

(Convenience Translation into English from the  
Original Previously Issued in Portuguese)

# **Cia de Ferro Ligas da Bahia S.A. - FERBASA and Subsidiaries**

Individual and Consolidated  
Financial Statements  
for the Year Ended  
December 31, 2018 and  
Independent Auditor's Report

Deloitte Touche Tohmatsu Auditores Independentes

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## INDEPENDENT AUDITOR'S REPORT ON THE INDIVIDUAL AND CONSOLIDATED FINANCIAL STATEMENTS

To the Shareholders, Directors and Management of  
Cia de Ferro Ligas da Bahia S.A. - FERBASA

### **Opinion**

We have audited the accompanying individual and consolidated financial statements of Cia de Ferro Ligas da Bahia S.A. - FERBASA ("Company"), identified as Parent and Consolidated, respectively, which comprise the balance sheet as at December 31, 2018, and the related statements of income, of comprehensive income, of changes in equity and of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements referred to above present fairly, in all material respects, the individual and consolidated financial position of Cia de Ferro Ligas da Bahia S.A. - FERBASA as at December 31, 2018, and its individual and consolidated financial performance and its individual and consolidated cash flows for the year then ended in accordance with accounting practices adopted in Brazil and International Financial Reporting Standards - IFRSs, issued by the International Accounting Standards Board - IASB.

### **Basis for opinion**

We conducted our audit in accordance with Brazilian and International Standards on Auditing. Our responsibilities under those standards are further described in the "Auditor's responsibilities for the audit of the individual and consolidated financial statements" section of our report. We are independent of the Company and its subsidiaries in accordance with the relevant ethical requirements in the Code of Ethics for Professional Accountants and the professional standards issued by the Brazilian Federal Accounting Council ("CFC"), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Key audit matters**

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

## *(a) Business combination*

As disclosed in note 1.1 to the individual and consolidated financial statements, on April 2, 2018, the Company has completed the process for acquisition of BW Guirapá I S.A. and subsidiaries ("BW Guirapá"). Management, supported by its external appraisal specialists, has determined the fair value of the identifiable assets and liabilities of BW Guirapá, resulting in the recognition of tangible and intangible assets and gain in profit or loss for the year in the amount of R\$49,595 thousand, net of taxes. The estimates related to the accounting for a business combination entail significant risk, as significant judgments are used to determine the fair value of the consideration transferred, the assets acquired and liabilities assumed, the bargain purchase amount and the information that must be disclosed to enable the users of the financial statements to assess the nature of and the financial effects arising from the business combination. Due to the significance of the amounts, the complexity, the level of judgment of assumptions, the methodology used in such measurements and the impact that potential changes in assumptions could have on the consolidated financial statements and on the investment amount recorded under the equity method in the parent's financial statements, we consider this matter a key audit matter.

Our audit procedures included, but were not limited to: (i) obtaining an understanding of the transaction and assessing the contractual aspects that formalized the transaction; (ii) assessing the design and implementation of relevant internal controls determined by Management on the identification and assessment of business combinations; and (iii) assessing the determination of the fair value of the assets acquired, prepared by independent appraisers hired and assessing the capability of these appraisers. With the support of our appraisal specialists, we analyzed the methodology used by Management to measure the fair values, assessed the reasonableness of the assumptions used and calculations made, matching them to market information, if any, and conducted a sensitivity analysis on the main assumptions used and the impacts arising from possible changes in such assumptions and their relevance in relation to the financial statements taken as a whole, and the effect of the fair value allocation in the business combination in the financial statements, as well as the bargain purchase measurement.

Based on the result of the audit procedures performed on the acquisition process, including the methodology used and the assumptions adopted for the identification and fair value measurement of the assets acquired and liabilities assumed, we understand that the criteria and assumptions adopted by Management, as well as the respective disclosures in the notes to the financial statements, are adequate in the context of the financial statements for the year ended December 31, 2018.

## *(b) Measurement of the fair value of biological assets*

As described in notes 4, 6 and 19 to the financial statements, the Company measures the fair value of its eucalyptus forests using the discounted cash flow model, which takes into consideration several assumptions and judgments by Management, such as the estimated sales price, the cubic volume of timber, the annual average increase per tree nursery and the discount rate. In addition, a portion of the assumptions considers unobservable market data. Changes in the assumptions or valuation techniques used may result in significantly different fair value estimates, impacting profit or loss for the year. Consequently, the measurement of the fair value of biological assets is considered as one of the key audit matters.

Accordingly, our audit procedures included, without limitation: (i) obtaining an understanding of the biological asset measurement and accounting flow considering the significant assumptions adopted by Management; (ii) understanding the internal controls related to the Company's forest activities; (iii) involving our specialists in the assessment of the calculation methodology of the discounted cash flow model; and (iv) assessing the adequacy of the criteria and assumptions adopted by Management to measure fair value of the biological assets, mainly those related to the estimated forest growth rate, forest age when the fair value differs from the historical cost, interest rates for cash flow discounts, estimated productivity, projected harvest volume and standing timber price, as well as assessing the proper disclosure by the Company about the assumptions used in the measurement of the respective fair value in the financial statements.

Based on the result of the audit procedures performed on the measurement of the fair value of biological assets, we understand that the criteria and assumptions adopted by Management, as well as the respective disclosures in the notes to the financial statements, are adequate in the context of the financial statements taken as a whole.

### *(c) Revenue recognition*

As described in notes 6 and 31 to the financial statements, the Company's revenue derives from the sale of ferroalloys, ferrochrome, ferrosilicon and energy. As a result of the relevance of the net revenue in the Company's individual and consolidated financial statements, in the amount of R\$1,310,070 thousand and R\$1,381,722 thousand, respectively, as well as the processes that support their recognition, some risks must be addressed, as follows: (i) the inherent risk that revenue is recognized without meeting all minimum revenue recognition requirements; and (ii) the deemed risk of revenue recognition without any rationale or justification in line with the Company's normal course of business. Consequently, revenue recognition is considered as one of the key audit matters.

Accordingly, our audit procedures included, without limitation: (i) obtaining an understanding of the revenue recognition flow considering the revenue nature and contractual aspects, among others; (ii) assessing the design, implementation and effectiveness of the relevant internal controls determined by Management on revenue recognition; (iii) obtaining an understanding of the main systems used in the revenue recognition process and reviewing, with the support of IT specialists, the automated controls of the relevant systems; and (iv) selecting sales transactions over the year based on a statistical sampling, and comparison with the respective supporting documentation to verify whether they represented valid revenues in line with the Company's normal course of business, as well as their respective recording in the proper period.

Based on the result of the audit procedures, we understand that the revenue recognition criteria adopted by Management, as well as the respective disclosures in the notes to the financial statements, are adequate in the context of the financial statements taken as a whole.

## **Other matters**

### *Statements of value added*

The individual and consolidated statements of value added ("DVA") for the year ended December 31, 2018, prepared under the responsibility of the Company's Management and disclosed as supplemental information for purposes of the IFRSs, were subject to audit procedures performed together with the audit of the Company's financial statements. In forming our opinion, we evaluated whether these individual and consolidated statements of value added are reconciled with the financial statements and accounting records, as applicable, and whether their form and content are in accordance with the criteria set out in technical pronouncement CPC 09 - Statement of Value Added. In our opinion, these statements of value added were appropriately prepared, in all material respects, in accordance with the criteria set out in such technical pronouncement and are consistent in relation to the individual and consolidated financial statements taken as a whole.

## **Other information accompanying the individual and consolidated financial statements and the independent auditor's report**

Management is responsible for the other information. The other information comprises the Management Report.

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

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

## **Responsibilities of Management and those charged with governance for the individual and consolidated financial statements**

Management is responsible for the preparation and fair presentation of the individual and consolidated financial statements in accordance with accounting practices adopted in Brazil and the IFRS, issued by the IASB, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the individual and consolidated financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate the Company and its subsidiaries or to cease operations, or has no realistic alternative but to do so.

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

## **Auditor's responsibilities for the audit of the individual and consolidated financial statements**

Our objectives are to obtain reasonable assurance about whether the individual and consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Brazilian and International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Brazilian and International Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

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

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's and its subsidiaries' internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's and its subsidiaries' ability to continue as going concerns. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the individual and consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company and its subsidiaries to cease to continue as going concerns.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the individual and consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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

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

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

The accompanying individual and consolidated financial statements have been translated into English for the convenience of readers outside Brazil.

Salvador, February 26, 2019

  
DELOITTE TOUCHE TOHMATSU  
Auditores Independentes

  
José Luiz Santos Vaz Sampaio  
Engagement Partner

(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

BALANCE SHEET AS AT DECEMBER 31, 2018  
(Amounts expressed in thousand of Brazilian reais - R\$)

	Note	Parent		Consolidated			Note	Parent		Consolidated	
		12/31/2018	12/31/2017	12/31/2018	12/31/2017			12/31/2018	12/31/2017		
<b>CURRENT ASSETS</b>						<b>CURRENT LIABILITIES</b>					
Cash and cash equivalents	9	157,075	77,758	182,113	92,440	Trade payables	20	56,226	61,125	61,084	61,125
Short-term investments	10	110,132	407,005	110,132	421,571	Borrowings and financing	21	18,030	6,393	44,071	6,393
Trade receivables	11	128,622	129,315	135,943	129,315	Obligations with acquisition of subsidiary	22	39,554	-	39,554	-
Inventories	12	313,016	201,977	313,126	202,087	Labor and actuarial liabilities	23	75,091	67,553	75,131	67,575
Recoverable taxes	13	17,415	11,547	18,506	12,235	Income taxes and social contributions	24	21,144	6,651	22,968	6,737
Prepaid expenses		3,272	1,595	3,272	1,595	CCEE reimbursement account		-	-	1,002	-
Advances to suppliers	14	13,356	13,560	13,356	13,560	Provision for environmental liabilities	26	-	-	1,656	-
Foreign exchange hedging instruments	25	25,087	993	25,087	993	Proposed dividends and interest on capital		8,361	20,231	8,454	20,328
Other assets		15,848	14,974	8,873	14,583	Other liabilities		5,744	6,938	6,153	6,945
Total current assets		783,823	858,724	810,408	888,379	Total current liabilities		224,150	168,891	260,073	169,103
<b>NONCURRENT ASSETS</b>						<b>NONCURRENT LIABILITIES</b>					
Advances to suppliers	14	30,697	42,165	30,697	42,165	Borrowings and financing	21	46,132	59,989	352,744	59,989
Deferred taxes		-	6,867	-	5,312	Obligations with acquisition of subsidiary	22	137,182	-	137,182	-
Short-term investments	10	-	2,730	78,930	26,089	Labor and actuarial liabilities	23	67,586	41,478	67,586	41,478
Inventories	12	377	3,305	377	3,305	Taxes and social contributions	24	-	-	87	87
Recoverable taxes	13	5,422	5,454	5,422	5,454	Deferred Taxes	15	10,655	-	12,210	-
Judicial deposits	16	10,796	5,834	12,041	5,930	CCEE reimbursement account		-	-	8,334	-
Other receivables		534	431	545	442	Provision for contingencies	27	51,445	52,197	51,445	52,197
Investments	17	591,627	53,522	124	124	Provision for environmental liabilities	26	12,293	11,049	21,134	11,049
Property, plant and equipment and intangibles	18	670,080	658,886	1,521,958	666,515	Total noncurrent liabilities		325,293	164,713	650,722	164,800
Biological assets	19	199,408	212,746	199,408	212,746	<b>EQUITY</b>					
Total noncurrent assets		1,508,941	991,940	1,849,502	968,082	Capital	29	1,225,444	1,225,444	1,225,444	1,225,444
						Retained earnings		498,861	286,696	498,861	286,696
						Equity assessment adjustment		44,770	30,674	44,770	30,674
						Treasury shares		(25,754)	(25,754)	(25,754)	(25,754)
						Equity attributable to owners of the Company		1,743,321	1,517,060	1,743,321	1,517,060
						Noncontrolling interests		-	-	5,794	5,498
						Total equity		1,743,321	1,517,060	1,749,115	1,522,558
						<b>TOTAL LIABILITIES AND EQUITY</b>					
								2,292,764	1,850,664	2,659,910	1,856,461
<b>TOTAL ASSETS</b>		<u>2,292,764</u>	<u>1,850,664</u>	<u>2,659,910</u>	<u>1,856,461</u>			<u>2,292,764</u>	<u>1,850,664</u>	<u>2,659,910</u>	<u>1,856,461</u>

The accompanying notes are an integral part of these financial statements

(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

INCOME STATEMENT

FOR THE YEAR ENDED DECEMBER 31, 2018

(Amounts expressed in thousands of Brazilian reais - R\$, except earnings per share)

	Note	Parent		Consolidated	
		12/31/2018	12/31/2017	12/31/2018	12/31/2017
NET SALES REVENUE	31	1,310,070	1,108,842	1,381,056	1,108,722
Cost of sales	32	(873,115)	(759,394)	(920,601)	(758,296)
Changes in fair value of biological assets	19	22,266	41,368	22,266	41,368
<b>GROSS PROFIT</b>		<u>459,221</u>	<u>390,816</u>	<u>482,721</u>	<u>391,794</u>
OPERATING INCOME (EXPENSES)					
Selling expenses	32	(10,884)	(22,416)	(10,884)	(22,416)
General and administrative expenses		(127,366)	(116,937)	(135,923)	(118,596)
Other operating income (expenses), net		43,433	(4,315)	39,660	(4,768)
Equity method	17	(15,096)	2,129	-	-
		(109,913)	(141,539)	(107,147)	(145,780)
<b>SHARE OF PROFIT OF INVESTEEES</b>		<u>349,308</u>	<u>249,277</u>	<u>375,574</u>	<u>246,014</u>
FINANCE INCOME (COSTS)	33				
Finance income		43,052	70,561	48,920	75,652
Finance costs		(46,624)	(12,692)	(74,594)	(12,778)
		(3,572)	57,869	(25,674)	62,874
<b>PRETAX INCOME</b>		<u>345,736</u>	<u>307,146</u>	<u>349,900</u>	<u>308,888</u>
INCOME TAX AND SOCIAL CONTRIBUTION	15				
Current		(26,676)	(24,882)	(30,451)	(26,214)
Deferred		(10,261)	(12,412)	(10,261)	(12,412)
		(36,937)	(37,294)	(40,712)	(38,626)
<b>PROFIT FOR THE YEAR</b>		<u>308,799</u>	<u>269,852</u>	<u>309,188</u>	<u>270,262</u>
Profit attributable to owners of the Company				308,799	269,852
Profit attributable to noncontrolling interests				389	410
Basic and diluted earnings per common share - R\$	30			3.4059	2.9763
Basic and diluted earnings per preferred share - R\$	30			3.7465	3.2739

The accompanying notes are an integral part of these financial statements



(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

STATEMENTS OF COMPREHENSIVE INCOME  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts expressed in thousands of Brazilian reais - R\$)

---

	Note	Parent		Consolidated	
		<u>12/31/2018</u>	<u>12/31/2017</u>	<u>12/31/2018</u>	<u>12/31/2017</u>
PROFIT FOR THE YEAR		308,799	269,852	309,188	270,262
Item to be subsequently reclassified to profit or loss:					
Cash flow hedge	29	24,094	(15,318)	24,094	(15,318)
Actuarial	23 and 29	(2,737)	(9,551)	(2,737)	(9,551)
Deferred taxes		(7,261)	8,455	(7,261)	8,455
TOTAL COMPREHENSIVE INCOME		<u>322,895</u>	<u>253,438</u>	<u>323,284</u>	<u>253,848</u>
Total comprehensive income attributable to owners of the Company				328,368	253,438
Total comprehensive income attributable to noncontrolling interests				389	410

The accompanying notes are an integral part of these financial statements

(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

STATEMENTS OF CHANGES IN EQUITY  
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017  
(Amounts expressed in thousands of Brazilian reais - R\$)

	Attributable to owners of the Company										Attributable to noncontrolling interests	Total consolidated equity
	Earnings reserves					Supplementary dividends and interest on capital	Other comprehensive income and valuation adjustments to equity	Treasury shares	Retained earnings	Total equity		
	Capital	Legal	Tax incentive	Investments	Profits to be realized							
BALANCE AS AT DECEMBER 31, 2016	1,116,677	76,444	108,767	26,882	-	2,150	47,088	(25,754)	-	1,352,254	5,190	1,357,444
Capitalization of reserves	108,767	-	(108,767)	-	-	-	-	-	-	-	-	-
Other	-	-	-	3,302	-	-	-	-	-	3,302	-	3,302
Supplementary dividends	-	-	-	-	-	(2,150)	-	-	-	(2,150)	-	(2,150)
Forfeited dividends	-	-	-	-	-	-	-	-	351	351	-	351
Comprehensive income	-	-	-	-	-	-	(16,414)	-	-	(16,414)	-	(16,414)
Profit for the year	-	-	-	-	-	-	-	-	269,852	269,852	410	270,262
Allocation of profit:												
Recognition of reserves	-	13,493	48,960	117,615	-	-	-	-	(180,068)	-	-	-
Dividends and interest on capital	-	-	-	-	-	-	-	-	(90,135)	(90,135)	(102)	(90,237)
BALANCE AS AT DECEMBER 31, 2017	1,225,444	89,937	48,960	147,799	-	-	30,674	(25,754)	-	1,517,060	5,498	1,522,558
Comprehensive income	-	-	-	-	-	-	14,096	-	-	14,096	-	14,096
Profit for the year	-	-	-	-	-	-	-	-	308,799	308,799	389	309,188
Allocation of profit:												
Recognition of reserves	-	15,440	69,949	77,181	49,595	-	-	-	(212,165)	-	-	-
Dividends and interest on capital	-	-	-	-	-	-	-	-	(96,634)	(96,634)	(93)	(96,727)
BALANCE AS AT DECEMBER 31, 2018	1,225,444	105,377	118,909	224,980	49,595	-	44,770	(25,754)	-	1,743,321	5,794	1,749,115

The accompanying notes are an integral part of these financial statements

(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

STATEMENTS OF CASH FLOWS  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts expressed in thousands of Brazilian reais - R\$)

	Note	Parent		Consolidated	
		12/31/2018	12/31/2017	12/31/2018	12/31/2017
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>					
Profit for the year		308,799	269,852	309,188	270,262
Adjustments to reconcile profit to cash provided by operating activities:					
Interest, inflation adjustments and exchange rate changes, net		4,988	(29,405)	28,281	(33,032)
Depreciation, amortization, and depletion (mines)		55,558	64,291	87,975	64,489
Depletion of biological assets	18	59,197	45,584	59,197	45,584
Changes in fair value of biological assets	19	(22,266)	(41,368)	(22,266)	(41,368)
Share of profit (loss) of investees	19	15,096	(2,129)	-	-
Deferred taxes	17	10,261	12,412	10,261	12,412
Recognition (reversal) of provision for contingencies	15	(2,071)	4,972	(2,071)	4,972
Post-employment benefit update	23	23,371	5,993	23,371	5,993
Bargain purchase	1.1	(75,143)	-	(75,143)	-
Other		1,147	(2,502)	5,186	(2,502)
Decrease (increase) in assets:					
Trade receivables		5,928	2,874	6,988	2,874
Inventories		(111,039)	11,040	(111,039)	11,040
Recoverable taxes		2,701	1,423	2,511	1,351
Advances to suppliers		13,377	13,745	13,377	13,745
Other assets		178	3,611	(1,527)	5,861
Increase (decrease) in liabilities:					
Trade payables		(4,386)	8,918	(5,551)	8,966
Income tax and social contribution		14,155	(6,580)	13,732	(6,564)
Income tax and contribution payable		(7,485)	4,889	(6,084)	4,593
Labor and actuarial liabilities		7,538	27,910	7,556	27,904
Interest paid		(4,831)	(3,946)	(27,024)	(3,946)
Other liabilities		(2,203)	(241)	(10,822)	(243)
Net cash provided by operating activities		<u>292,870</u>	<u>391,343</u>	<u>306,096</u>	<u>392,391</u>
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>					
Purchase of property, plant and equipment	18	(67,685)	(71,448)	(67,703)	(71,448)
Biological assets	19	(23,593)	(19,096)	(23,593)	(19,096)
Dividends received		1,594	4,598	-	-
Proceeds from the sale of property, plant and equipment		471	38	471	38
Short-term investments and redemptions		305,217	(295,964)	312,874	(283,966)
Acquisition of subsidiary	1.1	(321,371)	-	(321,371)	-
Capital increase	17	(3,900)	-	-	-
Capital reduction	17	7,000	-	-	-
Net cash used in investing activities		<u>(102,267)</u>	<u>(381,872)</u>	<u>(99,322)</u>	<u>(374,472)</u>
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>					
Borrowings and financing	21	30,500	29,243	30,790	29,243
Amortization of borrowings and financing	21	(33,282)	(2,572)	(52,522)	(2,572)
Dividends and interest on capital paid		(108,504)	(144,426)	(108,600)	(144,550)
Net cash used in financing activities		<u>(111,286)</u>	<u>(117,755)</u>	<u>(130,332)</u>	<u>(117,879)</u>
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		<u>79,317</u>	<u>(108,284)</u>	<u>76,442</u>	<u>(99,960)</u>
Cash and Equivalents at the beginning of the year	9	77,758	186,042	105,671	192,400
Cash and Equivalents at the end of the year	9	157,075	77,758	182,113	92,440
<b>INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS</b>		<u>79,317</u>	<u>(108,284)</u>	<u>76,442</u>	<u>(99,960)</u>

The accompanying notes are an integral part of these financial statements

(Convenience Translation into English from the Original Previously Issued in Portuguese)

CIA DE FERRO LIGAS DA BAHIA S.A. - FERBASA AND SUBSIDIARIES

STATEMENTS OF VALUE ADDED  
FOR THE YEAR ENDED DECEMBER 31, 2018  
(Amounts expressed in thousands of Brazilian reais - R\$)

	Note	Parent		Consolidated	
		12/31/2018	12/31/2017	12/31/2018	12/31/2017
Sales revenue		1,562,387	1,323,966	1,636,502	1,323,966
Other income		<u>159,175</u>	<u>114,105</u>	<u>159,175</u>	<u>114,105</u>
		<u>1,721,562</u>	<u>1,438,071</u>	<u>1,795,677</u>	<u>1,438,071</u>
INPUTS PURCHASED FROM THIRD PARTIES					
Costs of sales and raw materials		(177,847)	(251,671)	(201,344)	(250,783)
Materials, energy, third-party services and others		<u>(602,856)</u>	<u>(409,638)</u>	<u>(600,546)</u>	<u>(409,970)</u>
		<u>(780,703)</u>	<u>(661,309)</u>	<u>(801,890)</u>	<u>(660,753)</u>
Gross value added		940,859	776,762	993,787	777,318
Depreciation, amortization, and depletion	18 and 19	(114,755)	(109,875)	(147,172)	(110,073)
WEALTH CREATED BY THE COMPANY		<u>826,104</u>	<u>666,887</u>	<u>846,615</u>	<u>667,245</u>
WEALTH RECEIVED IN TRANSFER					
Finance income	33	43,052	70,561	48,920	75,652
Share of profit (loss) of investees	17	(15,096)	2,129	-	-
TOTAL WEALTH FOR DISTRIBUTION		<u>854,060</u>	<u>739,577</u>	<u>895,535</u>	<u>742,897</u>
WEALTH DISTRIBUTED					
Employees:					
Salaries and wages		192,781	176,087	197,764	177,142
Benefits		74,598	70,756	74,598	70,756
Severance Pay Fund (FGTS)		<u>14,052</u>	<u>13,024</u>	<u>14,267</u>	<u>13,024</u>
		<u>281,431</u>	<u>259,867</u>	<u>286,629</u>	<u>260,922</u>
Taxes, fees and contributions:					
Federal		140,046	141,381	148,601	143,142
State		64,181	46,355	64,181	46,355
Municipal		<u>1,068</u>	<u>848</u>	<u>1,079</u>	<u>853</u>
		<u>205,295</u>	<u>188,584</u>	<u>213,861</u>	<u>190,350</u>
Lenders and lessors		58,535	21,274	85,857	21,363
Shareholders		96,634	90,135	96,727	90,237
Profit of the year		212,165	179,717	212,165	179,717
Noncontrolling interests		-	-	296	308
		<u>308,799</u>	<u>269,852</u>	<u>309,188</u>	<u>270,262</u>
WEALTH DISTRIBUTED		<u>854,060</u>	<u>739,577</u>	<u>895,535</u>	<u>742,897</u>

The accompanying notes are an integral part of these financial statements

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 1 General Information

Cia de Ferro Ligas da Bahia S.A. ("Ferbasa" or "Company") is a publicly-held corporation, headquartered in Pojuca, State of Bahia (BA), registered with the Brazilian Securities and Exchange Commission ("CVM") and listed on the São Paulo Stock Exchange (B3).

The Company started to operate on February 23, 1961 and is engaged in the manufacturing and sale of ferroalloys, ferrochrome and ferrosilicon; the exploration of chrome ore, lime and quartz deposits for own consumption or sale; design, implementation and management of forest-related projects to obtain timber for the production of bio-reducer for own consumption or sale; and establishment and exploration of any industry that, either directly or indirectly, is related to its corporate purpose, including by holding interest in other companies. Its parent company is Fundação José Carvalho, whose mission is to serve children, adolescents and underprivileged youth, in municipalities in the Northeastern region of Brazil, by offering basic education for the development of individuals capable of exercising citizenship and respecting the human being in all aspects, always based on ethical, cooperation and solidarity principles.

These financial statements were approved by the Company's Board of Directors on February 26, 2019.

##### 1.1. Acquisition of control of BW Guirapá

According to a material fact notice issued by the Company on December 22, 2017, Cia de Ferro Ligas da Bahia - Ferbasa S.A., Santander Corretora de Seguros, Investimentos e Serviços S.A. and Brazil Wind S.A. entered into a purchase and sale agreement for 100% of the shares issued by BW Guirapá I S.A. ("BW Guirapá"), which indirectly includes the acquisition of 100% of the shares of the seven Wind Power Plants of Guirapá complex. The purchase process mentioned above is in line with the Company's Strategic Plan and aims to ensure and implement process improvements and Ferbasa productive cycle.

The Guirapá Wind Farm Complex is located in the State of Bahia, with a total installed capacity of 170.2 MW, an operating period of 35 years and energy contracted for 20 years, through the Reserve Energy Auction held in 2011, whose contracts expire in 2034.

The following is a summary of the operational characteristics of each of the Wind Power Plants:

Wind Power Plant	Capacity installed (MW)*	Contracted Energy 1st Quadrenian (MWmed) <sup>(3)</sup>	Contracted Energy 2st Quadrenian (MWmed) <sup>(3)</sup>	1st Ordinance Authorization of MME (1)	Initial price of Contract (R\$/Mwh)	Update Price (R\$/Mwh) <sup>(2)</sup>
Angical	12.95	6.0	5.6	37, of 02/03/2012	99.98	151.13
Caititu	22.2	10.5	10.5	54, of 02/09/2012	99.98	151.13
Coqueirinho	29.6	13.5	13.4	53, of 02/09/2012	96.97	146.58
Corrupião	27.75	13.7	12.9	70, of 02/22/2012	96.97	146.58
Inhambu	31.45	15.5	15.5	69, of 02/22/2012	96.97	146.58
Tamandua Mirim	29.6	13.6	13.2	52, of 02/09/2012	96.97	146.58
Teiú	16.65	8.2	7.7	36, of 02/03/2012	99.98	151.13
	<u>170.2</u>	<u>81.0</u>	<u>78.8</u>			

(\*) According to Ordinance Authorization of MME.

(1) Authorized to establish itself as an independent producer of electric energy for a term of 35 years since the 1<sup>st</sup> Ordinance of MME - Ministry of Mines and Energy. The 2<sup>nd</sup> Ordinance changed the technical characteristics to suit the reality of the parks.

(2) Amount updated annually by the IPCA since July 2011. Values updated by CCEE base date August 2018.

(3) According to the purchase and sale agreement, the 1<sup>st</sup> quadrenian ended in June 2018 and the 2<sup>nd</sup> quadrenian began in July 2018

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

The closing and effective performance of the transaction were linked, among other conditions, to: (i) signing of the definitive documents; (ii) maintenance of the ordinary course of business of the SPEs (Special Purpose Entities); (iii) obtaining the necessary approvals from the competent authorities; and (iv) approval of the transaction at an Extraordinary General Meeting of Ferbasa.

The Extraordinary Shareholders' Meeting held on January 29, 2018 approved the operation, pursuant to art. 256, paragraph 1 of the Brazilian Corporate Law and CVM 358/02. The acquisition price initially measured was R\$450,000, which was adjusted up to the legal closing of the transaction by the Interbank Deposit Certificate ("CDI") plus 1% per annum, and may be increased by the earn-out payment detailed below, as disclosed in the financial statements for the year ended December 31, 2017.

On February 6, 2018, the General Superintendence of the Administrative Council for Economic Defense ("CADE") approved, without restrictions, the purchase transaction.

The acquisition process was completed on April 2, 2018, after all previous and legal conditions of the transaction were met. As of this date, the Company hold the direct control of BW Guirapá and ownership of all shares.

On April 2, 2018, the purchase price (consideration transferred) was remeasured totaling R\$489,184, considering: (i) the inflation adjustments by the CDI plus 1% per annum amounted to R\$469,128, of which R\$321,371 was paid by bank transfer on this date and R\$156,376 recorded under the caption "Obligations with acquisition of subsidiary" (see note 22) to be paid in 3 installments (see note 22), the installments are also adjusted by the CDI rate plus 1% p.a.; (ii) the increase in price resulting from negotiations with suppliers in the amount of R\$17,906, of which R\$8,619 was paid and R\$9,207 to be paid in 3 installments (see note 22); and (iii) the earn-out payment of R\$2,150, detailed below and see note 22. It should be noted that these adjustments are within the measurement period, as provided for in CPC 15.

As mentioned, the Acquisition Price may be increased up to R\$40,000 adjusted by the IPCA in the form of a earn-out payment if the performance of the Guirapá Complex, calculated up to December 2021, exceeds the assumed minimum reference of 79,44 average MW, limited to 85 average MW. Accordingly, based on the evaluation of the performance projections, the Company's Management concluded that it should include in the purchase price a contingent consideration at fair value estimated at R\$2,150, as mentioned above and recorded in the caption "Obligations with acquisition of subsidiaries" (see note 22).

The expenses incurred in the acquisition, in the amount of R\$2,136, were recognized in the Company's profit and loss account, related to the acquisition process, under the heading "Expenses with rendering of services", not being part of the acquisition cost.

This acquisition resulted in a business combination, as the Company now holds control of BW Guirapá. Pursuant to CPC 15 (R1) - Business Combinations, business acquisitions are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated by the sum of the fair values of the transferred assets, the liabilities assumed on the date of acquisition with the former controlling shareholders of the acquiree and the shares issued in exchange for control of the acquiree.

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

The acquisition of BW Guirapá occurred on April 2, 2018. As a result, the effects of this acquisition affected the consolidated results of operations of the Company as of this date, and BW Guirapá's equity was measured at its fair value on March 31, 2018 based on the preliminary financial economic report, issued by an independent valuation company.

The following table sets forth the calculation of the fair value of the assets and liabilities arising from the purchase of BW Guirapá on the date of acquisition:

<u>ASSETS</u>	<u>Book Value</u>	<u>Adjustments</u>	<u>Fair Value</u>
<u>Current assets</u>			
Cash and cash equivalents	13,231		13,231
Trade receivables	8,381		8,381
Recoverable taxes	213		213
Other assets	877		877
<u>Noncurrent assets</u>			
Related deposits	43,115		43,115
Deferred taxes	686		686
Property, plant and equipment	800,652	80,038 (i)	880,690
Fair value of assets	<u>867,155</u>	<u>80,038</u>	<u>947,193</u>
<u>LIABILITIES</u>			
<u>Current liabilities</u>			
Trade payables	5,691		5,691
Financing	26,447		26,447
Reimbursement account CCEE	9,223		9,223
Provision for social- and environmental liabilities	2,745		2,745
Guarantee	1,344		1,344
Other trade payables	1,903		1,903
<u>Noncurrent liabilities</u>			
Financing	323,272		323,272
Reimbursement account CCEE	3,074		3,074
Provision for contingencies	-	1,309 (ii)	1,309
Provision for asset decommissioning	7,858		7,858
Fair value of liabilities	<u>381,557</u>	<u>1,309</u>	<u>382,866</u>
Fair value of net assets acquired	<u>485,598</u>	<u>78,729</u>	<u>564,327</u>
Total acquisition cost			<u>489,184</u>
Gross bargain purchase			<u>75,143</u>
(-)Tax effect			<u>(25,848)</u>
Net bargain purchase			<u>49,595</u>

(i) In October 2018, the appraisal report on the net assets of the Guirapá Complex, issued by an independent valuation company, was concluded, and the Company made an adjustment to fair value in the amount of R\$80,038, related to the appreciation of machinery and equipment. This appreciation of the net assets acquired is basically due to the appreciation of the dollar, the price of inputs and inflation. In the individual financial statements, this amount is presented in the caption "Investments". In the consolidated interim financial information, it is presented as property, plant and equipment (see note 17).

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

(ii) At the date of acquisition, a contingent liability with a fair value of R\$1,309 was identified. This liability refers to seven lawsuits filed against BW Guirapá and its subsidiaries, which were classified as possible risk of loss, with a probability of 50%, being conservatively estimated and provisioned by the Company (see note 27).

The initial accounting for the acquisition was preliminarily determined on June 30, 2018. On December 31, 2018, based on the Company's best estimate, considering assumptions and appropriate methodology to allocate the purchase price, this accounting considered a the fair value measurement of the assets and liabilities, performed by independent experts hired by the Company, and is subject to possible modifications arising from facts existing on the acquisition date and that may come to Management's attention during the adjustment period up to one year after the acquisition date, as provided for in accounting pronouncement CPC 15 (R1).

In the period from April 1, 2018 to December 31, 2018, net revenue and loss for the period generated by the Guirapá Complex and included in the consolidated financial information of the Company's results represent R\$71,105 and R\$12,834, respectively, as follows.

Had the business combination occurred on January 1, 2018, the income statement would be as shown in the table below. The information on net operating revenue and net profit for the year was obtained by aggregating the amounts derived from the accounting records of the Company and the acquiree BW Guirapá.

	Consolidated Ferbasa	Guirapá Complex	Combined 9 months Ferbasa
	04/01/2018 to 12/31/2018	01/01/2018 to 03/31/2018	01/01/2018 to 12/31/2018
Energy sales revenue	71,105	19,709	90,814
Cost with energy generation	(48,585)	(14,924)	(63,509)
Gross profit	22,520	4,785	27,305
General and Administrative Expenses	(6,961)	(5,178)	(12,139)
BW Guirapá goodwill write-off	-	(19,995)	(19,995)
Financial expenses	(27,881)	(9,129)	(37,010)
Financial income	2,562	752	3,314
Pre-tax loss	(9,760)	(28,765)	(38,525)
Income tax and social contribution	(3,074)	(702)	(3,776)
Loss for the period	(12,834)	(29,467)	(42,301)



## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

## **2 Statement of compliance and basis of preparation**

### **Statement of compliance**

The individual and consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") and also in accordance with the accounting practices adopted in Brazil ("BR GAAP").

The accounting practices adopted in Brazil comprise the policies set out in Brazilian Corporate Law and the technical pronouncements, guidelines and interpretations issued by the Accounting Pronouncements Committee ("CPC") and approved by the Federal Accounting Council ("CFC") and the Brazilian Securities and Exchange Commission ("CVM").

As there is no difference between the consolidated equity and the consolidated profit or loss attributable to the Company's shareholders, disclosed in the consolidated financial statements prepared in accordance with IFRSs and the accounting practices adopted in Brazil, and the Parent's equity and profit or loss disclosed in the individual financial statements prepared in accordance with IFRSs and the accounting practices adopted in Brazil, the Company opted for presenting these individual and consolidated financial statements in a single set, using a side-by-side format.

Management asserts that all relevant information for the financial statements, and only this information, is disclosed and that it corresponds to the information used in managing the Company.

### **Basis of preparation**

The individual and consolidated financial statements have been prepared based on the historical cost and adjusted to reflect the deemed cost of certain property, plant and equipment items at the date of transition to CPC/IFRS, except for certain financial assets and financial liabilities (including foreign exchange hedging instruments) and biological assets measured at their fair values.

The presentation of the individual and consolidated Statement of Value Added (DVA) is required by the Brazilian Corporate Law and the accounting practices adopted in Brazil applicable to publicly-held companies. The IFRSs do not require the presentation of such statement. Consequently, the presentation of the Statement of Value Added is considered by the IFRSs as supplemental information, without prejudice to the set of financial statements.

The preparation of financial statements requires the use of certain critical accounting estimates and the exercise of judgment by the Company's Management in the process of application of the Company's and its subsidiaries' accounting policies. The areas involving a higher degree of judgment and complexity, as well as those where assumptions and estimates are significant to the financial statements, are disclosed in note 4.

The significant accounting policies adopted in preparing these financial statements are described below. These policies have been applied consistently for the reporting years presented.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

### **3 Functional currency and translation of foreign currency**

The Company's and its subsidiaries' functional currency is the Brazilian real (R\$), which represents the currency of the main economic environment where the Company and its subsidiaries operate and the currency used in preparing and presenting the financial statements.

Foreign currency-denominated transactions are translated into the functional currency at the exchange rates prevailing on the transaction dates or measurement dates, when items are remeasured. Exchange gains and losses resulting from the settlement of these transactions and the translation at the exchange rates effective at the balance sheet date, for foreign currency-denominated monetary assets and liabilities, are recorded in the income statement for the period they are earned or incurred.

### **4 Critical accounting judgments and key sources of estimation uncertainties**

Accounting estimates and judgments are continuously assessed and are based on past experience and other factors, including expected future events, that are deemed reasonable in the circumstances. The effects arising from the revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in subsequent periods if the revision affects both current and future periods.

By definition, the resulting accounting estimates may differ from the respective actual results. The estimates and assumptions that present a significant risk and probably would cause a material adjustment to the carrying amount of assets and liabilities for the next year are as follows:

(a) Biological assets

The calculation of the fair value of biological assets takes into consideration various assumptions with some level of judgment, such as the estimated sales price, the cubic volume of timber, the annual average increase per tree nursery and the business risk rate. Any changes in these assumptions may entail changing the result of the discounted cash flow and, consequently, the appreciation of these assets.

(b) Provision for mine closure

The Company considers accounting estimates related to the costs to close a mine as a critical accounting policy as it involves material provision amounts and refers to estimates that involve several assumptions, such as interest rate, inflation rate, and assets' useful lives, taking into consideration the current stage of depletion and the projected depletion dates of each mine. Although the estimates are reviewed annually, this provision requires the use of assumptions to project cash flows applicable to the operations.

**Cia de Ferro Ligas da  
Bahia - FERBASA**

**Notes to the Financial Statements  
For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

(c) Fair value of financial instruments

The fair value of financial instruments that are not traded in active markets (e.g., over-the-counter derivatives) is determined using valuation techniques. These valuation techniques maximize the use of information obtained from fund managers or financial institutions with which the Company maintains the financial instruments. The fair values recognized in the financial statements may not represent the amount of cash that the Company would receive or pay upon settlement of transactions.

(d) Allowance for obsolete inventories

The Company recognizes allowances for obsolete and slow-moving inventories, related to items with no turnover for more than five years. This allowance is determined based on the best information available at the balance sheet date, involving past experience, as well as area specialists, when applicable.

(e) Provision for risks

The Company manages its lawsuits internally and is supported by specialized law firms on a timely basis, generally in relation to tax lawsuits. The Company analyzes, based on the history of the claim, the expected cash disbursement and the likelihood of loss for each lawsuit. Accordingly, the Legal Department prepares an analysis based on the lawsuit amount, risk and necessary provision to be recorded in the financial statements, which amount is normally different from the lawsuit amount.

The Company is a party to labor, civil and tax lawsuits. These lawsuits, when applicable, are backed by escrow deposits (note 27).

(f) Provision for actuarial obligations

The current amount of postemployment defined benefit plans, relating to the health care and pension plan, and retirement premium, depends on a series of factors that are determined based on actuarial calculations that use a series of assumptions. The assumptions used to determine the net cost (revenue) for such postemployment benefit plans include the discount rate. Any changes in these assumptions will affect the carrying amount of the postemployment benefit plan obligations (note 23).

The Company determines the proper discount rate at the end of each year. This is the interest rate that should be used to determine the present value of future estimated cash outflows that should be required to settle the postemployment benefit plans. In determining the proper discount rate, the Company considers the interest rates applicable to government bonds. The Company adopts the discount rate of the government bonds that are compatible with the average estimated term for payment of the postemployment benefit plans (duration). For those cases where there are no government bonds with the same duration attributed to the plan, the Company adopted the linear interpolation.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

- (g) Useful lives of property, plant and equipment

As described in note 6 (f), the Company reviews the useful lives of property, plant and equipment items and the estimated minable deposits on an annual basis, at the end of each reporting period.

## **5 Financial assets and financial liabilities**

### **5.1 Financial assets**

Financial assets are classified upon initial recognition at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss.

- (i) Amortized cost

Financial instruments included in this group comprise balances arising from regular transactions such as trade receivables, judicial deposits, trade payables, borrowings and financing and debentures, short-term investments and cash and cash equivalents held by the Company. All financial instruments are stated at their nominal amounts plus, when applicable, charges and contractual interest rates, the expenses and income of which are recognized in profit or loss for the period.

- (ii) Measured at fair value through profit or loss

These assets are subsequently measured at fair value. The net profit or loss, including interest, is recognized directly in profit or loss.

- (iii) Measured at fair value through other comprehensive income

These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, exchange gains and losses and impairment are recognized in profit or loss. Other net profit or loss are recognized in "Other comprehensive income". Upon derecognition, the profit or loss accumulated in "Other comprehensive income" is reclassified to profit or loss.

- (a) Recognition and measurement

Regular-way purchases and sales of financial assets are recognized on the trade date. The financial assets are initially recognized at fair value, plus transaction costs for all financial assets not measured at the fair value through profit or loss. Financial assets are derecognized when the rights to receive cash flows expire or are transferred; in the latter case, provided that the Company has substantially transferred all the risks and rewards of ownership associated with the financial assets.

Loans and receivables are initially measured at fair value and, subsequently, at amortized cost using the effective interest method, less any impairment losses. Interest income is recognized by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

(b) Impairment of financial assets

The Company recognizes the allowance for impairment losses in an amount corresponding to the lifetime expected credit loss. When determining whether the credit risk of a financial asset has increased significantly since the initial recognition and estimating the expected credit losses, the Company takes into consideration reasonable, supportable information that is relevant and available without excessive cost or effort. This includes quantitative and qualitative information and analyses, based on the Company's historical experience, credit rating and prospective information. The allowance for doubtful debts was calculated based on the credit risk analysis, which includes the history of loss, individual situation of customers, situation of the economic group to which they belong, collaterals for debts and the opinion of the legal counsel, and is considered sufficient to cover probable losses on the collection of receivables, in addition to a prospective analysis that takes into consideration the change or expected change in economic factors that affect expected credit losses, which will be determined based on weighted probabilities. The Company recognizes the impairment of financial assets (allowance for doubtful debts) in "Selling expenses" in the income statement and in "Allowance for doubtful debts" in note 32 for purposes of breakdown of the income statement by nature.

(b) Derecognition

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the contractual rights to receive contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor maintains substantially all the risks and rewards of ownership of the financial asset nor retains control over the financial asset.

## **5.2 Financial liabilities**

Financial liabilities are classified as measured at amortized cost or at fair value through profit or loss. Financial liabilities are classified as measured at fair value through profit or loss when they are held for trading, are derivatives or are designated as such upon initial recognition. Financial liabilities measured at fair value through profit or loss are measured at fair value and the net profit or loss, including interest, is recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and exchange gains and losses are recognized in profit or loss.

The Company's financial liabilities are represented by borrowings and financing, and trade payables, classified as other financial liabilities.

The Company derecognizes a financial liability when its contractual obligations are discharged, canceled or expire. The Company also derecognizes a financial liability when the terms are modified and the cash flows from the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value. Upon derecognition of a financial liability, the difference between the extinguished carrying amount and the consideration paid (including non-cash transferred assets or liabilities assumed) is recognized in profit or loss.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

#### **5.3 Foreign exchange hedging instruments**

The Company uses foreign exchange hedging instruments. These instruments are initially recognized at their fair values at the commencement of the derivative contracts and are subsequently remeasured at their fair values.

The method used to recognize the gain or loss arising on this remeasurement depends on whether the derivative is designated or not as a hedge instrument for hedge accounting purposes.

The Company designates the derivatives for hedge accounting when related to highly probable future transactions (cash flow hedges) and documents, at the beginning of the transaction, the relationship between the hedge instruments and hedged items, as well as their goals and strategies for risk management. The Company also documents, both at the beginning of the hedge and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in the cash flows of the hedged items.

The effective portion of the changes in fair value of the derivatives designated and qualified as cash flow hedges is recognized in line item "Valuation adjustments to equity" (in "Other comprehensive income") in equity, net of deferred taxes. The gain or loss related to the non-effective portion is recognized in profit or loss as "Finance income (expenses)".

The amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged items are settled. When the hedged items no longer meet the criteria for hedge accounting, they are discontinued prospectively and all cumulative gains or losses remain in equity, and, from that moment, the respective gains and losses are recognized in profit or loss for the period. When the proposed transaction is no longer expected to occur, the cumulative gain or losses that are reported in equity are immediately transferred to profit or loss, in line "Finance income (expenses)".

The market values of hedging instruments are disclosed in note 25. The total fair value of hedging instruments is classified as noncurrent asset or noncurrent liability when the remaining maturity of the hedged item is more than 12 months.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 5.4 Classification of financial instruments and fair value hierarchy

The table below shows the main asset and liability financial instruments:

	Accounting measurement	Parent		Consolidated	
		2018	2017	2018	2017
<b>Assets</b>					
Cash and cash equivalents	Amortized cost	157,075	77,758	182,113	92,440
Short-term investments (i)	Fair value through profit or loss	110,132	407,005	110,132	421,571
Noncurrent short-term investments	Fair value through profit or loss	-	2,730	78,930	26,089
Trade receivables	Amortized cost	128,622	129,315	135,943	129,315
Judicial deposits	Amortized cost	10,796	5,834	12,041	5,930
Foreign exchange hedging instruments (i)	Fair value through other comprehensive income	25.087	993	25.087	993
<b>Liabilities</b>					
Trade payables	Amortized cost	56,226	61,125	61,084	61,125
Borrowings and financing	Amortized cost	18,030	6,393	44,071	6,393
Noncurrent borrowings and financing	Amortized cost	46,132	59,989	352,744	59,989
Obligations with acquisition of subsidiary	Amortized cost	39,554	-	39,554	-
Noncurrent Obligations with acquisition of subsidiary	Amortized cost	137,182	-	137,182	-

(i) Level 2 - used for financial instruments not traded in active markets (e.g., over-the-counter derivatives) using valuation techniques that, in addition to the quoted prices included in Level 1, use market inputs for the asset or liability either directly (as prices) or indirectly (derived from prices).

The Company measures derivative instruments at fair value, which main source of data is B3. The fair values of nonderivative financial instruments with public quotation are based on current purchase prices. If the market for a financial asset and securities not listed on the stock exchange is not active, the Company establishes fair value using valuation techniques. These techniques include the use of recent transactions with third parties, with reference to other instruments that are substantially similar.

#### 6 Significant accounting policies

##### (a) Cash and cash equivalents and short-term investments

Cash and cash equivalents include cash, bank deposits and other highly-liquid short-term investments maturing in less than 90 days, that are readily convertible into a known cash amount and subject to an insignificant risk of change in value.

The Company has with prime banks, i.e. first-class issuers, exclusive investment funds, in line with its Risk and Financial Management Policy, classified as cash and cash equivalents and short-term investments in current and noncurrent assets. The Company is the holder of these funds and the portfolio yield is described in notes 9 and 10.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

(b) Trade receivables

Trade receivables correspond to the amounts receivable for the sale of goods in the normal course of business, plus exchange rate changes when denominated in foreign currency. Receivables mature within no more than 33 days. They are initially recognized in current assets at fair value and subsequently measured at their amortized cost.

Estimated losses on doubtful accounts ("PECLD") are recognized based on an individual analysis of receivables, considering: (i) the concept of incurred loss and expected loss, taking into account default events that are expected to take place within twelve months after the date of disclosure of the financial statements, (ii) financial instruments that presented a significant increase in the credit risk, but do not show objective evidence of impairment, and; (iii) financial assets that already show objective evidence of impairment as at December 31, 2018.

The estimated losses on doubtful accounts are recorded in an amount considered sufficient and necessary by Management to cover probable losses on collection of receivables, which can be changed as a result of the recovery of receivables from defaulting customers or change in the customers' financial condition.

The present value adjustment of trade receivables is not material due to the short period of collection.

(c) Inventories

Inventories are stated at the lower of cost or net realizable value. The inventories' valuation method is the weighted moving average. The cost of finished products and work in progress comprises costs, raw materials, direct labor, other direct costs and related overhead expenses (based on the normal operating capacity), excluding borrowing costs. The net realizable value is the estimated selling price in the normal course of business, less estimated completion costs and the estimated costs to sell.

The cost of timber transferred from biological assets is the fair value plus harvest and freight costs.

The balances of inventories are stated net of the estimated losses recognized to cover probable losses identified or estimated by Management.

(d) Advances to power suppliers

Advances to power suppliers refer to the advances under contractual conditions to guarantee the future power delivery. They are initially recognized at fair value and, subsequently, measured at their amortized cost under the effective interest method.

(e) Biological assets

Biological assets correspond to eucalyptus forests exclusively for the production of bio-reducer, which is the raw material used in the production of ferroalloys, in addition to the sale of timber not consumed to third parties. The harvesting process has an approximate cycle of seven years, which may vary depending on the crop and genetic material to which it refers. Biological assets are measured at fair value less estimated selling costs on harvest date.



## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

The significant assumptions used to determine the fair value of biological assets are disclosed in note 19.

The Company measures its biological assets on an annual basis and any gain or loss on changes in the fair value of biological assets is recognized in profit or loss for the period they are earned or incurred, in a separate line item of the income statement named "Changes in fair value of biological assets". The depletion of biological assets is measured based on the amount of timber cut at fair value.

(f) Property, plant and equipment

Property, plant and equipment items are recorded at historical cost of purchase, less accumulated depreciation.

Depreciation of assets starts when they are ready for the intended use on the same basis of other property, plant and equipment items. Depreciation is recognized on a straight-line basis over the estimated useful life of each asset, so that cost less its residual value after its useful life is fully written off (except for land and construction in progress that are not depreciated).

Mine depletion is calculated at the rates corresponding to the ratio between the volume of extracted ore and the estimated minable deposits.

A property, plant and equipment item is written off after sale. Gains and losses on disposals are determined based on the comparison with the carrying amount and are recognized in the income statement in line item "Other operating income (expenses), net".

Constructions in progress for the purpose of supplying goods or providing services is recorded at cost.

Repairs and maintenance are recorded in profit or loss when incurred. The cost of main renovations is added to the carrying amount of the asset when future economic benefits exceed the performance pattern initially estimated for the asset. Renovations are depreciated over the remaining useful life of the relevant asset.

(g) Impairment of nonfinancial assets

Non-financial assets with finite useful life are reviewed for indicators of impairment at each balance sheet date and whenever significant events or changes in circumstances indicate that their carrying amounts may not be recoverable. When such an indicator exists, the assets are tested for impairment.

An impairment loss is recognized when the asset's carrying amount exceeds its recoverable amount, which represents the higher of its fair value less costs to sell and its value in use. For impairment test, assets are grouped at the lowest levels for which there are separately identifiable cash flows (Cash-generating Units, or CGUs). In the years ended December 31, 2018 and 2017, no impairment of nonfinancial assets was identified.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

(h) Trade payables

Trade payables are payables for goods or services acquired in the normal course of business, classified as current liabilities if payment is due within the period of one year. They are initially recognized at fair value and, subsequently, measured at their amortized cost under the effective interest method.

(i) Dividend distribution and interest on capital

The distribution of dividends to shareholders is recognized based on Brazilian Corporate Law and the Company's bylaws. At the balance sheet date, the mandatory minimum dividend is recorded as current liabilities in line item "Dividends and interest on capital" as it is considered as a legal obligation under the Company's bylaws. The portion of the dividend that exceeds the minimum required is recorded in line item "Proposed additional dividend", in "Retained Earnings", in equity. Once approved at the Shareholders' Meeting, that portion is transferred to current liabilities.

The Company may pay in advance to its shareholders, based on prevailing corporate law and its bylaws, interest on capital and/or dividends.

The tax benefit of interest on capital is recognized in the income statement.

(j) Income tax and social contribution

The provision for income tax and social contribution is based on taxable income for the year which differs from the income shown in the income statement because it excludes income or expenses taxable or deductible in other years, as well as permanently nontaxable or nondeductible items.

The provision for income and social contribution is individually calculated by the Company and its subsidiaries based on the tax rates prevailing at yearend, taking into consideration the tax benefits granted by SUDENE. The reduction portion of the income tax corresponding to the tax incentives is recognized in profit or loss, but it is transferred from retained earnings to earnings reserve at the balance sheet date as it cannot be distributed to shareholders.

Deferred taxes are recognized on temporary differences arising from differences between asset and liability tax basis and their carrying amounts in the financial statements. Deferred tax assets are only recognized to the extent that it is probable that taxable income in the coming years will be available, against which temporary differences can be utilized, based on projections prepared and supported by internal assumptions. Deferred tax liabilities are fully recognized, and the amounts accounted for and projections are periodically reviewed.

(k) Provisions

Provisions for mine closure and for risks (labor, civil and tax) are recognized when: (i) the Company has a legal or constructive obligation as a result of past events; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) its amount can be reliably estimated.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

Provisions are measured at the present value of the disbursements that are expected to be required to settle the obligation, using a pretax rate that reflects current market valuations of the time value of money and the specific obligation risks. The increase in the obligation as a result of the time elapsed is recognized as finance costs.

The provision for environmental recovery comprises mine closure costs, resulting from the shutdown of activities. The asset decommissioning cost equivalent to the obligation is capitalized as part of the carrying amount of the asset and is amortized over its useful life. The provision for risks is recognized in profit or loss for the year.

#### (l) Borrowings and financing

Financing is initially recognized at fair value, less transaction costs incurred, and subsequently stated at amortized cost. Any difference between the amounts raised (less transaction costs) and the total amount payable is recognized in the income statement over the period financing is outstanding, using the effective interest method.

Financing is classified as current liabilities, unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

#### (m) Employee benefits

##### Postemployment benefit

With respect to the defined contribution plan, the Company pays contributions to private pension plans on a contractual or voluntary basis. Once contributions end and terms elapse, the Company has no obligations related to additional payments.

The Company offers postemployment benefits to employees based on the length of service. The expected costs of these benefits are accumulated over the employment period, estimating how many employees will receive this benefit, less the amount at present value.

##### (ii) Retirement health care benefit

The Company offers postemployment health care plans to their employees, in accordance with applicable terms. The right to these benefits is usually contingent to their remaining in employment until the retirement age and the completion of the minimum length of service. The expected costs of these benefits are accumulated during the employment period, and are calculated using the same accounting method used for defined benefit pension plans. Actuarial gains and losses resulting from adjustments based on experience and changes in actuarial assumptions are charged against or credited to equity in line item "Other comprehensive income". These obligations are annually valued by qualified independent actuaries.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

#### (iii) Retirement premium – collective agreements

Metallurgy: i. as set forth in clause 8 of the respective agreement, the employee, when retiring, either due to disability, length of service or age, will be entitled to a premium equivalent to 10% of the respective wage for each year of service, provided that the employee has worked for more than five years in the company and is terminated from the Company. The premium is limited to one wage, corresponding to the maximum of ten years working at the same company. ii. Pursuant to clause 7 of the respective agreement, the employee eligible to the FGTS, when retired, and if not continuing to work at the Company after his/her termination, will be entitled to receive severance fees to which he/she is entitled as if terminated at the Company's discretion, provided that his/her length of service is above five years.

Mining: i. as set forth in clause 11 of the respective agreement, the employee, when retiring, either due to disability, length of service or age, remaining as an employee, will be entitled to a premium, paid in one single installment upon retirement. The amount shall correspond to 10% of the respective wage for each year of service, provided that the employee has worked for more than eight years in the company. The benefit is limited to one wage. ii. Pursuant to clause 10, the employee eligible to the FGTS, when retired, and if terminated based on his/her request, will be entitled to receive, upon termination, severance fees to which he/she would be entitled as if terminated at the Company's discretion, provided that his/her length of service is above eight years.

#### (iv) Profit sharing

The Company recognizes a liability and a profit sharing expense based on the methodology that takes into account the profit attributable to the Company's shareholders. The Company recognizes an accrual for profit sharing when it is contractually required or when there is a past practice that created a constructive obligation.

#### (n) Capital

Common and preferred shares are classified in equity. When the Company buy its shares (treasury shares), the amount paid, including any directly attributable additional costs (net of income tax), is deducted from equity attributable to owners of the Company until the shares are canceled or reissued. When these shares are subsequently reissued, any proceeds, net of any directly attributable additional transaction costs and the related income tax and social contribution, are included in equity attributable to owners of the Company.

#### (o) Revenue recognition

Revenue consists of the fair value of the consideration received or receivable from the sale of products. Revenue is presented net of taxes, returns, rebates and discounts, as well as after the elimination of intragroup leases. The tax incentive under the ICMS DESENVOLVE is also recognized in sales revenue. Such tax incentive is not subject to taxes on revenue (PIS and COFINS).

The sales revenue of products is recognized when the Company transfers to the buyer the risks and rewards of ownership of the products, i.e., upon actual delivery of products.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

Finance income is recognized according to the period elapsed, under the effective interest method, to the extent that expected realization is probable. It comprises interest, inflation adjustments and exchange rate changes on short-term investments, trade receivables, inflation adjustments and provisions and interest on financing, as described in note 33.

(p) Segment reporting

The information by operating segments is presented in a manner consistent with the internal report provided to the chief operating decision maker. The chief operating decision maker, responsible for allocating resources to the operating segments and assessing their performance, is represented by the Board of Directors, which is also responsible for the Company's strategic decision making.

(q) Government grants

The Company has a government grant called "ICMS - DENSENVOLVE", which is systematically recognized in profit or loss.

The benefits from the Industrial Development and Economic Integration Program of the State of Bahia (ICMS DESENVOLVE), with the purpose of expanding the industrial process, aiming at increasing ferroalloy production, are as follows:

- i. Deferral of assessment and payment of State VAT (ICMS) on the importation and purchases in Bahia of property, plant and equipment items to the time they are disposed of.
- ii. Deferral of assessment and payment of State VAT (ICMS) on the purchases in any other Brazilian state, referring to tax rate differences, of property, plant and equipment items to the time they are disposed of.
- iii. Extension of the 72-month term for payment of State VAT (ICMS) outstanding debt, related to own operations, due on investments estimated in project entitled to the tax relief, as established in Class I, Table I, attached to the ICMS DESENVOLVE Regulation.
- iv. Portion of the monthly outstanding ICMS balance eligible to the relief, exceeding R\$3,414, adjusted for inflation at the IGPM rate on an annual basis.
- v. The benefits are effective over a twelve-year period from the date of publication of the Concession Resolution 59/2015 at the State Official Gazette.
- vi. On each portion of the ICMS with extended period, an interest rate of 80% of the TJLP rate per year will be levied, or another rate that will replace it, according to Table II, attached to the ICMS DESENVOLVE Regulation.
- vii. With respect to the 72-month payment term extension, if installments with extended term are prepaid, the Company will be entitled to a 90% discount and would pay the remaining 10% as ICMS. The discount portion is recorded in line item "Net sales revenue".

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

#### **For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

viii. Law 13564, of June 20, 2016, established the mandatory deposit, on behalf of the State Fund for Poverty Combat and Eradication, enacted by Law 7988, of December 21, 2001, of the amount corresponding to 10% related to the respective incentive or benefit, under penalty of losing it, in the event of noncompliance. The State of Bahia, through Decree 16970, of August 19, 2016, regulated the procedures to be adopted in the calculation and payment of the deposit. The Company is complying with the provisions set forth in the prevailing legislation.

#### **(r) Consolidation and investments in subsidiaries**

The consolidated financial statements include the financial statements of the Company and its subsidiaries, as well as of exclusive funds, measured in accordance with the criteria disclosed in note 6. The information on the Company's equity interest in each subsidiary is disclosed in note 17.

The Company controls an entity when it is exposed, or is entitled, to variable returns arising from its involvement with the entity and has ability to affect such returns by exercising power on the entity.

In the Company's individual financial statements, the financial information on the subsidiaries is recognized under the equity method.

The balance sheet and income statement account balances deriving from transactions between the Company and its subsidiaries were eliminated in the consolidated financial statements, as well as the unrealized gains and losses and the investments in these subsidiaries and respective share of profit (loss) of investees.

The subsidiaries' accounting policies are changed when necessary so as to ensure consistency with the Company's accounting policies.

## **7 New and revised standards and interpretations issued by the IASB and CPC**

### **7.1 Standards issued in 2018**

The new standards below issued by the IASB and approved by the CFC became effective beginning January 1, 2018. The Company adopted these standards as mentioned below and Management, during its assessments, did not identify significant impacts.

#### **(i) IFRS 15 - Revenue from Contracts with Customers**

The Company's revenues mostly derive from the sale of goods and products. Based on the prior-year assessment, at the five stages of the new revenue recognition model, as follows: (i) identification of contracts with customers; (ii) identification of the performance obligations set forth in the contracts; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations set forth in the contracts and (v) revenue recognition when the performance obligations are satisfied; the Company did not identify changes in the current revenue recognition.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

Also considering the nature of its sales transactions, where the performance obligations are clear (delivery of chrome alloys, silicon alloys, ore, lime, microsilica, timber or slag) and the transfer of control over the assets is not complex, occurring to the extent to which the responsibility is transferred to the buyer, the Company was not subject to any impacts or changes in revenue recognition.

#### (ii) IFRS 9 - Financial Instruments

The main amendments refer to: (i) classification and measurement of financial assets (measured at fair value through other comprehensive income, measured at amortized cost and measured at fair value through profit or loss); (ii) impairment (replacement of the incurred loss model for an expected credit loss model); and (iii) hedge accounting.

Management adopted the new pronouncement and, considering its transactions on the adoption date, it has not identified any changes that would have a significant impact on the Company's financial statements, since the financial instruments held are not complex and do not pose significant risk of impacting their remeasurement and do not pose significant risk of impairment or significant decrease in amount due to expected future losses, being only applicable to the classification of the financial assets in the categories expected.

The purchase and sale of financial assets are recognized on the transaction date and derecognized when the cash flows from investing activities have expired or were received, provided that all risk and rewards of ownership are transferred.

## **7.2 Standards to be issued in 2019**

The early adoption of the standards, even though encouraged by the IASB, is not permitted in Brazil by the CPC. The following new standards and interpretations were issued by the IASB but are not yet effective in 2018:

#### (i) IFRS 16 – Leases (CPC 06 (R2) - Leases)

The standard is effective beginning January 1, 2019 and is intended to combine the lease accounting model, requiring lessees to recognize liabilities assumed as a contra entry to the respective assets corresponding to their right of use for all lease agreements, unless the following characteristics that are within the standard exemption scope are observed: (i) agreement with term below or equal to twelve months; and (ii) has immaterial amount or is based on variable amounts.

Ferbasa and its subsidiaries are assessing the potential impacts on their financial statements, arising from the first-time adoption of the standard. This assessment was segregated as follows: (i) determination of the agreements; (ii) transition approach; (iii) measurement of the initial liability and initial asset; and (iv) impacts from the first-time adoption.

Management has prepared an inventory of the agreements and conducted an analysis of the types of agreements within the lease scope and identified the following agreement classifications during 2018: (a) exemptions: (i) effective period below twelve months; (ii) low-value agreements; (iii) agreements without defined term; and (iv) agreements where the Company has no control over the asset, and (b) agreements where the Company has control over the asset and requires consideration.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

The Company elected to adopt the simplified retrospective transition approach, which will not require the restatement of the amounts, will not impact equity and the calculation of payment of interest on capital and will enable using practical expedients.

On January 1, 2019, the Company will measure the lease liability corresponding to the total future lease payments, where we will consider the renewals according to the Company's internal policy. These payment flows will be adjusted to present value, considering the actual discount rate. The actual discount rate corresponds to the market quotations for borrowings that represent total investments, considering the remaining period of each set of agreements. The Company has elected to use the practical expedient of using a single actual discount rate according to the respective terms for agreements that show similar characteristics.

The right-of-use asset is measured based on the initial amount of the lease liability plus direct initial costs incurred. The Company's Management elected to use the practical transition expedient and not to consider the initial costs upon initial measurement of the right-of-use asset, thus maintaining the same amount of the initial lease liability.

Upon the Company's initial assessment, it was possible to conclude that the lease consideration that is currently recorded as cost will start to be recognized as depreciation and finance costs. Although the new pronouncement does not provide for any change in the total amount that should be recorded in profit or loss during the useful life of the agreement, it is reasonable to assert that there will be a timing effect on profit mainly as a result of the interest recognition method and inflation adjustment to the lease amount, even though without significant impact according to previous analyses.

Beginning January 1, 2019, the Company expects an increase in its assets arising from the recognition of the right of use for each agreement that falls within the definitions of the CPC and respective increase in liabilities arising from the consideration. Net assets will decrease and there will be a timing effect on profit in the first years. Moreover, no change in equity and taxes is expected. On January 1, 2019, based on best estimates, the Company's Management will recognize a right-of-use asset and a lease liability at the present value of R\$7,850 in the Parent and R\$17,628 in the consolidated.

#### (ii) IFRIC 23 – Uncertainty over Income Tax Treatments (ICPC 22)

ICPC 22 clarifies how to apply the recognition and measurement requirements of CPC 32 when there is uncertainty over income tax treatments. The Company's Management should recognize and measure its current or deferred tax assets or liabilities, by applying the requirements set out in CPC 32 based on taxable income (tax loss), tax bases, unutilized tax losses, unutilized tax credits and tax rates, in accordance with this interpretation. The interpretation was approved on December 21, 2018 and is effective beginning January 1, 2019.

The Company has assessed and does not expect significant impacts arising from the interpretation, as all procedures adopted for calculation and payment of income taxes are supported by the prevailing legislation.



## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 8 Risk management

The Company's activities expose it to several financial risks: (i) currency risk; (ii) interest rate risk; (iii) credit risk; (iv) liquidity risk; (v) concentration risk, (v) commodity price risk and (vii) Other nonfinancial risk factors.

Risk is managed in accordance with the Risk Management Policy approved by the Board of Directors.

##### (i) Currency risk

In addition to the Company carrying out transactions in foreign currency (exports of ferroalloys and chrome ore, and imports of reactive coke), domestic sales prices are linked to the global commodity market, translated at the time of sale based on the prior-month US dollar rate. As more than 90% of operating costs are denominated in local currency, this mismatch may affect profitability and the distribution of dividends by the Company.

The Company's Financial Risk Management Policy provides for a hedging program for the foreign exchange risk arising on part of its revenue, both in the foreign market and the domestic market.

For purposes of the sensitivity analysis required by the CVM, the Company adopted as scenario I (probable) the expected average foreign exchange rate for 2019 disclosed in the Focus Report issued on February 2, 2019, as scenario II (possible) a 25% appreciation of the Brazilian real against the US dollar, and as scenario III (remote) a 50% appreciation of the Brazilian real against the foreign currency.

	12/31/2018		Scenario I		Scenario II		Scenario III	
	US\$	R\$	Rate	Gain/ (loss) - R\$	Rate	Gain/ (loss) - R\$	Rate	Gain/ (loss) - R\$
Trade receivables	4,624	17,916	3.90	119	2.93	(4,390)	1.95	(8,898)

In the case of derivatives (NDFs), the impact of a depreciation of the Brazilian real on these instruments needs to be considered as a whole and, consequently, the changes in the exchange rate will entail fluctuations both in NDFs (30%) and in dollar-indexed revenue (100%). Thus, this analysis should always be conducted on an integrated basis.

For purposes of the sensitivity analysis required by the CVM, the Company adopted as scenario I (probable) the expected average foreign exchange rate for 2019 disclosed in the Focus Report issued on February 1, 2019, as scenario II (possible) a 25% depreciation of the Brazilian real against the US dollar, and as scenario III (remote) a 50% depreciation of the Brazilian real against the foreign currency.

	12/31/2018		Scenario I		Scenario II		Scenario III	
	US\$	R\$	Rate US\$	Gain/ (loss) - R\$	Rate US\$	Gain/ (loss) - R\$	Rate US\$	Gain/ (loss) - R\$
Foreign exchange hedging instrument	108,000	449,874	4.165	28,674	4.88	(78,626)	5.85	(181,926)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### (ii) Interest rate risk

For the balance applied as at December 31, 2018, the Company considers as scenario I (probable) the average benchmark interest rate for 2018 of 6.50% per year, as disclosed in the Focus Report of February 1, 2019. In projecting scenario II (possible) and scenario III (remote), the benchmark rate was decreased by 25% and 50%, respectively.

<u>Interest rate risks</u>	<u>Closing rate 12/31/2018 - p.a.</u>	<u>Scenario I - Probable</u>	<u>Scenario II 25% decrease</u>	<u>Scenario III 50% dec rease</u>
Average benchmark interest rate - (% p.a.)	6.50	6.50	4.88	3.25
Balance of short-term investments	307,346	331,498	325,460	319,422
Net effect		24,153	18,114	12,076

For the balance of borrowings and financing as at December 31, 2018, the Company considers as scenario I (probable) the Long-term Interest Rate ("TJLP") of 7.03% p.a. in 2019. In projecting scenario II (possible) and scenario III (remote), the TJLP rate was increased by 25% and 50%, respectively.

<u>Interest rate risks</u>	<u>Closing rate 12/31/2018 - p.a.</u>	<u>Scenario I - Probable</u>	<u>Scenario II 25% increase</u>	<u>Scenario III 50% increase</u>
Interest rate - TJLP - (% p.a.)	6.98	7.03	8.79	10.55
Borrowings and financing	32,163	34,424	34,989	35,555
Net effect		(2,261)	(2,826)	(3,392)

#### (iii) Credit risk

The risk arises from the possibility of the Company incurring losses due to the selection of assets to make up the investment portfolio, the financial capacity of the counterparties to the derivative contracts, and the difficulty in receiving the proceeds from the sales and for not fulfilling the obligations relating to the delivery of goods or services paid through advances to suppliers.

The Company limits the allocation of its short-term investments to each issuer of financial bill, debentures or securities to a maximum of 30% of the volume of investments. This limit does not apply to notes issued by the National Treasury. Derivatives transactions are conducted with prime financial institutions.

The credit risk is monitored, and there is no historical material losses.

#### (iv) Liquidity risk

The Company maintains sufficient cash and short-term investments in order to meet its financial and operational commitments. The amount in cash is used to comply with the disbursements arising from the Company's normal course of operations, while the excess amount is invested in highly liquid short-term investments.

The Company's only financial liabilities maturing after one year and settled in cash comprise borrowings and financing. The maturities of these liabilities are shown in note 21.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

**For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

(v) Concentration risk

The Company derives revenues from a few customers, which were significant in 2018. In the domestic market, for ferrochrome, we have Aperam Inox and Magoteux Brasil and, in the foreign market, for ferrosilicon, we have Marubeni Corporation and Traxys. Any reduction in the demand from these customers could significantly impact the Company's cash generation capacity.

In this context, the Company has a constant focus in initiatives to reduce costs to increase international competition and also improves the strategy to diversify its clients portfolio, mainly international costumers.

Additionally, the Company maintains highly-liquid investments and adequate relationship with prime-line banks for credit.

(vi) Commodity price risk

This refers to the exposure to fluctuations in the prices of final products (alloys), which can significantly change the Company's operating margins. Management understands that the exposure to this risk is part of the nature of its business and there are no mechanisms or financial instruments at this moment to mitigate this risk.

(vii) Other nonfinancial risk factors

Regulatory risks: the Company is subject to strict laws and regulations at federal, state and municipal levels. In addition, the noncompliance with these laws or regulations, or the occurrence of accidents that impact the environment, arising from the Company's operations (mining, forest resources and metallurgy), may result in administrative, civil and/or criminal sanctions, including fines, indemnity obligations and/or disbursements by the Company, which may adversely affect its operating and financial performance.

Environmental risks: the Company is subject to the laws and regulations governing the activities it carries out. The Company has established environmental measures and procedures to mitigate this risk. Management conducts periodic reviews to identify environmental risks, and to ensure that its existing systems are sufficient to manage these risks. The Company, aware of the global environmental problems, and in accordance with the environmental legislation, operates in conformity with its environmental licenses and obtained the ISO 14001 certification for the environmental management of forest areas and metallurgy. In the mining area, these standards are being implemented and it is expected to be completed by mid-2018.

Climate and weather risks: the Company's operating activities are exposed to the risk of damages arising from climate changes, such as high temperatures, floods and extreme rain, risks of nature, such as damages arising from pests, diseases, forest fires and other forces of nature (mine landslides, floods, among others). The Company has processes to mitigate these risks, including regular inspections in the plantation areas and hiring of a specialized company to analyze the mine structure conditions and develop contingency plans.

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

Risk of fair value of biological assets: although the biological asset is substantially planted for own consumption (bio-reducer), the Company is subject to the impacts on profit and, consequently, on the distribution of dividends, as a result of changes in the assumptions on the calculation of the fair value of biological assets: market prices, forest productivity, discount rates, etc. The assumptions are reviewed annually to predict potential impacts.

Risk of non-maintenance of tax incentives: the Company is entitled to income tax incentives as it is located in SUDENE's operating area. In the case of ICMS, there is a benefit called ICMS DESENVOLVE which extends payment deadlines for 90% of the tax within up to 72 months, with a 90% discount on the extended installment if payment is made by the 20<sup>th</sup> day of the prepayment month. If these incentives are not renewed, the Company's profit or loss will be negatively impacted.

Electricity risk: due to its being power intensive nature, the Company depends on power at prices that are compatible with those of its competitors in Brazil and abroad. To minimize its exposure to power supply, or a significant increase in prices, the Company maintains a long-term agreement with CHESF. On August 21, 2015, the Company, together with other power-intensive companies in the Northeast region, entered into a contractual extension, which term was extended to 2037. Also, in 2018, the Company has acquired the wind farm BW Guirapá, strengthening its intent to continue as a going concern and also become an electric power generator.

Logistics transportation risk: chrome ore is transported about 390 km from the mines operated by the Company to the metallurgical plant, located in the municipality of Pojuca, State of Bahia. This transportation is primarily made using railways, which services are provided by a private company, through a Federal Public Concession (Mid-East Network), whose regulation and supervision are under the responsibility of the National Land Transportation Agency (ANTT). The possible discontinuity in the provision of transportation services by the concessionary will require the Company to seek economically feasible alternatives.

## **9 Cash and cash equivalents**

	<u>2018</u>	<u>Parent 2017</u>	<u>2018</u>	<u>Consolidated 2017</u>
Cash and banks	3,573	8,217	24,379	8,460
Short-term investments in CDB	127	120	4,358	4,100
(i)				
Investment funds (ii)	<u>153,375</u>	<u>69,421</u>	<u>153,376</u>	<u>79,880</u>
	<u>157,075</u>	<u>77,758</u>	<u>182,113</u>	<u>92,440</u>

- (i) In the Parent, refers to a short-term investment yielding interest of 90% of the Interbank Deposit Rate (CDI) (90% as at December 31, 2017), with daily liquidity, used as collateral for transactions in the Electric Power Trade Chamber (CCEE). In consolidated it also includes transactions with Bank Deposit Certificates (CDBs), yielding interest of 98.5% of the CDI rate (98.5% as at December 31, 2017).

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

- (ii) Securities transactions through investment funds, which have a daily liquidity. The average mark-to-market interest range from 98% to 119.7% of the CDI rate (95.7% to 101.5% as at December 31, 2017).

#### 10 Short-term investments

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Current				
Investment funds (i)	<u>110,132</u>	<u>407,005</u>	<u>110,132</u>	<u>421,571</u>
Noncurrent				
Investment funds (i)		<u>2,730</u>	<u>39,450</u>	<u>2,730</u>
Financial bills (ii)			<u>39,480</u>	<u>23,359</u>
		<u>2,730</u>	<u>78,930</u>	<u>26,089</u>
Total short-term investments	<u>110,132</u>	<u>409,735</u>	<u>189,062</u>	<u>447,660</u>

- (i) Securities transactions whose maturities exceed 90 days and have average yield ranging from 94% to 121% of the CDI rate (from 98.5% to 104.8% as at December 31, 2017). Even though the Company and its subsidiaries select liquid securities in the secondary market, the uncertainty surrounding market conditions and prices in a liquidity event suggests that these investments should not be not considered cash equivalents. The decrease in short-term investments as at december 31, 2018 is due to the acquisition of control of BW Guirapá, as explained in note 1.1.

- (ii) Financial bills yielding interest between 101.5% and 103.3% of CDI (between 102% and 104% as at December 31, 2017).

#### 11 Trade receivables

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Domestic market	111,058	108,218	118,379	108,218
Foreign market	21,867	25,508	21,867	25,508
Allowance for doubtful debts	(4,303)	(4,411)	(4,303)	(4,411)
	<u>128,622</u>	<u>129,315</u>	<u>135,943</u>	<u>129,315</u>

Foreign trade receivables are denominated in US dollars and are translated into Brazilian reais at the end of the reporting period.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

Due to the short-term maturity of trade receivables (30 days on average), as at December 31, 2018 and 2017, the Company did not have any transaction that would generate a material adjustment to present value.

As at December 31, 2018, the Company recorded an allowance for doubtful accounts in the amount of R\$4,303 (R\$4,411 as at December 31, 2017).

The allowance for doubtful debts is broken down as follows:

Balance as at December 31, 2016	(305)
Recognition of allowance for doubtful accounts	<u>(4,106)</u>
Balance as at December 31, 2017	(4,411)
Write-off/reversal of allowance for doubtful accounts	<u>108</u>
Balance as at December 31, 2018	<u>(4,303)</u>

The estimated losses from allowance for doubtful debts were recorded in a sufficient amount to cover probable losses on trade receivables based on the Management's internal analysis.

## 12 Inventories

Inventories are demonstrated at average purchase or production cost, lower than the replaceable cost or selling value.

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Current				
Finished goods (i)	163,780	87,455	163,780	87,455
Raw materials	61,676	44,533	61,729	44,587
Chrome ore	43,059	26,846	43,059	26,846
Maintenance supplies (ii)	42,965	42,290	43,022	42,346
Other	<u>1,536</u>	<u>853</u>	<u>1,536</u>	<u>853</u>
	<u>313,016</u>	<u>201,977</u>	<u>313,126</u>	<u>202,087</u>
Noncurrent				
Maintenance supplies (ii)	5,201	5,201	5,201	5,201
Allowance for obsolescence (iii)	<u>(4,824)</u>	<u>(1,896)</u>	<u>(4,824)</u>	<u>(1,896)</u>
	<u>377</u>	<u>3,305</u>	<u>377</u>	<u>3,305</u>
	<u><u>313,393</u></u>	<u><u>205,282</u></u>	<u><u>313,503</u></u>	<u><u>205,392</u></u>

(i) The increase in the balance of finished products as at December 31, 2018 is explained by the approximate growth by 12% in ferroalloy production, in addition to the opportunity cost upon the assessment of the sale of electric power or use in production, coupled with the impacts arising from the decrease in customer demand in the last quarter of 2018.

(ii) Inventories of maintenance supplies are classified as current or noncurrent assets, based on the history of consumption.

(iii) The Company recognizes an allowance for obsolescence relating to slow-moving items when it does not expect to use such inventories in the coming periods.

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 13 Recoverable taxes

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Current				
Recoverable taxes on revenue (PIS and COFINS) (i)	3,161	5,951	3,161	5,952
Income tax and social contribution (ii)	9,558	2,429	10,637	3,116
Recoverable ICMS (i)	4,514	2,751	4,514	2,751
Other	182	416	194	416
	<u>17,415</u>	<u>11,547</u>	<u>18,506</u>	<u>12,235</u>
Noncurrent				
Recoverable ICMS (iii)	5,356	5,389	5,356	5,389
Other	66	65	66	65
	<u>5,422</u>	<u>5,454</u>	<u>5,422</u>	<u>5,454</u>
	<u>22,837</u>	<u>17,001</u>	<u>24,158</u>	<u>17,689</u>

(i) Mainly REINTEGRA credits to be offset in the first quarter of 2019.

(ii) Credits from gains on the distribution of interest on capital.

(iii) Credits from the increase of property, plant and equipment offset at the proportion of 1/48.

#### 14 Advances to suppliers

	<u>Parent and Consolidated</u>	
	<u>2018</u>	<u>2017</u>
Current		
Advances to power suppliers (i)	2,000	2,000
Advances to power suppliers - CHESF (ii)	11,356	11,560
	<u>13,560</u>	<u>13,560</u>
Noncurrent		
Advances to power suppliers (i)	8,167	10,167
Advances to power suppliers - CHESF (ii)	22,530	31,998
	<u>30,697</u>	<u>42,165</u>
	<u>44,053</u>	<u>55,725</u>

(i) Refers to an advance on an electric energy supply contract, entered into in February 2015, for which supply invoices corresponding to R\$167 per month are issued on a monthly basis, since January 31, 2016, in fixed, nonadjustable installments for eight years. The advance corresponds to R\$16,000, i.e., approximately 5% of the total contract, and is collateralized by a bank guarantee from a prime financial institution. As at December 31, 2018, the amount recognized at cost was R\$2,000 (R\$2,167 as at December 31, 2017).

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

- (ii) Refers to the payment provided for by Law 13182/15, which authorizes the extension of the contracts entered into by CHESF and the power-intensive industries in the Northeast to 2037. Said contract prescribes: (i) a 30% reduction of the volumes supplied up to February 8, 2032; (ii) from February 9, 2032 to 2037, a 1/6 reduction of the previous year's volume; (iii) a real 22.5% increase of the tariff on July, 1 2015; (iv) an annual adjustment, beginning July 1, 2016, using the agreed index, which is 70% of the Broad Consumer Price Index (IPCA) + 30% of LTN and NTN-B (federal bonds) rate; (v) the advance of R\$65 million made in the second six-month period of 2015; and (vi) a 8.8% discount of the tariff between 2016-2022 to offset the 2015 advance. As at December 31, 2018, the amount recognized at cost was R\$11,376 (R\$11,578 as at December 31, 2017).

#### 15 Current and deferred income tax and social contribution

	<u>2018</u>	<u>Parent 2017</u>	<u>2018</u>	<u>Consolidated 2017</u>
<u>Deferred tax assets</u>				
Provision for litigation	(51,445)	(52,197)	(51,455)	(52,197)
Allowance for inventory losses (Note 12)	(4,824)	(1,896)	(4,824)	(1,896)
Accrued profit sharing (i)	(45,581)	(38,561)	(45,581)	(38,561)
Provision for environmental liability	(10,914)	(9,029)	(10,914)	(9,029)
Labor and actuarial liabilities (note 22)	(67,586)	(41,478)	(67,586)	(41,478)
Realization of added value	(3,314)	-	(3,314)	-
Allowance for doubtful debts	(4,303)	(4,106)	(4,303)	(4,106)
Other temporary provisions	(13,930)	(16,315)	(13,930)	(16,315)
Tax base	<u>(201,897)</u>	<u>(163,582)</u>	<u>(201,897)</u>	<u>(163,582)</u>
Deferred income tax at the 25% tax rate	47,979	38,997	47,979	38,997
Deferred social contribution at the 9% tax rate	<u>18,171</u>	<u>14,722</u>	<u>18,171</u>	<u>14,722</u>
Deferred income tax and social contribution assets	<u>66,150</u>	<u>53,719</u>	<u>66,150</u>	<u>53,719</u>

- (i) Tax base to calculate deferred social contribution. In the case of income tax, this is a permanent difference (non-deductible for income tax purposes). The amount of Management profit sharing is R\$9,979 (R\$7,597 as at December 31, 2017).



(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

	Parent		Consolidated	
	2018	2017	2018	2017
<u>Deferred tax liabilities</u>				
Property, plant and equipment - deemed cost	58,810	58,810	63,385	63,385
Biological assets	56,977	67,156	56,977	67,156
Bargain purchase	75,143	-	75,143	-
Hedging financial instruments	25,087	993	25,087	993
Accelerated depreciation	9,878	10,839	9,878	10,839
Tax base	225,895	137,798	230,470	142,373
Deferred income tax at the 25% tax rate	(56,474)	(34,450)	(57,619)	(35,593)
Deferred social contribution at the 9% tax rate	(20,331)	(12,402)	(20,741)	(12,814)
Deferred income tax and social contribution liabilities	(76,805)	(46,852)	(78,360)	(48,407)
Deferred income tax and social contribution, net	(10,655)	6,867	(12,210)	5,312

Management, based on the individual analysis of the provisions, estimates that the tax credits arising from temporary differences will be realized as follows:

Calendar year	Parent		Consolidated	
	Deferred income tax and social contribution		Deferred income tax and social contribution	
	Assets	Liabilities	Assets	Liabilities
2019	16,517	15,052	16,517	15,052
2020	258	624	258	624
2021	258	564	258	564
2022	258	504	258	504
2023	258	444	258	444
2024 and thereafter	48,601	59,617	48,601	61,172
	66,150	76,805	66,150	78,360

The projected realization may not materialize if the estimates used in the preparation of this financial information are different from the actual data.

The income tax and social contribution that affected profit or loss for the periods are as follows:

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Pretax profit	345,736	307,146	349,900	308,888
Combined income tax and social contribution tax rate	34%	34%	34%	34%
Income tax and social contribution at statutory rates	(117,550)	(104,430)	(118,966)	(105,022)
Interest on capital	32,856	30,646	32,856	30,646
Share of profit (loss) of investees	(4,006)	724	-	-
Endowments	(809)	(562)	(809)	(562)
Other	1,938	(1,308)	(4,427)	(1,324)
SUDENE tax incentive (i)	50,634	37,636	50,634	37,636
	<u>(36,937)</u>	<u>(37,294)</u>	<u>(40,712)</u>	<u>(38,626)</u>
Income tax and social contribution SUDENE tax incentive (i)	50,634	37,636	50,634	37,636
Current	(77,310)	(62,518)	(81,085)	(63,850)
Deferred	(10,261)	(12,412)	(10,261)	(12,412)
Income tax and social contribution expenses	<u>(36,937)</u>	<u>(37,294)</u>	<u>(40,712)</u>	<u>(38,626)</u>

As the industrial project is located within the area under the jurisdiction of the Northeast Development Authority (SUDENE), the Company is entitled to an income tax relief benefit, equivalent to a reduction of 75% on income tax and non-refundable surtaxes, levied on revenues from:

- the manufacturing of ferroalloys and by-products, from January 1, 2015 to December 31, 2024, according to the Incentive-Granting Report 0200/2015;
- the exploration and processing of chrome ore and by-products, from January 1, 2016 to December 31, 2025, according to the Incentive-Granting Report 0131/2016.

The portions corresponding to the income tax relief R\$ 298 (R\$515 as at December 31, 2017), ICMS Desenvolve R\$ 19,017 (R\$20,287 as at December 31, 2017) and SUDENE R\$ 50.634 (R\$28,158 as at December 31, 2017) are recognized in profit or loss and at the end of each year they are transferred from retained earnings to earnings reserve (tax incentive), which cannot be distributed to shareholders.

## 16 Judicial deposits

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Labor	2,856	3,597	2,865	3,606
Tax	7,940	2,237	9,176	2,324
	<u>10,796</u>	<u>5,834</u>	<u>12,041</u>	<u>5,930</u>

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

Refer to deposits related to tax and labor lawsuits and challenges regarding the legality and constitutionality of certain taxes, which are recorded in noncurrent assets, until a final decision on the redemption of these deposits by one of the parties is handed down.

## **17 Investments**

Aiming to transfer the benefits of mineral deposits, land and other assets owned by subsidiaries, the Company opted to lease these assets in order to maintain all costs and expenses under the Company's responsibility. For this reason, there are no tax and operational inefficiencies on intragroup transactions, while at the same time it is not necessary to reorganize the corporate structure or request transfers to regulatory bodies (INCRA, DNPM etc.). Below is a brief comment on the subsidiaries:

(i) Silício de Alta Pureza da Bahia S.A. ("Silbasa") is a closely-held company located in Pojuca, State of Bahia, as a result of a technological partnership with Marubeni Corporation, a Japanese company, which is engaged in the sale of high-purity ferroalloys, and Japan Metals & Chems - JMC. This company leases since January 2004 its industrial facilities to the Company, and the lease agreement is renewed on annual basis.

(ii) Mineração Vale do Jacurici S.A. ("Jacurici") is a closely-held company, engaged in the research and mining of chrome ore deposits. Since November 1997, the company leased to the Company for an indefinite period its mining business, entitling the Company to economically exploit 15 chromium mines and use mining facilities, buildings, properties, equipment, machinery, and vehicles.

(iii) Reflorestadora e Agrícola S.A. ("Reflora") is a closely-held company, engaged in the design and/or implementation of reforestation projects, and the production of bio-reducer. Reflora is leased to the Company since November 1997 for an indefinite period.

(iv) Indústria de Minérios Damacal Ltda. ("Damacal") is engaged in the exploitation and exploration of limestone deposits for lime production. Damacal is leased to the Company since November 1997 for an indefinite period.

(v) BW Guirapá I S.A. ("BW Guirapá") is a closely-held company engaged in holding 100% stake in the following entities ("Subsidiaries"): Central Eólica Angical S.A., Central Eólica Caititu S.A., Central Eólica Coqueirinho S.A., Central Eólica Corrupião S.A., Central Eólica Inhambu S.A., Central Eólica Tamanduá Mirim S.A. and Central Eólica Teiú S.A. The Guirapá Wind Farm Complex is located in the Bahia State, has total installed capacity of 170.2 MW, operation period of 35 years and energy contracted for 20 years, through the Reserve Energy Auction held in 2011, which agreements expire in 2035.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018 In thousands of Brazilian reais - R\$, except as otherwise indicated

The financial information on the subsidiaries is summarized as follows:

	<u>Equity interest - %</u>	<u>Total assets</u>	<u>Total liabilities</u>	<u>Equity</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Profit or loss</u>	<u>Equity interest in subsidiaries</u>	<u>Share of profit (loss) of subsidiaries</u>
December 31, 2017									
Silbasa	51.26	11,501	221	11,280	1,647	(807)	840	5,782	430
Jacurici	100	44,155	1,844	42,311	4,173	(2,603)	1,570	42,311	1,570
Reflora	99.96	3,147	2	3,145	293	(263)	30	3,144	30
Damacal	100	2,467	260	2,207	154	(55)	99	2,207	99
								<u>53,444</u>	<u>2,129</u>
December 31, 2018									
Silbasa	51.26	12,120	230	11,890	1,388	(588)	800	6,095	410
Jacurici	100	36,160	9,585	26,575	2,749	(2,246)	503	26,575	503
Reflora	99.96	3,272	4	3,268	226	(103)	123	3,268	123
Damacal	100	2,483	260	2,223	119	(103)	(16)	2,223	16
BW Guirapá		842,018	365,354	476,664	73,667	(86,501)	(12,834)	553,388*	(16,148)*
								<u>591,549</u>	<u>(15,096)</u>

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018 In thousands of Brazilian reais - R\$, except as otherwise indicated

The variations in investments are as follows:

	<b>Silbasa</b>	<b>Jacurici</b>	<b>Reflora</b>	<b>Damacal</b>	<b>BW Guirapá(*)</b>	<b>Others</b>	<b>Total</b>
Balances as at December 31, 2016	5,454	44,464	3,115	2,108	-	78	55,219
Dividends	(102)	(3,724)	-	-	-	-	(3,826)
Share of profit (loss) of investees	430	1,570	30	99	-	-	2,129
Balances as at December 31, 2017	<u>5,782</u>	<u>42,310</u>	<u>3,145</u>	<u>2,207</u>		<u>78</u>	<u>53,522</u>
Acquisition of liquid assets (Note 1.1)	-	-	-	-	485,598	-	485,598
Contribution to subsidiaries	-	-	-	-	3,900	-	3,900
Dividends	(97)	(1,238)	-	-	-	-	(1,335)
Capital reduction	-	(15,000)	-	-	-	-	(15,000)
Identifiable assets measured at fair value in combination business (Note 1.1)	-	-	-	-	80,038	-	80,038
Share of profit (loss) of investees:							
Year/Period result (**)	410	503	123	16	(12,834)	-	(11,782)
Realization of assets measured at fair value	-	-	-	-	(3,314)	-	(3,314)
Balances as at December 31, 2018	<u>6,095</u>	<u>26,575</u>	<u>3,268</u>	<u>2,223</u>	<u>553,388</u>	<u>78</u>	<u>591,627</u>

(\*) Adjusted by the assets measured at fair value and respective realization in the net amount of R\$76,724.

(\*\*) BW Guirapá's equity accounting calculation comprises 9 months only, as it was acquired on April 1, 2018, according to note 1.1.

**Cia de Ferro Ligas da  
Bahia - FERBASA**

**Notes to the Financial Statements  
For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

**18 Property, plant and equipment**

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Farming land (i)	115,419	115,419	115,571	115,571
Land	26,357	23,882	32,127	29,051
Buildings	149,669	144,479	297,978	145,193
Machinery and equipment	268,351	272,325	952,455	272,452
Vehicles and tractors	6,034	8,273	6,034	8,273
Furniture and fixtures	3,967	3,941	4,028	3,941
IT	2,012	2,546	2,018	2,549
Mine development (ii)	58,767	54,114	58,767	54,114
Provision for mine closure (iii)	1,380	2,021	1,380	2,021
In progress and other (iv)	38,124	31,886	51,600	33,350
	<u>670,080</u>	<u>658,886</u>	<u>1,521,958</u>	<u>666,515</u>

- (i) Land used for eucalyptus plantations for the production of bio-reducer used in the production of alloys with a total area of 64,070 hectares.
- (ii) Refer to the concession to exploit chromium mines and mining development costs incurred in own mines and mines leased from subsidiaries. Mine depletion is calculated based on the volume of extracted ore prorated to the estimated minable deposits.
- (iii) Costs on the closure of mines resulting from the shutdown of activities. The asset decommissioning cost is realized proportionally to the mineral depletion.
- (iv) At the Mining segment, we point out the Hard Lump project which is intended to improve the processing and mining processes, aiming at increasing the production of chrome ore. Additionally, we also point out the investments in machinery and equipment related to the modernization of heavy pieces of equipment used in the mining process to support the production growth curve required by such project. At the Metallurgy segment, the main investment refers to the 1<sup>st</sup> stage of the Casting Machine, an equipment that allows minimizing losses and obtaining lower generation of fines in the casting process.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018 In thousands of Brazilian reais - R\$, except as otherwise indicated

										Parent	
	Farming land	Land	Buildings	Machinery and equipment	Vehicles and tractors	Furniture and fixtures	IT	Mines	Provision for mine closure	Construction in progress, intangible assets, and other	Total
<b>Cost</b>											
Balance as at December 31, 2016	115,419	5,961	143,847	502,427	73,817	10,766	9,552	74,474	10,792	106,751	1,053,806
Additions and transfers	-	17,921	46,701	61,405	1,618	701	602	14,851	-	(63,601)	80,198
Write-offs/reclassifications	-	-	-	(4,657)	(580)	(6)	(135)	-	(1,677)	(691)	(7,746)
Balance as at December 31, 2017	<u>115,419</u>	<u>23,882</u>	<u>190,548</u>	<u>559,175</u>	<u>74,855</u>	<u>11,461</u>	<u>10,019</u>	<u>89,325</u>	<u>9,115</u>	<u>42,459</u>	<u>1,126,258</u>
Additions and transfers	-	2,475	12,784	30,429	1,328	758	442	8,945	-	10,524	67,685
Write-offs/others	-	-	-	(943)	(2,672)	-	(30)	-	-	(314)	(3,959)
Reclassification	-	-	-	(43)	-	-	-	-	-	(807)	(850)
Balance as at December 31, 2018	<u>115,419</u>	<u>26,357</u>	<u>203,332</u>	<u>588,618</u>	<u>73,511</u>	<u>12,219</u>	<u>10,431</u>	<u>98,270</u>	<u>9,115</u>	<u>51,862</u>	<u>1,189,134</u>
<b>Accumulated depreciation and depletion</b>											
Balance as at December 31, 2016			(40,140)	(248,413)	(60,940)	(6,774)	(6,614)	(31,780)	(6,405)	(6,632)	(407,698)
Depreciation and depletion expenses			(5,929)	(42,957)	(6,096)	(750)	(994)	(3,431)	(689)	(3,960)	(64,806)
Write-offs/others			-	4,005	454	4	135	-	-	19	4,617
Reinvestment amortization			-	515	-	-	-	-	-	-	515
Balance as at December 31, 2017			<u>(46,069)</u>	<u>(286,850)</u>	<u>(66,582)</u>	<u>(7,520)</u>	<u>(7,473)</u>	<u>(35,211)</u>	<u>(7,094)</u>	<u>(10,573)</u>	<u>(467,372)</u>
Depreciation and depletion expenses			(7,594)	(34,574)	(3,584)	(732)	(976)	(4,292)	(641)	(3,165)	(55,558)
Write-offs/reclassifications			-	859	2,689	-	30	-	-	-	3,578
Reinvestment amortization			-	298	-	-	-	-	-	-	298
Balance as at December 31, 2018			<u>(53,663)</u>	<u>(320,267)</u>	<u>(67,477)</u>	<u>(8,252)</u>	<u>(8,419)</u>	<u>(39,503)</u>	<u>(7,735)</u>	<u>(13,738)</u>	<u>(519,054)</u>
<b>Net balances as at</b>											
December 31, 2017	<u>115,419</u>	<u>23,882</u>	<u>144,479</u>	<u>272,325</u>	<u>8,273</u>	<u>3,941</u>	<u>2,546</u>	<u>54,114</u>	<u>2,021</u>	<u>31,886</u>	<u>658,886</u>
December 31, 2018	<u>115,419</u>	<u>26,357</u>	<u>149,669</u>	<u>268,351</u>	<u>6,034</u>	<u>3,967</u>	<u>2,012</u>	<u>58,767</u>	<u>1,380</u>	<u>38,124</u>	<u>670,080</u>

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018 In thousands of Brazilian reais - R\$, except as otherwise indicated

	Consolidated										
	Farming land	Land	Buildings	Machinery and equipment	Vehicles and tractors	Furniture and fixtures	IT	Mines	Provision for mine closure	Construction in progress, intangible assets, and other	Total
<b>Cost</b>											
Balance as at December 31, 2016	115,571	11,130	148,195	508,989	82,604	10,830	9,785	74,474	10,792	108,216	1,080,586
Additions and transfers	-	17,921	46,701	61,405	1,618	701	602	14,851	-	(63,601)	80,198
Write-offs/reclassifications	-	-	-	(4,657)	(580)	(6)	(135)	-	(1,677)	(691)	(7,746)
Balance as at December 31, 2017	<u>115,571</u>	<u>29,051</u>	<u>194,896</u>	<u>565,737</u>	<u>83,642</u>	<u>11,525</u>	<u>10,252</u>	<u>89,325</u>	<u>9,115</u>	<u>43,924</u>	<u>1,153,038</u>
Acquisition BW Guirapá (Note 1,1)	-	601	208,172	579,429	-	58	23	-	-	12,369	800,652
Adjustment to fair value acquisition BW (Note 1,1)	-	-	(7,507)	87,562	-	3	(20)	-	-	-	80,038
Additions and transfers	-	2,475	12,784	30,447	1,328	758	442	8,945	-	10,524	67,703
Write-offs and Reclassifications	-	-	(46,900)	45,006	(2,672)	-	(30)	-	-	(941)	(5,537)
Balance as at December 31, 2018	<u>115,571</u>	<u>32,127</u>	<u>361,445</u>	<u>1,308,181</u>	<u>82,298</u>	<u>12,344</u>	<u>10,667</u>	<u>98,270</u>	<u>9,115</u>	<u>65,876</u>	<u>2,095,894</u>
Depreciation and depletion accumulated											
Balance as at December 31, 2016			(43,613)	(254,812)	(69,727)	(6,838)	(6,844)	(31,780)	(6,405)	(6,632)	(426,651)
Depreciation and depletion expenses			(6,090)	(42,993)	(6,096)	(750)	(994)	(3,431)	(689)	(3,961)	(65,004)
Write-offs and Reclassifications			-	4,005	454	4	135	-	-	19	4,617
Reinvestment amortization			-	515	-	-	-	-	-	-	515
Balance as at December 31, 2017			<u>(49,703)</u>	<u>(293,285)</u>	<u>(75,369)</u>	<u>(7,584)</u>	<u>(7,703)</u>	<u>(35,211)</u>	<u>(7,094)</u>	<u>(10,574)</u>	<u>(486,523)</u>
Write-offs and Reclassifications			(14,075)	(59,973)	(3,584)	(732)	(976)	(4,292)	(641)	(3,702)	(87,975)
Amortization adjustment to fair value acquisition BW			-	1,157	2,689	-	30	-	-	-	3,876
			311	(3,625)	-	-	-	-	-	-	(3,314)
Balance as at December 31, 2018			<u>(63,467)</u>	<u>(355,726)</u>	<u>(76,264)</u>	<u>(8,316)</u>	<u>(8,649)</u>	<u>(39,503)</u>	<u>(7,735)</u>	<u>(14,276)</u>	<u>(573,936)</u>
Net balance at											
December 31, 2017	<u>115,571</u>	<u>29,051</u>	<u>145,193</u>	<u>272,452</u>	<u>8,273</u>	<u>3,941</u>	<u>2,549</u>	<u>54,114</u>	<u>2,021</u>	<u>33,350</u>	<u>666,515</u>
December 31, 2018	<u>115,571</u>	<u>32,127</u>	<u>297,978</u>	<u>952,455</u>	<u>6,034</u>	<u>4,028</u>	<u>2,018</u>	<u>58,767</u>	<u>1,380</u>	<u>51,600</u>	<u>1,521,958</u>



(Convenience Translation into English from the Original Previously Issued in Portuguese)

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

The table below shows the economic useful lives of the assets. The annual depreciation rates were calculated using the straight-line method in 2018:

	Useful life in years
Machinery and equipment	21
Vehicles and tractors	5
Buildings	25
Furniture and fixtures	10
IT	5
Other	5

The Company has machinery, equipment and vehicles pledged as collaterals for lawsuits totaling R\$1,888 (R\$122 as at December 31, 2017), less depreciation.

## **19 Biological assets**

Biological assets are represented by grown and growing forests, for the supply of timber for the production of bio-reducer, which in turn is used as a raw material in the manufacturing of silicon alloys. The forests are located in the State of Bahia. The Company has a total area of 64,070 hectares; of this total, 25,648 hectares are planted.

The reconciliation of the accounting balances at the beginning and end of year is as follows:

	<b>Parent and Consolidated</b>	
	<b>2018</b>	<b>2017</b>
At the beginning of the year	212,746	197,866
Plantation and maintenance	23,593	19,096
Depletion	(59,197)	(45,584)
Changes in fair value	22,266	41,368
At the end of the year	199,408	212,746

To determine the fair value of biological assets, the discounted cash flow model was used, whose projections are based on a single projection scenario, with productivity and eucalyptus plantation area for a cut cycle of approximately seven years. The period of the cash flows was projected according to the productivity cycle of the forest projects. The volume of production of "standing timber" of eucalyptus to be harvested was estimated considering the average productivity per m<sup>3</sup> of timber of each nursery at the cut age.

The average productivity varies depending on genetic material, soil and climate conditions, and mainly forestry treatments. This projected volume is based on the Annual Average Increase (IMA) per region. Annual inventories are carried out to validate the growth rates.

The prices of biological assets, denominated in R\$/cubic meter are obtained based on the price charged by the Company in sales transactions to third parties, considering the scenario of eucalyptus sales price for timber production, in addition to the price surveys in the regional market, through a study conducted by a specialized, independent company.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

The estimated average standard cost includes the costs on the activities involving cut, chemical control of weeds, ant and other pest eradication, fertilizing, road maintenance, inputs, services and own labor. The estimated costs on the compensation for own land used for cultivation were also considered.

The main assumptions used in calculating the fair value of biological assets are:

	<b>Parent and Consolidated</b>	
	<b>2018</b>	<b>2017</b>
Effective planted area (hectare) (*)	25,756	25,648
Annual Average Increase (IMA) – m <sup>3</sup> /hectare per year (*)	32.00	31.00
Compensation for own land – R\$/hectare	510.00	444.00
Discount rate - %	7.18%	8.49%

(\*) Unaudited information

The Company has 17,168 hectares(\*) of biological assets pledged as collateral for the financing with the National Bank for Economic and Social Development (BNDES) relating to a line of credit of R\$40,493. In 2018, disbursements amounted to R\$2,500 (R\$11,157 as at December 31, 2017) in line with the plantation schedule.

The fair values of biological assets were considered as level 3 in the fair value hierarchy defined by IFRS 13/CPC 46 (information for assets or liabilities that are not based on observable market inputs, that is, unobservable assumptions).

## 20 Trade payables

	<b>Parent</b>		<b>Consolidated</b>	
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
Electric power	14,945	14,158	14,945	14,158
Raw material and inputs	31,273	25,021	31,273	25,021
Other suppliers	10,008	21,946	14,866	21,946
	<u>56,226</u>	<u>61,125</u>	<u>61,084</u>	<u>61,125</u>

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

## 21 Borrowings and financing

	<b>Parent</b>		<b>Consolidated</b>	
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
Current				
Financing (i)	18,030	6,383	18,030	6,383
Financing BNDES BW Guirapá I (ii)	-	-	26,492	-
Leasing	-	10	-	10
	<u>18,030</u>	<u>6,393</u>	<u>44,522</u>	<u>6,393</u>
Borrowing costs	-	-	(451)	-
	<u>18,030</u>	<u>6,393</u>	<u>44,071</u>	<u>6,393</u>
Noncurrent				
Financing (i)	46,132	59,989	46,132	59,989
Financing BNDES BW Guirapá I (ii)	-	-	312,026	-
	<u>46,132</u>	<u>59,989</u>	<u>358,158</u>	<u>59,989</u>
Borrowing costs	-	-	(5,414)	-
	<u>46,132</u>	<u>59,989</u>	<u>352,744</u>	<u>59,989</u>
	<u><u>64,162</u></u>	<u><u>66,382</u></u>	<u><u>396,815</u></u>	<u><u>66,382</u></u>

- (i) Refers to long-term third-party capital for investment in the forest area and acquisition of machinery and equipment allocated to metallurgy and mining.
- (ii) BNDES BW Guirapa financing: For the balances related to the consolidation, due to the acquisition of BW Guirapá I, the following points must be highlighted:

On October 6, 2015, the Wind Power Plants signed the financing agreements for the construction of the wind farm with the National Bank for Economic and Social Development (BNDES). The financing is distributed by the SPEs.

The interest rate of the contracts is 2.65% per year plus the TJLP variation, with monthly and successive payments, the first maturing on December 12, 2015 and the last on April 15, 2032.

The balances, costs and maturities are as follows:

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

Type	R\$ thousand	Maturities	Annual charges	Amortization	Collaterals
FINEX 4131	24,824	2020	8.2%	Monthly	-
FINAME	179	2021	TJLP + 3.9%	Monthly	Financed assets
FINAME	128	2022	2.5%	Monthly	Financed assets
FINAME	1,527	2022	TJLP + 3.5%	Monthly	Financed assets
FINEM	14,396	2022	TJLP + 1.52%	Monthly	Financed assets
FINAME	2,755	2023	2.5%	Monthly	Financed assets
FINAME	1,255	2023	3.0%	Monthly	Financed assets
FINAME	195	2023	4.0%	Monthly	Financed assets
FINAME	3,887	2023	TJLP + 3.9%	Monthly	Financed assets
FINAME	2,981	2024	6.0%	Monthly	Financed assets
FINAME	1,086	2024	TJLP + 3.6%	Monthly	Financed assets
FINAME	1,257	2024	TJLP + 3.5%	Monthly	Financed assets
FINAME	182	2024	TJLP + 3.4%	Monthly	Financed assets
FINEM	9,510	2025	TJLP + 2.26%	Monthly	Land mortgage

Variations in borrowings and financing are as follows:

	Parent	Consolidated
Balances as at December 31, 2016	39,369	39,369
Borrowings	29,243	29,243
Accrued interest and inflation adjustments	4,202	4,202
Interest paid	(3,860)	(3,860)
Repayment of principal	(2,572)	(2,572)
Balances as at December 31, 2017	66,382	66,382
Acquisition of BW Guirapá (Note 1,1)	-	349,719
Borrowings	30,500	30,790
Accrued interest and inflation adjustments	5,265	29,005
Amortization of borrowing costs	-	337
Interest paid	(4,703)	(26,896)
Repayment of principal	(33,282)	(52,522)
Balances as at December 31, 2018	64,162	396,815
Current	18,030	44,071
Noncurrent	46,132	352,744
	64,162	396,815

The noncurrent portion matures as follows:

Maturity year	Parent		Consolidated	
	2018	2017	2018	2017
2019	-	12,963	-	12,963
2020	16,246	14,467	41,199	14,467
2021	10,579	15,076	35,532	15,076
2022	7,613	8,435	32,566	8,435
2023 and thereafter	11,694	9,048	243,447	9,048
Total	46,132	59,989	352,744	59,989

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

#### Restrictive covenants

The Company recognizes financing, subject to restrictive covenants that require the compliance with periodic performance ratios, under penalty of accelerated debt maturity in case of noncompliance with the covenants.

The ratio between net debt and EBTIDA, in the consolidated, must be below or equal to 2.5x during the agreement term. As at December 31, 2017, the Company met this ratio.

Subsidiary BW Guirapá I and the seven Wind Plants must maintain, during the term of the BNDES financing agreement, the consolidated debt service coverage ratio for the entire group at 1.30, which was complied with as at December 31, 2018.

The collaterals offered for debt payment were: pledge of shares of BW Guirapá I, pledge of receivables (O&M agreement), pledge of emerging rights (authorization of independent producer), pledge of machinery and equipment (aerogenerators), conditional assignment of receivables (electric energy sales revenue and CER revenue, and recognition of reserve accounts) and bank guarantee.

Subsidiaries' significant obligations include the compliance with deadlines to start and implement the business operation; submission to the BNDES of the respective operating licenses; be in regular standing with the environmental agencies, CCEE, ANEEL, MME, the National Electric System Operator ("ONS") and/or any other bodies and entities comprising the Direct or Indirect Public Administration; and adopt measures and actions to avoid or repair damages to the environment, occupational health and safety. These covenants have been met.

In the year ended December 31, 2018, the Company complied with the financial and non-financial covenants set out in the agreements effective on that date.

## **22 Obligations with acquisition of subsidiary**

	<u>Remaining acquisition balance</u>	<u>Negotiation with suppliers</u>	<u>Earn-out</u>	<u>Total</u>
Balance payable on 04/02/2018	156,376	9,287	2,150	167,813
Adjustment	8,620	238	65	8,923
Balance payable on 09/30/2018	<u>164,996</u>	<u>9,525</u>	<u>2,215</u>	<u>176,736</u>
States as:				
Current	38,493	1,061	-	39,554
Noncurrent	126,503	8,464	2,215	137,182

The obligations with acquisition of subsidiary refer to the remaining balance of the acquisition of BW Guirapá I adjusted up to December 31, 2018: (i) R\$174,521 divided into three installments, of which R\$39,554 on 4/2/2019, R\$39,554 on 4/2/2020 and R\$95,413 on 4/2/2021; the installments are adjusted by the CDI rate + 1% p.a.; and (ii) the earn-out payment of R\$2,215.

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 23 Labor and actuarial liabilities

	Parent		Consolidated	
	2018	2017	2018	2017
Current				
Payroll and related taxes	9,645	10,295	9,685	10,316
Accrued payroll and related taxes	19,865	18,697	19,865	18,698
Profit sharing (i)	45,581	38,561	45,581	38,561
	<u>75,091</u>	<u>67,553</u>	<u>75,131</u>	<u>67,575</u>
Noncurrent				
Labor and actuarial liabilities (ii)	67,586	41,478	67,586	41,478
	<u>142,677</u>	<u>109,031</u>	<u>142,717</u>	<u>109,053</u>

(i) The Company's bylaws set forth that, of the profit for the year, after deducting accumulated losses and the provision for income tax and social contribution, up to 10% will be allocated for distribution to employees and, of this balance, up to 10% as management bonus. In 2018, the Company recognized accrued profit sharing in the amount of R\$9,979 (R\$7,597 as at December 31, 2017) and R\$35,602 (R\$30,964 as at December 31, 2017), respectively.

(ii) The Company has a defined, supplementary defined contribution plan, managed by BRASILPREV Seguros e Previdência S.A., and a health care plan, managed by Bradesco Saúde.

The Company also offers an additional postemployment benefit for employees who receive wages below the social security ceiling and who have worked in the Company for at least ten consecutive years. It refers to one single contribution paid to the employee upon termination of employment. In addition to the retirement premium benefit described in note 6(m(iii)). For this group, the Company prepared a projected calculation of fair value and recorded an accrual as at December 31, 2018 in the amount of R\$24,106 (R\$8,988 as at December 31, 2017).

Additionally, the Company grants to its retired employees, or employees dismissed without cause, the right to continue to be eligible to the corporate health care plan. The coverage conditions remain the same as those during the term of the employment contract, provided that employees fully pay for such plan.

Pursuant to the Collective Bargaining Agreement, the employees eligible to the FGTS and who resigned from the Company, when retiring, and if not continuing to work at the termination date, will be entitled to receive severance fees to which he/she is entitled as if he/she was terminated at the Company's discretion, provided that the length of service is above five and eight years, depending on the work site. The amount recorded by the Company in the year ended December 31, 2018 is R\$43,480 (R\$32,491 as at December 31, 2017).

**Cia de Ferro Ligas da  
Bahia - FERBASA**

**Notes to the Financial Statements  
For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

- (a) The variations in the present value of actuarial obligations are as follows:

	<u>Health care plan</u>	<u>Private pension plan and retirement premium</u>	<u>Total</u>
Value of actuarial obligations at the beginning of year	32,491	8,987	41,478
Current service expenses and interest on obligations recorded in profit or loss for the year	8,324	15,972	24,296
Employer's contributions in the year (-)	(676)	(249)	(925)
Loss (gain) on actuarial obligations	3,341	(604)	2,737
Present value of actuarial obligations at the end of year	<u>43,480</u>	<u>24,106</u>	<u>67,586</u>

- (b) The actuarial gains and losses for the period on the present value of the defined benefit obligation are broken down below, including those resulting from the changes in the demographic and financial assumptions, and those resulting from experience adjustments, as well as the identification of the amounts to be recognized in line item "Other comprehensive income".

	<u>Health care plan</u>	<u>Private pension plan and retirement premium</u>	<u>Total</u>
Actuarial gain (loss) from changes in demographic assumptions	(2,056)	(231)	(2,287)
Actuarial gain (loss) from changes in financial assumptions	(2,465)	119	(2,346)
Actuarial gain (loss) from experience adjustments	1,180	716	1,896
Amounts to be recognized in other comprehensive income for the year	<u>(3,341)</u>	<u>604</u>	<u>(2,737)</u>

- (c) Sensitivity analysis of profit or loss from actuarial valuation of postemployment benefits; this analysis considered the changes in general mortality assumptions, interest rates, health care plan inflation and permanence in the retirement plan.

	<u>Health care plan</u>		<u>Private pension plan and retirement premium</u>	
	<u>Liabilities</u>	<u>Impact*</u>	<u>Liabilities</u>	<u>Impact*</u>
Base scenario	<u>43,480</u>		<u>24,106</u>	
General mortality – reduction of 10% in mortality rates	44,561	2.49%	24,161	0.23%
General mortality – increase of 10% in mortality rates	42,485	(2.29%)	24,052	(0.23%)
Actual interest rates – reduction of 0.50% p.a.	48,273	11.02%	24,906	3.32%
Actual interest rates – increase of 0.50% p.a.	39,357	(9.48%)	23,358	(3.11%)
Health care plan inflation – increase of 1.00% p.a.	53,923	24.02%		
Health care plan inflation – decrease of 1.00% p.a.	35,667	(17.97%)		

\*Impact based on the base scenario.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### (d) Actuarial assumptions

	<u>Actuarial assumptions</u>	
	<u>2018</u>	<u>2017</u>
Expected inflation rate - % p.a.	4.00	4.82
Actual discount rate – pension plan - % p.a.	4.85	5.07
Actual discount rate – health care plan cost - % p.a.	5.05	5.34
Actual discount rate – Retirement premium - % p.a.	4.60	4.79
Turnover rate - % p.a.	5.00	3.30
Actual wage growth - % p.a.	1.50	1.14
Permanence in the plan after retirement - % (indirect grant)	55.00	55.00
Eligibility to retirement	65 normal 25,20 and 15 special	55 years old and 10 years of contribution

#### 24 Taxes and social contributions

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Current:				
Income tax and social contribution	-	-	1,046	42
Federal VAT (IPI)	1,873	1,041	1,873	1,041
State VAT (ICMS)	14,351	1,423	14,351	1,423
Withholding Income Tax (IRRF)	2,324	2,165	2,513	2,186
PIS and COFINS	1,705	1,346	2,263	1,369
Other	891	676	922	676
	<u>21,144</u>	<u>6,651</u>	<u>22,968</u>	<u>6,737</u>
Noncurrent:				
PIS and COFINS	-	-	87	87
	-	-	87	87
	<u>21,144</u>	<u>6,651</u>	<u>23,055</u>	<u>6,824</u>

#### 25 Foreign exchange hedging instruments

The Company contracted derivatives consisting of dollar forward sales (non-deliverable forward, or NDFs) to minimize risks involving the impact of foreign exchange fluctuations on the translation of its sales prices both in foreign markets and in the domestic market, as defined in an internal policy, approved by the Management, as described in note 5.4.

The methodology for determining the amount of the NDFs is the mark-to-market using the B3 benchmark rates.



(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

The Company and its subsidiaries do not make investments involving derivatives or any other risk financial instruments for speculative purposes.

The information on derivative transactions as at December 31, 2018 designated for hedge accounting (cash flow hedge) is broken down as follows:

<b>Parent and Consolidated</b>				
<b>Hedging instrument</b>				<b>Hedged item</b>
Maturities	Transaction	National (US\$)	Fair value	Transaction
First quarter of 2019	NDF	27,000	4,562	Future sales
Second quarter of 2019	NDF	27,000	5,334	Future sales
Third quarter of 2019	NDF	27,000	8,059	Future sales
Fourth quarter of 2019	NDF	27,000	7,132	Future sales
		108,000	25,087	

As at December 31, 2018, the Company valued its outstanding agreements (NDFs). The amount of R\$24,094 was considered effective for hedge accounting purposes and recorded to equity.

In the period, hedge contracts were settled, whose gains were recorded in profit or loss, in the amount of R\$15,096. As at December 31, 2017, losses on contracts settled amounted to R\$23,576.

The information on derivative transactions as at December 31, 2017 designated and not designated as hedge accounting (cash flow hedge) is broken down as follows:

<b>Parent and Consolidated</b>				
<b>Hedging instrument</b>				<b>Hedged item</b>
Maturities	Transaction	Notional amount (US\$)	Fair value	Transaction
First quarter of 2018	NDF	10,000	305	Future sales
Second quarter of 2018	NDF	4,000	275	Future sales
Third quarter of 2018	NDF	5,000	122	Future sales
Fourth quarter of 2018	NDF	9,000	291	Future sales
		28,000	993	

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

Below are the variations in hedge during 2018 and 2017:

	<u>Parent and consolidated</u>
Balances as at December 31, 2016	<u>16,311</u>
Hedge variation	(15,318)
Balances as at December 31, 2017	<u>993</u>
Hedge variation	24,094
Balances as at December 31, 2018	<u>25,087</u>

## 26 Provision for mine closure

The Company makes judgments and assumptions when measuring its obligations relating to the provision for mine closure and the decommissioning of assets related to mining operations. The potential costs covered by insurance or indemnities are not deducted from the amount accrued, as their recovery is considered uncertain.

The annual long-term interest rate used to discount the amount at present value and adjust the provision was 4.57% as at December 31, 2017 (5.44% as at December 31, 2017). Variations in the provision are summarized as follows:

	<u>Parent</u>		<u>Consolidated</u>	
	<u>12/31/2018</u>	<u>12/31/2017</u>	<u>12/31/2018</u>	<u>12/31/2017</u>
Current				
At the beginning of the year				
Provision for environmental liabilities (a)	-	-	2,745	-
Derecognition	-	-	(1,089)	-
Total current	<u>-</u>	<u>-</u>	<u>1,656</u>	<u>-</u>
Noncurrent				
At the beginning of the year	11,049	16,222	11,049	16,222
Estimated cash flow review	(750)	(1,677)	(750)	(1,677)
Derecognition	(1,010)	(4,066)	(1,010)	(4,066)
Inflation adjustment	3,004	570	3,004	570
Demobilization of wind farms (b)	-	-	7,858	-
Fair value Adjustment	-	-	983	-
Total noncurrent	<u>12,293</u>	<u>11,049</u>	<u>21,134</u>	<u>11,049</u>
Total	<u>12,293</u>	<u>11,049</u>	<u>22,790</u>	<u>11,049</u>

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

(a) For social and environmental liabilities: Considering that: (a) until the commercial operation of wind farms begins, the Company obtains all environmental licenses and, consequently, has an obligation to comply with the constraints contained therein in order to operate; (b) this obligation arises from events that have already occurred (construction of the project); and (c) it is expected that there will be an outflow of resources capable of generating future economic benefits, Wind Power plants will provide for social and environmental costs in noncurrent liabilities, when applicable, and incorporated such costs into the fixed assets during the construction period.

(b) For asset decommissioning liabilities: Wind farms are not subject to return to the granting authority and there is no legal obligation to remove equipment from the location where they are installed. Despite this, the business development department reassessed the approach of the Company and its subsidiaries, and from that date consider that the removal of the power plant from the installed location is necessary in order to return the area to the closest possible conditions to the status original. The decommissioning expenses were measured based on estimates based on the information available for the dismantling costs of equipment and civil works, inflated and discounted at the average cost of capital of each project. Accordingly, the Company applied technical interpretation ICPC 12 - Changes in Existing Decommissioning, Restoration and Similar Liabilities, recording the provision calculated based on its best estimate of the costs to be incurred in the disassembly of such equipment at the end of the authorization, discounted to present value considering a real interest rate based on the CDI discounted by the inflation measured according to the IPCA.

## 27 Provision for risks

The Company's and its subsidiaries' Management, based on its legal counsel's opinion, assessed lawsuits based on the likelihood of loss, as follows:

	Parent and Consolidated		
	Possible	Probable	Total
Tax/administrative	20,838	42,369	72,265
Labor	1,075	6,044	7,119
Civil	439	3,032	3,471
	<u>22,352</u>	<u>51,445</u>	<u>82,855</u>

(a) Accrued lawsuits whose likelihood of loss is assessed as probable:

	Parent and Consolidated	
	2018	2017
Tax/administrative:		
CFEM (i)	5,666	11,478
Taxes on revenue (PIS and COFINS) (ii)	11,376	10,690
CDE and TUST tariffs (iii)	22,600	20,587
Other	2,727	2,519
Labor (iv)	6,044	5,439
Civil:		
Derecognition of land deed (v)	1,511	1,395
BW (vi)	1,309	-
Other	212	89
	<u>51,445</u>	<u>52,197</u>

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements**

#### **For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

- (i) CFEM: The Company was notified in July 2007 by the National Department of Mineral Production (DNPM) to pay an alleged debt for improper collection of the Financial Compensation for the Exploration of Mineral Resources from January 1991 to December 2005. The main items under discussion are (a) the levy period, which is considered by the DNPM as the stage subsequent to the electric furnace, while the Company considers as the ore sintering stage; and (b) statute of limitation/expiration. The Company filed its defense/administrative appeals requiring the annulment of the notifications and the shelving of the respective collection lawsuits. After the administrative stage, the Company will file a lawsuit requesting the annulment of the respective case records, when the likelihood of a favorable outcome is higher. Although the case records total R\$68,081, the Company believes that a substantial portion of this assessment has a remote risk. Based on the opinion of its legal counsel, the Company recorded a provision in the amount of R\$5,666 (R\$11,478 as at December 31, 2017) to cover the portion being challenged, which it believes is sufficient to cover any cash disbursement.
- (ii) PIS and COFINS: The Company accrued the amount of R\$11,736 (R\$10,690 as at December 31, 2017) relating to a risk assessment carried out by Management, supported by tax firm, on untimely credits recorded and offset against federal taxes.
- (iii) The Company is a party to lawsuits filed by the Brazilian Association of Large Industrial Power Consumers and Free Consumers (ABRACE), whereby it challenges the amount calculated by ANEEL relating to the Energy Development Account (CDE) and the Transmission System Use Tariff (TUST). The Company recorded a provision in the amount of R\$19,192 (R\$19,192 as at December 31, 2017) and provision R\$ 3,408 (R\$1,395 as at December 31, 2017), respectively.
- (v) Labor: The Company and its subsidiaries are parties to several labor lawsuits filed by former employees or for joint liability claiming the payment of labor rights (severance pay, overtime, additional amounts, among others). In total, the Company is a party to 227 lawsuits as at December 31, 2018 and recorded a provision for lawsuits whose likelihood of loss is assessed as probable – in whole or in part – in the amount of R\$6,044 (R\$5,439 as at December 31, 2017).
- (vi) Derecognition of land deed: The Company acquired in good faith, properties in the State of Bahia for eucalyptus plantation. Despite of the absence of a lien on these properties at the time of transfer, the Company was sued by a company seeking to annul the purchase and sale agreements claiming that it owns the land as collateral for a bankruptcy lawsuit involving former owners. The Company recorded a provision in the amount of R\$1,511 (R\$1,395 as at December 31, 2017) to cover probable losses.

Variation in provisions:

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

	<b>Parent and Consolidated</b>			
	<b>Labor</b>	<b>Tax</b>	<b>Civil</b>	<b>Total</b>
Balances as at December 31, 2016	6,055	37,773	1,403	45,231
New lawsuits/additions	2,662	12,118	89	14,869
Reversals	(2,623)	(6,610)	(8)	(9,241)
Write-off due to payment	(655)	-	-	(655)
Inflation adjustments	-	1,993	-	1,993
Balances as at December 31, 2017	5,439	45,274	1,484	52,197
New lawsuits/additions	605	7,858	1,548	10,011
Reversals	-	(12,082)	-	(12,082)
Inflation adjustments	-	1,319	-	1,319
Balances as at December 31, 2018	6,044	42,369	3,032	51,445

(b) Risks of loss assessed as possible and, therefore, not accrued:

**Administrative/tax:** The Company is a party to a number of lawsuits challenging the payments considered inappropriate or overstated, mainly due to the differences between statements and accessory obligations. The Company assesses part of the risk of loss as possible, totaling R\$2,263 (R\$2,766 as at December 31, 2017).

The Municipality of Queimadas notified the Company due to irregularities in the mining lawsuits, part of the risk of which is assessed as possible, in the amount of R\$493 (R\$455 as at December 31, 2017).

**Tax offset:** The Company is discussing the use of credits to offset other federal taxes with the Brazilian Federal Revenue Service. The Company assessed the possible risk of loss in the amount of R\$8,892 (R\$7,600 as at December 31, 2017).

**PIS and COFINS:** In the case of the abovementioned notifications related to PIS and COFINS in 2005 and 2006, the difference between the total risk and the probable loss risk portion totals R\$9,190 (R\$8,486 as at December 31, 2017), which portion is assessed as possible loss risk.

**Labor:** There are approximately 33 lawsuits filed by former employees or of subsidiary responsibility; in the opinion of the outside legal counsel, the likelihood of loss is possible. The estimated risk of these lawsuits amounts to R\$1,075 (R\$2,297 as at December 31, 2017).

**Civil:** The Company is a party to 04 indemnity lawsuits for pain and suffering and repossession. The loss risk is assessed as possible and totals R\$439 (R\$431 as at December 31, 2017).

The Company is also a party to three land expropriation lawsuits filed by the National Institute of Colonization and Agrarian Reform (INCRA), which are under the litigation phase (amount of the indemnities); one lawsuit being in the survey/inspection phase. If expropriated, the Company will receive Agrarian Debt Securities (TDA) as compensation for the land.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018 In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 28 Related-party balances and transactions

	Profit or loss		Current assets		Current liabilities		
	Lease costs (i)	Sales revenue (ii)	Trade receivables (ii)	Dividends receivable (iii)	Trade payables (iv)	Other payables (v)	Interest on capital (vi)
<u>Parent</u>							
Fundação José Carvalho	-	73	66	-	-	102	4,258
<u>Subsidiaries</u>							
Silício de Alta Pureza da Bahia S.A. - Silbasa	840	-	-	-	-	-	-
Mineração Vale do Jacurici S.A.	360	-	-	-	-	-	-
Reflorestadora e Agrícola S.A.	60	-	-	-	-	-	-
Indústria de Minérios Damacal Ltda.	36	-	-	-	-	-	-
<u>Related parties</u>							
Marubeni Corporation	-	177,182	13,801	-	-	-	-
Total as at December 31, 2018	<u>1,296</u>	<u>177,255</u>	<u>13,867</u>	<u>-</u>	<u>-</u>	<u>102</u>	<u>4,258</u>
Total as at December 31, 2017	<u>1,296</u>	<u>147,978</u>	<u>7,199</u>	<u>475</u>	<u>8,750</u>	<u>567</u>	<u>10,634</u>

(i) Refers to the leases for the subsidiaries' operations.

(ii) Revenue and receivables from the sale of alloys (FeSi 75) to the foreign related party and receivables from the sale of timber, quicklime and waste dust to the Parent.

(iii) Dividends proposed based on adjusted profit in 2017.

(iv) Payables from the purchase of the Parent's real estate, disclosed to the market on December 26, 2017, as set forth in CVM Instruction 480/09. The total acquisition amount was R\$17,500.

(v) Agreements for supply of meals and dairy products.

(vi) See note 29

The Company has not provided or received any guarantees to or from related parties.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

Pursuant to the Brazilian Corporate Law, shareholders are responsible for setting the overall annual management compensation at a shareholders' meeting.

	Parent		Consolidated	
	2018	2018	2018	2017
Payroll (i)	11,056	8,981	13,406	10,035
Payroll taxes	2,208	1,796	2,679	2,005
Benefits	1,159	1,078	1,159	1,078
Profit sharing (ii)	9,979	7,597	9,979	7,597
	<u>24,402</u>	<u>19,452</u>	<u>27,223</u>	<u>20,715</u>

(i) Approved at the Annual Shareholders' Meetings of the Parent and its subsidiaries.

(ii) Profit sharing accrued in accordance with the Company's bylaws, as described in note 23.

## 29 Equity

### a) Capital

The limit of the Company's authorized capital is R\$1,500,000 and, as at December 31, 2018 and 2017, the Company's subscribed and paid-in capital totals R\$1,225,444, of which the subscribed and paid-in capital is represented by 88,320 thousand registered shares without par value, of which 29,440 thousand common shares and 58,880 thousand preferred shares, held as follows:

Shareholders	2018		2017	
	Common shares	Preferred shares	Common shares	Preferred shares
Fundação José Carvalho	29,086,696	15,534,200	29,086,696	16,884,600
Dimensional Funds	-	1,901,537	-	2,164,515
Morgan Stanley Uruguay	-	811,097	-	1,409,598
Market Vectors Minor Metal ETF	-	626,523	-	1,261,923
Other shareholders	313,304	36,823,343	313,304	33,976,064
Treasury shares	<u>40,000</u>	<u>3,183,300</u>	<u>40,000</u>	<u>3,183,300</u>
	<u>29,440,000</u>	<u>58,880,000</u>	<u>29,440,000</u>	<u>58,880,000</u>

The Company can, if so decided by the Shareholders' Meeting, increase the number of existing types or classes of shares, without keeping proportion among the existing shares, or create a new class of preferred shares, within the limit of 2/3 of total shares issued for preferred shares that are nonvoting or subject to restrictions to this regard.

### b) Treasury shares

The Company holds 3,183,300 preferred shares, at an average cost of R\$8.07 per share, acquired through the share buyback program.

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

The shares bought back under the program will remain in treasury and the decision on the sale and/or cancellation of these shares will be taken in due time, and will be then duly communicated to the market. The preferred shares held in the treasury are intended for subsequent sale or cancellation, among others. The volume of treasury shares and their market values, considering the quoted closing price on B3 are as follows:

	2018		2017	
	Preferred shares	Common shares	Preferred shares	Common shares
Number of treasury shares	3,183,300	40,000	3,183,300	40,000
Quoted on B3 - R\$/share	24.32	20.45	20.47	19.00

Preferred shares are nonvoting and are entitled, under the bylaws, to the payment of dividends 10% higher than the dividends paid to common shareholders, and priority in the capital reimbursement.

#### c) Earnings reserves

- (i) The legal reserve is recorded upon capital increase and allocation of 5% of profit for the year, up to the limit of 20% of capital, and is used solely to offset losses, after the balances of retained earnings and other earnings reserves are absorbed.
- (ii) The earnings reserve (SUDENE tax incentive) related to income tax refers to the portion of the income tax incentive (operating profit). This reserve is recognized by transferring the portion of the tax incentive that affected the expenses on income tax for the year and cannot be distributed to shareholders. This reserve also includes the income tax reinvestment amount.
- (iii) Profit after the allocation to the legal reserve, the earnings reserve (tax incentive), and the allocation of dividends to be distributed to shareholders, is transferred to line item "Earnings retention reserve - investments", to be realized according to the Company's capital budget and strategic planning.

#### d) Other comprehensive income and valuation adjustments to equity

Other comprehensive income comprises the revenue and expense components (including from reclassification adjustments) that are not recognized in the income statement as required or permitted by the pronouncements, interpretations and guidelines issued by the CPC.

Created by Law 11638/07, the group of "Valuation adjustments to equity" in the Company's equity comprises the valuation adjustments and increases and decreases of assets and liabilities, where applicable, while not recorded in profit or loss for the year, until effective realization.

	Parent		Consolidated	
	2018	2017	2018	2017
Deemed land cost (i)	61,830	61,830	66,404	66,404
Adjustments to financial instruments (note 25)	25,087	993	25,087	993
Actuarial - postemployment (note 23)	(15,534)	(17,902)	(15,534)	(17,902)
Deferred taxes	(26,613)	(14,247)	(28,168)	(15,802)
	<u>44,770</u>	<u>30,674</u>	<u>47,789</u>	<u>33,693</u>



(Convenience Translation into English from the Original Previously Issued in Portuguese)

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

(i) Deemed cost of property, plant and equipment for forest land, which option was exercised in the first-time adoption of the new accounting pronouncements in convergence with the IFRS on January 1, 2009.

e) Unrealized earnings reserve

The Company recognized unrealized earnings reserve arising from the bargain purchase gain on the acquisition of complex BW Guirapá (note 1.1) in the amount of R\$49,595 as at December 31, 2018.

f) Dividends and interest on capital

The Company entitles its shareholders to receive mandatory minimum dividends corresponding to 25% of annual adjusted profit. Interest on capital is considered as profit distribution for purposes of determining mandatory minimum dividend. Preferred shares are entitled to dividends 10% higher than those attributed to common shares.

The Company's Board of Directors, based on the decisions made at the meetings held on May 29, 2018, August 28, 2018, November 27, 2018 and December 18, 2018, approved the distribution of interest on capital, in the amounts of R\$24,257, R\$31,576, R\$32,440 and R\$8,361, respectively.

The respective distributions will be attributed to the Company's mandatory minimum dividends upon the allocation of profit for the year ended December 31, 2018.

The Company's Management proposed the distribution of interest on capital and dividends as shown below:

	<b>2018</b>	<b>2017</b>
(=) Profit for the year	308,799	269,852
(-) Recognition of legal reserve (5% of profit)	(15,440)	(13,493)
(-) Tax incentive reserve (SUDENE, ICMS DESENVOLVE and reinvestment)	(69,949)	(48,960)
(-) Unrealized earnings reserve (bargain purchase)	(49,595)	-
(=) Adjusted profit for distribution	<u>173,815</u>	<u>207,399</u>
Dividends and interest on capital		
Common shares - R\$ 1.0658 (12/31/2017 - R\$ 0,9941)	31,335	29,227
Preferred shares - R\$ 1.1724 (12/31/2017 - R\$ 1,0935)	<u>65,299</u>	<u>60,908</u>
	<u>96,634</u>	<u>90,135</u>
Percentage on adjusted profit	<u>56%</u>	<u>43%</u>
Total dividends and interest on capital payable	<u>96,634</u>	<u>90,135</u>
Percentage on adjusted profit	<u>56%</u>	<u>43%</u>

Withholding Income Tax (IRRF) on interest on capital was recorded at 15% rate. In order to ensure the same benefits to shareholders who are not exempt or immune they would have, in case they receive compensation, as dividends, the amount relating to the withholding income tax at the rate of 15% has been added.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 30 Earnings per share

As established by CPC 41 - Earnings per Share, basic earnings per share are calculated by dividing profit for the three-month period attributable to the holders of the Company's common and preferred shares by the weighted average number of common and preferred shares outstanding in the period. Diluted earnings per share correspond to basic earnings per share as the Company has no potentially diluting common or preferred shares.

	<u>Continuing operations</u>	
	<u>2018</u>	<u>2017</u>
Profit attributable to owners of the Company	308,799	269,852
Reconciliation of distributable profit, per class (numerator):		
Profit attributable to		
common shares	100,133	87,504
preferred shares	208,666	182,348
Weighted average number of shares, per class (denominator):		
Weighted average number of		
common shares issued	29,400,000	29,400,000
preferred shares issued	55,696,700	55,696,700
Basic and diluted earnings per share (in R\$)		
common shares	3.4059	2.9763
preferred shares	3.7465	3.2739

#### 31 Net sales revenue

	<u>Parent</u>		<u>Consolidated</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Gross sales revenue				
Domestic market	1,123,833	976,180	1,197,948	976,180
Foreign market	484,638	364,007	484,638	364,007
	<u>1,608,471</u>	<u>1,340,187</u>	<u>1,682,586</u>	<u>1,340,187</u>
Sales deductions				
Returns and rebates	(46,084)	(16,221)	(46,084)	(16,221)
Taxes on sales	(252,317)	(215,124)	(255,446)	(215,244)
	<u>(298,401)</u>	<u>(231,345)</u>	<u>(301,530)</u>	<u>(231,465)</u>
	<u>1,310,070</u>	<u>1,108,842</u>	<u>1,381,056</u>	<u>1,108,722</u>

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

#### 32 Expenses by nature – operating, cost of sales, and other expenses, net

	Parent		Consolidated	
	2018	2017	2018	2017
Cost of sales (i)	(873,115)	(759,394)	(920,601)	(758,296)
Selling expenses	(10,884)	(22,416)	(10,884)	(22,416)
General and administrative expenses	(67,361)	(66,521)	(73,097)	(66,917)
Management fees	(14,424)	(11,855)	(17,245)	(13,118)
Profit sharing	(45,581)	(38,561)	(45,581)	(38,561)
Other income (expenses), net (iii)	43,433	(4,315)	39,660	(4,768)
	<u>(967,932)</u>	<u>(903,062)</u>	<u>(1,027,748)</u>	<u>(904,076)</u>

The table below shows the breakdown by nature of cost of sales and operating expenses:

	Parent		Consolidated	
	2018	2017	2018	2017
Variable cost and indirect product expenses	(414,362)	(392,762)	(415,766)	(391,862)
Personnel expenses (ii)	(310,797)	(246,251)	(315,791)	(247,514)
Depreciation and depletion expenses	(114,755)	(109,875)	(147,172)	(110,073)
Expenses on services provided	(89,299)	(72,212)	(90,030)	(72,212)
Maintenance and repair costs	(52,425)	(45,672)	(68,813)	(45,672)
Fuel and lubricants	(15,957)	(12,561)	(15,957)	(12,561)
Idle capacity cost	(1,861)	(10,930)	(1,861)	(10,930)
Losses on equipment lease	(11,909)	(8,484)	(12,018)	(8,484)
Other income (expenses)	43,433	(4,315)	39,660	(4,768)
	<u>(967,932)</u>	<u>(903,062)</u>	<u>(1,027,748)</u>	<u>(904,076)</u>

(i) Cost of sales include:

- (a) cost of the electricity supply for the 14 electric furnaces. In addition to the electric furnaces, there is energy consumption in auxiliary services and other functions, as well as in mining.
- (b) The Company imports reactive metallurgical coke (met coke) (a commodity available in the foreign market) for the production of ferrochrome.
- (c) Cost of chrome ore transportation between the mines (municipality of Campo Formoso) and the metal plant (Pojuca, BA), by rail.
- (d) In the consolidated, includes costs on depreciation, amortization, energy transmission, system use charges, operation and maintenance, etc. for wind power generation in the amount of R\$48,585.

(ii) Includes personnel expenses, management compensation, and employee and management profit sharing.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

(iii) The table shows the breakdown per nature of other income (expenses), net:

	Parent		Consolidated	
	2018	2017	2018	2017
Post-employment benefits	(23,371)	(5,993)	(23,371)	(5,993)
Other taxes	(3,032)	(5,755)	(3,032)	(5,613)
Corporate and social responsibility	(2,332)	(1,626)	(2,332)	(1,626)
Provisions for contingent liabilities	(5,575)	(5,275)	(5,575)	(5,275)
Assignment of electricity (i)	15,187	25,052	15,187	25,052
Derecognition of property, plant and equipment, by inventory	(329)	(2,693)	(719)	(2,693)
Bargain purchase (a)	75,143	-	75,143	-
Other income (expenses)	(12,258)	(8,025)	(15,641)	(8,620)
	<u>43,433</u>	<u>(4,315)</u>	<u>39,660</u>	<u>(4,768)</u>

(a) The Company made the adjustment in the amount of R\$75,143 related to bargain purchase (see note 1.1).

### 33 Finance income (costs)

	Parent		Consolidated	
	2018	2017	2018	2017
Finance income				
Income from short-term investments	21,849	37,876	27,518	42,963
Exchange rate changes	16,274	4,049	16,283	4,048
Other finance income	2,764	3,285	2,954	3,290
	<u>40,887</u>	<u>45,210</u>	<u>46,755</u>	<u>50,301</u>
Finance costs				
Exchange rate changes	(11,006)	(2,684)	(14,390)	(2,683)
Adjusted provision for mine closure (note 26)	(2,254)	(570)	(2,254)	(570)
Interest paid or incurred	(15,630)	(6,278)	(39,461)	(6,307)
Other	(473)	(1,385)	(1,228)	(1,443)
	<u>(29,363)</u>	<u>(10,917)</u>	<u>(57,333)</u>	<u>(11,003)</u>
Hedging financial instruments (note 25)				
Change in hedge assets	2,165	25,351	2,165	25,351
Change in hedge liabilities	(17,261)	(1,775)	(17,261)	(1,775)
	<u>(15,096)</u>	<u>23,576</u>	<u>(15,096)</u>	<u>23,576</u>
	<u>(3,572)</u>	<u>57,869</u>	<u>(25,674)</u>	<u>62,874</u>

### 34 Operating segments

The Company segmented its operating structure taking into consideration the way Management manages the business. Management defined the following operating segments:

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## Cia de Ferro Ligas da Bahia - FERBASA

### Notes to the Financial Statements For the Year Ended December 31, 2018

In thousands of Brazilian reais - R\$, except as otherwise indicated

Chrome alloy segment - involves the operations of high chrome alloys, low carbon alloys and ferrochrome.

Silicon segment - involves the operations of ferroalloys of silicon 75 special and silicon 75 standard.

Wind power segment - include the transactions of subsidiary BW Guirapá.

Other segments - include forestry activity, with standing timber sales and mining activities with chrome ore, chromite sand, quicklime and hydrated lime sales.

Consolidated information on operating segments:

	Chrome alloys		Silicon alloys		Wind power	Other segments		Total	
	2018	2017	2018	2017	2018	2018	2017	2018	2017
Net sales									
Domestic market	671,334	606,658	121,450	107,366	71,105	49,341	42,570	913,230	756,594
Foreign market	75,317	133,916	374,731	182,364	-	17,778	35,848	467,826	352,128
	746,651	740,574	496,181	289,730	71,105	67,119	78,418	1,381,056	1,108,722
Cost of sales	(502,859)	(486,188)	(305,727)	(227,466)	(48,585)	(63,430)	(44,642)	(920,601)	(758,296)
Change in fair value of biological assets						22,266	41,368	22,266	41,368
Gross profit	243,792	254,386	190,454	62,264	22,520	25,955	75,144	482,721	391,794
Operating expenses	(57,104)	(97,667)	(37,948)	(38,210)	(6,961)	(5,134)	(9,903)	(107,147)	(145,780)
Operating profit from before finance income (costs)	186,688	156,719	152,506	24,054	15,559	20,821	65,241	375,574	246,014
Product sales (tonnes)									
Domestic market	128,349	122,158	21,862	24,698	-	-	-	150,211	146,856
Foreign market	10,641	22,452	65,112	42,236	-	-	-	75,753	64,688
	138,990	144,610	86,974	66,934				225,964	211,544

Information on finance income, income tax and social contribution, total assets and liabilities was not disclosed in the segment reporting, as it is not used by the Company's Management on a segmented manner, as such information is managed and analyzed on a consolidated basis in its operations.

## 35 Commitments

The Company is the lessee in lease agreements entered into with subsidiaries Re flora, Silbasa, Damacal, and Jacurici. Amendments are made to the agreements on an annual basis setting the lease payment amounts effective until the next contractual amendment. Lease payments effective for the period April 2018-April 2019 total R\$108 per month. Lease expenses in 2018 and 2017 totaled R\$1,296.

(Convenience Translation into English from the Original Previously Issued in Portuguese)

## **Cia de Ferro Ligas da Bahia - FERBASA**

### **Notes to the Financial Statements For the Year Ended December 31, 2018**

**In thousands of Brazilian reais - R\$, except as otherwise indicated**

---

#### **36 Insurance**

The Company and its subsidiaries have insurance coverage against fire in equipment, explosions, electrical damages, vehicles, and civil liability amounting to R\$35,260 as at December 31, 2018 (R\$34,997 as at December 31, 2017).

#### **37 Transactins not affecting cash and cash equivalent**

During 2018, Company registered the following transactions that not affected cash and cash equivalent. These transactions do not affect cash flow statement.

	<b>Parent</b>		<b>Consolidated</b>	
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>
Land acquisition (Note 28)	-	8,750	-	8,750
Prescribed dividends	-	351	-	351
Gain (loss) actuarial (Note 23)	(2,737)	(9,551)	(2,737)	(9,551)
Provision for mine disclosure cash flow review (Note 25)	(750)	(1,677)	(750)	(1,677)
Dividends/Interest on capital (Note 29)	8,361	20,231	8,454	20,328
Subsidiary capital reduction (Jacurici)	(8,000)	-	-	-
Obligation with subsidiary	-	-	8,000	-
Capital increase with tax incentive (Note 29)	-	108,767	-	108,767

\* \* \*

---

#### **Accountant:**

Arnaldo Pereira Anastácio  
Accounting Manager  
CRC-RJ 61263/O - 0-T-BA