	<b>10,913</b>

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

**11. Other financial assets and liabilities**

	Consolidated			
	Current		Non-Current	
	September 30, 2017	December 31, 2016	September 30, 2017	December 31, 2016
<b>Other financial assets</b>				
Financial investments	17	59		
Loans			487	587
Derivative financial instruments (note 21)	430	892	1,389	1,454
Related parties (note 26)	6,697	233	8,457	5
	<b>7,144</b>	<b>1,184</b>	<b>10,333</b>	<b>2,046</b>
<b>Other financial liabilities</b>				
Derivative financial instruments (note 21)	400	1,349	2,153	3,991
Related parties (note 26)	1,608	2,190	3,113	415
Participative stockholders' debentures			4,119	2,526
	<b>2,008</b>	<b>3,539</b>	<b>9,385</b>	<b>6,932</b>

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

	September 30, 2017			Consolidated			December 31, 2016		
	Fertilizers assets	Shipping assets	Total	Fertilizers assets	Nacala	Shipping assets	Total		
<b>Assets</b>									
Accounts receivable	231		231	279	21		300		
Inventories	1,108		1,108	1,261	7		1,268		

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Other current assets	569		569	348	370		718
Investments in associates and joint ventures	298		298	295			295
Property, plant and equipment and Intangible	7,671	580	8,251	8,779	13,246	1,164	23,189
Other non-current assets	3,243		3,243	2,216	8		2,224
<b>Total assets</b>	<b>13,120</b>	<b>580</b>	<b>13,700</b>	<b>13,178</b>	<b>13,652</b>	<b>1,164</b>	<b>27,994</b>
<b>Liabilities</b>							
Suppliers and contractors	821		821	913	134		1,047
Other current liabilities	702		702	626	44		670
Other non-current liabilities	2,067		2,067	1,821	16		1,837
<b>Total liabilities</b>	<b>3,590</b>		<b>3,590</b>	<b>3,360</b>	<b>194</b>		<b>3,554</b>
<b>Net non-current assets held for sale</b>	<b>9,530</b>	<b>580</b>	<b>10,110</b>	<b>9,818</b>	<b>13,458</b>	<b>1,164</b>	<b>24,440</b>

a) **Discontinued operations (Fertilizers assets)**

In December 2016, the Company entered into an agreement with The Mosaic Company ( Mosaic ) to sell (i) the phosphate assets located in Brazil, except those mainly related to nitrogen assets located in Cubatão (Brazil); (ii) the control of Compañía Minera Miski Mayo S.A.C., in Peru; (iii) the potassium assets located in Brazil; and (iv) the potash projects in Canada. The fertilizer segment, including Cubatão, is presented as a discontinued operation and the related assets and liabilities were classified as assets and liabilities held for sale.

In December 2016, the agreed transaction price was R\$7,920 (US\$2.5 billion), of which R\$3,960 (US\$1.25 billion) will be paid in cash and 42.3 million common shares to be issued by Mosaic, which at the agreement signature date represented R\$3,960 (US\$1.25 billion), around 11% of Mosaic's total outstanding common shares.

The net asset of the fertilizer segment was adjusted to reflect the fair value less cost to sell and a loss of R\$1,898 was recognized in the income statement as Impairment of non-current assets from discontinued operations for the nine-month period ended September 30, 2017, mainly due to the decline in the Mosaic stock prices.



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The result and the cash flow of discontinued operations of the Fertilizer segment for the periods ended September 30, 2017 are presented as follows, and includes the comparative restated periods ended September 30, 2016, as described in note 3(b).

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Discontinued operations</b>				
Net operating revenue	1,685	1,941	4,138	5,061
Cost of goods sold and services rendered	(1,554)	(1,982)	(3,814)	(5,069)
Operating expenses	(97)	(128)	(294)	(352)
Impairment of non-current assets	(693)		(1,898)	
<b>Operating loss</b>	<b>(659)</b>	<b>(169)</b>	<b>(1,868)</b>	<b>(360)</b>
Financial Results, net	(4)	(22)	(30)	83
Equity results in associates and joint ventures	1	5	3	10
<b>Loss before income taxes</b>	<b>(662)</b>	<b>(186)</b>	<b>(1,895)</b>	<b>(267)</b>
Income taxes	324	59	912	113
<b>Loss from discontinued operations</b>	<b>(338)</b>	<b>(127)</b>	<b>(983)</b>	<b>(154)</b>
Net income (loss) attributable to noncontrolling interests	8	(13)	21	7
<b>Loss attributable to Vale's stockholders</b>	<b>(346)</b>	<b>(114)</b>	<b>(1,004)</b>	<b>(161)</b>

	Consolidated			
	Three-month period ended September 30,		Nine-month period ended September 30,	
	2017	2016	2017	2016
<b>Discontinued operations</b>				
<b>Cash flow from operating activities</b>				
Loss before income taxes	(662)	(186)	(1,895)	(267)
<b>Adjustments:</b>				
Equity results in associates and joint ventures	(1)	(5)	(3)	(10)
Depreciation, amortization and depletion		361	3	930
Impairment of non-current assets	693		1,898	
Increase (decrease) in assets and liabilities	245	(20)	235	(371)
<b>Net cash provided by operating activities</b>	<b>275</b>	<b>150</b>	<b>238</b>	<b>282</b>
<b>Cash flow from investing activities</b>				
Additions to property, plant and equipment	(226)	(338)	(686)	(737)
Others	2	(10)	2	(4)
<b>Net cash used in investing activities</b>	<b>(224)</b>	<b>(348)</b>	<b>(684)</b>	<b>(741)</b>
<b>Cash flow from financing activities</b>				
<b>Loans and borrowings</b>				
Repayments	(107)	(29)	(108)	(45)
<b>Net cash used in financing activities</b>	<b>(107)</b>	<b>(29)</b>	<b>(108)</b>	<b>(45)</b>
<b>Net cash used in discontinued operations</b>	<b>(56)</b>	<b>(227)</b>	<b>(554)</b>	<b>(504)</b>

The spin-off of the nitrogen assets located in Cubatão from the remaining Vale Fertilizantes' assets was concluded in July 2017. The completion of this milestone was one of the requirements for the conclusion of the transaction which is expected to be completed before the end of 2017 and, still, is subject to the fulfillment of usual precedent conditions, including other operational and regulatory matters.

### **13. Acquisitions and divestitures**

#### **a) Coal - Nacala Logistic Corridor**

In December 2014 and as amended in November 2016, the Company signed an agreement with Mitsui & Co., Ltd. ( Mitsui ) to transfer 50% of its stake of 66.7% in Nacala Logistic Corridor, which comprises entities that holds railroads and port concessions located in Mozambique and Malawi. Also, Mitsui committed to acquire 15% participation in the entity that owns Vale Moçambique, which holds the Moatize Coal Project.

In March 2017, the transaction was concluded, and a consideration of R\$2,186 (US\$690 million) was received by Vale. After the completion of the transaction, the Company (i) holds 81% of Vale Moçambique and retains the control of the Moatize Coal Project and (ii) shares control of the Nacala Logistic Corridor structure (Nacala BV), with Mitsui.

Nacala Logistic Corridor is in negotiations for a project finance, which the completion is expected to occur during the course of 2017. Upon the completion an additional amount of R\$181 (US\$57 million) will be paid by Mitsui. Mitsui has certain rights, based on the execution of the project finance, to sell their participation in the Moatize Coal Project and Nacala BV, back to Vale, at original amounts and the same number of shares. The fair value of these put options is non-significant.

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As a consequence of sharing control of Nacala BV, the Company:

(i) derecognized the assets and liabilities classified as held for sale in the total amount of R\$13,130 (US\$4,144 million), from which R\$12,874 (US\$4,063 million) refers to property, plant and equipment and intangibles;

(ii) derecognized R\$44 (US\$14 million) related to cash and cash equivalents;

(iii) recognized a gain of R\$1,576 (US\$504 million) in the income statement related to the sale and the re-measurement at fair value, of its remaining interest at Nacala BV based on the consideration received;

(iv) reclassified the gain related to the cumulative translation adjustments on to income statements in the amount of R\$34 (US\$11 million);

The result of the transaction regarding the assets from Nacala's corridor was recognized in the income statement as Impairment and other results on non-current assets .

The results of the transaction with the Moatize Coal Project was recognized in Results from operation with noncontrolling interest in the amount of R\$329 (US\$105 million), directly in Stockholders' Equity.

The consideration received was recognized in the statement of cash flows in Proceeds from disposal of assets and investments in the amount of R\$1,387 (US\$435 million) and Transactions with noncontrolling stockholders in the amount of R\$799 (US\$255 million).

Due to the deconsolidation of Nacala Logistic Corridor, Vale has after the transaction, outstanding loan balances with Nacala BV and Pangea Emirates Ltd stated as Related parties, as described in note 26. The use of proceeds of the project finance is expected to settle part of this debt.

**b) Floating Transfer Stations ( FTS )**

In June 2017, the Company completed the sale of one of its Floating Transfer Stations in Philippines in the amount of R\$49. In this transaction, Vale recognized a loss of R\$180 as Impairment and other results on non-current assets .

## c) Shipping assets

In August 2017, the Company concluded the sale of two Very Large Ore Carriers ( VLOC s ) for R\$561, which were recognized as Non-current assets and liabilities held for sale and discontinued operations .

## 14. Investments in associates and joint ventures

## a) Changes during the period

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

	Consolidated					
	Associates	2017 Joint ventures	Total	Associates	2016 Joint ventures	Total
<b>Balance at January 1st,</b>	<b>4,683</b>	<b>7,363</b>	<b>12,046</b>	<b>5,166</b>	<b>6,315</b>	<b>11,481</b>
Additions (i)	2	286	288	2	854	856
Disposals				(14)		(14)
Translation adjustment	(24)	(20)	(44)	(257)	(103)	(360)
Equity results in income statement	150	359	509	191	1,195	1,386
Equity results from discontinued operations				10		10
Equity results in statement of comprehensive income		(541)	(541)			
Dividends declared (ii)	(134)	(290)	(424)	(92)	(327)	(419)
Others		380	380	1	(33)	(32)
<b>Balance at September 30,</b>	<b>4,677</b>	<b>7,537</b>	<b>12,214</b>	<b>5,007</b>	<b>7,901</b>	<b>12,908</b>

(i) Refers to the Coal and Other segments in the amounts of R\$237 and R\$51, respectively, on September 30, 2017.

(ii) The Company received the amount of R\$191 during the nine-month period ended September 30, 2017 related to dividends declared in 2017.

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				
			September 30, 2017	December 31, 2016	Three-month period ended September 30, 2017	Three-month period ended September 30, 2016	Three-month period ended September 30, 2017	Three-month period ended September 30, 2016	Three-month period ended September 30, 2017	Three-month period ended September 30, 2016			
<b>Ferrous minerals</b>													
Baovale Mineração S.A. Companhia Coreano-Brasileira de Pelotização	50.00	50.00	103	86	5	15	17	26					
Companhia Hispano-Brasileira de Pelotização (i)	50.89	51.00	270	191	28	13	96	35			18	65	
Companhia Ítalo-Brasileira de Pelotização (i)	50.90	51.00	288	223	28	16	91	38			54	33	
Companhia Nipo-Brasileira de Pelotização (i)	51.00	51.11	521	353	69	30	214	62			47	71	
MRS Logística S.A.	48.16	46.75	1,732	1,592	70	55	188	174					
VLI S.A.	37.60	37.60	3,207	3,158	53	51	74	106	37		37		
Zhuhai YPM Pellet Co.	25.00	25.00	71	70									
			<b>6,479</b>	<b>5,894</b>	<b>288</b>	<b>188</b>	<b>793</b>	<b>482</b>	<b>37</b>		<b>156</b>	<b>214</b>	
<b>Coal</b>													
Henan Longyu Energy Resources Co., Ltd.	25.00	25.00	965	929	11	3	62	(32)					
			<b>965</b>	<b>929</b>	<b>11</b>	<b>3</b>	<b>62</b>	<b>(32)</b>					
<b>Base metals</b>													
Korea Nickel Corp.	25.00	25.00	41	40	1	1	2	(5)					
			<b>41</b>	<b>40</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>(5)</b>					
<b>Others</b>													
Aliança Geração de Energia S.A. (i)	55.00	55.00	1,890	1,896	10	34	57	112	27		63	79	
Aliança Norte Energia Participações S.A. (i)	51.00	51.00	530	483	(12)	7	(1)	(5)					
California Steel Industries, Inc.	50.00	50.00	656	604	32	54	111	67			43		
Companhia Siderúrgica do Pecém	50.00	50.00	1,260	1,716		(171)	(456)	646					
Mineração Rio Grande do Norte S.A.	40.00	40.00	342	421	28	27	30	152			68	111	
Others			51	63	9	1	(89)	(31)			1	2	
			<b>4,729</b>	<b>5,183</b>	<b>67</b>	<b>(48)</b>	<b>(348)</b>	<b>941</b>	<b>27</b>		<b>1</b>	<b>174</b>	<b>192</b>
<b>Total</b>			<b>12,214</b>	<b>12,046</b>	<b>367</b>	<b>144</b>	<b>509</b>	<b>1,386</b>	<b>64</b>		<b>1</b>	<b>330</b>	<b>406</b>

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(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**15. Intangibles**

Changes in intangibles are as follows:

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at December 31, 2016</b>	<b>10,041</b>	<b>10,759</b>	<b>480</b>	<b>1,115</b>	<b>22,395</b>
Additions		2,360		73	2,433
Disposals		(19)			(19)
Amortization		(367)	(5)	(345)	(717)
Translation adjustment	229	(13)	17	7	240
Merger of Valepar (note 4)	3,073				3,073
<b>Balance at September 30, 2017</b>	<b>13,343</b>	<b>12,720</b>	<b>492</b>	<b>850</b>	<b>27,405</b>
Cost	13,343	16,651	779	5,092	35,865
Accumulated amortization		(3,931)	(287)	(4,242)	(8,460)
<b>Balance at September 30, 2017</b>	<b>13,343</b>	<b>12,720</b>	<b>492</b>	<b>850</b>	<b>27,405</b>

	Goodwill	Concessions	Consolidated Right of use	Software	Total
<b>Balance at December 31, 2015</b>	<b>11,544</b>	<b>7,084</b>	<b>811</b>	<b>1,350</b>	<b>20,789</b>
Additions		3,646	3	38	3,687
Disposals		(29)		(1)	(30)
Amortization		(606)	(7)	(413)	(1,026)
Translation adjustment	(1,185)	140	(96)	15	(1,126)
Transfers		270	(263)	288	295
<b>Balance at September 30, 2016</b>	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>
Cost	10,359	14,205	708	5,100	30,372
Accumulated amortization		(3,700)	(260)	(3,823)	(7,783)
<b>Balance at September 30, 2016</b>	<b>10,359</b>	<b>10,505</b>	<b>448</b>	<b>1,277</b>	<b>22,589</b>

The goodwill was recognized on the acquisition of Vale controlling interest by Valepar, based on the expected future returns on the ferrous segment. As the fundamentals are still valid on the date of the merger of Valepar by Vale, which is supported by projected cash flow of this cash generation unit, the goodwill was fully recognized. The company did not recognize the deferred taxes above goodwill, due to the fact that there are no differences between the tax basis and accounting basis. The company will periodically evaluate goodwill for recoverability purposes.

**16. 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
<b>Balance at December 31, 2016</b>	<b>2,360</b>	<b>34,790</b>	<b>30,866</b>	<b>22,141</b>	<b>27,312</b>	<b>24,494</b>	<b>38,653</b>	<b>180,616</b>
Additions (i)							7,085	7,085
Disposals	(1)	(2)	(154)	(102)	(402)	(368)	(446)	(1,475)
Assets retirement obligation					(238)			(238)
Depreciation, amortization and depletion		(1,397)	(1,724)	(2,025)	(1,525)	(1,804)		(8,475)
Translation adjustment	(7)	53	67	(234)	693	226	(15)	783
Transfers	59	5,765	8,375	2,340	2,062	4,427	(23,028)	
<b>Balance at September 30, 2017</b>	<b>2,411</b>	<b>39,209</b>	<b>37,430</b>	<b>22,120</b>	<b>27,902</b>	<b>26,975</b>	<b>22,249</b>	<b>178,296</b>
Cost	2,411	60,810	58,492	40,828	54,572	40,677	22,249	280,039
Accumulated depreciation		(21,601)	(21,062)	(18,708)	(26,670)	(13,702)		(101,743)
<b>Balance at September 30, 2017</b>	<b>2,411</b>	<b>39,209</b>	<b>37,430</b>	<b>22,120</b>	<b>27,902</b>	<b>26,975</b>	<b>22,249</b>	<b>178,296</b>



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	Land	Building	Facilities	Equipment	Consolidated Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2015</b>	<b>2,989</b>	<b>35,538</b>	<b>32,378</b>	<b>28,532</b>	<b>40,234</b>	<b>28,135</b>	<b>43,453</b>	<b>211,259</b>
Additions (i)							11,043	11,043
Disposals	(1)	(5)	(11)	(97)	(409)	(1,214)	(74)	(1,811)
Assets retirement obligation					1,694			1,694
Depreciation, amortization and depletion		(1,311)	(1,660)	(2,355)	(2,091)	(1,609)		(9,026)
Transfers to non-current assets held for sale						(1,595)		(1,595)
Translation adjustment	(130)	(3,558)	(2,125)	(2,682)	(3,778)	(1,376)	809	(12,840)
Transfers	83	4,365	1,674	2,477	870	(262)	(9,502)	(295)
Acquisition of subsidiary		1						1
<b>Balance at September 30, 2016</b>	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>
Cost	2,941	53,845	49,370	46,013	62,030	34,227	45,729	294,155
Accumulated depreciation		(18,815)	(19,114)	(20,138)	(25,510)	(12,148)		(95,725)
<b>Balance at September 30, 2016</b>	<b>2,941</b>	<b>35,030</b>	<b>30,256</b>	<b>25,875</b>	<b>36,520</b>	<b>22,079</b>	<b>45,729</b>	<b>198,430</b>

(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 17(c)) compared to those disclosed in the financial statements as at December 31, 2016.

In the nine-month period ended in September, 2017, Vale placed an underground mine, which is part of Sudbury operations, in Canada, on care and maintenance. Parts of the mine, affected by seismic activity, for which repairs would be uneconomical, are not expected to resume operations in the future, was derecognized from property, plant and equipment. As a result, the Company recognized a loss of R\$438 in the income statement as Impairment and other results on non-current assets. As other parts of the mine are subject to resume operation in the future, a net book value in the amount of R\$768 remains as part of the cost of the mine.

## 17. 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	
	September 30, 2017	December 31, 2016
Debt contracts in the international markets	58,616	68,863
Debt contracts in Brazil	23,086	26,701
<b>Total of loans and borrowings</b>	<b>81,702</b>	<b>95,564</b>
(-) Cash and cash equivalents	14,949	13,891
(-) Financial investments	17	59
<b>Net debt</b>	<b>66,736</b>	<b>81,614</b>

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.

Table of Contentsc) **Loans and borrowings**i) **Total debt**

	Consolidated			
	Current liabilities		Non-current liabilities	
	September 30, 2017	December 31, 2016	September 30, 2017	December 31, 2016
<b>Debt contracts in the international markets</b>				
<b>Floating rates in:</b>				
US\$	934	762	12,696	17,889
EUR			748	688
<b>Fixed rates in:</b>				
US\$			39,863	42,643
EUR			2,807	5,157
Other currencies	55	55	659	679
<b>Accrued charges</b>	<b>854</b>	<b>990</b>		
	<b>1,843</b>	<b>1,807</b>	<b>56,773</b>	<b>67,056</b>
<b>Debt contracts in Brazil</b>				
<b>Floating rates in:</b>				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	1,601	1,313	15,356	18,326
Basket of currencies and US\$ indexed to LIBOR	1,167	1,117	3,096	3,962
<b>Fixed rates in:</b>				
R\$	225	214	628	703
<b>Accrued charges</b>	<b>988</b>	<b>959</b>	<b>25</b>	<b>107</b>
	<b>3,981</b>	<b>3,603</b>	<b>19,105</b>	<b>23,098</b>
	<b>5,824</b>	<b>5,410</b>	<b>75,878</b>	<b>90,154</b>

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

	Consolidated				Estimated future interest payments (i)
	Principal		Development agencies	Total	
	Bank loans	Capital markets			
2017	16		814	830	5,281
2018	811		3,564	4,375	4,524
2019	3,463		3,067	6,530	4,169
2020	5,142	2,680	2,636	10,458	3,941
2021	3,355	4,261	2,465	10,081	3,390
Between 2022 and 2025	4,771	10,752	3,989	19,512	9,022

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2026 onwards	358	26,894	797	28,049	18,786
	<b>17,916</b>	<b>44,587</b>	<b>17,332</b>	<b>79,835</b>	<b>49,113</b>

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(i) Estimated future payments of interest, calculated based on interest rate curves and foreign exchange rates applicable as at September 30, 2017 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.

At September 30, 2017, the average annual interest rates by currency are as follows:

Loans and borrowings	Average interest rate (i)	Consolidated Total debt
US\$	5.24%	58,535
R\$ (ii)	8.14%	18,799
EUR (iii)	3.35%	3,643
Other currencies	3.16%	725
		<b>81,702</b>

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(i) In order to determine the average interest rate for debt contracts with floating rates, the Company used the rate applicable at September 30, 2017.

(ii) R\$ denominated debt that bears interest at IPCA, CDI, TR or TJLP, plus spread. For a total of R\$10,534 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 2.46% 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\$.

Table of Contentsii) **Credit and financing lines**

Type	Contractual currency	Date of agreement	Period of the agreement	Total amount	Consolidated Available amount September 30, 2017
<b>Credit lines</b>					
Revolving credit facilities	US\$	May 2015	5 years	9,504	9,504
Revolving credit facilities	US\$	June 2017	5 years	6,336	6,336
<b>Financing lines</b>					
BNDES (i)	R\$	April 2008	10 years	7,300	282
BNDES - CLN 150	R\$	September 2012	10 years	3,883	19
BNDES - S11D e S11D Logística	R\$	May 2014	10 years	6,163	2,050

(i) Memorandum of understanding signature date, however term is considered from the signature date of each contract amendment. This credit line supported or supports the pelletizing plant VIII, Onça Puma, Salobo I and II and capital expenditure of Itabira projects.

In June 2017, the Company signed a R\$6,336 (US\$2,000 million) revolving credit facility, which will be available for five years, to replace the R\$6,336 (US\$2,000 million) line that was signed in 2013, which was cancelled. At September 30, 2017, the total available amount in revolving credit facilities remains at R\$15,840 (US\$5,000 million).

iii) **Funding**

In February 2017, the Company issued through Vale Overseas Limited guaranteed notes due August 2026 totaling R\$3,168 (US\$1,000 million). The notes bears 6.250% coupon per year, payable semi-annually, and were sold at a price of 107.793% of the principal amount. The notes were consolidated with, and formed a single series with, Vale Overseas's R\$3,168 (US\$1,000 million) 6.250% notes due 2026 issued on August, 2016. Vale applied the net proceeds from the offering on the earlier redemption of Vale's 750 notes (due in March 2018).

In September 2017, the Company redeemed all of its 5.625% guaranteed notes due 2019 issued by its Vale Overseas Limited totaling R\$3,168 (US\$1,000 million). Additionally, the Company entered into a Tender Offer of the outstanding 4.625% guaranteed notes due 2020 issued by its subsidiary Vale Overseas Limited. In September 2017, the total principal amount of 2020 Notes accepted for purchase pursuant to the Tender Offer was R\$1,587 (US\$501 million) from a total of R\$3,168 (US\$1,000 million).

iv) **Guarantees**

As at September 30, 2017 and December 31, 2016, loans and borrowings are secured by property, plant and equipment and receivables in the amount of R\$1,198 and R\$1,538, respectively.

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

**v) 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 and interest coverage. The Company has not identified any instances of noncompliance as at September 30, 2017 and December 31, 2016.

**vi) Hedge in foreign operations**

**Implementation of net investment hedge**

As at January 1, 2017, Vale S.A., which the functional currency is Reais, designated its debts in US\$ and Euro, as an instrument in a hedge of its investment in foreign operations (Vale International S.A. and Vale International Holding GmbH; hedging objects) to mitigate part of the foreign exchange risk on financial statements.

At September 30, 2017 the carrying value of the designated debts are R\$19,523 (US\$6,162 million) and R\$2,807 (EUR750 million). The foreign exchange gains of R\$935 and R\$515 (R\$617 and R\$339, net of taxes), were recognized in the Cumulative translation adjustments in stockholders' equity for the three and nine month periods ended September 30, 2017, respectively. This hedge was highly effective throughout the period ended on September 30, 2017.

Table of Contents**Accounting policy**

Foreign currency differences arising on the translation of a financial liability designated as a hedge of a net investment in a foreign operation are recognized in other comprehensive income to the extent that the hedge is effective and regardless of whether the net investment is held directly or through an intermediate parent.

The hedging instrument is accounted for in the same way as a cash flow hedge, i.e. translated at the closing rate with the gain or loss on the effective hedge being recognized in equity. Gains or losses in the reserves will only be realized when the foreign operation is disposed of.

**18. Liabilities related to associates and joint ventures****a) Movements of the provision**

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 and nine-month periods ended in September 30, 2017 are as follows:

	<b>2017</b>
<b>Balance at June 30,</b>	<b>3,369</b>
Payments	(243)
Interests	124
<b>Balance at September 30,</b>	<b>3,250</b>
	<b>2017</b>
<b>Balance at January 1st,</b>	<b>3,511</b>
Payments	(687)
Interests	426
<b>Balance at September 30,</b>	<b>3,250</b>
Current liabilities	954
Non-current liabilities	2,296
<b>Liabilities</b>	<b>3,250</b>

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In addition to the provision above, Vale S.A. made available in the three-month and nine-month periods ended in September 30, 2017 the amount of R\$78 and R\$370, respectively, to fund the working capital of Samarco, which was recognized in Vale's income statement as Impairment and other results in associates and joint ventures. Vale S.A. might make available until December, 2017 of up to R\$188 to Samarco to support its operations, without undertaking an obligation to Samarco. Funds for working capital requirements will be released as needed by the shareholders subject to achieving certain milestone, on the same basis.

At each reporting period, Vale S.A. will reassess the key assumptions used by Samarco in the preparation of the projected future cash flows and will adjust the provision, if required.

### **b) Contingencies related to Samarco accident**

#### *(i) Public civil lawsuit 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.

On May 5, 2016, the Framework Agreement, which was signed on March 2, 2016, was ratified by the Federal Regional Court ( TRF ), 1st Region. In June 2016 the Superior Court of Justice ( STJ ) in Brazil issued an interim order, suspending the decision of TRF, which ratified the Framework Agreement until the final judgments of the claim.

On August 17, 2016, the TRF of the 1st Region rejected the appeal presented by Samarco, Vale S.A. and BHPB against the interim order, and overruled the judicial decision that ratified the Framework Agreement. This decision of the TRF of the 1st Region, among other measures, confirmed a prior injunction that prohibited 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 ordered a deposit with the court of R\$1.2 billion by January 2017. This R\$1.2 billion cash deposit was provisionally replaced by the guarantees provided for under the agreements with MPF, as detailed in the item (ii) below.



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*(ii) Public civil lawsuit 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 Fundão dam failure and other emergency measures; (ii) the payment of compensation to the community; and (iii) payments for the collective moral damage. The estimated action value indicated by the Federal Prosecution Office (MPF) is R\$155 billion. The first conciliatory hearing was held on September 13, 2016. On November 21, 2016, the court ordered that the defendants be served, and the defendants submitted their defense.

In January 2017 Samarco, Vale S.A. and BHPB entered into two preliminary agreements with the Federal Prosecutor's Office in Brazil (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 and now expected to occur by October 30, 2017. This First Agreement establishes a timeline and actions to set the ground for conciliation of two public civil lawsuits which aim to establish socio-economic and socio-environmental remediation and compensation programs for the impacts of the Fundão dam failure, respectively: claim n° 023863-07.2016.4.01.3800, filed by the Federal Prosecutors, as mentioned in this item, and claim n° 0069758-61.2015.4.01.3400, filed by the Federal Government, the states of Minas Gerais and Espírito Santo and other governmental authorities, as mentioned in the item (i) above. Both claims were filed with the 12th Judicial Federal Court of Belo Horizonte and are suspended as requested by the parties.

In addition, the First Agreement provides for: (i) the appointment of experts to give support the Federal Prosecutors and paid for by the companies to conduct a diagnosis and monitor the progress of the 41 programs under the Framework Agreement signed on March 2nd, 2016 by the companies and the Federal Government and the states of Minas Gerais and Espírito Santo and other governmental authorities, and (ii) holding at least eleven public hearings, five of which are to be held in Minas Gerais, three in Espírito Santo and the remainder in the indigenous territories of the Krenak, Comboios and Caieiras Velhas, 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 the 12th Judicial Federal Court of Belo Horizonte with 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. In order to implement the First Agreement, it has been requested that the 12th Judicial Federal Court of Belo Horizonte accept such guarantees until the completion of the negotiations and the signing of the Final Agreement, or until the deadline set by the parties jointly postponed to October 30, 2017, whichever comes first; or until the parties reach a new agreement regarding the guarantees. If, by October 30th, the negotiations have not been completed, the Federal Prosecutor's Office may require that the 12th Judicial Federal Court of Belo Horizonte re-institute the order for the deposit of R\$1.2 billion in relation to the R\$20.2 billion public civil action, which is currently suspended. The parties requested the partial ratification of the First Agreement, excluding only the engagement of the socio-economic expert condition.

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On March 16, 2017, the 12th Judicial Federal Court of Belo Horizonte partially ratified the First Agreement, being that this decision includes: (i) ratification of the engagement of experts to perform a socio-environmental impact assessment and assessment of programs under the Framework Agreement signed on March 2nd, 2016 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. Parties are still negotiating an agreement regarding the choice of the expert to perform the socio-economic impact assessment, and, alongside, are conducting the discussions regarding the Final Agreement.

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.

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*(iii) U.S. Securities class action suits*

Related to the Vale's American Depositary Receipts

On May 2, 2016, 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.

In July 2016, Vale S.A. and the individual defendants filed a motion to dismiss the Amended Complaint.

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 the responsibility of Vale S.A. for the Fundão dam failure made in a conference call in November 2015.

At the end of April 2017, it has started the Discovery phase, the plaintiffs have presented their Initial Disclosures, requesting the presentation of several sets of documents and listing and requesting names of persons that might be aware of the facts related to the action. On May 05, 2017 Vale S.A. has presented its Initial Disclosures. The Discovery is currently ongoing with the gathering of documents to be provided to the plaintiffs.

Vale S.A. continues to contest the lawsuit and the outstanding points.

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, Vale S.A. and the other defendants have jointly filed a Motion to Dismiss the Complaint. The Motion to Dismiss was responded by the plaintiffs and jointly replied by Vale S.A. and other defendants on August 31, 2017. A decision ruling the Motion to Dismiss is expected by Vale S.A. and other defendants.

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.

On November 16, 2016, the judge received the Federal Prosecutors Office criminal lawsuit and determined the summons of all defendants, granting 30 days each to file their defenses, to count from the day they receive the summon. Vale has already been served and its defense was presented in March 3, 2017.

On May 8, 2017, Vale presented its manifestation against the Federal Prosecutors Office dismemberment requests and on June 6, 2017, the Federal Prosecutors Office presented its reply to the defenses, where it requested for the action to be regularly processed.

On July 5, 2017, the judge decided to suspend the criminal lawsuit.

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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.

These lawsuits and petitions are at early stages, so it is not possible to determine a range of outcomes or reliable estimates of the potential exposure at this time. No contingent liability has been quantified and no provision was recognized for lawsuits related to Samarco's dam failure.

**19. Financial instruments classification**

	Consolidated					
	September 30, 2017	September 30, 2017		December 31, 2016		Total
	Loans and receivables or amortized cost	At fair value through profit or loss	Total	Loans and receivables or amortized cost	At fair value through profit or loss	Total
<b>Financial assets</b>						
<b>Current</b>						
Cash and cash equivalents	14,949		14,949	13,891		13,891
Financial investments	17		17	59		59
Derivative financial instruments		430	430		892	892
Accounts receivable	8,592		8,592	11,937		11,937
Related parties	6,697		6,697	233		233
	<b>30,255</b>	<b>430</b>	<b>30,685</b>	<b>26,120</b>	<b>892</b>	<b>27,012</b>
<b>Non-current</b>						
Derivative financial instruments		1,389	1,389		1,454	1,454
Loans	487		487	587		587
Related parties	8,457		8,457	5		5
	<b>8,944</b>	<b>1,389</b>	<b>10,333</b>	<b>592</b>	<b>1,454</b>	<b>2,046</b>
<b>Total of financial assets</b>	<b>39,199</b>	<b>1,819</b>	<b>41,018</b>	<b>26,712</b>	<b>2,346</b>	<b>29,058</b>
<b>Financial liabilities</b>						
<b>Current</b>						
Suppliers and contractors	12,712		12,712	11,830		11,830
Derivative financial instruments		400	400		1,349	1,349
Loans and borrowings	5,824		5,824	5,410		5,410
Related parties	1,608		1,608	2,190		2,190
	<b>20,144</b>	<b>400</b>	<b>20,544</b>	<b>19,430</b>	<b>1,349</b>	<b>20,779</b>

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<b>Non-current</b>						
Derivative financial instruments		2,153	2,153		3,991	3,991
Loans and borrowings	75,878		75,878	90,154		90,154
Related parties	3,113		3,113	415		415
Participative stockholders debentures		4,119	4,119		2,526	2,526
	<b>78,991</b>	<b>6,272</b>	<b>85,263</b>	<b>90,569</b>	<b>6,517</b>	<b>97,086</b>
<b>Total of financial liabilities</b>	<b>99,135</b>	<b>6,672</b>	<b>105,807</b>	<b>109,999</b>	<b>7,866</b>	<b>117,865</b>

Table of Contents**20. Fair value estimate****a) Assets and liabilities measured and recognized at fair value:**

	September 30, 2017			Consolidated		December 31, 2016	
	Level 2	Level 3	Total	Level 2	Level 3	Total	
<b>Financial assets</b>							
Derivative financial instruments	990	829	1,819	1,319	1,027	2,346	
<b>Total</b>	<b>990</b>	<b>829</b>	<b>1,819</b>	<b>1,319</b>	<b>1,027</b>	<b>2,346</b>	
<b>Financial liabilities</b>							
Derivative financial instruments	1,738	815	2,553	3,877	1,463	5,340	
Participative stockholders debentures	4,119		4,119	2,526		2,526	
<b>Total</b>	<b>5,857</b>	<b>815</b>	<b>6,672</b>	<b>6,403</b>	<b>1,463</b>	<b>7,866</b>	

For the three-month period ended in September 30, 2017, the Company recognized in the financial results, the amount of R\$(401) and R\$652 related to the measurement of the fair of derivative financial instruments assets and liabilities classified as level 3, respectively. For the nine-month period ended in September 30, 2017, the Company recognized in the financial results, the amount of R\$(198) and R\$648 related to the measurement of the fair value of derivative financial instruments assets and liabilities classified as level 3, respectively.

There were no transfers between Level 1 and Level 2, or between Level 2 and Level 3 in the period ended September 30, 2017.

**Methods and techniques of evaluation****i) 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.

**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	Fair value	Consolidated	
			Level 1	Level 2
<b>Financial liabilities</b>				
<b>September 30, 2017</b>				
Debt principal	79,835	83,459	47,223	36,236
<b>December 31, 2016</b>				
Debt principal	93,508	89,218	45,216	44,002

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.



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## 21. Derivative financial instruments

## a) Derivatives effects on statement of financial position

	Consolidated Assets			
	September 30, 2017		December 31, 2016	
	Current	Non-current	Current	Non-current
<b>Derivatives not designated as hedge accounting</b>				
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	240	3	429	3
IPCA swap	29	266	22	199
Eurobonds swap		44		
Pré-dólar swap	76	138	3	75
	<b>345</b>	<b>451</b>	<b>454</b>	<b>277</b>
<b>Commodities price risk</b>				
Nickel	24	4	13	7
Bunker oil	61		425	
	<b>85</b>	<b>4</b>	<b>438</b>	<b>7</b>
<b>Others</b>		934		1,170
		<b>934</b>		<b>1,170</b>
<b>Total</b>	<b>430</b>	<b>1,389</b>	<b>892</b>	<b>1,454</b>

	Consolidated Liabilities			
	September 30, 2017		December 31, 2016	
	Current	Non-current	Current	Non-current
<b>Derivatives not designated as hedge accounting</b>				
<b>Foreign exchange and interest rate risk</b>				
CDI & TJLP vs. US\$ fixed and floating rate swap	364	1,166	955	2,078
IPCA swap		91	65	186
Eurobonds swap	13		24	147
Euro Forward			149	
Pré-dólar swap	16	72	16	104
	<b>393</b>	<b>1,329</b>	<b>1,209</b>	<b>2,515</b>
<b>Commodities price risk</b>				
Nickel	7		16	7
Bunker oil			124	
	<b>7</b>		<b>140</b>	<b>7</b>
<b>Others</b>		824		1,469
		<b>824</b>		<b>1,469</b>
<b>Total</b>	<b>400</b>	<b>2,153</b>	<b>1,349</b>	<b>3,991</b>

## b) Effects of derivatives on the income statement, cash flow and other comprehensive income

	Gain (loss) recognized in the income statement		Consolidated Three-month period ended September 30, Financial settlement inflows (outflows)		Gain (loss) recognized in other comprehensive income	
	2017	2016	2017	2016	2017	2016
<b>Derivatives not designated as hedge accounting</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap	594	(182)	(308)	16		
IPCA swap	150	3	(65)	(83)		
Eurobonds swap	65	28				
Euro forward		15				
Pré-dolar swap	131	(26)		(3)		
	<b>940</b>	<b>(162)</b>	<b>(373)</b>	<b>(70)</b>		
<b>Commodities price risk</b>						
Nickel	31	(8)	12	(9)		
Bunker oil	(19)	(25)		(540)		
	<b>12</b>	<b>(33)</b>	<b>12</b>	<b>(549)</b>		
<b>Others</b>	<b>214</b>	<b>62</b>				
<b>Total</b>	<b>1,166</b>	<b>(133)</b>	<b>(361)</b>	<b>(619)</b>		

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	Gain (loss) recognized in the income statement		Consolidated Nine-month period ended September 30, Financial settlement inflows (outflows)		Gain (loss) recognized in other comprehensive income	
	2017	2016	2017	2016	2017	2016
<b>Derivatives not designated as hedge accounting</b>						
<b>Foreign exchange and interest rate risk</b>						
CDI & TJLP vs. US\$ fixed and floating rate swap	871	2,621	(441)	(322)		
IPCA swap	166	244	(65)	(78)		
Eurobonds swap	79	(2)	(121)	(524)		
Euro forward	144	(27)				
Pré-dólar swap	164	218	(4)	(304)		
	<b>1,424</b>	<b>3,054</b>	<b>(631)</b>	<b>(1,228)</b>		
<b>Commodities price risk</b>						
Nickel	20	(151)	(8)	(113)		
Bunker oil	(309)	441	(75)	(2,277)		
	<b>(289)</b>	<b>290</b>	<b>(83)</b>	<b>(2,390)</b>		
<b>Others</b>	<b>411</b>	<b>532</b>				
<b>Derivatives designated as cash flow hedge accounting</b>						
Bunker oil				(203)		
Foreign exchange		(10)		(10)		10
		<b>(10)</b>		<b>(213)</b>		<b>10</b>
<b>Total</b>	<b>1,546</b>	<b>3,866</b>	<b>(714)</b>	<b>(3,831)</b>		<b>10</b>

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

	Last maturity dates
Currencies and interest rates	January 2024
Bunker oil	December 2017
Nickel	August 2019
Others	December 2027

**Additional information about derivatives financial instruments**

In millions of Brazilian Reais, except as otherwise stated

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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 statistic properties verified in the historical data. The value at risk estimate considers a 95% confidence level for a one-business day time horizon.

There was no cash amount deposited as margin call regarding derivative positions on September 30, 2017. The derivative positions described in this document did not have initial costs associated.

The following tables detail the derivatives positions for Vale and its controlled companies as of September 30, 2017, 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.

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Flow	Notional		Index	Average rate	Fair value		Financial settlement Inflows (Outflows) September 30, 2017	Value at Risk September 30, 2017	Fair value by year				
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			2017	2018	2019+		
<b>CDI vs. US\$ fixed rate swap</b>													
Receivable	R\$	4,295	R\$	6,289	CDI	107.87%	6	(396)	140	67	9	110	(113)
Payable	US\$	1,367	US\$	2,105	Fix	3.82%							
<b>TJLP vs. US\$ fixed rate swap</b>													
Receivable	R\$	3,140	R\$	4,360	TJLP +	1.25%	(1,131)	(2,027)	(576)	141	(23)	(227)	(881)
Payable	US\$	1,398	US\$	2,030	Fix	1.56%							
<b>TJLP vs. US\$ floating rate swap</b>													
Receivable	R\$	227	R\$	242	TJLP +	0.88%	(162)	(179)	(5)	12	(3)	(12)	(147)
Payable	US\$	130	US\$	140	Libor +	-1.22%							
<b>R\$ fixed rate vs. US\$ fixed rate swap</b>													
Receivable	R\$	1,178	R\$	1,031	Fix	7.98%	126	(42)	(4)	94	(1)	60	67
Payable	US\$	394	US\$	343	Fix	-0.28%							
<b>IPCA vs. US\$ fixed rate swap</b>													
Receivable	R\$	1,000	R\$	1,000	IPCA +	6.55%	(68)	(167)	0	30		25	(92)
Payable	US\$	434	US\$	434	Fix	3.98%							
<b>IPCA vs. CDI swap</b>													
Receivable	R\$	1,350	R\$	1,350	IPCA +	6.62%	272	136	(65)	1		6	266
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 and forward 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\$. In those forwards only the principal amount of the debt is converted from EUR to US\$.

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The swap and forward 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.

EUR fixed rate vs. US\$ fixed rate swap						31	(170)	(22)	20	(14)	45
Receivable		500		500	Fix 3.75%						
Payable	US\$	613	US\$	613	Fix 4.29%						

Forward		0		500	B	1.143	(149)	(99)		
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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 derivatives were implemented, through zero cost-collars.

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)	Value at Risk	Fair value by year
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			
Call options	1,249,998	2,856,000	B	327	59	424	6	22	59
Put options	1,249,998	2,856,000	S	220	(0)	(45)		0	(0)
<b>Total</b>					<b>59</b>	<b>379</b>	<b>6</b>	<b>22</b>	<b>59</b>

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As at December 31, 2016, excludes R\$78, of transactions in which the financial settlement occurs subsequently of the closing month.

Table of Contents**(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.

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	
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016	September 30, 2017	September 30, 2017	2017	2018
<b>Fixed prices sales protection</b>										
Nickel forwards	9,832	11,615	B	9,665	(0)	(2)	(7)	10	(0)	
<b>Raw materials purchase protection</b>										
Nickel forwards	171	134	S	10,224	27	0	1	0	6	21
Copper forwards	57	441	S	6,461	(0)	(0)	(1)	0	(0)	
<b>Total</b>					<b>27</b>	<b>(0)</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>21</b>

**c) Silver Wheaton Corp. warrants**

The company owns warrants of Silver Wheaton Corp. (SLW), a Canadian company with stocks negotiated in Toronto Stock Exchange and New York Stock Exchange. Such warrants configure American call options and were received as part of the payment regarding the sale of part of gold payable flows produced as a sub product from Salobo copper mine and some nickel mines in Sudbury.



Flow	Notional (quantity)		Bought / Sold	Average strike (US\$/share)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			
Call options	10,000,000	10,000,000	B	44	105	144		11	105

d) **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 / Sold	Average strike (R\$/share)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			
Conversion options	140,239	140,239	S	8,489	(213)	(236)		15	(213)

e) **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. Under certain restrict 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. On the other hand, the Company has the right to buy back this non-controlling interest in the subsidiary.

Flow	Notional (quantity, in millions)		Bought / Sold	Average strike (R\$/ação)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			
Options	2,139	2,139	B/S	1.8	729	393		44	729

Table of Contentsf) **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)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			
Nickel Forward	4,623	5,626	S	10,905	(5)		1		5 (5)
Copper Forward	2,583	3,684	S	6,440	(1)		5		1 (1)
<b>Total</b>					<b>(6)</b>		<b>6</b>		<b>6 (6)</b>

The Company has also a natural gas purchase agreement in which there's 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)		Bought / Sold	Average strike (US\$/ton)	Fair value		Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year	
	September 30, 2017	December 31, 2016			September 30, 2017	December 31, 2016			September 30, 2017	September 30, 2017
Call options	746,667	746,667	S	233	(9)	(7)		5	(0)	(8)

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)	Average	Fair value	Financial Settlement Inflows (Outflows)	Value at Risk	Fair value by year

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	September 30, 2017	December 31, 2016	Bought / Sold	strike (R\$/share)	September 30, 2017	December 31, 2016	September 30, 2017	September 30, 2017
Put option	1,105,070,863	1,105,070,863	S	3.07	(502)	(593)		55 (502)

For sensitivity analysis of derivative financial instruments, Financial counterparties ratings and market curves, see note 29.

## 22. Provisions

	Consolidated		Consolidated	
	September 30, 2017	December 31, 2016	September 30, 2017	December 31, 2016
	Current liabilities		Non-current liabilities	
Payroll, related charges and other remunerations	2,940	2,362		
Onerous contracts	174	329	1,332	1,541
Environment Restoration	296	33	300	362
Asset retirement obligations	126	154	8,464	8,055
Provisions for litigation (note 23 (a))			4,627	2,734
Employee postretirement obligations (note 24)	257	225	7,060	6,038
<b>Provisions</b>	<b>3,793</b>	<b>3,103</b>	<b>21,783</b>	<b>18,730</b>

Table of Contents**23. 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				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
<b>Balance at December 31, 2016</b>	<b>695</b>	<b>272</b>	<b>1,742</b>	<b>25</b>	<b>2,734</b>
Additions	11	141	561	17	730
Reversals	(59)	(99)	(287)	(5)	(450)
Payments	(286)	(22)	(260)	(2)	(570)
Merger of Valepar (note 4) (i)	2,013				2,013
Indexation and interest	11	39	98	(4)	144
Translation adjustment	26				26
<b>Balance at September 30, 2017</b>	<b>2,411</b>	<b>331</b>	<b>1,854</b>	<b>31</b>	<b>4,627</b>

	Consolidated				
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision
<b>Balance at December 31, 2015</b>	<b>1,052</b>	<b>309</b>	<b>1,771</b>	<b>78</b>	<b>3,210</b>
Additions	75	298	590	17	980
Reversals	(67)	(185)	(284)	(27)	(563)
Payments	(363)	(171)	(320)		(854)
Indexation and interest	28	68	76	(2)	170
Translation adjustment	10			1	11
Additions and reversals of discontinued operations		(1)	32	(1)	30
<b>Balance at September 30, 2016</b>	<b>735</b>	<b>318</b>	<b>1,865</b>	<b>66</b>	<b>2,984</b>

(i) refers to litigations of PIS/COFINS of interest on capital.

**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	
	September 30, 2017	December 31, 2016
Tax litigation (i)	32,920	26,995
Civil litigation	5,377	7,484
Labor litigation	6,511	7,933
Environmental litigation	7,111	6,134
<b>Total</b>	<b>51,919</b>	<b>48,546</b>

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(i) R\$613 from merger of Valepar S.A.

**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, ICMS charges on our own transportation costs and challenges to other tax credits we claimed. The changes reported in the period resulted, mainly, from new proceedings related to PIS, COFINS, ICMS, CFEM; as well as the inclusion of Valepar S.A. proceedings 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.

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**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	
	September 30, 2017	December 31, 2016
Tax litigation (i)	3,919	630
Civil litigation	130	202
Labor litigation	2,260	2,251
Environmental litigation	43	52
<b>Total</b>	<b>6,352</b>	<b>3,135</b>

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(i) Includes R\$3,034 related to the merger of Valepar (note 4).

**d) Others**

For contingencies related to Samarco Mineração S.A., see note 18.

**24. Employee postretirement obligations**

## Reconciliation of net liabilities recognized in the statement of financial position

	Consolidated					
	Overfunded pension plans	2017 Underfunded pension plans	Other benefits	Overfunded pension plans	2016 Underfunded pension plans	Other benefits
<b>Movements of assets ceiling</b>						
<b>Balance at June 30,</b>	<b>4,788</b>			<b>5,443</b>		
Interest income	120			138		
Changes on asset ceiling and onerous liability	(429)			483		
<b>Balance at September 30,</b>	<b>4,479</b>			<b>6,064</b>		
<b>Amount recognized in the statement of financial position</b>						
Present value of actuarial liabilities	(10,932)	(14,511)	(4,723)	(9,962)	(13,958)	(4,491)
Fair value of assets	15,411	11,917		16,026	11,353	
Effect of the asset ceiling	(4,479)			(6,064)		
<b>Liabilities</b>		<b>(2,594)</b>	<b>(4,723)</b>		<b>(2,605)</b>	<b>(4,491)</b>
Current liabilities		(60)	(197)		(64)	(171)
Non-current liabilities		(2,534)	(4,526)		(2,541)	(4,320)
<b>Liabilities</b>		<b>(2,594)</b>	<b>(4,723)</b>		<b>(2,605)</b>	<b>(4,491)</b>

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	Consolidated					
	Overfunded pension plans	2017 Underfunded pension plans	Other benefits	Overfunded pension plans	2016 Underfunded pension plans	Other benefits
<b>Movements of assets ceiling</b>						
<b>Balance at January 1st,</b>	<b>4,402</b>			<b>3,754</b>		
Interest income	364			404		
Changes on asset ceiling and onerous liability	(287)			1,906		
<b>Balance at September 30,</b>	<b>4,479</b>			<b>6,064</b>		
<b>Amount recognized in the statement of financial position</b>						
Present value of actuarial liabilities	(10,932)	(14,511)	(4,723)	(9,962)	(13,958)	(4,491)
Fair value of assets	15,411	11,917		16,026	11,353	
Effect of the asset ceiling	(4,479)			(6,064)		
<b>Liabilities</b>		<b>(2,594)</b>	<b>(4,723)</b>		<b>(2,605)</b>	<b>(4,491)</b>
Current liabilities		(60)	(197)		(64)	(171)
Non-current liabilities		(2,534)	(4,526)		(2,541)	(4,320)
<b>Liabilities</b>		<b>(2,594)</b>	<b>(4,723)</b>		<b>(2,605)</b>	<b>(4,491)</b>

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

As mentioned in note 4, at September 30, 2017, the share capital was R\$77.300 corresponding to 5,304,684,600 shares issued and fully paid without par value.

Stockholders	September 30, 2017			December 31, 2016		
	ON	PNA	Total	ON	PNA	Total
Litel/Litela	1,108,483,410		1,108,483,410			
BNDESPar	438,127,230		438,127,230	206,378,882	66,185,272	272,564,154
Bradespar	332,965,266		332,965,266			
Mitsui&co	286,347,055		286,347,055			
Valepar S.A.				1,716,435,045	20,340,000	1,736,775,045
Brazilian Government (Golden Share)		12	12		12	12
Foreign investors - ADRs	1,256,447,940	43,682,854	1,300,130,794	786,067,634	610,880,671	1,396,948,305
FMP - FGTS	64,540,376		64,540,376	70,662,746		70,662,746
PIBB - Fund	1,804,258		1,804,258	741,730	1,171,101	1,912,831



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Foreign institutional investors						
in local market	943,976,894	178,500,682	1,122,477,576	262,868,264	825,753,408	1,088,621,672
Institutional investors	206,456,577	24,298,897	230,755,474	104,510,549	133,496,260	238,006,809
Retail investors in Brazil	271,363,206	60,657,651	332,020,857	37,988,150	309,895,202	347,883,352
<b>Shares outstanding</b>	<b>4,910,512,212</b>	<b>307,140,096</b>	<b>5,217,652,308</b>	<b>3,185,653,000</b>	<b>1,967,721,926</b>	<b>5,153,374,926</b>
Shares in treasury	87,032,292		87,032,292	31,535,402	59,405,792	90,941,194
<b>Total issued shares</b>	<b>4,997,544,504</b>	<b>307,140,096</b>	<b>5,304,684,600</b>	<b>3,217,188,402</b>	<b>2,027,127,718</b>	<b>5,244,316,120</b>
<b>Share capital - Amounts per class of shares (in millions)</b>	<b>72,773</b>	<b>4,527</b>	<b>77,300</b>	<b>47,421</b>	<b>29,879</b>	<b>77,300</b>
<b>Total authorized shares</b>	<b>7,000,000,000</b>		<b>7,000,000,000</b>	<b>3,600,000,000</b>	<b>7,200,000,000</b>	<b>10,800,000,000</b>

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PNA - Preferred shares

ON - Common shares

Table of Contents**26. Related parties**

Transactions with related parties are made by the Company at arm's-length, observing the price and usual market conditions and therefore do not generate any undue benefit to their counterparties or loss to the Company. The definition of related party is based on applicable accounting standards and our internal policies, which may be more restrictive than applicable laws and regulations under certain circumstances.

In the normal course of operations, Vale enters into contracts with related parties (associates, joint ventures and stockholders), related to the sale and purchase of products and services, loans, derivatives, leasing of assets, sale of raw material and railway transportation services.

The balances of these related party transactions and their effects on the interim financial statements are as follows:

	Consolidated Assets							
	September 30, 2017				December 31, 2016			
	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties
Previous Valepar shareholders	2,535	899	6		1,887	1,167	11	
Companhia Coreano-Brasileira de Pelotização				62				15
Companhia Hispano-Brasileira de Pelotização							2	
Companhia Ítalo-Brasileira de Pelotização								27
Companhia Nipo-Brasileira de Pelotização				47				48
Companhia Siderúrgica do Pecém			175				122	
Consórcio de Rebocadores da Baía de São Marcos			27				32	
MRS Logística S.A.				125				78
Nacala BV (i)				14,768				
VLI			24	26			27	38
Others			214	126			155	32
<b>Total</b>	<b>2,535</b>	<b>899</b>	<b>446</b>	<b>15,154</b>	<b>1,887</b>	<b>1,167</b>	<b>349</b>	<b>238</b>

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(i) Refers to the balances after the sale of Nacala Corridor business (note 13).

	<b>Consolidated Liabilities</b>							
	<b>September 30, 2017</b>				<b>December 31, 2016</b>			
	<b>Derivative financial instruments</b>	<b>Others liabilities</b>	<b>Related parties</b>	<b>Loans and borrowings</b>	<b>Derivative financial instruments</b>	<b>Others liabilities</b>	<b>Related parties</b>	<b>Loans and borrowings</b>
Aliança Geração de Energia S.A.		97				51	125	
Previous Valepar shareholders Companhia Coreano-Brasileira de Pelotização	421	124	53	20,605	1,198	56		24,181
Companhia Hispano-Brasileira de Pelotização		360	99			10	192	
Companhia Ítalo-Brasileira de Pelotização		255	148			126	47	
Companhia Nipo-Brasileira de Pelotização		238	168					323
Ferrovias Centro-Atlântica S.A.		650	220			10	477	
MRS Logística S.A.		2	271				270	
Nacala BV (i)		59				82		
Pangea Emirates Ltd Mitsui (i)		666						3,641
Sumic Nickel Netherland B.V							1,149	
VLI		8	116			8		
Others		282	5			130	22	
<b>Total</b>	<b>421</b>	<b>2,741</b>	<b>4,721</b>	<b>20,605</b>	<b>1,198</b>	<b>473</b>	<b>2,605</b>	<b>24,181</b>

(i) Refers to the balances after the sale of Nacala Corridor business (note 13).

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	Consolidated Three-month period ended September 30,					
	Net operating revenue	2017 Costs and expenses	Financial result	Net operating revenue	2016 Costs and expenses	Financial result
Aliança Geração de Energia S.A.	22	(124)			(105)	
Previous Valepar shareholders	100		(407)	133		(2,202)
Baovale Mineração S.A.		(13)			(13)	
Companhia Coreano-Brasileira de Pelotização		(119)	(2)		(21)	(17)
Companhia Hispano-Brasileira de Pelotização		(92)	(3)		(37)	(11)
Companhia Ítalo-Brasileira de Pelotização		(90)	(3)		(42)	(19)
Companhia Nipo-Brasileira de Pelotização		(227)	(5)		(88)	(29)
Companhia Siderúrgica do Pecém	370	(44)		192		
Ferrovias Centro-Atlântica S.A.	35	(21)	(1)	35	(31)	(4)
Ferrovias Norte Sul S.A.	21			11		
MRS Logística S.A.		(447)			(433)	
Nacala BV (i)		(591)	215			
Pangea Emirates Ltd Mitsui (i)			(52)			
Samarco Mineração S.A.			(35)			
VLI	193		2	239	(24)	
Others	13	2	(20)	7	(27)	7
<b>Total</b>	<b>754</b>	<b>(1,766)</b>	<b>(311)</b>	<b>617</b>	<b>(821)</b>	<b>(2,275)</b>

	Consolidated Nine-month period ended September 30,					
	Net operating revenue	2017 Costs and expenses	Financial result	Net operating revenue	2016 Costs and expenses	Financial result
Aliança Geração de Energia S.A.	58	(320)			(334)	
Previous Valepar shareholders	306		(1,424)	359		(2,674)
Baovale Mineração S.A.		(39)			(43)	
California Steel Industries, Inc.	113					
Companhia Coreano-Brasileira de Pelotização		(353)	(11)		(152)	(17)
Companhia Hispano-Brasileira de Pelotização		(280)	(11)		(108)	(11)
Companhia Ítalo-Brasileira de Pelotização		(262)	(18)		(123)	(19)
Companhia Nipo-Brasileira de Pelotização		(635)	(27)		(285)	(29)
Companhia Siderúrgica do Atlântico					(21)	
Companhia Siderúrgica do Pecem	775	(323)		308		
Ferrovias Centro-Atlântica S.A.	98	(70)	(2)	104	(75)	(5)
Ferrovias Norte Sul S.A.	58			50		
MRS Logística S.A.		(1,271)			(1,161)	
Nacala BV (i)		(895)	429			

Pangea Emirates Ltd Mitsui (i)			(208)			
Samarco Mineração S.A.	45		4			
VLI	610		2	705	(35)	
Others	57	(6)	(51)	48	(94)	1
<b>Total</b>	<b>2,120</b>	<b>(4,454)</b>	<b>(1,317)</b>	<b>1,574</b>	<b>(2,431)</b>	<b>(2,754)</b>

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(i) Does not include exchange rate variation.

## 27. Commitments

### a) Participative stockholders debentures

At October 2, 2017 (subsequently event), the company has paid the semiannual remuneration to its stockholder's debentures amounting to R\$226.

### b) Guarantees provided

As of September 30, 2017, 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. totaled R\$1,236 and R\$4,768, respectively and on December 31, 2016 totaled R\$1,176 and R\$4,725, respectively.

Table of Contents**28. Select notes to Parent Company information (individual interim information)****a) Investments**

	Parent company	
	2017	2016
<b>Balance at January 1st,</b>	<b>107,539</b>	<b>127,517</b>
Additions/Capitalizations	1,309	1,638
Translation adjustment	(311)	(13,504)
Equity results in income statement	5,349	6,131
Equity results in statement of comprehensive income	(520)	(683)
Results from operations with noncontrolling interest	(858)	
Equity results from discontinued operations	(1,004)	(161)
Dividends declared	(1,610)	(524)
Merger of Valepar (note 4)	3,073	
Others	1,468	8
<b>Balance at September 30,</b>	<b>114,435</b>	<b>120,422</b>

Dividends received by the Parent Company during the period ended at September 30, 2017 were R\$1,378 related to dividends declared in 2017.

**b) Intangible**

	Parent company			
	Concessions	Right of use	Software	Total
<b>Balance at December 31, 2016</b>	<b>10,278</b>	<b>118</b>	<b>918</b>	<b>11,314</b>
Additions	2,327		64	2,391
Disposals	(16)			(16)
Amortization	(272)	(5)	(303)	(580)
<b>Balance at September 30, 2017</b>	<b>12,317</b>	<b>113</b>	<b>679</b>	<b>13,109</b>
Cost	15,755	223	4,105	20,083
Accumulated amortization	(3,438)	(110)	(3,426)	(6,974)
<b>Balance at September 30, 2017</b>	<b>12,317</b>	<b>113</b>	<b>679</b>	<b>13,109</b>

  

	Parent company			
	Concessions	Right of use	Software	Total
<b>Balance at December 31, 2015</b>	<b>7,084</b>	<b>123</b>	<b>1,350</b>	<b>8,557</b>
Additions	3,643		36	3,679
Disposals	(29)			(29)
Amortization	(405)	(5)	(362)	(772)

<b>Balance at September 30, 2016</b>	<b>10,293</b>	<b>118</b>	<b>1,024</b>	<b>11,435</b>
Cost	13,773	223	4,033	18,029
Accumulated amortization	(3,480)	(105)	(3,009)	(6,594)
<b>Balance at September 30, 2016</b>	<b>10,293</b>	<b>118</b>	<b>1,024</b>	<b>11,435</b>

c) **Property, plant and equipment**

	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2016</b>	<b>1,684</b>	<b>20,945</b>	<b>20,416</b>	<b>8,479</b>	<b>4,122</b>	<b>16,499</b>	<b>29,911</b>	<b>102,056</b>
Additions (i)							4,235	4,235
Disposals	(1)		(57)	(35)		(32)	(254)	(379)
Assets retirement obligation					90			90
Depreciation, amortization and depletion		(570)	(806)	(863)	(223)	(1,287)		(3,749)
Transfers	55	4,619	6,889	1,770	1,410	2,749	(17,492)	
<b>Balance at September 30, 2017</b>	<b>1,738</b>	<b>24,994</b>	<b>26,442</b>	<b>9,351</b>	<b>5,399</b>	<b>17,929</b>	<b>16,400</b>	<b>102,253</b>
Cost	1,738	29,422	33,486	15,879	7,076	27,237	16,400	131,238
Accumulated depreciation		(4,428)	(7,044)	(6,528)	(1,677)	(9,308)		(28,985)
<b>Balance at September 30, 2017</b>	<b>1,738</b>	<b>24,994</b>	<b>26,442</b>	<b>9,351</b>	<b>5,399</b>	<b>17,929</b>	<b>16,400</b>	<b>102,253</b>

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	Land	Building	Facilities	Equipment	Parent company Mineral properties	Others	Constructions in progress	Total
<b>Balance at December 31, 2015</b>	<b>1,672</b>	<b>19,546</b>	<b>19,379</b>	<b>8,371</b>	<b>4,215</b>	<b>14,203</b>	<b>29,501</b>	<b>96,887</b>
Additions (i)							6,288	6,288
Disposals		(1)	(9)	(64)		(37)	(30)	(141)
Assets retirement obligation					159			159
Depreciation, amortization and depletion		(467)	(723)	(817)	(152)	(934)		(3,093)
Transfers	9	1,808	759	960	(46)	226	(3,721)	(5)
<b>Balance at September 30, 2016</b>	<b>1,681</b>	<b>20,886</b>	<b>19,406</b>	<b>8,450</b>	<b>4,176</b>	<b>13,458</b>	<b>32,038</b>	<b>100,095</b>
Cost	1,681	24,044	25,796	14,103	5,575	21,049	32,038	124,286
Accumulated depreciation		(3,158)	(6,390)	(5,653)	(1,399)	(7,591)		(24,191)
<b>Balance at September 30, 2016</b>	<b>1,681</b>	<b>20,886</b>	<b>19,406</b>	<b>8,450</b>	<b>4,176</b>	<b>13,458</b>	<b>32,038</b>	<b>100,095</b>

(i) Includes capitalized borrowing costs, see cash flow.

**d) Loans and borrowings**

	Current liabilities		Parent company	
	September 30, 2017	December 31, 2016	September 30, 2017	Non-current liabilities December 31, 2016
<b>Debt contracts in the international markets</b>				
<b>Floating rates in:</b>				
US\$	628	448	9,880	15,876
<b>Fixed rates in:</b>				
US\$			4,752	4,889
EUR			2,807	5,158
<b>Accrued charges</b>	<b>224</b>	<b>425</b>		
	<b>852</b>	<b>873</b>	<b>17,439</b>	<b>25,923</b>
<b>Debt contracts in Brazil</b>				
<b>Floating rates in:</b>				
R\$, indexed to TJLP, TR, IPCA, IGP-M and CDI	1,344	1,059	14,583	17,307
Basket of currencies and US\$ indexed to LIBOR	1,167	1,117	3,096	3,962
<b>Fixed rates in:</b>				
R\$	190	190	543	685
<b>Accrued charges</b>	<b>980</b>	<b>932</b>		
	<b>3,681</b>	<b>3,298</b>	<b>18,222</b>	<b>21,954</b>
	<b>4,533</b>	<b>4,171</b>	<b>35,661</b>	<b>47,877</b>



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

	<b>Parent company Debt principal</b>
2017	753
2018	3,723
2019	5,465
2020	7,000
2021	5,263
Between 2022 and 2025	11,403
2026 onwards	5,383
	<b>38,990</b>

e) **Provisions**

	<b>Current liabilities</b>		<b>Parent company</b>		<b>Non-current liabilities</b>	
	<b>September 30, 2017</b>	<b>December 31, 2016</b>	<b>September 30, 2017</b>	<b>December 31, 2016</b>	<b>September 30, 2017</b>	<b>December 31, 2016</b>
Payroll, related charges and others remunerations	2,037	1,649				
Environment Restoration	32	14	144		200	
Asset retirement obligations	49	71	1,790		1,571	
Provisions for litigation			4,032		1,944	
Employee postretirement obligations	82	58	660		681	
<b>Provisions</b>	<b>2,200</b>	<b>1,792</b>	<b>6,626</b>		<b>4,396</b>	

Table of Contentsf) **Provisions for litigation**

	Parent company					
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision	
<b>Balance at December 31, 2016</b>	<b>53</b>	<b>247</b>	<b>1,621</b>	<b>23</b>	<b>1,944</b>	
Additions	1	66	522	9	598	
Reversals	(3)	(96)	(273)	(3)	(375)	
Payments	(6)	(21)	(252)	(2)	(281)	
Merger of Valepar (note 4)	2,013				2,013	
Indexation and interest	19	35	85	(6)	133	
<b>Balance at September 30, 2017</b>	<b>2,077</b>	<b>231</b>	<b>1,703</b>	<b>21</b>	<b>4,032</b>	

	Parent company					
	Tax litigation	Civil litigation	Labor litigation	Environmental litigation	Total of litigation provision	
<b>Balance at December 31, 2015</b>	<b>332</b>	<b>241</b>	<b>1,562</b>	<b>55</b>	<b>2,190</b>	
Additions	38	296	575	7	916	
Reversals	(44)	(171)	(278)	(16)	(509)	
Payments	(277)	(167)	(306)		(750)	
Indexation and interest	2	66	56	(4)	120	
<b>Balance at September 30, 2016</b>	<b>51</b>	<b>265</b>	<b>1,609</b>	<b>42</b>	<b>1,967</b>	

g) **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	
	Nine-month period ended September 30, 2017	2016
<b>Income before income taxes</b>	<b>19,890</b>	<b>18,119</b>
<b>Income taxes at statutory rates - 34%</b>	<b>(6,763)</b>	<b>(6,160)</b>
<b>Adjustments that affect the basis of taxes:</b>		
Income tax benefit from interest on stockholders' equity	1,190	
Tax incentives	759	559
Equity results	1,818	2,083
Others	(796)	(2,702)
<b>Income taxes</b>	<b>(3,792)</b>	<b>(6,220)</b>

h) **Related parties**

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	Parent company Assets							
	September 30, 2017				December 31, 2016			
	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties	Cash and cash equivalents	Derivative financial instruments	Accounts receivable	Related parties
Previous Valepar shareholders	795	899			75	1,167		
Biopalma da Amazônia S.A. Companhia			1	764			1	965
Coreano-Brasileira de Pelotização Companhia				62				15
Hispano-Brasileira de Pelotização Companhia							2	
Ítalo-Brasileira de Pelotização Companhia								27
Nipo-Brasileira de Pelotização Companhia				47				48
Companhia Portuária Baía de Sepetiba Companhia			2	36			1	80
Siderúrgica do Atlântico Companhia				50				
Siderúrgica do Pecém Consórcio de			175				115	
Rebocadores da Baía de São Marcos Empreendimentos			27				32	
Brasileiros de Mineração S.A. Mineração								292
Brasileiras Reunidas S.A. Mineração			9				1	14
Corumbaense Reunidas S.A.			3				52	
MRS Logística S.A.				41				30
Salobo Metais S.A.			38	104			16	104
Vale International S.A.			11,844				27,387	
VLI			24	26			27	38
Others			219	77			172	36
<b>Total</b>	<b>795</b>	<b>899</b>	<b>12,342</b>	<b>1,207</b>	<b>75</b>	<b>1,167</b>	<b>27,806</b>	<b>1,649</b>

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	Parent company Liabilities							
	September 30, 2017				December 31, 2016			
	Derivative financial instruments	Others liabilities	Related parties	Loans and borrowings	Derivative financial instruments	Others liabilities	Related parties	Loans and borrowings
Aliança Geração de Energia S.A.		97				51	125	
Previous Valepar shareholders	421		53	19,442	1,198			22,776
Companhia Coreano-Brasileira de Pelotização		360				10		
Companhia Hispano-Brasileira de Pelotização		255				126		
Companhia Ítalo-Brasileira de Pelotização		238						
Companhia Nipo-Brasileira de Pelotização		650				10		
Companhia Portuária Baía de Sepetiba		38				285		
Empreendimentos Brasileiros de Mineração S.A.			7				7	
Ferrovias Centro-Atlântica S.A.		2	271				270	
Mineração Brasileiras Reunidas S.A.		552	3,018			505	3,131	
MRS Logística S.A.		59				82		
Vale International S.A.			51,374			4	59,715	
VLI		8	116			8		
Others		384	294			163	292	
<b>Total</b>	<b>421</b>	<b>2,643</b>	<b>55,133</b>	<b>19,442</b>	<b>1,198</b>	<b>1,244</b>	<b>63,540</b>	<b>22,776</b>

	Parent company Nine-month period ended September 30,					
	2017		2016			
	Net operating revenue	Costs and expenses	Financial result	Net operating revenue	Costs and expenses	Financial result
Aliança Geração de Energia S.A.		(295)			(334)	
Previous Valepar shareholders			(1,418)			(2,662)
Baovale Mineração S.A.		(39)			(43)	
Biopalma da Amazônia S.A.	1		7			(178)
Companhia Coreano-Brasileira de Pelotização		(353)			(151)	
Companhia Hispano-Brasileira de Pelotização		(280)			(108)	
Companhia Ítalo-Brasileira de Pelotização		(262)			(123)	
		(635)			(285)	

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Companhia Nipo-Brasileira de Pelotização						
Companhia Portuária Baía de Sepetiba	3	(299)			(536)	
Companhia Siderúrgica do Atlântico					(21)	
Companhia Siderúrgica do Pecem	585			294		
Ferrovias Centro-Atlântica S.A.	98	(70)	(2)	104	(75)	(5)
Ferrovias Norte Sul S.A.	58					
Mineração Brasileiras Reunidas S.A.		(1,480)	(252)		(1,172)	(305)
MRS Logística S.A.		(1,271)			(1,161)	
Samarco Mineração S.A.	45		4			
Vale International S.A.	41,028		(1,064)	28,206		3,344
VLI	610		2	705	(35)	
Others	227	(156)	(129)	119	(11)	(276)
<b>Total</b>	<b>42,655</b>	<b>(5,140)</b>	<b>(2,852)</b>	<b>29,428</b>	<b>(4,055)</b>	<b>(82)</b>

Table of Contents**29. 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:

- *Scenario I*: fair value calculation considering market prices as of September 30, 2017
- *Scenario II*: fair value estimated considering a 25% deterioration in the associated risk variables
- *Scenario III*: fair value estimated considering a 50% deterioration in the associated risk variables

**Sensitivity analysis for Derivatives Instruments (all amounts in R\$ million)**

Instrument	Instrument s main risk events	Scenario I	Scenario II	Scenario III
<b>CDI vs. US\$ fixed rate swap</b>	R\$ depreciation	6	(1,094)	(2,194)
	US\$ interest rate inside Brazil decrease	6	(31)	(68)
	Brazilian interest rate increase	6	(3)	(12)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>TJLP vs. US\$ fixed rate swap</b>	R\$ depreciation	(1,131)	(2,216)	(3,301)
	US\$ interest rate inside Brazil decrease	(1,131)	(1,178)	(1,227)
	Brazilian interest rate increase	(1,131)	(1,220)	(1,304)
	TJLP interest rate decrease	(1,131)	(1,214)	(1,297)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>TJLP vs. US\$ floating rate swap</b>	R\$ depreciation	(162)	(261)	(360)
	US\$ interest rate inside Brazil decrease	(162)	(167)	(172)
	Brazilian interest rate increase	(162)	(169)	(176)
	TJLP interest rate decrease	(162)	(168)	(175)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		

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<b>R\$ fixed rate vs. US\$ fixed rate swap</b>	R\$ depreciation	126	(134)	(394)
	US\$ interest rate inside Brazil decrease	126	89	48
	Brazilian interest rate increase	126	37	(41)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>IPCA vs. US\$ fixed rate swap</b>	R\$ depreciation	(68)	(433)	(799)
	US\$ interest rate inside Brazil decrease	(68)	(84)	(101)
	Brazilian interest rate increase	(68)	(124)	(177)
	IPCA index decrease	(68)	(100)	(132)
Protected item: R\$ denominated debt	R\$ depreciation	n.a.		
<b>IPCA vs. CDI swap</b>	Brazilian interest rate increase	272	165	67
	IPCA index decrease	272	212	154
Protected item: R\$ denominated debt linked to IPCA	IPCA index decrease	n.a.	(212)	(154)
<b>EUR fixed rate vs. US\$ fixed rate swap</b>	EUR depreciation	31	(533)	(1,097)
	Euribor increase	31	5	(20)
	US\$ Libor decrease	31	(21)	(76)
Protected item: EUR denominated debt	EUR depreciation	n.a.	533	1,097

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Instrument	Instrument s main risk events	Scenario I	Scenario II	Scenario III
<b>Bunker Oil protection</b>				
Forwards and options	Bunker Oil price decrease	59	(5)	(216)
Protected item: Part of costs linked to bunker oil prices	Bunker Oil price decrease	n.a.	5	216
<b>Nickel sales fixed price protection</b>				
Forwards	Nickel price decrease	(0)	(82)	(163)
Protected item: Part of nickel revenues with fixed prices	Nickel price fluctuation	n.a.	82	163
<b>Purchase protection program</b>				
Nickel forwards	Nickel price increase	27	26	24
Protected item: Part of costs linked to nickel prices	Nickel price increase	n.a.	(26)	(24)
Copper forwards	Copper price increase	(0.0)	(0.3)	(0.6)
Protected item: Part of costs linked to copper prices	Copper price increase	n.a.	0.3	0.6
<b>WPM warrants</b>	WPM stock price decrease	105	53	17
<b>Conversion options - VLI</b>	VLI stock value increase	(213)	(327)	(465)
<b>Options - MBR</b>	MBR stock value decrease	729	432	115

Instrument	Main risks	Scenario I	Scenario II	Scenario III
Embedded derivatives - Raw material purchase (nickel)	Nickel price increase	(5)	(46)	(87)
Embedded derivatives - Raw material purchase (copper)	Copper price increase	(1)	(15)	(28)
Embedded derivatives - Gas purchase	Pellet price increase	(9)	(18)	(32)
Embedded derivatives - Guaranteed minimum return (VLI)	VLI stock value decrease	(502)	(996)	(1,673)

**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.



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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 September 30, 2017.

Long term ratings by counterparty	Moody's	S&P
ANZ Australia and New Zealand Banking	Aa3	AA-
Banco ABC	Ba3	BB
Banco Bradesco	Ba3	BB
Banco do Brasil	Ba3	BB
Banco de Credito del Peru	Baal	BBB
Banco do Nordeste	Ba3	BB
Banco Saffa	Ba3	BB
Banco Santander	A3	A-
Banco Votorantim	Ba3	BB
Bank of America	Baal	BBB+
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	A3	BBB+
BNP Paribas	A2	A
BTG Pactual	Ba3	BB-
Caixa Economica Federal	Ba3	BB
Canadian Imperial Bank	A1	A+
China Construction Bank	A1	A

Long term ratings by counterparty	Moody's	S&P
Citigroup	Baal	BBB+
Credit Agricole	A1	A
Credit Suisse	Baa2	BBB+
Deutsche Bank	A3	A-
Goldman Sachs	A3	BBB+
HSBC	A2	A
Intesa Sanpaolo Spa	A3	BBB-
Itaú Unibanco	Ba3	BB
JP Morgan Chase & Co	A3	A-
Macquarie Group Ltd	A3	BBB
Mizuho Financial	A1	A-
Morgan Stanley	A3	BBB+
National Australia Bank NAB	Aa3	AA-
National Bank of Oman	Baa3	
Rebobank	Aa2	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	Baal	BBB-

Table of Contentsc) **Market curves**

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

(i) **Products****CURVAS INGLES****Nickel**

<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>	<b>Maturity</b>	<b>Price (US\$/ton)</b>
SPOT	10,585	MAR18	10,573	SEP18	10,704
OCT17	10,445	APR18	10,599	SEP19	10,939
NOV17	10,473	MAY18	10,625	SEP20	11,135
DEC17	10,500	JUN18	10,646	SEP21	11,306
JAN18	10,527	JUL18	10,667		
FEB18	10,548	AUG18	10,686		

**Copper**

<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>	<b>Maturity</b>	<b>Price (US\$/lb)</b>
SPOT	2.96	MAR18	2.96	SEP18	2.97
OCT17	2.93	APR18	2.96	SEP19	2.99
NOV17	2.94	MAY18	2.96	SEP20	3.00
DEC17	2.94	JUN18	2.97	SEP21	2.99
JAN18	2.95	JUL18	2.97		
FEB18	2.95	AUG18	2.97		

**Bunker Oil**

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Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)	Maturity	Price (US\$/ton)
SPOT	336	MAR18	320	SEP18	315
OCT17	332	APR18	319	SEP19	308
NOV17	328	MAY18	318	SEP20	293
DEC17	325	JUN18	317	SEP21	281
JAN18	323	JUL18	316		
FEB18	321	AUG18	316		

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

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
11/01/17	2.59	09/03/18	2.33	01/04/21	3.17
12/01/17	2.36	10/01/18	2.38	04/01/21	3.26
01/02/18	2.28	01/02/19	2.52	07/01/21	3.34
02/01/18	2.26	04/01/19	2.63	10/01/21	3.38
03/01/18	2.25	07/01/19	2.71	01/03/22	3.42
04/02/18	2.24	10/01/19	2.76	04/01/22	3.51
05/02/18	2.26	01/02/20	2.85	07/01/22	3.59
06/01/18	2.30	04/01/20	2.93	01/02/23	3.64
07/02/18	2.31	07/01/20	3.03	07/03/23	3.76
08/01/18	2.34	10/01/20	3.09	01/02/24	3.88

**US\$ Interest Rate**

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
1M	1.23	6M	1.49	11M	1.56
2M	1.27	7M	1.51	12M	1.56
3M	1.33	8M	1.52	2Y	1.76
4M	1.41	9M	1.54	3Y	1.91
5M	1.46	10M	1.55	4Y	2.01

**TJLP**

<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>	<b>Maturity</b>	<b>Rate (% p.a.)</b>
11/01/17	7.00	09/03/18	7.00	01/04/21	7.00
12/01/17	7.00	10/01/18	7.00	04/01/21	7.00
01/02/18	7.00	01/02/19	7.00	07/01/21	7.00
02/01/18	7.00	04/01/19	7.00	10/01/21	7.00
03/01/18	7.00	07/01/19	7.00	01/03/22	7.00
04/02/18	7.00	10/01/19	7.00	04/01/22	7.00
05/02/18	7.00	01/02/20	7.00	07/01/22	7.00
06/01/18	7.00	04/01/20	7.00	01/02/23	7.00
07/02/18	7.00	07/01/20	7.00	07/03/23	7.00
08/01/18	7.00	10/01/20	7.00	01/02/24	7.00

**BRL Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/17	8.01	09/03/18	7.11	01/04/21	8.78
12/01/17	7.73	10/01/18	7.13	04/01/21	8.90
01/02/18	7.51	01/02/19	7.26	07/01/21	9.05
02/01/18	7.37	04/01/19	7.44	10/01/21	9.17
03/01/18	7.28	07/01/19	7.65	01/03/22	9.22
04/02/18	7.18	10/01/19	7.90	04/01/22	9.29
05/02/18	7.13	01/02/20	8.09	07/01/22	9.36
06/01/18	7.09	04/01/20	8.28	01/02/23	9.47
07/02/18	7.09	07/01/20	8.46	07/03/23	9.54
08/01/18	7.08	10/01/20	8.65	01/02/24	9.64

**Implicit Inflation (IPCA)**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
11/01/17	4.91	09/03/18	4.03	01/04/21	4.61
12/01/17	4.63	10/01/18	4.05	04/01/21	4.63
01/02/18	4.42	01/02/19	4.14	07/01/21	4.68
02/01/18	4.28	04/01/19	4.30	10/01/21	4.72
03/01/18	4.19	07/01/19	4.35	01/03/22	4.70
04/02/18	4.10	10/01/19	4.45	04/01/22	4.70
05/02/18	4.04	01/02/20	4.46	07/01/22	4.71
06/01/18	4.01	04/01/20	4.51	01/02/23	4.73
07/02/18	4.01	07/01/20	4.54	07/03/23	4.72
08/01/18	4.00	10/01/20	4.60	01/02/24	4.75

**EUR Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	-0.40	6M	-0.30	11M	-0.26
2M	-0.39	7M	-0.28	12M	-0.25
3M	-0.38	8M	-0.27	2Y	-0.17
4M	-0.34	9M	-0.27	3Y	-0.04
5M	-0.31	10M	-0.26	4Y	0.10

**CAD Interest Rate**

Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)	Maturity	Rate (% p.a.)
1M	1.31	6M	1.63	11M	0.92
2M	1.36	7M	1.40	12M	0.86
3M	1.42	8M	1.24	2Y	1.91
4M	1.53	9M	1.11	3Y	2.03
5M	1.59	10M	1.01	4Y	2.13

**Currencies - Ending rates**

CAD/US\$	0.7994	US\$/BRL	3.1680	EUR/US\$	1.1784
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**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)

Date: October 26, 2017

By:

/s/ Andre Figueiredo  
Andre Figueiredo  
Director of Investor Relations

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