Germano Complex,
in Minas Gerais

SAMARCO MINERAÇÃO S.A.

MESSAGE FROM MANAGEMENT, INDEPENDENT AUDITORS' REPORT
AND FINANCIAL STATEMENTS AS OF DECEMBER 31, 2019

(Free-translation of an original version issued in Portuguese)

SAMARCO

SAMARCO MINERAÇÃO S.A.

MESSAGE FROM MANAGEMENT

MESSAGE FROM MANAGEMENT 2019

In this publication, Samarco presents its financial statements for the year ended December 31, 2019, with their respective explanatory notes, additional information and clarifications from management.

With 42 years of experience, Samarco Mineração S.A. is a privately held Brazilian mining company, a joint venture controlled in equal parts by two shareholders - BHP Billiton Brasil Ltda. and Vale S.A. Until November 2015, the mining company had become one of the largest exporters in Brazil when, on November 5, 2015, it suspended its operations due to the failure of the Fundão dam, in Mariana, Minas Gerais. This incident impacted the lives of thousands of people as well as the environment along the Rio Doce watershed, in the states of Minas Gerais (MG) and Espírito Santo (ES), a sad milestone in the Company's history which will never be forgotten.

Since then, Samarco has based its actions on a commitment to remedy the impacts and, above all, on the lessons and experiences acquired. It plans to gradually resume its operations with the implementation of a new operational model, using new technologies that increase safety and seek business sustainability.

The actions to remediate and compensate the environmental and social damages are being carried out by the Renova Foundation, a private, non-profit independent institution, which started its activities in 2016, under the Transaction and Conduct Adjustment Agreement ("TTAC") and, subsequently, the Governance Conduct Adjustment Agreement ("Governance TAC"), approved in 2018. Altogether, 42 socio-environmental and socio-economic programs are being implemented. In 2019, the Foundation received resources in the amount of R$ 2.99 billion.

Samarco is responsible for supporting and financing the Renova Foundation. The total resources invested in the institution up to the end of 2019 amounted to R$ 7.9 billion and the liability provisioned by Samarco on December 31, 2019 is R$ 12.2 billion for future disbursements. It should also be noted that the scope, deadlines and costs foreseen for the remediation programs are an estimate and as such subject to change, since they depend on the conclusion of studies, action plans, program reviews and, also, on the result of judicial decisions.

After the depletion of its own resources, due to the interruption of its operations, Samarco has received funding from Shareholders. This support has been provided through loans to the Company by its shareholders, by means of the subscription of debentures issued by Samarco, to cover the need for working capital and expenses with the remediation and compensation actions that are part of the TTAC programs. The contributions to the Renova Foundation have been made directly by the shareholders, under the terms of the TTAC.

Among the responsibilities of the Renova Foundation is the [execution and] oversight of programs such as resettlement and water monitoring. It is important to mention that, in 2019, works began on the resettlement of Bento Rodrigues, an impacted town in MG including infrastructure and housing. In Paracatu de Baixo (MG), the foundations of the houses and infrastructure interventions began, and in Gesteira (MG), the land for the construction of the houses was acquired and the conceptual design is in progress. Regarding water management, the 92 monitoring points of the impacted water courses show that raw water from the Doce River is good for consumption after standard treatment. According to the Consolidation Report of Human Health Risk Assessment Studies (ARSH), released in December 2019, there are no metals resulting from the Fundão dam failure that represent toxicological risk to human health. Therefore, there is no limitation of agricultural activities or water consumption (after standard treament). There has also been an increase in the budget for remediation actions executed by the Foundation, with an estimated total of R$ 4.68 billion for 2020.

Along with the progress in remediation, over the past four years Samarco has devoted special attention to assuring the safety of its geotechnical structures, meeting not only Brazilian standards, but also more stringent international requirements. The Integrated Safety System, supported by the Monitoring and Inspection Center (CMI), is constantly being improved upon. In 2018, this system had 600 pieces of equipment and, in 2019, the number was expanded to 840 state-of-the-art instruments. It is important to observe that the CMI operates 24 hours a day, seven days a week, with a specialized technical team which also performs field inspections. In addition, emergency drills were carried out in the cities of Mariana, Barra Longa, Matipó (MG) and the Ubu Complex (ES) in 2019.

Up to December 2019, approximately R$ 383.7 million had been allocated to robust engineering works, following recommendations from independent [technical] audits. It should be noted that, in the second half of last year, Samarco contracted, through an Agreement with the Public Prosecution Office of the State of Minas Gerais, an external auditor to monitor the entire process of resumption of its operations, thus ensuring more transparency to the process.

Thanks to the measures adopted, all the company's geotechnical structures are stable, are permanently monitored and have a Dam Safety Assurance Statement (*Declaração de Condição de Estabilidade* - DCE), a document recently validated in March 2020, which attests the fulfillment of applicable safety requirements and standards.

At the same time, Samarco has been investing in the process of gradually resuming its operations and is looking forward to contributing again to the economies of the states where it operates - Minas Gerais and Espírito Santo. Throughout its history, the company has played an important role in the economy. In 2015, it ranked 12th among exporters in the country, it ranked second in the seaborne iron ore pellet market, with a production capacity of 31.5 million tons and a revenue equivalent to 6.4% of GDP of Espírito Santo and 1.5% of the GDP of Minas Gerais. As such, the company's operational restart also represents a positive step towards full remediation, as it is focused on the local economy, generating job opportunities and income and fiscal revenue.

The actions carried out by the company in 2019 show its commitment to society and, above all, to a new operational model. Among Samarco's achievements for 2019, we highlight the issue of the Corrective Operational License (LOC) for its operational activities in the Germano Complex. The LOC was approved on October 25, 2019 by the Chamber of Mining Activities (CMI) of the State Council for Environmental Policy (COPAM). Thus, Samarco currently has all the necessary environmental licenses to restart its operations.

However, reaffirming its values, Samarco has chosen to resume activities only after the implementation of a new Tailings Disposal System, which includes a Filtration System. With this decision, the activities related to iron ore mining, to the beneficiation plants in Germano, Mariana (MG), and the pelletizing plants in the Ubu Complex, in Anchieta (ES), will only resume after the implementation of the Filtration System, on which work started in late 2019 and should be ready within a year. The filtration unit has received financial support from the shareholders in the approximate amount of R$ 302.5 million.

Regarding the tailings disposal system, an important milestone in 2019 was the preparation of the Alegria Sul pit. The preparation works began in October 2018 and were concluded in May 2019, without a single reported accident on site. In the first phase, the works carried out were for the preparation of the space, which is currently estimated to have the capacity to receive 9.7 million cubic meters of tailings. In the second phase, the electromechanical assembly of the pumping system was carried out, involving an investment of R$ 192.4 million. The Alegria Sul pit is currently estimated to be able to receive 20% of the volume of tailings, while the remaining 80% are expected to be filtered and dry stacked. The water removed from this process will be reused in production, reducing the need for external removal and increasing the company's water efficiency.

After the completion of the Filtration System, Samarco will gradually start operating again. Initially, the plan is to use one of the three concentrators, together with pipeline 2 and the fourth pelletizing plant, which is the plant with the highest operational efficiency.

In addition to the works to implement the filtration system for the resumption, the company continued to invest in its Operational Readiness Plan. Over the years, Operational Readiness has been ensuring the proper maintenance and conservation of production assets so that the company is prepared for the resumption of operations. Up to December 2019, approximately R$ 69.8 million had been allocated to actions such as: the assembly of the mine bench conveyor system, repair of the concentrator 3 ball mill, running the instrumented PIG (i.e. for inspection, cleaning and maintenance) through pipeline 2 and preparation works for the fourth pelletizing plant.

Still with regard to 2019, it is important to mention the changes in the environmental and regulatory legislation established for the mining industry in Brazil. Thus, Samarco, in compliance with Joint Resolution SEMAD / FEAM No. 2,784 / 2019, State Law 23,291 / 2019 and Resolution No. 13 of the National Mining Agency, which determine the decharacterization of upstream dams, filed with the State Foundation of Environment (Feam) the Germano Pit and Dam Decharacterization Project, which includes the Sela, Selinha and Tulipa dikes. The decharacterization works are in progress.

Samarco continues to analyze and evaluate the impact on its business plan of the various changes in legislation mentioned above. The current estimate for expenses related to the decharacterization of the Germano dam and pit, which were not considered in the company's business plan announced in January 2019, is approximately R$ 2.9 billion.

In addition, the mining company emphasizes that an adequate restructuring of its financial obligations, as the company has an outstanding debt of some US$ 7.3 billion.

Regarding the financial statements in this document, Samarco reinforces that these are Management expectations, representing forecasts and not guarantees of any future performance. Any forward-looking statements are and will be subject to risks, uncertainties, external factors, changes in legislation and in Samarco's business environments, which could cause current results to be materially different.

As an example, one can mention that currently Brazil and the world face a Coronavirus pandemic. The impacts of COVID-19 on the global economy cannot yet be fully assessed, and therefore they are not foreseen and quantified in this document. Management expectations as reflected in this document might change as a result of circumstances arising from these new developments. In March 2020, Samarco established a Crisis Management Committee that works continuously to manage preventive actions to respond to the new Coronavirus and assesses the risks and impacts to its business and to its operational restart.

Accordingly, the statements contained in this document were based on a series of assumptions including the resumption of operations, which, however, is conditioned to several external factors.

Aware of the current scenario and the risks presented, we believe that Samarco's operational resumption is being consolidated through constant dialogue with its stakeholders. For this reason, we appreciate the support received throughout our history. Our trajectory is marked by challenges, lessons learned and achievements, which reinforce our commitment to seek different, sustainable mining in order to generate value for society.

Rodrigo Alvarenga Vilela
CEO and Director of Operations

Cristina Morgan Cavalcanti
CFO

Reuber Luiz Neves Koury
Director of Planning and Projects

SAMARCO MINERAÇÃO S.A.

INDEPENDENT AUDITORS' REPORT ON PARENT COMPANY AND CONSOLIDATED FINANCIAL STATEMENTS

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Independent auditors' report on the individual and consolidated financial statements

To the shareholders of Samarco Mineração S.A.

Belo Horizonte – MG

Opinion

We have audited the individual and consolidated financial statements of Samarco Mineração S.A. ("the Company"), identified as parent company and consolidated respectively, which comprise the statement of financial position as at December 31, 2019 and the related statements of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended, including significant accounting policies and other explanatory information.

In our opinion, the aforementioned financial statements present fairly, in all material respects, the individual and consolidated financial and equity position of Samarco Mineração S.A. as of December 31, 2019, and the individual and consolidated performance of its operations and individual and consolidated cash flows for the financial year then ended, in accordance with accounting practices adopted in Brazil.

Basis for opinion

We conducted our audit in accordance with Brazilian and international auditing standards. Our responsibilities under those standards are further described in the section Auditors' Responsibilities for the Audit of the individual and consolidated financial statements. We are independent of the Company and its subsidiaries in accordance with the ethical requirements set out in the Professional Code of Ethics for Accountants and the Professional Standards issued by the Federal Accounting Council, and we have fulfilled our 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.

Material uncertainty regarding going concern

We draw your attention to note 1 to the financial statements, which states that the Company and its subsidiaries have had their activities suspended due to the collapse of Fundão dam on November 5, 2015. As a result of this event, the consolidated financial statements as at December 31, 2019 has negative equity of R$ 37,078,141 thousand, current liabilities exceed current assets by R$ 27,974,513 thousand. These events or conditions indicate the existence of significant uncertainty that may raise significant doubts as to the ability of the Company and its subsidiaries to continue operating. Until the operations of the Company and its subsidiaries are resumed, ordinary obligations are being honoured through financial support from their shareholders. Our opinion is not qualified in relation to this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the current period. These matters were addressed in the context of our audit of the individual and consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matters described in the section "Material uncertainty regarding going concern", we have determined that the matters described below are the key audit matters to be communicated in our report.

Environmental and socioeconomic provision for remedying the damage caused by the collapse of the Fundão tailings dam

See Notes 1(a) and 3 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
Following the collapse of the Fundão tailings dam in Mariana-MG on November 5, 2015, the Company and its subsidiaries had their operations suspended and since the accident the Company has incurred material expenses in order to prevent the impacts from worsening and to remedy and compensate for the material, environmental and social economic damages. The Company also recognized the write-off of its assets affected by the accident and recorded provisions based on estimated future expenses. The provision for future expenses resulting from the accident was based on the estimated contributions to be made to Fundação Renova, following the signing of the Transaction and Conduct Adjustment Agreement - TTAC. This Foundation carries out environmental and socioeconomic recuperation and compensation programs. The provision initially resulted from internal estimates and support from specialized independent consultants contracted for this purpose and are updated based on changes in the estimated amount that Fundação Renova will spend on delivering the programs. The Company's provision also includes estimated internal expenses related to the accident not related to Fundação Renova and its programs. As there is significant uncertainty around the amounts the Company will pay to deliver Fundação Renova's programs and other expenses resulting from the dam collapse due to the possibility of changes in assumptions, the lack of precedent and	As part of our audit we carried out the following procedures, amongst others: We assessed the design and implementation of material internal controls related to approving the budget estimates of Fundação Renova that serve as a basis for the socio-environmental and socioeconomic provision and updated the other assumptions made when calculating this provision. We obtained the breakdown of Fundação Renova's budget by program as of December 31, 2019. This budget establishes a provision for environmental and socioeconomic recuperation and compensation, and we compared this breakdown against the terms established in the Transaction and Conduct Adjustment Agreement - TTAC, in order to check whether a provision exists for each program. For changes deemed material when estimating the provision, we obtained the underlying data of the assumptions used to review the estimates in order to increase or decrease the provision. Our procedures included confirmations of balances and costs incurred by Fundação Renova. We also used our corporate finance experts in our revision of estimates to review the methodology used to calculate the present value of the obligations, including interest and inflation rates used in the provision's financial calculation. We obtained reports prepared by Company management regarding the administrative and judicial proceedings and public civil actions, and for

reliance on several factors not exclusively under the Company's control, the provisions made at December 31, 2019 required material judgment by management. There are also administrative and judicial proceedings (including public civil actions) filed against the Company related to the collapse of the Fundão dam. Significant judgment is required to assess the risks posed by these cases which could result in material impacts on the amount recognized in the individual and consolidated financial statements. Due to the materiality of the amounts involved and the complexity and judgments involved in assessing and measuring the socio-environmental and socioeconomic provision, this matter required material attention and was deemed a key audit matter.	material proceedings we compared them against the confirmations obtained from the Company's legal advisers. We also brought in our legal experts to review the material public civil actions related to the dam collapse, in order to ascertain, by using information provided by management, whether certain claims made in the proceedings filed against the Company had already been resolved in the settlements made by the Company. We read the information disclosed in the notes to the financial statements. Based on the evidence obtained through the aforesaid procedures, we consider the socio-environmental and socioeconomic provisions and respective disclosures made within the context of the individual and consolidated financial statements taken as a whole are acceptable.

Property, plant and equipment impairment testing

See Note 12.1 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
Due to the suspension of the Company's operations in Mariana, following the collapse of the Fundão tailings dam, management's assessments on the impairment of its property, plant and equipment found that its assets may be understated. To determine the recoverable value, the Company uses the discounted cash flow method based on economic and financial projections requiring a high degree of judgment in determining the estimates used to project the cash generating unit's cash generation in order to determine the assets' recoverable value. The use of different assumptions could result in significant changes to the findings determined by the Company in its cash flow projections. Because the balances are material and any changes to the assumptions made could materially impact the financial statements, we consider this to be a key audit matter.	As an audit response, we carried out the following procedures, amongst others: We assessed the performance and implementation of the internal controls related to preparing and reviewing the business plan which formed the basis for our impairment analysis. We involved our corporate finance specialists to recalculate the projections and assess the models and core assumptions used in the future cash flow projections. When assessing the assumptions made by management in the projections presented, we primarily considered the time estimated to resume operations and market projections of exchange rates, market projections of iron ore pellet prices, the estimated sales volume, useful life of assets, growth in costs and the consistency of these variables in the projections prepared by Company management. We also read the information disclosed in the notes to the financial statements. In the course of our audit, we identified adjustments related to the measurement and disclosure of the recoverable amount, which were

	not recorded and disclosed by management, as they were considered immaterial. Based on the evidence obtained through the aforesaid procedures, we consider the provision for impairment amount, with respect to their recoverability, the values of property, plant and equipment and respective disclosures, within the context of the individual and consolidated financial statements taken as a whole to be acceptable.

Provision for environmental liability – Germano Dam

See Note 20 to the individual and consolidated financial statements

Key audit matter	How the matter was addressed in our audit
On February 25, 2019, Law nº 23.291 was enacted, which instituted the state dam safety policy. In line with the aforementioned law, the joint SEMAD / FEAM Resolution nº 2.784, of March 21, 2019, decrees, among other determinations, the de-characterization of all tailings dams that use or used the upstream raising method, from mining activities in the state of Minas Gerais. The process of de-characterization of the Germano dam submitted to the National Mining Agency, has a deadline to close on December 2029. In this sense, the process of closing the Germano dam presupposes the withdrawal of the dam function, interrupting the tailings disposal process (which makes it an inactive structure), with no more water accumulation with the formation of a permanent lake and requires, within a long-term view, the joint adoption of solutions aimed at the physical, chemical and biological stability of the structure. On December 31, 2019, the Company recorded a provision for closing the Germano dam, in the amount of R$ 2,533,811 thousand. The calculation of this provision involves critical judgments by the Company's management, due to the complexity inherent in estimating the term and the amount of future costs to be incurred in the dam closing process, and in determining the appropriate discount rate to discount these flows payment at present value, this matter required relevant attention and was considered a significant issue for our audit.	As an audit response, we carried out the following procedures, amongst others: We assessed the design and implementation of the relevant internal controls related to the approval of the estimates and calculation of the Provision for environmental liability – Germano Dam. We assessed the consistency between the accounting policy defined by the Company regarding the provision for closing the dam and the procedures adopted by it for determining the provision and its respective disclosures. We obtained the composition of the Company's budget for the closing process of the Germano dam on December 31, 2019. We analyzed the assumptions used in the composition of the budget. With the support of our environmental experts, we assessed the reasonableness of the main assumptions used by management, as well as tested the budget measurement calculations on a sample basis. We involve our corporate finance specialists in recalculating projections and evaluating models and main assumptions used in future cash flow projections. We also read the information disclosed in the notes to the financial statements. Based on the evidence obtained through the aforesaid procedures, we consider the provision for environmental liability – Gemano Dam and respective disclosures within the context of the individual and consolidated financial statements taken as a whole to be acceptable.

Provision for contingencies

See Note 19 to the individual and consolidated financial statements	
Key audit matter	**How the matter was addressed in our audit**
The recognition and measurement of the Provisions and disclosure of contingent liabilities for civil, labor and above all tax judicial and administrative proceedings requires Company judgment to determine the existence of a present obligation and the likelihood that an outflow of funds will be required to settle the obligation. Significant judgment is required to assess the risks posed by these cases which could result in material impacts on the amount recognized in the individual and consolidated financial statements. Due to the materiality, complexity and judgment involved in assessing and measuring the Provisions and Contingent Liabilities, we consider this area to be a key audit matter.	As an audit response, we carried out the following procedures, amongst others: We obtained the list of judicial and administrative proceedings to which the Company is party, the Company's assessment of the measurement and probability that an outflow of funds will be necessary to settle the obligation, and the assessment of the Company's independent advisers of the measurement and risk of defeat. Based on this information we assessed the criteria used by the Company to recognize, and disclose the Provisions and contingent liabilities, in addition to the adequacy thereof, taking into account the assessments made by the Company and its subsidiaries' internal and independent legal advisers and historical information. With the help of our legal experts we assessed the Company's criteria to support the analyses and amounts attributed to certain proceedings we deemed material. On a sample basis, we also recalculated and compared the monetary restatement of liabilities recorded and judicial deposits in place up to the reporting date. We lastly analyzed the Company's disclosures in its financial statements regarding information about the nature, exposure and size of risks posed by the main proceedings involving the Company and its subsidiaries. Based on the evidence obtained through the aforesaid procedures, we consider the provisions for contingencies and contingent liabilities and respective recognition disclosures made within the context of the individual and consolidated financial statements taken as a whole to be acceptable.

Other matters

Statements of value added

The individual and consolidated statements of added value (DVA) for the financial year ended December 31, 2019, which are the responsibility of Company Management and are not required to be published by privately held companies, were subject to audit procedures conducted in conjunction with the audit of the Company's financial statements. To form our opinion we evaluated whether the statements have been reconciled against the financial statements and accounting records, as applicable, and whether their form and content comply with the criteria set out in CPC Technical Pronouncement 09 - Statements of Added

Value. In our opinion, these statements of added value have been adequately prepared, in all material respects, in accordance with this Technical Pronouncement and are consistent with the individual and consolidated financial statements taken as a whole.

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 the accounting practices adopted in Brazil, 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 interim 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 the governance of the Company and its subsidiaries are responsible for overseeing the financial reporting process.

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

Our objectives are to obtain reasonable assurance about whether the individual and consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. 'Reasonable assurance' is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Brazilian auditing standards and ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in 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 auditing standards and ISAs, 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 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 and its subsidiaries' ability to continue as a going concern. If we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the individual and consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company and its subsidiaries to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the

disclosures, and whether the individual and consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

– Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the individual and 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.

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

Belo Horizonte, April 29, 2020

KPMG Auditores Independentes
CRC SP-014428/O-6 F-MG

Free-translation of an original version issued in Portuguese signed by)
Marco Túlio Fernandes Ferreira
Contador CRC MG-058176/O-0

STATEMENT OF FINANCIAL POSITION

At December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
Assets	**Note**	**2019**	**2018**	**2019**	**2018**
Current					
Cash and cash equivalents	4	62,617	79,981	65,792	82,322
Restricted short-term investments	5	2,505	1,919	2,505	1,919
Accounts receivable	6	11,126	7,654	9,502	6,093
Inventory	7	14,367	14,166	14,367	14,166
Recoverable taxes	8	6,055	80,552	6,056	80,554
Prepaid expenses		2,760	1,457	3,175	1,510
Advances to suppliers		9,194	5,653	9,194	5,653
Other accounts receivable	9	14,662	10,688	14,662	10,688
Other assets	10	10,330	7,021	10,395	7,089
Total current assets		**133,616**	**209,091**	**135,648**	**209,994**
Noncurrent					
Court deposits	19	1,906,183	1,849,787	1,906,183	1,849,787
Recoverable taxes	8	76,743	76,741	76,743	76,741
Inventory	7	368,737	396,341	368,737	396,341
Advances to suppliers	30	44,085	44,085	44,085	44,085
Other assets	10	16,416	16,747	16,416	16,942
Long term assets		**2,412,164**	**2,383,701**	**2,412,164**	**2,383,896**
Investments	11	19,010	18,136	-	-
Property, plant and equipment	12	12,810,506	20,154,663	12,810,513	20,154,705
Intangible assets	13	131,588	231,526	131,588	231,526
Total noncurrent assets		**15,373,268**	**22,788,026**	**15,354,265**	**22,770,127**
Total assets		**15,506,884**	**22,997,117**	**15,489,913**	**22,980,121**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF FINANCIAL POSITION
At December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
Liabilities	**Note**	**2019**	**2018**	**2019**	**2018**
Current					
Trade payables	14	252,065	76,439	252,122	76,455
Loans and financing	15	20,233,138	18,530,227	20,233,138	18,530,227
Financial charges payable	15	2,831,708	1,844,328	2,831,708	1,844,328
Payroll, provisions and social contributions	17	24,641	21,302	24,692	21,418
Taxes payable	18	451,911	240,199	451,908	240,237
Provision for income tax	28	-	-	167	143
Other provisions	20	4,271,711	2,753,486	4,271,711	2,753,486
Other liabilities	21	61,741	53,433	44,715	36,330
Total current liabilities		**28,126,915**	**23,519,414**	**28,110,161**	**23,502,624**
Noncurrent					
Taxes payable	18	127,123	201,047	127,123	201,047
Dividends	22	2,805,548	2,805,548	2,805,548	2,805,548
Provisions for contingencies	19	127,320	113,526	127,320	113,526
Deferred income tax	28	2,967,348	2,268,230	2,967,131	2,268,024
Other provisions	20	12,024,798	7,280,863	12,024,798	7,280,863
Other liabilities – Related parties	30	6,356,499	3,848,499	6,356,499	3,848,499
Other liabilities	21	49,474	76,604	49,474	76,604
Total Noncurrent Liabilities		**24,458,110**	**16,594,317**	**24,457,893**	**16,594,111**
Equity	22				
Capital		297,025	297,025	297,025	297,025
Capital reserves		2,476	2,476	2,476	2,476
Carrying value adjustments		885,138	1,622,734	885,138	1,622,734
Accumulated losses		(38,262,780)	(19,038,849)	(38,262,780)	(19,038,849)
Total equity		**(37,078,141)**	**(17,116,614)**	**(37,078,141)**	**(17,116,614)**
Total liabilities and equity		**15,506,884**	**22,997,117**	**15,489,913**	**22,980,121**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF PROFIT OR LOSS

Year ended December 31 – In thousands of Reais – R$, except for the number of shares

		Parent Company		Consolidated	
	Note	2019	2018	2019	2018
Revenue	23	57,191	104,887	57,191	104,887
Cost of goods sold and services rendered	24	(955,981)	(680,793)	(956,009)	(680,754)
Gross loss		**(898,790)**	**(575,906)**	**(898,818)**	**(575,867)**
Operating expenses					
Selling	25	(56,604)	(40,457)	(56,337)	(38,877)
General and administrative	25	(59,752)	(55,435)	(59,752)	(55,435)
Other operating (expenses) income, net	26	(16,630,166)	699,448	(16,630,180)	698,485
Equity in results of investees	11	99	595	-	-
(Loss) before finance result		**(17,645,213)**	**28,245**	**(17,645,087)**	**28,306**
Finance result					
Finance income	27	78,038	91,257	78,042	91,260
Finance expenses	27	(1,845,919)	(2,342,228)	(1,845,925)	(2,342,233)
Net foreign exchange gains/losses	27	890,517	412,568	890,454	412,563
(Loss) before taxation		**(18,522,577)**	**(1,810,158)**	**(18,522,516)**	**(1,810,104)**
Current income tax	28	-	-	(61)	(54)
Deferred income tax	28	(701,354)	(666,950)	(701,354)	(666,950)
Loss for the year		**(19,223,931)**	**(2,477,108)**	**(19,223,931)**	**(2,477,108)**
Loss for the year per share – basic and diluted				**(3,666.38)**	**(472.43)**
Quantity of shares at end of year	22			**5,243,298**	**5,243,298**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF COMPREHENSIVE INCOME (LOSS)
Year ended December 31 – In thousands of Reais – R$

	Parent Company and Consolidated	
	2019	2018
Net Loss for the year	**(19,223,931)**	**(2,477,108)**
Other comprehensive (loss) income		
Items that will not be reclassified to the result		
Cumulative translation adjustment, net	(737,717)	(36,501)
Retirement benefit obligations	121	(10)
Other comprehensive (loss) income for the year	**(737,596)**	**(36,511)**
Total comprehensive (loss)	**(19,961,527)**	**(2,513,619)**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF CHANGES IN EQUITY

Year ended December 31 – In thousands of Reais – R$

		Capital reserves					
	Capital	Special monetary restatement of PPE	Premium on share subscription	Tax incentive reserves	Comprehensive income adjustments	Accumulated deficit	Total
Balance at December 31, 2017	**297,025**	**785**	**1,681**	**10**	**1,659,245**	**(16,561,741)**	**(14,602,995)**
Loss for the year	-	-	-	-	-	(2,477,108)	(2,477,108)
Other comprehensive (loss) income							
Cumulative translation adjustment, net	-	-	-	-	(36,501)	-	(36,501)
Retirement benefit obligations	-	-	-	-	(10)	-	(10)
Total comprehensive income	**-**	**-**	**-**	**-**	**(36,511)**	**-**	**(36,511)**
Balance as of December 31, 2018	**297,025**	**785**	**1,681**	**10**	**1,622,734**	**(19,038,849)**	**(17,116,614)**
Loss for the year	-	-	-	-	-	(19,223,931)	(19,223,931)
Other comprehensive (loss) income							
Cumulative translation adjustment, net	-	-	-	-	(737,717)	-	(737,717)
Retirement benefit obligations	-	-	-	-	121	-	121
Total comprehensive (loss) income	**-**	**-**	**-**	**-**	**(737,596)**	**-**	**(737,596)**
Balance as of December 31, 2019	**297,025**	**785**	**1,681**	**10**	**885,138**	**(38,262,780)**	**(37,078,141)**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF CASH FLOWS
Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2019	2018	2019	2018
Cash flows from operating activities					
Loss before tax		(18,522,577)	(1,810,158)	(18,522,516)	(1,810,104)
Adjustments to reconcile loss before tax to cash from operations:					
Depreciation and amortization	12 and 13	209,299	193,336	209,333	193,454
Provision (reversal) of allowance for doubtful accounts	25	3	(10,948)	3	(10,948)
Provision for inventory obsolescence	7	26,394	(21)	26,394	(21)
Reversal of provision for realization of recoverable taxes	26	(4,530)	(1,685)	(4,530)	(1,685)
Provision (reversal) for socioenvironmental and socioeconomic remediation	26	1,955,076	2,894,783	1,955,076	2,894,783
Provision (reversal) for decommissioning of Germano dam	26	2,533,811	-	2,533,811	-
Provision for shareholder contribution to Renova Foundation	26	2,508,000	2,091,011	2,508,000	2,091,011
Provision for realization of other assets		741	944	741	944
Provision (reversal) for contingencies	26	29,096	(9,929)	29,096	(9,929)
Provision for other liabilities		4,381	(4,578,288)	4,381	(4,578,057)
Reversal of provision for write-off of property, plant, equipment		-	(5,459)	-	(5,459)
Impairment charges	12 and 13	9,705,110	-	9,705,110	-
Losses on property plant equipment		2,037	11,047	2,037	11,048
Equity in the results of investees	11	(99)	(595)	-	-
Interest on loans		1,023,697	708,235	1,023,697	708,235
Exchange variance gains and losses		(756,174)	(362,522)	(755,397)	(362,527)
		(1,285,735)	**(880,249)**	**(1,284,764)**	**(879,255)**
(Increase) decrease in operating assets:					
Trade accounts receivable		(3,475)	20,437	(3,412)	20,437
Inventory		13,140	4,140	13,140	4,140
Recoverable taxes		79,025	6,954	79,026	6,953

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

>> TO BE CONTINUED

>> CONTINUATION

STATEMENT OF CASH FLOWS
Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2019	2018	2019	2018
Court deposits		(67,283)	(77,481)	(67,283)	(77,481)
Prepaid expenses		(909)	10,060	(1,271)	10,127
Other assets		(10,937)	13,810	(10,738)	16,338
Increase (decrease) in operating liabilities:					
Trade payables		175,626	33,634	175,667	33,630
Taxes payable		137,789	81,593	137,738	81,425
Payroll, provisions and social contributions		3,339	(108)	3,274	(55)
Income tax paid		(2,237)	-	(2,275)	(15)
Interest payment		(949)	(70,082)	(949)	(70,082)
Miscellaneous provisions		700,568	191,762	700,569	191,762
Other liabilities		(23,349)	(204,406)	(23,268)	(207,424)
Net cash used in operating activities		**(285,387)**	**(869,936)**	**(284,546)**	**(869,500)**
Cash flows from investing activities					
Purchase of property plant and equipment and intangible assets		(760,000)	(115,191)	(760,007)	(115,191)
Resources from sale of property, plant, equipment		2,759	-	2,759	-
Net cash used in investing activities		**(757,241)**	**(115,191)**	**(757,248)**	**(115,191)**
Cash flows from financing activities					
Restricted short-term investments		(586)	(789)	(586)	(789)
Financing obtained from third parties and stockholders	15	1,027,139	1,004,227	1,027,139	1,004,227
Payment of loans and financing - third parties	15	(632)	-	(632)	-
Net cash from financing activities		**1,025,921**	**1,003,438**	**1,025,921**	**1,003,438**
Effects of exchange rate changes on cash and cash equivalents		(657)	6,102	(657)	6,102
Net increase (decrease) in balance of cash and cash equivalents		**(17,364)**	**24,413**	**(16,530)**	**24,849**
Cash and cash equivalents at the beginning of year		79,981	55,568	82,322	57,473
Cash and cash equivalents at the end of the year		62,617	79,981	65,792	82,322

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

STATEMENT OF VALUE ADDED

Year ended December 31 – In thousands of Reais – R$

		Parent Company		Consolidated	
	Note	2019	2018	2019	2018
Revenue					
Sales of goods, products and services		65,279	116,414	65,279	116,414
Other revenue		877,353	827,384	877,353	827,384
Revenue relating to construction of Company assets		732,418	115,191	732,418	115,191
Allowance for/Reversal of Doubtful Debts		(3)	10,948	(3)	10,948
		1,675,047	**1,069,937**	**1,675,047**	**1,069,937**
Consumables acquired from third parties					
Cost of goods sold and services rendered		(1,151,466)	(588,199)	(1,148,906)	(586,194)
Material, electricity, outsourced services and other		(7,787,677)	(2,038)	(7,678,587)	(1,203)
Loss of asset values		(9,734,283)	(6,382)	(9,734,283)	(6,382)
		(18,673,426)	**(596,619)**	**(18,561,776)**	**(593,779)**
Gross		**(16,998,379)**	**473,318**	**(16,886,729)**	**476,158**
Depreciation and amortization	12 and 13	(209,299)	(193,336)	(209,333)	(193,454)
Net value added produced by the Company		**(17,207,678)**	**279,982**	**(17,096,062)**	**282,704**
Transferred value added					
Equity in results of investees	11	99	595	-	-
Finance income		1,056,402	1,124,553	1,056,500	1,124,448
		1,056,501	**1,125,148**	**1,056,500**	**1,124,448**
Total value added to be distributed		**(16,151,177)**	**1,405,130**	**(16,039,562)**	**1,407,152**
Distribution of value added		**(16,151,177)**	**1,405,130**	**(16,039,562)**	**1,407,152**
Personnel					
Direct compensation		136,221	107,513	138,693	109,232
Benefits		52,858	59,613	52,974	59,857
Government Severance Indemnity Fund for Employees (FGTS)		10,460	8,333	10,460	8,333
Taxes					
Federal		887,589	735,303	996,453	735,460
State		29,787	3,048	29,787	3,048
Municipal		22,073	5,472	22,073	5,472
Interest expenses					
Interest on loans, financing and other debt items		1,933,766	2,962,956	1,933,929	2,962,858
Interest on stockholders' equity					
Loss for the period		(19,223,931)	(2,477,108)	(19,223,931)	(2,477,108)

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESES FINANCIAL STATEMENTS

1. OPERATIONAL CONTEXT

Samarco Mineração S.A. ("Samarco", "Company" or "Parent Company"), a privately held corporation, is a joint venture owned by Vale S.A. ("Vale") and BHP Billiton Brasil Ltda. ("BHP Billiton Brasil") with each having a 50 per cent shareholding. Samarco's registered office is located in Belo Horizonte - Minas Gerais ("MG"). Samarco has an integrated operation which consists of the mining and beneficiation of low-grade iron ore and the transportation of the concentrated ore in the form of slurry through pipelines. These pipelines connect the two operational units of the Company, in Minas Gerais (MG) and Espírito Santo (ES). At the Ponta Ubu unit in the municipality of Anchieta (ES) the ore is dewatered and undergoes the process of transformation into pellets, which are the Company's main product. The pellets are shipped overseas from Samarco own port facility in Anchieta (ES), mostly to international buyers.

Samarco's ore reserves, prior to the failure of the Fundão tailings dam in November 2015, were based upon mineral resources located in the municipalities of Mariana and Ouro Preto, MG, compromising mineral resources estimated at 7.4 billion metric tons (not audited). As of October 2015, the recoverable or mineable reserves, based on the technical and economic conditions and mineral characteristics, were estimated at 2.9 billion metric tons (not audited).

After the failure of the Fundão tailings dam in November 2015 and suspension of the Company's operations in Germano/Alegria, the Company is reviewing its operational reserves.

a) Failure of the Fundão dam
As detailed in Note 3, in November 2015, as a consequence of the failure of the Fundão tailings dam, the operations in Germano/Alegria ("Mariana complex") were temporarily suspended by order of government agencies - (the State Secretariat for Sustainable Development and Environment ("SEMAD") and the National Mineral Production Department ("DNPM"). The latter has since become the National Mining Agency ("ANM"). The Company has been working on meeting the legal requirements established by the competent authorities for the remediation of the social and environmental impacts caused by the failure of the Fundão dam, through the Renova Foundation, as described in note 3.

On June 23, 2016, Samarco submitted the Environmental Impact Study and the respective Environmental Impact Report ("EIA" / "RIMA") to SEMAD, related to the environmental licensing process for the use of the SDR Alegria Sul Pit for tailings disposal. In December of 2016, public hearings were held, coordinated by SEMAD, in the municipalities of Mariana and Ouro Preto.

The corresponding Preliminary and Installation Licenses (LP + LI) nº.02 were issued on December 13, 2017. On September 28, 2018, the Company entered into an agreement with the Minas Gerais Public Prosecutors to contract an independent technical audit to monitor the construction of the SDR Cava de Alegria Sul (SDR = Tailings Disposal System of the Alegria Sul Pit). With the revalidation of the permits issued by the municipal councils of Mariana and Ouro Preto and this important alignment with the Public Prosecution Office, Samarco had the necessary authorization to start the activities required for preparing the Alegria Sul pit.

On October 25, 2019, Samarco was granted the Corrective Operation License (LOC) No. 020/2019 for the resumption of operating activities in the Germano Complex. The license was approved by the CMI (Chamber of Mining Activities) of COPAM (State Council for Environmental Policy).

Obtaining the LOC means that Samarco now has all the necessary environmental licenses to restart its operations.

Samarco expects to resume its operations using new technologies for stacking dry tailings. Thus, the resumption of the extraction of iron ore, the operation of the processing plants in Germano, Mariana, and the pelletizing plant in the Ubu Complex, will only occur after the implementation of a filtration system. The construction of the filtration plant is already under way. During this period, the company will continue with operational readiness activities, which include equipment maintenance that will enable you to return your operations.

The resumption of Samarco's activities will be monitored by an expert from the Public Prosecutor Office of Minas Gerais (MPMG), according to the Term of Commitment signed by Samarco and MPMG on September 9, 2019.

In the period ended December 31, 2019, Vale and BHP Billiton Brasil contributed R$ 3,313,530, divided between contributions to the Renova Foundation and short-term loans to Samarco. The contributions to the Renova Foundation aim to allow the continuation of the remediation and compensation, social and environmental, to comply with the obligations provided under the Term of Transaction and Conduct Adjustment ("TTAC"). Short-term loans, in turn, supported activities of dam stabilization works and Samarco's working capital needs. The funds are released to the Renova Foundation and to Samarco as needed and in accordance with the fulfillment of the established milestones.

As mentioned in Note 3 (g), as a result of the dam failure, the Samarco is a party to several judicial, administrative, civil, environmental and labor proceedings, for which it cannot provide a accurately estimate of outcomes and consequences.

b) Going Concern

Samarco's main operations consist of the integrated mining and concentration of low quality iron ore in the municipality of Mariana, in the State of Minas Gerais, as well as the transportation of this concentrated ore from the Company's plants located in Minas Gerais to the pelletizing plants in Espírito Santo, through pipelines and consequent exportation through its own port terminal.

Due to the failure of the Fundão dam on November 5, 2015, (as described in Note 1(a) and Note 3), the operations of extraction and beneficiation of iron ore were thereafter suspended. This has significantly affected the Company's capacity to generate cash flows and fulfill its financial obligations.

At December 31, 2019, the Company presents a net capital deficiency of R$ 37,078,141 (R$17,116,614 negative at 31 December 2018) in the parent company and consolidated financial statements, and, in the parent company's financial statements, current liabilities exceeded current assets by R$ 27,993,299 (R$ 23,310,323 at 31 December 2018) in the parent company and R$ 27,974,513 (R$ 23,292,630 31 December 2018) in the consolidated financial statements. For the fiscal year of 2019, the Company presented negative cash flows from operations of R$ 285,387 (R$ 869,936 negative in 2018) in the parent company and R$ 284,546 (R$ 869,500 negative in 2018) in the consolidated financial statements.

As informed in Note 15, "Loans and Financing", the Company has not been able to meet certain obligations of its loan and financing agreements (covenants). As a result of this default, all of these loans and financings were reclassified to short term obligations, also reflecting accrued interest on the overdue installments and the application of delinquent interest. The Company has total loans and financing (including financial charges payable) in the amount of R$ 23,064,846 (R$ 20,374,555 at 31 December 2018), classified as current at December 31, 2019.

The Company has hired advisors with the objective of discussing a restructuring of the conditions of its existing loan and financing agreements with the lenders in view of its current financial situation.

Samarco is also a party to several legal and administrative proceedings involving civil, labor and environmental claims (Note 3 (g). Samarco negotiated the Framework Agreement/TTAC and other agreements in some relevant actions, for which there are liabilities recognized by the company. Furthermore, in several of these proceedings the Company is subject to injunctions, such as mandatory court deposits and freezing of accounts, which may further restrict its cash liquidity. Unfavorable results related to the existing litigation may significantly worsen the company´s financial position.

Vale and BHP Billiton Brasil have provided funds to Samarco and have been called upon to fulfill the Company's obligations under the Framework Agreement/TTAC. In the year of 2019, the shareholders contributed R$ 2,508,000 to the Renova Foundation and R$ 805,530 to Samarco, the latter amount being divided into RR$ 770,417 to support the Company's operational activities and R$ 35,113 to defray the expenses of the TTAC programs which are still under Samarco's responsibility. Vale and BHP loans to Samarco will be deposited to Samarco only as required and subject to the proposed budget approval for the period in which the amounts will be allocated.

In February 2019, there was a change in legislation involving dam safety policies (Law No. 23,291, of February 25, 2019, State Policy for Dam Safety). In line with the aforementioned law, the joint SEMAD / FEAM Resolution No. 2,784, of March 21, 2019, decrees, among other determinations, the decharacterization of all tailings dams that use or used the upstream raising method, related to mining activities in the state of Minas Gerais.

In view of this determination, considering also Technical Opinion No. 02/2019 - SPM / GSBM-GFAM / LPN-ESGJ, which, with a new understanding, returns the Cava de Germano structure to the National Registry of Mining Dams - CNBM, in the Integrated Management System for Mining Dams - SIGBM, preventing its use for the disposal of tailings, as it is a structure that was raised by the upstream method.

Additionally, in view of the new legislation and aiming at greater safety in the resumption of operations (as mentioned in Note 1 (a)), Samarco revised the design of the tailings disposal system, with emphasis on: (i) removal of the containment dike of the Alegria Sul pit, adopting the "confined pit" disposal system; and (ii) execution of the Filtration Project that will enable the dewatering of the sandy tailings to allow the disposal of this material in piles, thus expanding the useful life of the existing structures.

The resumption of operations will be gradual, without the use of a tailings containment dam and will take place only after the implementation of filtration. Samarco believes that the resumption of operations is essential and depends on some several issues, as described below:

- Conclusion of the filtration project.

- Availability of sufficient funding to support operations before and during restart.

In the event the necessary combination of factors above, required for the operational restart, fails to occur, the Company may be unable to continue its operations, and, therefore, may not fulfill its obligations in the normal course of business. The financial statements include no adjustments to reflect the scenario which would ensue if the Company were unable to continue operating.

c) Company equity interests
Samarco participates in the following companies (jointly, the "Group").

- Samarco Iron Ore Europe B.V. ("Samarco Europe") - direct interest of 100% - headquartered in the Netherlands; this company was incorporated on October 13, 2000 to provide marketing and selling services for iron ore produced by Samarco. It also provides support to clients through technical seminars and market studies.

- Samarco Asia Ltd. ("Samarco Asia") - direct interest of 100% - headquartered in Hong Kong; this company was acquired on July 10, 2001 by Samarco Europe to provide marketing and selling services through commercial representation in the Asia-Pacific region.

- Samarco Finance Ltd. ("Samarco Finance") - direct interest of 100% - headquartered in the Cayman Islands, this company was incorporated on February 21, 2000 to optimize Samarco's foreign-trade business, by supporting exports (resale) of iron ore acquired from the Company to designated clients and to borrow funds on the international market and subsequently pass them through to the Company.

2. PRESENTATION OF THE FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

The main accounting policies applied in the preparation of these financial statements are outlined below. These policies were applied in a consistent manner over previous years, unless stipulated otherwise.

2.1 Presentation of financial statements

(a) Statement of compliance
The parent company and consolidated financial statements have been prepared in accordance with the accounting practices adopted in Brazil (BR GAAP) and take into account all of the relevant information pertinent to the financial statements themselves, to the exclusion of all others, as consistent with the data used by management in its administration of the Company.

The statement of value added was additionally prepared in accordance with accounting pronouncement CPC 09 - Statement of Value Added, presented as an integral part of the financial statements pursuant to BR GAAP.

The issue of these financial statements was authorized by the Executive Board on April 28, 2020.

Details on the accounting policies of the Company and its subsidiaries are presented in the notes No. 2.5 to No. 2.20.

In preparing these financial statements, Management used judgments and estimates that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and assumptions are continuously reviewed. The revisions to the estimates are recognized prospectively. Those areas that require a higher level of judgment and have greater complexity, as well as the areas in which the assumptions and estimates are significant for the financial statements, are disclosed in Note 2.2.

The accounting practices adopted in Brazil comprise those included in the Brazilian company law and the statements, guidelines and interpretations issued by the Committee of Accounting Instructions (CPC) and by the Federal Accounting Council (CFC).

(b) Basis of preparation
The financial statements were developed on the basis of historical cost convention, except for certain financial instruments measured by their fair value, as described in the accounting practices below. The historical cost is generally based on the fair value of the payments made in exchange for assets.

(c) changes in accounting policies and disclosures
The Company initially applied CPC 06 (R2) (IFRS 16) as of January 1, 2019. A number of other new standards also came into effect as of January 1, 2019, but did not materially affect the Group's financial statements.

The Group adopted CPC 06 (R2) using the modified retrospective approach, in which the cumulative effect of the initial investment is recognized in the opening balance of retained earnings on January 1, 2019. Consequently, the comparative information presented for 2018 is not restated. - that is, they are presented, as previously reported, in accordance with CPC 06 (R1) and related interpretations. Details of changes in accounting policies are disclosed below in Note 2.20.

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

In the transition, for these leases, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental loan rate on January 1, 2019. Right-of-use assets are measured at an amount equal to Lease liabilities, adjusted by the value of any anticipated or accumulated lease receipts: the Group applied this approach to all other leases.

	01 January 2019
User right asset - property, plant and equipment	24,431
Short term lease liability	19,582
Long term lease liability	4,849

Interpretation ICPC 22 (IFRIC 23) - "Uncertainty about income tax treatment" addresses the accounting of income taxes when tax treatments involve uncertainty that affects the application of CPC 32 and does not apply to taxes or fees outside the scope CPC 32, nor does it specifically include requirements regarding the treatment of interest and penalties associated with uncertain taxes.

ICPC 22 applies for annual periods beginning on or after January 1, 2019. Management conducted an impact assessment of the adoption of ICPC 22 based on its position on December 31, 2019 and concluded that there will be no impacts significant, as disclosed in Note 28.

2.2 Critical accounting estimates and judgments

In preparing these financial statements, Management used judgments and estimates that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Accounting estimates and assumptions are continuously reviewed, based on previous experience and other factors, including expectations of future events deemed reasonable for the circumstances. The revisions to the estimates are recognized prospectively.

(a) Judgments

Information on judgments made in applying accounting policies that have a significant effect on the amounts recognized in the financial statements is included in the following notes:

Explanatory note 12: Lease term: if the Company is reasonably sure of exercising extension options.

Explanatory note 3(g) and 19: Management in conjunction with its legal advisers analyzes contingencies. The Company's analyses include factors such as hierarchy of laws, case law available, recent decisions delivered by courts and their relevance in the legal framework.

Explanatory note 28: Uncertainty about income tax treatment: When this is not clear how tax law applies to a specific transaction or circumstance.

(b) Use of estimates

Based on assumptions, the Company makes estimates concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. These estimates are based on the best knowledge existing in each financial year. Changes in facts and circumstances could lead to a revision of estimates; actual future results could diverge from the estimates.

The information on the uncertainties related to the estimates and assumptions at December 31, 2019 that presents a significant risk that is likely to cause a significant adjustment in the carrying amounts of assets and liabilities for the next fiscal year is contemplated below.

(i) Provision for socio-environmental and socioeconomic recovery

The provision for socio-environmental and socioeconomic recovery is made for areas impacted or reparation of damages which generate a current obligation on the Company. This process involves complex estimates for determining the future disbursement expected by management and by its independent consultants (Note 3).

(ii) Income Tax

Current and deferred tax is calculated in accordance with the interpretations deriving from the existing legislation. This process normally involves complex estimates to determine the taxable income, deductible or taxable items and temporary differences. The measurement of the recoverability of deferred tax on temporary differences takes into account the estimated taxable income based on future cash flows, as informed in Note 28.

(iii) Impairment

The Company evaluates its assets with a defined useful life yearly for the existence of indicators of impairment. If such indicators are found, the recoverability of its tangible and intangible assets, grouped by cash generating unit, is tested. The discounted cash flow criterion is normally used, which depends on several estimates, subject to market conditions at the time the impairment test is conducted, as informed in note 12.1.

(iv) Mineral reserves and useful life of mines

The estimated proven and probable reserves are periodically evaluated and updated. These reserves are determined by using generally accepted geological estimation techniques. The estimated volume of the mineral reserves is the basis for determining the depletion of the respective mines and the estimated useful life is a prime factor for quantifying the provision for environmental recovery of the mines, as informed in note 13.1. Any change in the estimated volume of reserves of the mine and the useful life of the underlying assets could have a significant impact on the depreciation, depletion and amortization charges recognized in the financial statements. Changes in the estimated useful life of the mine could affect the estimated provision for environmental expenses, the recovery thereof and impairment analyses.

Following the failure of the Fundão tailings dam in November 2015 and the temporary suspension of operations in the Germano/Alegria areas, the Company is reviewing the operation's resources and reserves.

(v) Asset retirement obligations

The Company recognizes an obligation for demobilization of assets and environmental rehabilitation in the period in which the disturbance occurs. This provision is determined based on the present value of the cash flows necessary to demobilize the assets and perform the environmental rehabilitation. The Company considers the accounting estimates related to the recovery of degraded areas and the cost of closing a mine as a critical accounting practice as it involves large provisions and estimates involving a range of assumptions, such as interest rates, inflation, useful life of the asset under analysis and the current stage of depletion as well as the projected depletion dates of each mine. These estimates are revised annually, as informed in note 20.

(vi) Provision for contingencies

Provisions are recorded when the value of a probable loss can be reliably estimated.

2.3 Consolidation

The Company's consolidated financial statements, which include the financial statements of its subsidiaries, have been prepared in accordance with applicable consolidation practices and legal provisions. Balances of unrealized revenues, expenses and profits between companies are eliminated from the consolidated financial statements. Unrealized gains deriving from transactions with investees recorded by the equity method are eliminated against the investment in proportion to the Group's interest in the investee.

(a) Subsidiaries

Subsidiaries are all entities over which the Group exercises control. The Group controls an entity when it is exposed or entitled to variable returns deriving from its involvement in the entity and can influence its returns due to the power it exercises over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

(b) Joint operations

A joint operation is an arrangement that involves the use of joint assets and other resources with each owner using its own resources in the joint operation. Joint operations are recorded in the financial statements to represent the entity's contractual rights and obligations. The assets, liabilities, revenue and expenses related to interests in joint operations are therefore recorded individually in the financial statements. The Company has an interest of 49% in the Guilman-Amorim hydroelectric power plant; the remaining 51% of the joint operation belongs to the partner Arcelor Mittal Brasil S.A.

(c) Investments

In the individual financial statements, subsidiaries are accounted for using the equity method based on the financial statements of the investees. The financial statements of investments based abroad were prepared by adopting accounting practices consistent with those observed by the Company. The subsidiaries have the same functional currency as the parent, the US dollar.

2.4 Foreign currency translation

(a) Functional currency

The items in the financial statements of each one of the companies of the Group were measured using the US dollar ("USD" or "US$") which is the functional currency of the Company and its subsidiaries, as it is the currency of the main economic environment in which they operate, generate and consume cash.

(b) Presentation currency

In accordance with Brazilian legislation, these financial statements are being presented in Brazilian Reais. Financial statements prepared in the Company's functional currency are translated to Reais by using the following criteria:

- Assets and liabilities are converted at the closing rate at the respective reporting date.

- Accounts in the statements of operations, comprehensive income (loss), cash flows and value added are converted at the rates in effect on the transaction dates.

- Stockholders' equity at historical rate.

The exchange gain/loss resulting in the cumulative translation adjustment is recognized in a specific account of stockholders' equity, under "Carrying value adjustments".

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

(c) Transactions and balances
Transactions in currencies other than the Company's functional currency are translated into the functional currency at the exchange rates prevailing on the transaction dates or valuation dates, if the items are remeasured. Exchange gains and losses resulting from the settlement of these transactions and the translation at the exchange rates at the end of the financial year for monetary assets and liabilities denominated in foreign currency are recognized in the income statement under finance income or expense.

The parent company and consolidated financial statements measured in the functional currency (USD) are as follows:

STATEMENT OF FINANCIAL POSITION – US$

	Parent Company		Consolidated	
	2019	2018	2019	2018
Current assets				
Cash and cash equivalents	15,520	20,627	16,307	21,231
Restricted short-term investments	622	495	622	495
Accounts receivable	2,753	1,969	2,353	1,568
Inventory	3,565	3,656	3,565	3,656
Recoverable taxes	1,502	20,792	1,503	20,792
Prepaid expenses	685	376	788	390
Advances to suppliers	2,281	1,459	2,281	1,459
Other accounts receivable	3,638	2,759	3,638	2,759
Other assets	2,557	1,805	2,557	1,807
Total current assets	**33,123**	**53,938**	**33,614**	**54,157**
Noncurrent assets				
Court deposits	472,986	477,463	472,986	477,463
Recoverable taxes	19,042	19,808	19,043	19,808
Inventory	91,496	102,303	91,496	102,303
Advances to suppliers	10,939	11,379	10,939	11,379
Other assets	3,909	4,323	3,909	4,373
Long-term assets	**598,372**	**615,276**	**598,373**	**615,326**
Investments	4,716	4,681	-	-
Property, plant and equipment	3,178,706	5,202,277	3,178,708	5,202,288
Intangible assets	32,652	59,761	32,652	59,761
Total noncurrent assets	**3,814,446**	**5,881,995**	**3,809,733**	**5,877,375**
Total assets	**3,847,569**	**5,935,933**	**3,843,347**	**5,931,532**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF FINANCIAL POSITION – US$

	Parent Company		Consolidated	
	2019	2018	2019	2018
Current liabilities				
Trade payables	62,584	19,724	62,601	19,732
Loans and financing	5,020,505	4,782,982	5,020,505	4,782,982
Financial charges payable	702,640	476,054	702,640	476,054
Payroll, provisions and social contributions	6,129	5,513	6,141	5,543
Taxes payable	112,134	62,000	112,134	62,011
Provision for income tax	-	-	41	37
Other provisions	1,059,952	710,724	1,059,952	710,724
Other liabilities	15,333	13,806	11,093	9,372
Total current liabilities	**6,979,277**	**6,070,803**	**6,975,107**	**6,066,455**
Noncurrent liabilities				
Taxes payable	31,543	51,894	31,543	51,894
Dividends	696,148	724,162	696,148	724,162
Provisions for contingencies	31,610	29,315	31,610	29,315
Deferred income tax	736,296	585,471	736,243	585,418
Other provisions	2,983,747	1,879,320	2,983,747	1,879,320
Other accounts payable Related Parties	1,577,256	993,366	1,577,256	993,366
Other liabilities	12,277	19,773	12,278	19,773
Total noncurrent liabilities	**6,068,877**	**4,283,301**	**6,068,825**	**4,283,248**
Equity				
Capital	409,774	409,774	409,774	409,774
Capital reserves	1,619	1,619	1,619	1,619
Comprehensive income adjustments	(1,264)	(1,294)	(1,264)	(1,294)
Accumulated deficit	(9,610,714)	(4,828,270)	(9,610,714)	(4,828,270)
Total equity	**(9,200,585)**	**(4,418,171)**	**(9,200,585)**	**(4,418,171)**
Total liabilities and equity	**3,847,569**	**5,935,933**	**3,843,347**	**5,931,532**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF PROFIT OR LOSS

	Parent Company		Consolidated	
	2019	2018	2019	2018
Revenue	14,546	29,208	14,546	29,208
Cost of goods sold and services rendered	(241,360)	(185,709)	(241,360)	(185,709)
Gross loss	**(226,814)**	**(156,501)**	**(226,814)**	**(156,501)**
Operating expenses				
Selling	(15,739)	(11,291)	(15,671)	(10,863)
General and administrative	(15,223)	(15,466)	(15,223)	(15,466)
Other operating (expenses) income, net	(4,206,713)	647,365	(4,206,717)	647,123
Equity in results of investees	35	164	-	-
Profit (Loss) before finance result	**(4,464,454)**	**464,271**	**(4,464,425)**	**464,293**
Finance result				
Finance income	20,069	24,970	20,070	24,970
Finance expenses	(388,743)	(488,078)	(388,744)	(488,079)
Net foreign exchange variance	211,798	115,234	211,785	115,229
Profit (Loss) before taxation	**(4,621,330)**	**116,397**	**(4,621,314)**	**116,413**
Current tax deferred	-	-	(16)	(16)
Income tax deferred	(161,115)	(119,260)	(161,115)	(119,260)
(Loss) for the year	**(4,782,445)**	**(2,863)**	**(4,782,445)**	**(2,863)**

STATEMENT OF COMPREHENSIVE INCOME – US$

	Parent Company and Consolidated	
	2019	2018
Loss for the year	**(4,782,445)**	**(2,863)**
Other comprehensive (loss) income		
Items that will not be reclassified to the result		
Retirement benefit obligations	30	(3)
Other comprehensive (loss) income for the year	**30**	**(3)**
Total comprehensive (loss) income	**(4,782,415)**	**(2,866)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF CHANGES IN EQUITY – US$

		Capital reserves				
	Capital	Premium on share subscription	Tax incentive reserves	Comprehensive income adjustments	Accumulated deficit	Total
Balance at December 31, 2017	**409,774**	**1,616**	**3**	**(1,291)**	**(4,825,407)**	**(4,415,305)**
Loss for the year	-	-	-	-	(2,863)	(2,863)
Other comprehensive (loss) income						
Retirement benefit obligations	-	-	-	(3)	-	(3)
Total comprehensive (loss) income	**-**	**-**	**-**	**(3)**	**-**	**(3)**
Balance as of December 31, 2018	**409,774**	**1,616**	**3**	**(1,294)**	**(4,828,270)**	**(4,418,171)**
Loss for the year	-	-	-	-	(4,782,445)	(4,782,445)
Other comprehensive (loss) income						
Retirement benefit obligations	-	-	-	30	-	30
Total comprehensive (loss) income	**-**	**-**	**-**	**30**	**-**	**30**
Balance as of December 31, 2019	**409,774**	**1,616**	**3**	**(1,264)**	**(9,610,715)**	**(9,200,586)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF CASH FLOWS – US$

	Parent Company		Consolidated	
	2019	2018	2019	2018
Cash flows from operating activities				
Loss before tax	(4,621,330)	116,398	(4,621,314)	116,414
Adjustments to reconcile loss before taxation to cash from operations:				
Depreciation and amortization	91,254	88,460	91,265	88,497
Reversal of allowance for doubtful accounts	5	(3,834)	5	(3,834)
Reversal of provision for inventory obsolescence	6,418	(279)	6,418	(279)
Reversal of provision for realization of recoverable taxes	(1,134)	(66,448)	(1,134)	(66,448)
Provision (reversal) for socioenvironmental and socioeconomic remediation	585,123	(1,165,056)	585,123	(1,165,056)
Provision (reversal) decommissioning of Germano Dam	653,129	-	653,129	-
Provision for shareholder contribution to Foundation Renova	629,858	567,038	629,858	567,038
Provision for realization of other assets	196	189	196	189
Reversal of provision for contingencies	6,322	(8,018)	6,322	(8,018)
Reversal (provision) for other liabilities	420	212,180	420	212,587
Impairment charges	2,408,156	-	2,408,156	-
Reversal of provision for write-off of property plant and equipment	-	(1,951)	-	(1,951)
Losses on property, plant and equipment	956	3,962	956	3,962
Equity in the results of investees	(35)	(163)	-	-
Interest on loans	259,072	195,950	259,072	195,950
Exchange variance gains and losses	(270,253)	(157,766)	(270,253)	(157,766)
	(251,843)	**(219,338)**	**(251,781)**	**(218,715)**
(Increase) decrease in operating assets:				
Trade accounts receivable	(718)	(5,138)	(718)	(5,545)
Inventory	4,480	2,203	4,480	2,203
Recoverable taxes	20,380	807	20,379	806
Court deposits	(15,011)	58,398	(15,011)	58,398

>> TO BE CONTINUED

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

>> CONTINUATION

STATEMENT OF CASH FLOWS – US$

	Parent Company		Consolidated	
	2019	2018	2019	2018
Prepaid expenses	(309)	2,842	(399)	2,865
Other assets	(2,105)	(106,278)	(2,055)	(106,277)
Increase (decrease) in operating liabilities:				
Trade payables	42,087	6,740	42,096	6,741
Taxes payable	27,946	(2,777)	27,936	(2,820)
Payroll, provisions and social contributions	885	(204)	868	(193)
Income tax paid	(540)	(60)	(552)	(71)
Interest payment	(228)	(11,229)	(228)	(11,229)
Miscellaneous provisions	99,926	26,395	99,926	26,395
Other liabilities	(8,207)	65,094	(8,012)	64,926
Net cash provided by (used in) operating activities	**(83,257)**	**(182,545)**	**(83,071)**	**(182,516)**
Cash flows from investing activities				
Purchase of property plant and equipment and intangible assets	(185,258)	(13,896)	(185,261)	(13,896)
Resources from sale of property, plant equipment	658	-	658	-
Net cash generated by (applied to) investment activities	**(184,600)**	**(13,896)**	**(184,603)**	**(13,896)**
Cash flows from financing activities				
Restricted short-term investments	(127)	(153)	(127)	(153)
Financing obtained from third parties and Stockholders	263,186	200,363	263,186	200,363
Payment of loans and financing - third parties	(150)	-	(150)	-
Net cash from financing activities	**262,909**	**200,210**	**262,909**	**200,210**
Effects of exchange rate changes on cash and cash equivalents	(159)	74	(159)	74
Net increase (decrease) in balance of cash and cash Equivalents	**(5,107)**	**3,843**	**(4,924)**	**3,872**
Cash and cash equivalents at the beginning of year	20,627	16,784	21,231	17,359
Cash and cash equivalents at the end of the year	15,520	20,627	16,307	21,231

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF VALUE ADDED – US$

	Parent Company		Consolidated	
	2019	2018	2019	2018
Revenue				
Sales of goods, products and services	16,599	32,410	16,599	32,410
Other revenue	229,151	608,684	229,151	608,684
Revenue relating to construction of company assets	245,560	29,881	245,560	29,881
Allowance for doubtful accounts	(5)	3,834	(5)	3,834
	491,305	**674,809**	**491,305**	**674,809**
Consumables acquired from third parties				
Cost of goods sold and services rendered	(350,629)	(158,686)	(349,976)	(158,151)
Material, electricity, outsourced services and other	(1,987,289)	40,381	(1,959,248)	40,630
Recovery/(loss) of asset values	(2,415,726)	(1,239)	(2,415,725)	(1,239)
	(4,753,644)	**(119,544)**	**(4,724,949)**	**(118,760)**
Gross	**(4,262,339)**	**555,265**	**(4,233,644)**	**556,049**
Depreciation and amortization	(91,254)	(88,460)	(91,265)	(88,497)
Net value added produced by the Company	**(4,353,593)**	**466,805**	**(4,324,909)**	**467,552**
Transferred value added				
Equity in results of investees	35	164	-	-
Finance income	251,913	311,690	251,908	311,691
	251,948	**311,854**	**251,908**	**311,691**
Total value added to be distributed	**(4,101,645)**	**778,659**	**(4,073,001)**	**779,243**
Distribution of value added	**(4,101,645)**	**778,659**	**(4,073,001)**	**779,243**
Personnel				
Direct compensation	34,323	29,182	34,947	29,650
Benefits	13,381	16,688	13,410	16,754
Government Severance Indemnity Fund for Employees (FGTS)	2,632	2,258	2,632	2,258
Taxes				
Federal	208,469	137,440	236,452	137,483
State	7,394	(65,141)	7,394	(65,141)
Municipal	5,812	1,530	5,812	1,530
Interest expenses				
Interest on loans, financing and other debt items	408,789	659,564	408,797	659,571
Interest on stockholders' equity				
Loss for the period	(4,782,445)	(2,862)	(4,782,445)	(2,862)

2.5 Financial instruments

The assets and liabilities are recognized when the Company and its subsidiaries are a party to the contractual provisions of the instrument and are initially measured according to their fair value.

The transaction costs are directly attributable to the acquisition or issue of financial assets and liabilities (except for financial assets and liabilities recognized at fair value in the income statement) and are added to or deducted to the fair value of the financial assets or liabilities, if applicable, after the initial recognition. The transaction costs directly attributable to the purchase of financial assets and liabilities at fair value by means of income are immediately recognized in the income statement.

Financial assets and liabilities are presented net in the balance sheet if, and only if, there is a current and enforceable legal right to offset the recognized amounts and if there is the intention of offsetting, or of realizing the asset and liquidating the liability simultaneously.

Financial assets

The classification of financial assets is based on the business model in which the asset is managed and its characteristics of contractual cash flows (binomial contractual cash flow and business model), as summarized below:

Categories/measurement	Conditions for definition of category
Amortized cost	Financial assets are held according to the Company´s business model whose objective is to hold financial assets to collect contractual cash flows on specific dates.
Fair value through other comprehensive income (“FVTOCI”)	There is no specific definition as to holding the financial assets to collect the contractual cash flows on the specified dates or carry out the sale of the financial assets in the Company´s business model.
Fair value through profit or loss(“FVTPL”)	All other financial assets.

For cash, cash equivalents and short-term investments, the Company has a policy of investing its resources in prime banks, with a minimum rating of A- by Standard & Poor’s or equivalent (A- Fitch, A3 Moody’s).

Accounts receivable from customers and other receivables are classified at amortized cost. Their respective classifications between amortized cost, FVTOCI and FVTPL are presented in note 31.2.

All regular acquisitions or disposals of financial assets are recognized or written off based on the trade date. Regular acquisitions or divestitures correspond to acquisitions or disposals of financial assets that require the delivery of assets within the term established by means of a market standard or practice.

The Company and its subsidiaries write off a financial asset only when the contractual rights to the cash flows from this asset expire or transfer the asset and substantially all the risks and benefits of the asset to another company. When a financial asset is written off in its entirety, the difference between the book value of the assets and the sum of the consideration received and receivable is recognized in profit or loss.

Financial liabilities

These liabilities are classified in the initial recognition as: (i) amortized cost; or (ii) measured at fair value through profit or loss. The Company’s financial liabilities are classified as measured at amortized cost using the effective interest method and include loans, financing and debentures, accounts payable to suppliers and obligations with related companies and other accounts payable, as disclosed in note 31.2.

The aforementioned financial liabilities are initially recognized in the receipt of funds, net of transaction costs, when applicable. At the balance sheet date, they are presented at their initial recognition, minus the amortization of the installments of principal, when applicable, plus corresponding charges incurred. Transaction costs are presented as a reduction of current liabilities and are appropriated to the income in the same payment term of the financing that originated it, based on the effective rate of each transaction.

Impairment of financial instruments

In relation to the impairment of financial assets, CPC 48 (IFRS 9) requires a model of expected credit losses. The expected credit loss model requires the Group to account for expected credit losses and changes in expected credit losses on each reporting date to reflect changes in credit risk since the initial recognition of financial assets. In other words, it is not necessary for a credit event to occur before credit losses are recognized.

Specifically, CPC 48 requires the Company to recognize a provision for expected credit losses on:

(1) Investments in debt instruments subsequently measured at amortized cost or at fair value through other comprehensive income,
(2) Amounts receivable from leases,
(3) Accounts receivable and contract assets, and
(4) Financial guarantee contracts to which the impairment requirements of CPC48 (IFRS 9) apply.

In particular, CPC 48 (IFRS 9) requires the Company to measure the provision for losses on a financial instrument in an amount equivalent to the expected credit loss (ECL) over the useful life if the credit risk related to that financial instrument has increased from the initial recognition, or if the financial instrument corresponds to a financial asset subject to a reduction in the recoverable value acquired or originated. However, if the credit risk related to a financial instrument has not increased significantly since the initial recognition (except for a financial asset subject to impairment acquired or originated), the Group shall measure the provision for losses for that financial instrument corresponding to the PCE of the 12-month period.

The Company periodically reviews its assumptions for the constitution of the provision for credit risk. For the accounts receivable, the company has adopted a simplified approach and calculated the foreseen credit loss, pursuant to Note 6, based on the expectation of default risk along the life of the financial instrument in view of the revision of the history of its current operations and improvement of its estimates.

2.6 Accounts receivable

Trade receivables consist of amounts owed by customers for goods or services acquired, and are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method, minus an allowance for doubtful accounts.

The provision for credit losses reflects the volatility of the global iron ore sector. Based on the trend of falling iron ore prices, management conducts an individual evaluation of each client's contract and makes a provision in an amount sufficient to cover any losses, pursuant to criteria already informed in note 2.5.

2.7 Inventories

Inventories are valued at average acquisition or production cost not in excess of the market or realization value.

Samarco uses the absorption costing system. Direct costs are appropriated objectively and indirect costs are appropriated based on normal production capacity and include expenses incurred on the acquisition of inventory, production and transformation costs and other costs incurred to bring the inventories to their current condition and location.

2.8 Property, plant, equipment

Property, plant and equipment are recorded at the cost of acquisition, formation or construction including capitalized financial charges.

Elements that comprise the cost of an item of property, plant and equipment are:

- Acquisition price, plus import taxes and non-recoverable purchase taxes, after deducting any commercial discounts and rebates.
- Any direct costs attributable to bringing the asset to its location and condition necessary to allow it to be operated as intended by management.
- The initial estimate of the cost of disassembling and removing the item and recovering the area where it is located. These costs comprise the obligation incurred by the Company upon acquiring the item or as a result of having used the item for a certain period.

When significant parts of an asset item have different useful lives, they are recorded as separate items (principal components) of property, plant and equipment.

Subsequent costs are capitalized only when it is probable that economic benefits expenses associated with the expenses will be earned by the Group.

Depreciation and amortization commence from the date the assets are installed and ready for use. For the items directly related to the respective productive areas, the depreciation is calculated by the units produced method. For the remainder the depreciation is calculated based on the straight-line depreciation and amortization method taking into account the useful lives (Note 12).

Depreciation methods, useful lives and residual values are reviewed on each balance sheet date and adjusted if appropriate.

The gains and losses deriving from the sale of property, plant and equipment are determined by comparing the funds obtained through the sale against the book value of the property, plant and equipment, and are recorded in "Other operating expenses, net" in profit or loss.

2.9 Intangible assets

Intangible assets acquired separately consisting of easements, mining rights and software are measured upon initial recognition at their acquisition cost and, subsequently, less the accumulated amortization and impairment losses, when applicable.

Intangible assets with a defined useful life are amortized according to their estimated economic lives, as per Note 13, and when indications of impairment are identified, they are submitted to impairment testing.

Removal of overburden to access the ore deposits

The cost of overburden (costs associated with stripping overburden and other waste products) incurred during the development of the mine, before production, is capitalized as part of the depreciable cost of the asset under development. These costs are amortized over the mine's useful life, based on the proven and probable reserves.

The cost of overburden removal incurred during production is added to the value of the inventory, except when a specific extraction campaign is conducted to access deposits located deeper in the reserve. In this case, the costs are capitalized and recorded in noncurrent assets as ore extraction takes place, and will be amortized over the reserve's useful life.

Research and Development

Development expenditures are capitalized only if development costs can be measured reliably, if the product or process is technically and commercially viable, if the future economic benefits are probable, and if the Group has the intention and sufficient resources to complete the development and use or sell the asset. Other development expenses are recognized in the income statement as incurred. After initial recognition, capitalized development expenses are stated at cost, less accumulated amortization and any impairment losses.

2.10 Impairment of nonfinancial assets

The book values of the Company's nonfinancial assets with a defined useful life are reviewed at each reporting date for signs of impairment. If any such indication exists, then the asset's recoverable amount is determined. Assets with an indefinite useful life are not subject to amortization and are tested annually for impairment. In the case of intangible assets in development not yet available for use, the recoverable value is estimated annually.

The recoverable amount of an asset or cash generating unit (CGU) is the greater of its value in use and its fair value less costs of disposal. When appraising the value in-use, the estimated future cash flows are discounted to their present values at a before-tax discount rate that reflects the current market terms regarding the capital recoverability period and the asset's specific risks.

For impairment testing purposes, assets that cannot be tested individually are grouped in the smallest group of assets that generate cash from continuous use and which are mainly independent from the cash flows from other assets or groups of assets

Impairment losses are recognized when the book value of an asset or its cash generating unit (CGU) exceeds its estimated recoverable value. Impairment losses are recognized in profit or loss. After November 2015, and considering the expected increase in socioenvironmental and socioeconomic remediation costs, management conducts an annual impairment test of non-financial assets (Notes 12 and 13).

2.11 Loans and financing

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

The loans are classified as current liabilities, unless the Company has an unconditional right to defer the settlement of the liability for at least 12 months after the date of the balance sheet.

The costs of loans and financing attributed directly to the acquisition, construction or production of a qualifying asset that requires a substantial period of time to be concluded for the purpose of use or sale are capitalized as part of the corresponding asset's cost when it is probable that future economic benefits will be generated in favor of the Company and the cost or value can be reliably measured. Other loans and financing costs are recorded as an expense in the period they are incurred.

2.12 Provision for contingencies

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

2.13 Provision for asset retirement and socioenvironmental and socioeconomic remediation

Provisions are determined by discounting the estimated future cash flows to a pre-tax rate that reflects the current market assessments of the value of money at the time and specific risks for the related liability. The effects of derecognition of the discount on the passage of time are recognized in the statement of income as a financial expense.

(a) Asset retirement obligations
An asset retirement obligation is arrise when there is a legal or constructive obligation to perform rehabilitation as a result of environmental disturbance, by means of an approved detailed asset retirement plan. The expenses for mine closure resulting from the termination of activities are recorded as asset retirement obligations. The obligations primarily consist of closure costs. The asset retirement cost related to the obligation is capitalized as part of the property, plant and equipment, and is depreciated over the asset's useful life.

(b) Socioeconomic and socioenvironmental remediation
The provision for socioenvironmental and socioeconomic remediation is made in accordance with the determinations of the respective authorities and under the agreements reached on March 2, 2016 and 25 June 2018 (Notes 1 and 3). The provision for environmental remediation is recorded when an impacted area is identified that generates an obligation for the Company. A liability for compensating social damages is recognized when the obligation for future payments has been identified arising from past events subject to civil damages and, when there is a reliable estimate of the obligations.

2.14 Adjustment of assets and liabilities to present value
Monetary assets and liabilities are adjusted to their present value when the transaction is originally recorded, taking into account the contractual cash flows, the explicit and in certain cases implicit interest rate of the respective assets and liabilities and the prevailing rates in the market for similar transactions. This interest is subsequently reallocated to financial expenses and revenue in the income statament by the effective interest rate method for contractual cash flows.

2.15 Income tax
The Company calculates taxes based on existing legislation, considering legal tax benefits and deductions. Deferred tax balances are recognized on temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements to the extent that it is probable that future taxable profits will be available against which they can be utilized. This is measured at the rates expected to apply to the temporary differences when they are reversed, based on the laws that have been enacted or substantially enacted by the reporting date. Deferred tax assets and liabilities are offset and presented net in the balance sheet if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity.

The Company has a tax benefit for exports that provides for a reduction of income tax based on the profits obtained from the exploration of abundant minerals.

The Company has a final court decision (res judicata) in its favor, which ruled that, the "social contribution on net income" ("CSLL") is unconstitutional. It is not therefore not considering or paying this tax/contribution (Note 19).

2.16 Employee benefits

(a) Retirement obligation
The Company's defined-contribution plan is a retirement benefits plan under which it pays fixed contributions to a separate entity (ValiaPrev) and incurs no legal or constructive obligations to pay additional amounts. Contributions are recognized as an employee benefit expense when due.

For the defined-benefit portion of the plan (ValiaPrev), a constructive obligation, the Company obtains the actuarial calculation. When the benefits of a plan are increased, the portion of the increase in the benefit related to past service of employees is recognized immediately in profit or loss.

The defined-benefit obligation is the present value of the gross defined-benefit obligation less the fair value of the plan's assets at the reporting date. Independent actuaries using the projected unit of credit method calculate it annually. The present value of the defined benefit obligation is determined by discounting future estimated cash disbursements using interest rates in line with market yields, which are denominated in the currency in which benefits are paid and have maturity terms close to those of the respective pension plan obligation. However, no asset is recognized, as there is no such provision in the bylaws for reimbursing the Company or reducing future contributions.

The actuarial gains or losses arising from the adjustment for experience and changes in actuarial assumptions are recorded directly in stockholders' equity as other comprehensive income, when incurred.

(b) Share-based payments
Samarco operates a compensation plan based on phantom stock, settled in cash. The fair value payable to employees relating to the long-term incentive plan is recognized as an expense with a corresponding increase in the liabilities. The amount is remeasured at least once a year, at the end of each fiscal year and on the settlement date. Any changes in the liability's fair value are recognized as personnel expenses in the income statement.

(c) Medical assistance
The Company provides life insurance and healthcare insurance benefits for its employees and their dependents, which are

recorded on the accrual basis and are discontinued in the event the employee leaves the Company.

2.17 Capital
Each common share entitles the holder thereof to one vote on General Meeting resolutions.

2.18 Payment of dividends
Minimum mandatory dividends paid to the Company's stockholders are recognized as a liability in the Company's financial statements at the end of the year, pursuant to its bylaws. Supplemental amounts referring to the portion exceeding the minimum obligation required by law or the bylaws is held in a specific account in the stockholders' equity, and is only transferred to liabilities when declared by the stockholders' General Meeting.

2.19 Results of operations
Income and expenses are recognized on the accrual basis, and include costs, expenses and revenue, in addition to the earnings, charges and indexation or exchange variance at official indices or rates applied to current and noncurrent assets and liabilities. The attributable income-tax amounts are charged/credited to the income statement.

According to CPC 47, the recognition of revenues from contracts with clients is based on the transfer of control of the good or service promised, which may be at a specific moment in time (at a point in time) or over time, depending on the satisfaction or otherwise of the so-called "contractual performance obligations". Revenue is measured at the amount that reflects the consideration to which it is expected to be entitled and is based on a five-step model detailed below: 1) contract identification; 2) identification of performance obligations; 3) determining the price of the transaction; 4) allocation of the transaction price to the performance obligations; 5) revenue recognition.

Performance obligations are considered promises to transfer to the customer a good or service (or group of goods or services) that is distinct, or a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

(a) Recognition of revenue from product sales
Revenue is recognized at the moment in which contractual performance obligations are satisfied. In our case, as most of the sales are made on a FOB (Free-on-Board) basis, the revenue is recognized when the product is delivered to the transporter. When the realization of an amount already recorded under revenue is uncertain, a provision for the uncollectible amount or amount unlikely to be realized is recognized as a price adjustment or loss directly classified as an expense.

(b) Recognition of revenue from services
The Company provides logistics services at its own port terminal. Service revenue is recognized at the moment in which contractual performance obligations are satisfied. When the realization of an amount already recorded under revenue is uncertain, the uncollectible amount or amount unlikely to be realized is recognized as an expense.

(c) Finance income and costs
Finance income comprises interest income on funds invested and changes in the fair value of financial assets measured at fair value through profit and loss.

Finance costs comprise interest expenses on loans and financing, and changes in the fair value of financial assets measured through profit and loss.

Interest income and expenses are recognized as they accrue in profit or loss, using the effective interest method. Foreign currency gains and losses are reported on a net basis.

The unwinding for discounting for assets and liabilities previously adjusted to their present value is recognized in the income statement as a financial income or expense.

2.20 Leasing
The Group applied CPC 06 (R2) using the modified retrospective approach and, therefore, comparative information has not been restated and continues to be presented in accordance with CPC 06 (R1) and ICPC 03. Details of accounting policies as per CPC 06 (R1) and ICPC 03 are disclosed separately.

For contracts before January 1, 2019, lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental loan rate on January 1, 2019. Right-of-use assets are measured for an amount equal to the lease liabilities, adjusted by the value of any anticipated or accumulated lease receipts: the Group applied this approach to all other leases.

(a) Accounting policies applicable prior to 1 January 2019
In the comparative period, as a lessee, the Company classified the leases that transferred substantially all the risks and benefits inherent to the property as financial leases. When this was the case, leased assets were initially measured at an amount equal to the lower of their fair value and the present value of the minimum lease payments. The minimum lease payments were payments during the lease term that the lessee was required to make, excluding any contingent rent. After initial recognition,

the assets were accounted for in accordance with the accounting policy applicable to that asset CPC 06 (R1) .8, 33 IAS 17.8, 33, SIC 15.3.

Assets held under other leases were classified as operating and were not recognized in the Group's balance sheet. Payments made under operating leases were recognized in the income statement on a straight-line basis over the lease term. The incentives received were recognized as an integral part of the total lease cost, during the lease term.

(b) Accounting policies applicable after 1 January 2019
At the beginning of a contract, the Company assesses whether a contract is or contains a lease. A contract is, or contains a lease, if the contract transfers the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract transfers the right to control the use of an identified asset, the Group uses the definition of lease in CPC 06 (R2). This policy is applied to contracts entered into as of January 1, 2019.

The Company recognizes a right-of-use asset and lease liabilities on the lease start date. The right-of-use asset is initially measured at cost, which comprises the initial measurement value of the lease liabilities, adjusted for any lease payments made up to the start date, plus any initial direct costs incurred by the lessee and an estimate of costs to be incurred by the lessee in disassembling and removing the underlying asset, restoring the location in which it is located or restoring the underlying asset to the condition required by the lease terms and conditions, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the date of beginning until the end of the lease term, unless the lease transfers ownership of the underlying asset to the lessee at the end of the lease term, or if the cost of the right-of-use asset reflects that the lessee will exercise the call option. In this case, the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as that of property, plant and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of lease liabilities.

Lease liabilities are initially measured at the present value of lease payments that are not made on the start date, discounted by the interest rate implicit in the lease or, if this rate cannot be determined immediately, by the Group's incremental loan rate. The Group generally uses its incremental loan rate as a discount rate.

The Company determines its incremental rate on loans by obtaining interest rates from various external sources of financing and making some adjustments to reflect the terms of the contract and the type of leased asset.

Lease liabilities are measured at amortized cost, using the interest method effective. They are remeasured when there is a change in future lease payments resulting from a change in index or rate, if there is a change in the values that are expected to paid according to the residual value guarantee, if the Group changes its valuation if it exercises a purchase, extension or termination option or whether there is essentially a fixed revised lease payment.

When lease liabilities are remeasured in this way, an adjustment is made corresponding to the book value of the right-of-use asset or is recorded in the income statement if the book value of the right-of-use asset has been reduced to zero.

2.21 Standards and interpretations that are not yet in effect

A series of new standards will be effective for years beginning after January 1, 2019. The Company did not early adopt these standards in the preparation of these financial statements. The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements:

- Changes in references to the conceptual framework in IFRS standards;
- Definition of a business (changes to CPC 15 / IFRS 3);
- Definition of materiality (amendments to CPC 26 / IAS 1 and CPC 23 / IAS 8);
- IFRS 17 Insurance contracts.

3. SIGNIFICANT EVENT - FAILURE OF THE FUNDÃO DAM

As a result of the failure of the Fundão tailings dam on November 5, 2015, material accounting adjustments were recorded particularly related to measures to prevent, remediate, contain and compensate property, environmental and social damages.

Samarco incurred expenses and made provisions for future disbursements that have been recorded and reported in accordance with CPC 25 - "Provisions, contingent liabilities and contingent assets".

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The material accounting effects from this significant event on the Company's Statement of Financial Position, Income Statement and Statement of Cash Flows in the financial year ended December 31, 2019 and 2018 are described below:

BALANCE SHEET

Assets Current	Nota	2019	2018
Other assets (Advance to suppliers)	(a)	8,089	5,161
Total current assets		**8,089**	**5,161**
Noncurrent			
Court deposits	(b)	337,797	341,942
Deferred income tax	(c)	-	13,285
Total noncurrent assets		**337,797**	**355,227**
Liabilities Current			
Trade payables	(d)	(28,443)	(22,003)
Other provisions	(e)	(4,023,333)	(2,752,791)
Other liabilities (SEMAD)	(f)	(30,304)	(28,777)
Total current liabilities		**(4,082,080)**	**(2,803,571)**
Noncurrent			
Provisions for contingencies	(g)	-	(53,138)
Other provisions	(e)	(8,148,418)	(6,787,344)
Other accounts payable to Related Parties	(h)	(6,356,498)	(3,848,498)
Other liabilities (SEMAD)	(f)	(45,197)	(71,794)
Total Noncurrent		**(14,550,113)**	**(10,760,774)**
Net liabilities		**(18,286,307)**	**(13,203,957)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

INCOME STATEMENT

		2019	2018
Cost of goods sold and services rendered	(i)	(87,190)	(2,821)
Gross Loss		**(87,190)**	**(2,821)**
Operating expenses			
Provision funding for Renova Foundation by shareholders Vale/BHP	(h)	(2,508,000)	(2,091,011)
Reversal (provision) for social, environmental and socioeconomic remediation	(e)	(1,955,076)	2,894,783
Expenses for social, environmental and socioeconomic remediation	(j)	(200,210)	(146,602)
Reversal for capitalization of expenditures	(j)	329,290	-
Reversal (provision) for contingency		-	851
Expenses input resources - Renova Foundation	(e)	(490,000)	-
Expenses with free services - Renova Foundation		-	(323)
Fines related to social, environmental and socioeconomic remediation		(195)	-
Operational profit/(loss) before financial result		**(4,911,381)**	**654,877**
Interest on contingencies		-	(4,592)
Financial expenses provision for socioenvironmental and socioeconomic remediation		(665,979)	(1,227,167)
SEMAD interest		(4,343)	(6,572)
Financial result	(k)	**(670,322)**	**(1,238,331)**
Profit/loss before income tax		**(5,581,703)**	**(583,454)**
Deferred income tax		(13,285)	935
Loss for the year		**(5,594,988)**	**(582,519)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

STATEMENT OF CASH FLOWS

	2019	2018
Cash flows from operating activities		
Profit / Loss before tax	(5,581,703)	(583,454)
Adjustments to reconcile the loss to the cash provided by operations:		
Provision (reversal) for socioenvironmental and socioeconomic remediation	1,955,076	(2,940,955)
Provision funding for Renova Foundation by shareholders Vale/BHP	2,508,000	2,091,011
Provisions for risks	-	(3,741)
Financial charges	665,979	1,227,167
(Increase) decrease in operating assets:		
Restricted short-term investments	-	224
Court deposits	4,145	(9,192)
Advances to suppliers	(2,928)	(4,264)
Increase (decrease) in operating liabilities:		
Trade payables	6,440	(233)
Other Liabilities (SEMAD)	(25,070)	(21,237)
Net cash used in operating activities	**(470,061)**	**(244,674)**
Total net decrease in cash and cash equivalents	**(470,061)**	**(244,674)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

(a) Advances to suppliers
At 31 December 2019, the amount of R$ 8,089 (R$ 5,161 at 31 December 2018) refers to advances made to suppliers related to the hiring of consultancy and specialist services support the Federal Public Prosecution Office.

(b) Court deposits
At 31 December 2019, the balance of judicial deposits is reported in the assets at the amount of R$ 337,797 (R$ 341,942 at 31 December 2018) and its composition is shown below:

	Parent Company and Consolidated	
	2019	2018
Civil	336,100	337,122
Environmental	140	3,660
Labor	1,557	1,160
Total	**337,797**	**341,942**

(c) Deferred income tax
The accounting impacts deriving from the dam's failure have been treated as temporary differences for tax purposes. At 31 December 2018 the Company therefore reported a deferred income tax asset from these amounts, as shown below.

Due to the uncertainty related to the resumption of the Company´s operational activities (Note 1b), an analysis was made of the realization of the deferred income tax constituted up to 31 December 2019.

With the understanding that the future fiscal profits subject to taxation at the rate of 25% would not be sufficient to support the use of the deferred income tax arising from the provision of socioeconomic and socioenvironmental remediation and the tax loss, the Company chose to not carry out the accounting recognition of the deferred income tax under these accounts:

	2019		2018	
	Calculation base	Income tax	Calculation base	Income tax
Provision for contingencies	-	-	53,138	13,285
Total		**-**		**13,285**

(d) Trade payables
This refers to amounts payable of R$ 28,443 at 31 December 2019 (R$ 22,003 at 31 December 2018), related to expenses arising from the failure of the Fundão dam.

(e) Other provisions
On March 2, 2016, Samarco and its stockholders Vale and BHP Billiton Brasil, signed the TTAC (Note 1(a)) as outlined in the case records of the public civil action brought by the Government Federal and others (No. 0069758-61.2015.4.01.3400), with the 12th Federal Court in Belo Horizonte, State of Minas Gerais, to establish the programs which determine the measures and actions to remedy and compensate for socio-environmental and socioeconomic damages caused by the failure of the Fundão dam.

It is important to observe that, in addition to Samarco and its stockholders, the following are also parties to the Framework Agreement: (i) the Federal Government, the Brazilian Environmental and Renewable Natural Resources Institute ("IBAMA"), Instituto Chico Mendes de Conservação da Biodiversidade ("ICMBio"), National Water Agency ("ANA"), the National Department of Mineral Production ("DNPM"), Fundação Nacional do Índio ("FUNAI"); (ii) in Minas Gerais: the State of Minas Gerais, the State Institute for Forestry ("IEF"), the State Institute for Water Management ("IGAM"), the State Foundation for the Environment ("FEAM"); and (iii) in Espírito Santo: the State of Espírito Santo, the State Institute for the Environment and Water Resources ("IEMA"), the State Institute for Agribusiness and Forestry Protection ("IDAF") and the State Water Resource Agency ("AGERH").

The scope of the Framework Agreement is extremely broad, comprising a total of 42 programs, of which: (i) 23 are of a social/economic nature; and (ii) 19 are socio-environmental. These programs include both remediation and compensatory measures. The TTAC further provides for the possibility of creating new programs, to the extent required to implement the actions stipulated in the agreement.

The Framework Agreement was structured so as to allow government authorities to comment, assess and approve the projects developed under the programs, and oversee the execution of all of the programs through an Interfederative Committee ("CIF"). Experts and advisory panels have also been appointed to settle technical disputes in a scientific, substantiated and, above all, expeditious manner.

The Framework Agreement established the creation of a private Foundation (Renova Foundation) to develop and implement the programs, the management of which will be independently audited. The term of the Framework Agreement is 15 years counted from the date of its signing, subject to renewal each year thereafter until all of the obligations outlined in the Framework Agreement are fulfilled.

Under the terms of the TTAC, Samarco is responsible for funding the Renova Foundation for the duration of the Framework Agreement. To the extent that Samarco fails to meet its funding obligations under the Framework Agreement, each of Vale and BHP Billiton Brasil has funding obligations under the Framework Agreement in proportion to their 50 per cent shareholding in Samarco.

For the year ended December 31, 2019, funding was provided to the Renova Foundation as follows:

- R$ 3,033,113 in 2019 (R$ 2,110,711 in 2018), of which R$ 35,113 (R$ 19,700 in 2018) was invested directly by Samarco in the TTAC programs, and R$ 2,508,000 (R$ 2,091,011 in 2018) contributed by Vale and BHP Billiton Brasil, in the proportion of 50% each, through of deposits in the Renova Foundation in the name of Samarco, and the amount of R$ 490,000 contributed directly by Samarco to the Renova Foundation.

In 2020, the total input to be provided to the Renova Foundation is R$ 4,232,300. In addition, a total of R$ 13,909 is earmarked to cover the programs executed by Samarco. From 2020 to 2021, annual contributions to the Renova Foundation will be sufficient to cover the costs of the remediation and compensation programs for each year, with the annual reference amounts for these contributions being between R$ 800,000 to R$ 1,600,000. These annual amounts already include the annual amount of R$ 240,000 for compensation projects over a period of 15 years, counting from the date of the signing of the TTAC on 02 March 2016. Additionally, a contribution of R$ 500,000 will be allocated to a program of sewage collection and treatment and disposal of solid waste in certain areas. From 2022 onwards, the amounts to be contributed to the Renova Foundation will be based on the planning of the programs approved by the Renova Foundation on the same date. The Framework Agreement does not specify a minimum or maximum limit on contributions for this period.

On June 25, 2018, the Governance TAC was executed to provide for the settlement of a Public Civil Action of R$ 20,000,000, suspension of the Public Civil Action of R$ 155,000,000, partial ratification of the Framework Agreement and a formal declaration of its validity for the signing parties.

This agreement establishes, among other matters, Renova Foundation governance enhancements to ensure a greater participation of the affected population and a process to deal with a possible renegotiation of the programs intended to remedy the Fundão dam failure, to be assessed following the conclusion of the work of specialists (Experts) hired by Samarco to advise the Federal Prosecutor's Office. The agreement was ratified on 08 August 2018 by the 12th Federal Court of Minas Gerais.

Based on the information above, Samarco management, following the advice of external consultants and experts, has been preparing action plans and studies for the future remediation of the environmental and socioeconomic damage caused by the dam failure, in addition to the implementation of compensatory programs established in the Framework Agreement. At December 31, 2019, Samarco had recognized provisions for future disbursements related to the present obligation generated by the dam's failure. The magnitude, full scope, timing and costs of the future remediation programs are subject to significant uncertainty as they depend on the conclusion of expert studies, the preparation of action plans and the outcome of pending court cases.

The provision made was discounted to present value at (i) the risk-free rate of 6.7010 % per annum based on the 12-year Brazil bond in the international market maturing on January 5, 2025 obtained from Bloomberg (EJ137186) and (ii) considering cash outflow foreseen over the next 11 years, up to December 31, 2030.

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(a) Breakdown

		2019	2018
Provision for :			
Remediation programs	(e.1)	6,991,829	3,858,342
Compensation programs	(e.2)	3,848,285	4,920,666
Other actions not included in the settlement	(e.3)	1,331,637	761,127
		12,171,751	**9,540,135**
Current Liabilities		**4,023,333**	**2,752,791**
Noncurrent Liabilities		**8,148,418**	**6,787,344**

(b) Changes

	2019	2018
Balance at 01 January	**9,540,135**	**11,253,923**
Realized provision	(200,210)	(146,602)
Realized provision - Samarco contribution to the Renova Foundation	(490,000)	-
Reversal of provision funding for Renova Foundation by shareholders Vale/BHP	(2,508,000)	(2,091,011)
Financial update	665,979	1,227,167
Increase (decrease) of provision	5,163,847	(703,342)
Balance at December 31	**12,171,751**	**9,540,135**
Current liabilities	**4,023,333**	**2,752,791**
Noncurrent liabilities	**8,148,418**	**6,787,344**

In line with the evolution of actions and knowledge about the impacts, changes in key own assumptions may result in future substantial changes in amounts accrued in future publications, including:

- Method of removal of remaining tailings in the rivers: the removal of remaining tailings in the flood plains, along river banks from Santarém to the beginning of the dam of Candonga (Risoleta Neves) will be mechanical, using typical earthmoving equipment, without the use of dredging. This method considers the cost of removal budgeted per cubic meter transported and hours worked of the loading and transport equipment of the tailings.

- Method of removal of remaining tailings in the dam of the Candonga HPP: the removal of the remaining tailings in the dam will be carried out by dredging, also including containment activities, as described below:

- Criteria for compensation of impacted population: The Mediated Indemnity Program began effectively in October 2016 with the purpose of developing and executing a compensation and indemnification program, through a coordinated negotiation, aimed at compensation and indemnifying the impacted population. It considers the registration, analysis and indemnification, including:

  - Urban and private property;
  - Working conditions and individual income;
  - Fatality and missing people;
  - Fishermen, sand miners and small traders;
  - Individual entrepreneurs and micro businesses; and
  - Shortage of water supply.

- Compensation costs for the Candonga HPP in view of the reduction of its useful life or as needed for resuming operation.

  (e.1) Remediation programs: these comprise measures and actions to remedy and/or repair the socio-environmental and socioeconomic damages resulting from the dam failure, as set out in the Framework Agreement, whose main programs are: survey and registration of those impacted; protecting and enhancing the living standards of indigenous peoples; preservation of historical, cultural and artistic heritage; social communication, engagement and participation; reconstruction of Bento Rodrigues, Paracatu de Baixo and Gesteira; rehabilitation of other affected communities and infrastructure between Fundão and Candonga; assisting animals; emergency financial aid; reforestation and environmental recovery; conservation of aquatic biodiversity; management of resulting tailings, including in situ stabilization, excavation, dredging, haulage, treatment and disposal; improvement of water supply systems.

  (e.2) Compensation programs: measures and initiatives to compensate for damages arising from the dam failure which are not applicable for mitigation or remediation, by improving socioenvironmental and socioeconomic conditions in affected areas, in accordance with the program set out in the Framework Agreement, whose main aspects are: supporting the research for the development and use of socioeconomic technologies applied to impact remediation; regional economic recuperation and diversification with incentives for industry; encouraging local contracting; rehabilitation of permanent protected areas (APP); recovery of springs; strengthening of screening structures and reintroduction of wildlife; collection and treatment of sewage and solid waste; environmental education and preparation for environmental emergencies.

  (e.3) Other actions not covered by the Framework Agreement: other disbursements required to meet the cost of actions related to the Fundão dam failure but not covered by the TTAC programs.

(f) Other liabilities

Samarco was assessed by SEMAD at R$ 127,500. Samarco requested to be allowed payment of the amount in 60 months. The first installment, corresponding to 5% (five percent) of the amount, was paid in December 2016. On 31 December 2019, the amount of R$ 30,304 (R$ 28,777 at 31 December 2018) refers to 12 installments of short-term and the amount of R$ 45,197 (R$ 71,794 at 31 December 2018) refer to long-term installments, updated by SELIC, as detailed in Note 21.

(g) Contingencies

The Company is a party in legal and administrative proceedings involving civil, labor and environmental matters arising from the Fundão dam failure. These proceedings filed by individuals, private companies, NGOs and public and government entities seek remediation and compensation for environmental and socioeconomic impacts, material/property and emotional distress damages and compensation for deaths, in addition to a wide range of indemnification actions brought by affected municipalities.

These lawsuits include public civil actions brought by State Public Prosecutors in Minas Gerais and Espírito Santo, State Public Defenders in Minas Gerais and Espírito Santo, Federal Prosecutors and defenders. In view of the status of all these proceedings, the duplicative nature of the damages sought in these proceeding and the R$ 20,000,000 and R$ 155,000,000 claims, which are detailed in the following paragraphs, it is not possible at this time to provide an overview of the possible outcomes or a reliable estimate of future exposure.

As defined in the Framework Agreement, the claims of several proceedings filed against Samarco are covered by this agreement. Any claims involving any matter established in the Framework Agreement should seek dismissal by resolution of substance or grouping together filed claims. The estimated losses for claims covered by the Framework Agreement have been included as part of the various provisions for the remediation and compensation of damages caused by the Fundão dam failure.

The Company received an assessment notice from environmental agencies, including IBAMA (Brazilian Environmental and Renewable Natural Resources Institute) due to the environmental damage caused by the discharge of solid and liquid waste (mining tailings) into the waters of the Doce river, and SEMAD (State Secretariat for Environment and Development) due to the environmental pollution and degradation resulting in damage to water resources. Samarco has submitted its defense against these charges and is waiting for a response from these entities. The assessment notices amount to R$ 755,686 (R$ 898,253 at 31 December 2018).). Losses and resulting outflows are rated as possible.

In relation to the Public Civil Action No. 0043356-50.2015.8.13.0400 filed by the Public Prosecutor of Minas Gerais, seeking full compensation for the affected people of Mariana. A preliminary injunction froze an amount of R$ 300,000 in Samarco's bank account earmarked for compensation and remediation measures required under this Public Civil Action. Samarco appealed, however, on December 4, 2017, the Minas Gerais Court of Appeals denied the appeal and maintained the decision that froze said amount. The amount frozen has been partially released to pay for investments in emergency actions and remediation, upon agreement reached with the Public Prosecution of Minas Gerais. On October 2, 2018, Samarco, Vale, BHP Billiton Brasil and the Public Prosecutor of Minas Gerais signed an agreement to address the payment of damages in Mariana through the use of resources blocked in the preliminary injunction. Although the action was closed, the amounts originally blocked by this injunction will be used to pay part of the damages.

On November 30, 2015, the Federal Government of Brazil, the state governments of Espírito Santo and Minas Gerais and other public authorities filed a public civil action before the 12th Federal Court of Belo Horizonte against Samarco and its shareholders, Vale and BHP Billiton Brasil, seeking the creation of a fund of up to R$ 20,000,000 to add to the costs of clean-up and damages.

On May 3, 2016, the Federal Public Prosecutor filed a public civil action against Samarco and its stockholders seeking full compensation, indemnification and emotional distress in view of the environmental damages caused by the dam failure, demanding: (i) adoption of measures for mitigating the social, economic and environmental impacts caused by the failure of the Fundão dam and other emergency measures, (ii) payment of compensation to the community and (iii) payment of collective moral damage. The value of the initial action brought by the Federal Public Prosecution Service is R$ 155,000,000.

On January 18, 2017, the Federal Public Prosecution Service, Samarco and its stockholders signed a preliminary agreement ("TAP" or "Preliminary Agreement") with the Federal Prosecutors' Office in Brazil, which outlines the process and timeline for further negotiations towards a settlement of the R$ 20,000,000 and R$ 155,000,000 claims. The Preliminary Agreement provided for the appointment of experts to advise the Federal Prosecutors in relation to social and environmental remediation and the assessment and monitoring of programs under the Framework Agreement programs.

The conclusions of the expert advisors not subordinated to Samarco, VALE and BHP Billiton Brasil will be taken into account in the negotiation of a final settlement arrangement with the Federal Prosecutors.

Under the Preliminary Agreement, Samarco and its stockholders also agreed to provide an interim security ("Interim Security") totaling R$ 2,200,000, the hiring of experts to advise the Federal Prosecutors, and holding public hearings.

On January 24, 2017, Samarco, Vale and BHP Billiton Brasil provided the Interim Security to the Court, which will remain in effect for up to 30 months after the ratification of the Governance TAC. Following a series of extensions, on June 25, 2018, the parties reached an agreement in the form of the Governance TAC.

The Preliminary Agreement established in the Public Civil Action of Ponte Nova provides for the allocation of R$ 200,000 for remedial actions in that district. This amount was allocated to existing Renova Foundation programs, and did not represent an increase in the allocation of resources forecast for 2018.

On June 25, 2018, Samarco, Vale and BHP Billiton Brasil, the other parties to the Framework Agreement, the Public Prosecutors Office and the Public Defense Office executed an arrangement which settles the Public Civil Action of R$ 20,000,000, enhances community participation in decisions related to programs under the Framework Agreement and establishes a process to renegotiate the programs over two years (with a further two year extension option) to progress settlement of the Public Civil Action of R$ 155,000,000 (Governance TAC).

Renegotiation of the programs will be based on certain agreed principles such as full reparation pursuant to Brazilian law, the requirement for a technical basis for any proposed changes, consideration of findings from experts appointed by the signatories to the TTAC, consideration of findings from experts appointed by Prosecutors and consideration of feedback from impacted communities. During the renegotiation period and up until revisions to the programs are agreed upon, the Renova Foundation will continue to implement the Programs in accordance with the terms of the Framework Agreement and the Governance TAC.

The Governance TAC was ratified by the 12th Federal Court of Minas Gerais on August 8, 2018, settling the Public Civil Action of R$ 20,000,000 and suspending the Public Civil Action of R$ 155,000,000 for a period of two years from the date of ratification.

Under the Governance TAC, the Interim Security provided under the Preliminary Agreement is maintained for a period of 30 months under the Governance TAC, after which Samarco, Vale and BHP Billiton Brasil will be required to provide security of an amount equal to the Renova Foundation annual budget up to a limit of R$ 2,200,000.

Management has also considered other claims classified as possible and/or probable which are at the initial stage and which pose significant uncertainties due to duplicative nature of the damages sought in those claims and the R$ 20,000,000 and R$ 155,000,000 claims, the definition of the amounts involved, compensation time-lapse, and other judicial and extrajudicial settlements.

Additional government proceedings and investigations related to the failure of the Fundão dam may be brought against the Company. Until further facts are available and the uncertainties mentioned above resolved, it is not possible to provide a range of potential outcomes or a reliable estimate of Samarco's obligations arising from such matters. As such, a provision has not been recognized or a contingent liability quantified for these potential claims. Only with time and natural development of disputes and maturity of the proceedings, with new settlements reached and/or legal decisions, will it be possible to understand the magnitude of the impacts and the Company's exposure. These items may result in significant impacts on the provisions and result in new adjustments to existing provisions and/or the recognition of new provisions for disbursements which cannot be currently projected and/or measured.

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As of 2019, the actions estimated as probable losses related to the failure of the Fundão dam were recorded as part of the environmental and socio-environmental provision.

The Company is a party in other actions for which management, based on the information and position of its internal and external legal advisors, has not set up a provision for contingencies, since the chance of loss has been rated as possible. The main such cases are described below:

Description	Status	2019	2018
Civil Proceedings related, mainly to compensation to third parties. According to the opinion of the Company's legal advisors, the likelihood of loss in these disputes is possible.	Proceedings in the judicial sphere in several procedural stages.	1,332,643	1,015,248
Labor lawsuits related to the application of fines by the controlling bodies, in addition to labor claims filed by own employees and third parties.	Proceedings in the judicial sphere in several procedural stages.	333,377	8,305
Processes involving environmental risks referring to the States of Minas Gerais and Espírito Santo, with respect to assessments by the inspection bodies.	Proceedings in the judicial sphere in several procedural stages.	1,058,067	1,119,995
		2,724,087	**2,143,548**

(h) Other accounts payable to Related Parties
On December 30, 2016, contracts were signed between Samarco, Vale and BHP Billiton Brasil to recognize Samarco's obligation to pay its shareholders the amounts contributed by them to the Renova Foundation. The contributions are to comply with the obligations set forth in the Term of Transaction and Conduct Adjustment (TTAC) signed with the agencies at the State and Federal levels. In 2019, the amount contributed by shareholders directly to the Renova Foundation was R$ 2,508,000 (R$ 2,091,011 in 2018) totaling up to December 31, 2019 a total amount contributed of R$ 6,356,498 (R$ 3,848,498 up to 31 December 2018).

The information regarding the TTAC is detailed in Notes 3 (e) and 3 (g).

(i) Cost of goods sold and services rendered
The Company incurred costs to maintain and repair facilities affected by the failure of the tailings dam (related to outsourced services, construction materials and fuel, amongst other items). Of the total amount, R$ 76,629 (R$ 48,993 at 31 December 2018) was recorded as idle capacity (Note 24).

(j) Other operating expenses

Expenses for socioeconomic and socio-environmental recovery
The breakdown of Samarco expenses related to the measures seeking to prevent, remediate, contain and compensate environmental and social impacts caused by the dam failure, incurred in 2019 and 2018, is shown below:

	2019	2018
Remediation programs	12,134	19,734
Compensation programs	-	56
Actions not included in the TTAC	188,076	126,812
	200,210	**146,602**

The descriptions of the nature of each of the expenses included in the table above are detailed in Note 3(e).

Reversal for capitalization of expenses
The amount of R$ 329,290 refers to the capitalization of expenses incurred in the Axis 1. Structures resulting from the necessary readjustment to make the operation of the Germano Plant feasible, as described in Note 12.

(k) Financial result
The financial result (income) is composed of:

(i) financial expenses of R$ 665,979 (R$ 1,227,167 at 31 December 2018) arising from the update of the socio-environmental and socioeconomic remediation provision, calculated at present value. The rate used is described in note 3 (e);

(ii) R$ 4,343 (R$ 6,572 at 31 December 2018) interest incurred on the environmental penalty applied by SEMAD.

(iii) R$ 4,592 at 31 December 2018, refers to the restatement of the provisions for contingencies related to civil, labor and environmental claims.

(l) Investigations
Immediately after the failure of the Fundão dam, the Company, together with its stockholders, contracted an external investigation team to identify the causes of the failure. The results of the investigation were made public at the end of August 2016.

The results of the investigation were shared with the Federal Police and the Public Prosecution Service, among other entities involved in the investigation process. The results also provided input for the police investigations in progress as well as all judicial proceedings.. The information will also help the Company and the mining industry as a whole in their quest to implement higher standards of operational safety to prevent the occurrence of other events of a similar nature.

On October 22, 2016, the Federal Public Prosecution Service indicted the Company, its stockholders and 22 individuals, for the failure of the Fundão dam, under proceeding no. 0002725-15.2016.4.01.3822. The Company was charged with environmental crimes as outlined in articles 29, caput, §1, items I and II, § 4, items I, III, V and VI, art. 33, art. 38, art. 38-A, art. 40, caput, §2, art. 49, art. 50, art. 53, items I and II, sub items "c", "d" and "e", art. 54, § 2, items I, III, IV and V c/c art. 58, item I, art. 62, item I, all contained in Law n. 9,605/98, concomitantly with the crimes specified in articles 68, 69, and, twice, in art. 69-A, §2. of Law no. 9,605/98. The indictment was received on November 17, 2016. After a detailed analysis of documents and legal issues, related to the indictment, the Company presented a response within the legally established timeframe.

After considering the defense presented in the process, the Federal Court of Ponte Nova proceeded with the regular processing of the proceeding. TRF1 (Federal Regional Court of the 1st Region), when judging habeas corpus filed by accused persons (individuals) dismissed the accusation of intentional homicide and, still, closed the criminal action in relation to some accused persons. As a result, the Court, in line with the decision issued by the TRF1, in addition to excluding several individuals from the indictment, changed the procedure for processing the proceeding - until then submitted to the rite of the jury court, now adopting the ordinary procedure. The process is currently being processed on a regular basis.

(m) Insurance

(i) Operational insurance
After the failure of the Fundão dam, the Company has been negotiating with its contracted insurers to receive indemnity under its various policies that covered its operational risks.

In 2019, the company obtained partial reimbursement of defense costs covered by the Directors' Civil Liability policy and maintains the channel of negotiations open so that additional amounts spent and covered by its insurance policies are reimbursed.

Any additional indemnity payments still depend on completion of the negotiations, definitions of coverages, deductibles and allocation of the amount of losses covered by the policies.

(ii) Financial guarantee insurance TTAC
Since 2017, it has been in place a financial guarantee insurance in compliance with the terms of the Framework Agreement – TTAC, signed with the Public Prosecution Service at the 12th Federal District of Belo Horizonte, MG, to assure payment of the amounts corresponding to the court deposits that the purchaser needs to make as a result of default on the obligations of funding for the Socioeconomic and Socioenvironmental Remediation programs in response to the damages arising from the failure of the Fundão dam, as per the case records of the public civil action nº0069758-61.2015.4.01.3400 (the ACP), brought against the Insured by the Federal Government, Agência Estadual de Recursos Hídricos - AGERH, Agência Nacional de Águas - ANA, Departamento Nacional de Produção Mineral - DNPM, Estado de Minas Gerais, Estado do Espírito Santo, Fundação Estadual de Meio Ambiente - FEAM, Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA, Instituto Estadual de Florestas - IEF, Instituto Estadual de Meio Ambiente e Recursos Hídricos - IEMA, Instituto Mineiro de Gestão das Águas - IGAM and Instituto Chico Mendes de Conservação da Biodiversidade, among others. Indemnity payments by the Insurer will be made on equal conditions with other insurance policies submitted in the case records.

(n) Commitments
After the failure of the Fundão dam on November 5, 2015, the Company invoked the force majeure clause in long-term contracts with suppliers and service providers to suspend contractual obligations, except for the electricity contract.

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4. CASH AND CASH EQUIVALENTS

The balance of cash and cash equivalents is detailed below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
Cash and bank deposits					
Domestic		564	34	564	34
Overseas	(a)	52,720	71,011	55,895	71,587
Financial investments					
Overseas	(b)	9,333	8,936	9,333	10,701
		62,617	**79,981**	**65,792**	**82,322**

(a) Current accounts are denominated in US dollars at financial institutions overseas.
(b) Short-term investments denominated in US dollars at overseas financial institutions, with yields pegged to pre-fixed rates, 0.25% p.a. at 31 December 2019 (0.4% p.a. at 31 December 2018). The company has a policy of investing its resources in top-tier banks, according to the policy described in note 2.5.

5. RESTRICTED SHORT-TERM INVESTMENTS

The Company's restricted short-term investments are as follows:

	Parent Company and Consolidated	
	2019	2018
Financial investment in restricted cash	2,505	1,919
	2,505	**1,919**

As of December 31, 2019, the restricted cash value of R$ 2,505 (R$ 1,919 at 31 December 2018) refers to funds held and invested in specific collection accounts linked to certain bank loans and financing, which are undergoing a process of renegotiation of debt, and also to resources maintained to guarantee contractual obligations related to the transmission of energy.

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6. ACCOUNTS RECEIVABLE

The accounts receivables comprise the following:

		Parent Company		Consolidated	
		2019	2018	2019	2018
Domestic clients	(a)	10,571	7,573	10,571	7,573
Domestic clients related parties (note 30)		88	88	88	88
Foreign clients	(b)	10,660	10,277	12,333	11,855
Clients abroad related parties (note 30)		1,656	1,561	-	-
		22,975	**19,499**	**22,992**	**19,516**
Expected credit loss	(c)	(11,849)	(11,845)	(13,490)	(13,423)
		11,126	**7,654**	**9,502**	**6,093**

(a) The accounts receivable from clients in Brazil is related to the sale of energy, lease of port area, and sale of supply inventory, since the ore production activities are stopped.
(b) The Consolidated balance of R$ 12,333 at 31 December 2019 (R$ 11,855 at 31 December 2018) from customers abroad, refers to the amounts receivable from ore customers abroad.
(c) Estimated allowance for doubtful accounts total R$ 11,849 on December 31, 2019, at Parent Company and R$ 13,490 on Consolidated (R$ 11,845 and R$ 13,423 at December 31, 2018, respectively). Provisions for losses are set up for the financial instrument corresponding to the expected credit loss for the 12-month period, according to the policy disclosed in Note 2.5. The provision made by the Parent Company does not include amounts receivable from sales made to the subsidiary Samarco Finance.

The composition of the balance of accounts receivable, classified by aging, is detailed below:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Not yet due	2,499	552	2,530	584
Up to 30 days overdue	1,583	534	1,583	534
31 to 60 days overdue	-	-	-	-
61 to 90 days overdue	-	15	-	15
Past due more than 90 days	18,893	18,398	18,878	18,383
	22,975	**19,499**	**22,991**	**19,516**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

7. INVENTORY

Composition and changes in the inventory balance are detailed as follows:

	Parent Company and Consolidated	
(a) Breakdown	**2019**	**2018**
Finished goods	2,041	2,939
Work in progress	12,263	11,158
Consumables	96,670	95,927
Consumption and maintenance materials	304,348	306,583
Provision for obsolescence of materials	(32,282)	(6,169)
Advances to suppliers	64	69
Total	**383,104**	**410,507**
Current assets	14,367	14,166
Noncurrent assets	368,737	396,341
Total	**383,104**	**410,507**

	Parent Company and Consolidated	
	2019	**2018**
(b) Changes in finished goods		
Balance on 01 January	**2,939**	**1,263**
Sales	(1,416)	-
Additions (write-offs) for inventory adjustment	990	2,068
Translation adjustment	(472)	(392)
Balance on December 31	**2,041**	**2,939**

	Parent Company and Consolidated	
	2019	**2018**
(c) Change in provision for inventory obsolescence		
Balance at 01 January	**(6,169)**	**(6,190)**
(Increase) / Reduction of provision	(26,394)	21
Conversion	281	-
Balance at 31 December	**(32,282)**	**(6,169)**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

The Company appraised its inventory as of December 31, 2019, and concluded these did not exceed realization value.

Considering the uncertainties as to the extent and nature of operations when Samarco will resume operations, the consumables were reclassified at long term inventory.

8. RECOVERABLE TAXES

The balance of recoverable taxes is detailed below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
ICMS – Minas Gerais	(a)	76,688	76,688	76,688	76,688
ICMS – Espírito Santo	(b)	1,486,138	1,490,668	1,486,138	1,490,668
Provision for ICMS losses - Espírito Santo	(b)	(1,486,138)	(1,490,668)	(1,486,138)	(1,490,668)
PIS and COFINS	(c)	2,305	8,886	2,305	8,886
Income tax recoverable	(d)	1,902	53,471	1,902	53,471
IRRF on short-term investment yields		22	9,275	22	9,275
Other		1,881	8,973	1,882	8,975
Total		**82,798**	**157,293**	**82,799**	**157,295**
Current assets		6,055	80,552	6,056	80,554
Noncurrent assets		76,743	76,741	76,743	76,741
Total		**82,798**	**157,293**	**82,799**	**157,295**

(a) These refer primarily to credits on the acquisition of property, plant and equipment.
(b) These refer to credits on the acquisition of property, plant and equipment, consumables, materials and other. In view of the history of non-realization of ICMS tax credits due from the state of Espírito Santo, the Company set up a provision to cover 100% of the credits due to expectation of non-use.
(c) The PIS and COFINS credits are mostly related to the acquisition of material, consumables, energy, and property, plant and equipment, which are appropriated over 12 months at the rate of 1/12 per month. In 2019, only credits relative to the purchase of electric energy were appropriated, since operations are currently suspended.
(d) Recoverable income tax on overpaid monthly estimates.

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9. OTHER ACCOUNTS RECEIVABLE

On December 31, 2019, the amount of R$ 14,662 (R$ 10,668 at 31 December 2018) at Parent Company and Consolidated, refers to the receipt of offset related to the difference between the contracted monthly energy versus the consolidated measured energy, and the sale of surplus electricity purchased for the production process, but not used.

10. OTHER ASSETS

		Parent Company		Consolidated	
		2019	2018	2019	2018
Advances to employees		5,229	4,590	5,229	4,590
Other		5,101	2,431	5,166	2,499
Current		**10,330**	**7,021**	**10,395**	**7,089**
COHESA	(a)	17,275	17,275	17,275	17,275
(-) Adjustment to Present Value COHESA	(a)	(2,860)	(2,182)	(2,860)	(2,182)
Advances to employees		632	286	632	286
Other accounts receivable Ponta Ubu Agropecuária	(b)	1,327	1,327	1,327	1,327
Other		42	41	42	236
Noncurrent		**16,416**	**16,747**	**16,416**	**16,942**

(a) The Company transfers funds to COHESA (the Samarco Employees' Housing Cooperative) on the basis of an arrangement to implement a housing plan signed on March 1, 1994 to finance real estate properties for employees, with terms varying from eight to 25 years. The amounts lent will be received in full upon termination of the Samarco Housing Plan - PHS, i.e. upon full repayment of the financing by the employees. The COHESA balance receivable is adjusted to present value. The interest charged by COHESA is updated according to the collective pay rise awarded by the Company.

(b) The balances at 31 December 2019 and 2018 in the amount of R$ 1,327, refer to expenses under the responsibility of Ponta Ubu Agropecuária, which were disbursed by the Company.

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11. INVESTMENTS

The Company reported earnings on equity interest of its subsidiaries of R$ 99 at 31 December 2019 (R$ 595 at 31 December 2018). In 2019 and 2018 the Company did not receive dividends from investments in subsidiaries. None of the investees have shares traded on stock exchanges.

	Interest	Number of shares or units	Current assets	Noncurrent assets	Total assets	Current liabilities	Equity	Total liabilities	Revenue	Costs and expenses	Net income for the year
2019											
Samarco Finance Ltd.	100%	50,000	1,824	-	1,824	1,641	183	1,824	-	(25)	(25)
Samarco Iron Ore Europe B.V	100%	180	18,259	4,880	23,139	4,312	18,827	23,139	3,833	(3,709)	123
		Total	**20,083**	**4,880**	**24,963**	**5,953**	**19,010**	**24,963**	**3,833**	**(3,734)**	**99**
2018											
Samarco Finance Ltd.	100%	50,000	1,765	-	1,765	1,578	187	1,765	16	-	16
Samarco Iron Ore Europe B.V	100%	180	17,618	4,609	22,227	4,278	17,949	22,227	5,293	(4,714)	579
		Total	**19,383**	**4,609**	**23,992**	**5,856**	**18,136**	**23,992**	**5,309**	**(4,714)**	**595**

The movement of investments in subsidiaries, presented in the parent company's individual financial statements, is as follows:

	Parent Company and Consolidated	
	2019	2018
Balance at 01 January	**18,136**	**14,942**
Profit sharing	99	595
Conversion	771	2,599
Balance at 31 December	**19,006**	**18,136**

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12. PROPERTY, PLANT AND EQUIPMENT

In 2019, as in 2018, the investments made corresponded to the current needs of the Company.

The Company's property, plant and equipment consist of the following:

		Consolidated										Parent Company
		Land	Industrial facilities (buildings, machinery and equipment)	Ore pipeline and correlated system	Decommissioning of plant	Data processing equipment and furniture and fixtures	Vessels and vehicles	Tools, rotating assets and mass assets	User rights	Construction in progress	Total	Total
Cost												
Balance as of December 31, 2017		**203,530**	**14,452,558**	**7,878,095**	**94,647**	**220,953**	**480,976**	**273,506**	**-**	**99,467**	**23,703,732**	**23,702,439**
Additions	(a)	-	-	-	-	-	-	-	-	119,843	119,843	119,843
Provision for write-off (Guilman – Cemig)	(b)	-	(1,200)	(5,278)	-	-	-	-	-	-	(6,478)	(6,478)
Transfers - in	(c)	778	37,519	14,665	-	11,165	17,324	14,427	-	-	95,878	95,878
Transfers - out		-	(19,338)	(3)	-	-	(12,184)	(2,659)	-	(61,694)	(95,878)	(95,878)
Free of payment transfer – out	(d)	(203)	(83,496)	-	-	-	-	-	-	-	(83,699)	(83,699)
Sales		-	(245)	-	-	(104)	(7)	(15)	-	(5,414)	(5,785)	(5,785)
Effect of exchange rate changes	(e)	35,071	2,396,380	1,352,405	(50,795)	40,326	83,560	48,796	-	3,221	3,908,964	3,908,721
Balance as of December 31, 2018		**239,176**	**16,782,178**	**9,239,884**	**43,852**	**272,340**	**569,669**	**334,055**	**-**	**155,423**	**27,636,577**	**27,635,041**
Additions	(a)	-	-	-	-	6	-	-	28,334	729,647	757,987	757,981
Evaluation of Plant Decommissioning Study	(f)	-	-	-	-	-	-	-	-	1,068,323	1,068,323	1,068,323
Transfers - in	(c)	39,203	8,851	2,037	1,068,323	4,596	718	578	-	-	1,124,306	1,124,306
Transfers - out		-	(8)	(647)	-	-	-	-	-	(1,123,553)	(1,124,208)	(1,124,208)
Sales		(2,625)	(1,717)	(49)	-	(1,603)	(3,071)	(16)	(6,161)	(1,265)	(16,507)	(16,507)
Effect of exchange rate changes	(e)	10,181	668,360	371,974	(17,673)	9,106	21,732	13,450	735	4,661	1,082,526	1,082,459
Balance as of December 31, 2019		**285,935**	**17,457,664**	**9,613,199**	**1,094,502**	**284,445**	**589,048**	**348,067**	**22,908**	**833,236**	**30,529,004**	**30,527,395**

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		Consolidated										Parent Company
		Land	Industrial facilities (buildings, machinery and equipment)	Ore pipeline and correlated system	Decommis-sioning of plant	Data processing equipment and furniture and fixtures	Vessels and vehicles	Tools, rotating assets and mass assets	User rights	Construc-tion in progress	Total	Total
Accumulated depreciation, loss due to impairment, and exchange rate variance												
Balance as of December 31, 2017		-	**(4,128,700)**	**(1,534,829)**	**(26,445)**	**(146,173)**	**(219,322)**	**(71,997)**	-	-	**(6,127,466)**	**(6,126,333)**
Depreciation for the year		-	(121,015)	(5,960)	(4,381)	(16,498)	(25,677)	(8,873)	-	-	(182,404)	(182,283)
Provision for write-off (Guilman - Cemig)	(b)	-	163	856	-	-	-	-	-	-	1,019	1,019
Transfers in	(c)	-	(3,912)	(1)	-	-	(3,837)	-	-	-	(7,750)	(7,750)
Transfers out		-	3,913	-	-	-	3,837	-	-	-	7,750	7,750
Sales		-	129	-	-	99	6	9	-	-	243	243
Effect of exchange rate changes	(e)	-	(804,481)	(259,560)	(2,652)	(34,290)	(53,244)	(19,037)	-	-	(1,173,264)	(1,173,024)
Balance as of December 31, 2018		-	**(5,053,903)**	**(1,799,494)**	**(33,478)**	**(196,862)**	**(298,237)**	**(99,898)**	-	-	**(7,481,872)**	**(7,480,378)**
Depreciation for the year		-	(118,741)	(6,220)	(4,381)	(15,921)	(25,044)	(9,022)	(19,582)	-	(198,911)	(198,877)
Sales		-	983	36	-	1,475	1,911	14	5,276	-	9,695	9,695
Impairment	(g)	(138,389)	(4,716,094)	(2,908,155)	(949,696)	(33,093)	(114,476)	(103,610)	(6,222)	(634,001)	(9,603,736)	(9,603,736)
Effect of exchange rate changes	(e)	-	(313,784)	(75,522)	1,348	(15,123)	(28,542)	(11,468)	(576)	-	(443,667)	(443,593)
Balance as of December 31, 2019		**(138,389)**	**(10,201,539)**	**(4,789,355)**	**(986,207)**	**(259,524)**	**(464,388)**	**(223,984)**	**(21,104)**	**(634,001)**	**(17,718,491)**	**(17,716,889)**

		Consolidated										Parent Company
		Land	Industrial facilities (buildings, machinery and equipment)	Ore pipeline and correlated system	Decommis-sioning of plant	Data processing equipment and furniture and fixtures	Vessels and vehicles	Tools, rotating assets and mass assets	User rights	Construc-tion in progress	Total	Total
Balance												
As of December 31, 2018		**239,176**	**11,728,275**	**7,440,390**	**10,374**	**75,478**	**271,432**	**234,157**	-	**155,423**	**20,154,705**	**20,154,663**
As of December 31, 2019		**147,546**	**7,256,125**	**4,823,844**	**108,295**	**24,921**	**124,660**	**124,083**	**1,804**	**199,235**	**12,810,513**	**12,810,506**

(a) On 31 December 2019, the additions as construction in progress resulted in an amount of R$ 729,647 (R$ 119,843 in 2018). Among these additions, it is important to single out the main project, detailed below:

- R$ 385,280 - Axis 1 dam

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As described in Note 1 (b), as a result of the new legislation and aiming at greater security in the resumption of operations, Samarco revised the tailings disposal project in the Alegria Sul pit, removing the containment dike, then adopting the "confined pit" disposal system. For this readjustment, necessary to make the operation of the Germano Plant feasible, the Nova Santarém and dike S3 structures were included in the scope of the corrective operational licensing, thus granting an already validated legal condition.

The Axis 1 Dike is an integral part of the Fundão Valley and will enable the operation of the Germano Plant in the medium term, since the area created by the construction of the dike will be used to dispose part of the sandy tailings (which will be filtered and dry stacked).

The composition of the addition in accordance with their nature is shown below:

Name of project	Start	End	2019	2018
Axis 1 Dam	2019	2020	385,280	-
PCN tailings disposal in pit	2016	2020	110,197	34,108
Sandy tailings and slime dewatering system	2018	2020	70,994	3,021
Improvements in Macacos dike and workshop	2018	2020	24,933	19,601
Structural overhaul Ubu	2018	2021	17,607	8,803
Real estate	2018	2021	15,352	24,764
Water/environmental prerequisite	2018	2021	11,210	2,334
Spare parts Germano/ Ubu	2014	2019	7,411	2,119
IT projects - operational readiness hardware	2019	2020	5,477	-
Dam Muniz Freire	2018	2019	1,463	1,606
Protection boundaries Samarco properties	2018	2019	1,353	440
Restart of concentrator 2	2018	2019	1,063	2,830
Capital expenditures Guilman Amorim HPP	2016	-	937	951
Improvements Matipó dam	2018	2020	509	2,788
Improvements North Dam	2018	2019	230	1,718
Software for mine planning	2018	2019	-	1,954
Electrical center for automation/instrumentation	2017	2018	-	311
Purchase accelerometer and seismometers	2017	2018	-	179
Renovation expansion of Germano restaurant	2013	2018	-	46
Purchase of hydrogeology equipment	2017	2018	-	29
Installation of logical blocking system	2017	2018	-	16
Acquisition of gmu tools (necessary for internalizations)	2016	2018	-	14
Other	-	-	75,631	12,211
Total			**729,647**	**119,843**

(b) Provisions for transfer, free of payment, of assets related to substation 230kV, installed at the HPP of Guilman Amorim, a consortium. The assets will be transferred to CEMIG – Companhia Energetica de Minas Gerais S.A. as a result of a legal requirement.
(c) The investments in property, plant and equipment and intangible assets are recorded in construction in progress. Once these investments are concluded and go into operation, the assets are transferred to the respective accounts of property, plant and equipment and intangible assets, depending on the accounting nature of each item.
(d) Transfer, free of payment, to Furnas of the substation 345k Barro Branco, as pursuant to Resolution n.º 2,260/10 of ANEEL.
(e) The effect of the exchange rate changes resulted from translating the financial statements from the functional currency (US dollars) to the reporting currency (Real).
(f) The decommissioning assessment study for industrial plants was revised and resulted in an increase of approximately R$ 1,068,323 as per Note 20.
(g) The Company recognized, in the year ended December 31, 2019, a reduction of R$ 9,603,736 in the value of its fixed assets as detailed in Note 12.1.

12.1 Impairment analysis
Due to the suspension of the Company's operations in Mariana because of the failure of the Fundão dam, Samarco identified indicators that certain fixed assets could be being recognized in the books at values above the recoverable value and thus carried out an impairment test during the period.

The assets' recoverable values were assessed based on projected cash flows with the revised mine plan, considering the integrated operations of the Company to be a single cash generating unit. Cash flow projections were made based on: (i) estimated useful life of the mines; (ii) assumptions and budgets approved by management for the period corresponding to the estimated useful life; (iii) discount rate derived from the methodology used to calculate the weighted average cost of capital – WACC; (iv) market projections for exchange rates (Real/US Dollar); (v) market projections for price quotes of iron ore pellets (BF and DR). In order to calculate the impairment, were considered the amounts recorded in property, plant and equipment and intangible assets.

The main assumptions used in the cash flow projections to determine the value in use of the cash generating unit were: WACC of 10.9%; average exchange rate for 2020 of R$ 3.94, rising to R$ 4,11 in the long term; average price of BF and DR pellets, as per the Platts index and pellet premium projected by market analysts and international marine freight references.

In assessing the recoverability of long-term non-financial assets, based on projected cash flows, the Company recognized, in the year ended December 31, 2019, a reduction in the amount of R$ 9,705,110, considering that the amount of R$ 9,603,736 was recognized in property, plant and equipment, and the amount of R$ 101,374 was recognized in intangible assets (Note 13).

Currently, insufficient cash resources to meet the Company's obligations, as well as the uncertainties as to when it will resume its operations, raise significant doubts about the Company's ability to continue to operate as a going concern (Note 1).

12.2 Residual value
Useful lives of assets are optimized as far as possible by carrying out preventive and corrective maintenance. This policy enables the Company to maintain its assets in an appropriate state of repair and operate for lengthy periods of time until they become effectively obsolete or are to be scrapped. As such, there is no expectation of recovering values in the sale of fixed assets, and their residual values are insignificant.

12.3 Pledged assets
On December 31, 2019, the Company had assets pledged as collateral in judicial proceedings. These assets are recorded under Property, Plant and Equipment as machinery and equipment, real estate property, vessels and related systems, the net book value for which R$ 2,347,362 (R$ 2,160,292 in 2018). The amount is composed of the asset acquisition cost less depreciation and does not include the result of the impairment. For 2019, there was an increase of R$ 187,192 related to the fixed assets provided as collateral as per the lawsuits associated with the failure of the Fundão tailings dam (the Ibama infraction notices which were judicialized) as informed in note 3(g).

12.4 Useful life
In accordance with technical pronouncement CPC 27 - Property, Plant and Equipment, in 2018 the Company concluded its review of the useful lives of its property, plant and equipment. There were no changes to the expected use of the asset, which is assessed based on physical production or capacity expected of it. There were therefore no changes to the standard uses of Samarco's property, plant and equipment in 2019, i.e. the useful lives are compatible with the expected benefit of the industrial complex.

Below is a summary description of the property, plant and equipment accounts and the useful life by accounting item used to calculate depreciation, based on the units produced method for the items directly related to the respective production areas and based on the straight-line depreciation method for the rest:

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		2019		2018	
Item	**Account description**	**Average weighted useful life in years**	**Years of depreciation**	**Average weighted useful life in years**	**Years of depreciation**
Buildings	Buildings, warehouses, security cabins, road surfacing and civil works improvements.	29	10 - 50	29	10 - 50
Machinery and equipment	Furnace, pelletizing disks, ship loader, loaders, precipitators, ball mills, grate cars and other such items.	17	10 - 50	18	10 - 50
Ore pipeline and correlated system	Pipelines to transport iron ore and industrial fixtures, such as conveyor belts, cabling and others	15	20 - 43	16	20 - 43
Plant decommissioning	Environmental obligations to shut down the slurry pipeline and industrial facilities of Germano and Ubu.	37	43	37	43
Data processing equipment	Personal computers, printers, monitors, Notebooks, servers, optical interfaces, collectors, switches, hubs, patch panels, racks, etc.	4	5	3	5
Furniture and fixtures	Chairs, tables, cabinets and other such furniture	5	10	6	10
Vessels	Boats, ferries, speedboats and dredgers.	15	9 - 24	15	9 - 24
Vehicles	Automobiles, trucks, stackers, cranes, tractors, loaders.	8	4 - 25	8	4 - 25
Tools	Pneumatic wrenches, multimeters, tachometers, microscopes, and other small instruments.	7	10 - 25	8	10 - 25
Rotating assets	Parts of machinery and equipment and industrial facilities.	20	10 - 27	20	10 - 27
Mass assets	Circuit breakers, capacitors, hydraulic pumps and other small items.	15	5 - 24	16	5 - 24

12.5 Assets with right-of-use

As described in notes 2.1 (c) and 2.20, the various assets, such as: real estate, vehicles, production equipment and IT equipment, were previously classified as operating or finance leases, based on their assessment of whether the lease significantly transferred all the risks and benefits inherent in the ownership of the Group's underlying asset.

As of 2019, with the implementation of CPC 06 (R2) - Leases, the Company started to recognize assets with right of use, that is, these leases started to constitute the group of fixed assets in the balance sheet.

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13. INTANGIBLE ASSETS

The intangible assets are broken down as follows:

		Consolidated								Parent Company
		Right of way	Mining rights	Other rights	Tailings removal	Right of use - power grid 345Kv	Applications and software	Construction in progress	Total	Total
Cost										
Balance as of December 31, 2017		**27,944**	**41,838**	**1,906**	**25,534**	**-**	**163,651**	**1,719**	**262,592**	**262,586**
Additions	(a)	-	-	-	-	-	-	763	763	763
Free of payment transfer - in	(b)	-	-	-	-	83,699	-	-	83,699	83,699
Transfers - in		157	-	-	-	475	2,182	-	2,814	2,814
Transfers - out		-	-	-	-	-	-	(2,814)	(2,814)	(2,814)
Effect of exchange rate variance	(c)	4,796	7,170	326	4,376	69,407	28,531	335	114,941	114,938
Balance as of December 31, 2018		32,897	49,008	**2,232**	**29,910**	**153,581**	**194,364**	**3**	**461,995**	**461,986**
Additions	(a)	-	-	-	-	-	-	4,036	4,036	4,036
Transfers - in		346	-	-	-	-	3,522	-	3,868	3,868
Transfers - out		(100)	-	-	-	-	-	(3,868)	(3,968)	(3,968)
Effect of exchange rate changes	(c)	1,347	1,972	90	1,204	6,180	8,083	4,461	23,337	23,337
Balance as of December 31, 2019		**34,490**	**50,980**	**2,322**	**31,114**	**159,761**	**205,969**	**4,632**	**489,268**	**489,259**

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		Consolidated								Parent Company
		Right of way	Mining rights	Other rights	Tailings removal	Right of use - power grid 345kv	Applications and software	Construction in progress	Total	Total
Amortization										
Balance as of December 31, 2017		**(9,893)**	**(28,917)**	**(1,906)**	**(9,032)**	**-**	**(132,022)**	**-**	**(181,770)**	**(181,764)**
Amortization of the period	(d)	(299)	(163)	-	(1,771)	-	(8,820)	-	(11,053)	(11,053)
Effect of exchange rate changes	(c)	(2,031)	(5,220)	(326)	(2,692)	-	(27,377)	-	(37,646)	(37,643)
Balance as of December 31, 2018		(12,223)	(34,300)	**(2,232)**	**(13,495)**	-	**(168,219)**	-	**(230,469)**	**(230,460)**
Amortization of the period	(d)	(296)	(163)	-	(1,560)	-	(8,403)	-	(10,422)	(10,422)
Disposals		-	-	-	-	-	-	-	-	-
Impairment	(e)	(7,663)	(4,313)	-	(8,062)	(66,831)	(10,981)	(3,524)	(101,374)	(101,374)
Effect of exchange rate changes	(c)	(853)	(1,662)	(90)	(1,654)	-	(11,156)	-	(15,415)	(15,415)
Balance as of December 31, 2019		**(21,035)**	**(40,438)**	**(2,322)**	**(24,771)**	**(66,831)**	**(198,759)**	**(3,524)**	**(357,680)**	**(357,671)**

		Consolidated								Parent Company
		Right of way	Mining rights	Other rights	Tailings removal	Right of use - power grid 345kv	Applications and software	Construction in progress	Total	Total
Balance										
Balance as of December 31, 2018		20,674	14,708	-	16,415	153,581	26,145	3	231,526	231,526
Balance as of December 31, 2019		13,455	10,542	-	6,343	92,930	7,210	1,108	131,588	131,588

(a) The investments and expenditures to be recorded in intangible assets are initially recorded as Construction in progress, under Property, plant and equipment. Once these investments are concluded and go into operation, the assets are transferred to the respective accounts of intangible assets, depending on the accounting nature of each item.

The composition of the addition in accordance with their nature is shown below:

Project Denomination	Start Date	End Date	2019	2018
Mine planning software	2018	2019	1,717	-
Projects TI – Software Operational Readiness	2019	2020	1,258	-
IT management systems – acquisitions software/licensing	2013	2019	715	762
Real Estate Compliance Regularization	2019	2019	346	-
Total			**4,036**	**762**

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(b) Transfer, free of payment, to Furnas of the substation 345kV Barro Branco, as pursuant to Resolution No. 2,260/10 of ANEEL.
(c) The effect of the exchange rate changes resulted from translating the financial statements from the functional currency (US dollars) to the reporting currency (Real).
(d) For the easements and mining rights, amortization of the intangible assets is calculated according to the expected useful life of the iron ore mines owned by the Company. The straight-line method is applied to the others.
(e) The Company recognized, in the year ended December 31, 2019, a reduction of R$ 101,374 in the value of its intangible assets, as detailed in note 12.1.

13.1 Useful life

Below is a summary description of the intangible asset accounts and the useful life by accounting item:

		2019		2018	
Item	**Account description**	**Average weighted useful life in years**	**Years of depreciation**	**Average weighted useful life in years**	**Years of depreciation**
Easements	Rights acquired to use the easement on the ground to lay the slurry pipeline.	33	43	34	43
Mining rights	Mining rights for exploration of iron ore deposits.	34	43	35	43
Tailings removal	Cost of removing tailings, incurred in surface mine during production.	21	25	21	25
Right to basic grid LT 345KV	Right to use/connection to basic grid LT 345KV.	25	25	25	25
Applications and software	Software and licenses.	4	5	4	5

13.2 Research and development

The Company incurred research and development expenses of R$ 19,602 (R$ 27,471 in 2018), which were recognized as other net operating expenses in 2019 (Note 26).

14. TRADE PAYABLES

	Parent Company		Consolidated	
	2019	2018	2019	2018
Domestic customers	250,578	70,316	250,595	70,332
Overseas customers	1,164	4,095	1,204	4,095
Related-party transactions (Note 30)	323	2,028	323	2,028
	252,065	**76,439**	**252,122**	**76,455**

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15. LOANS AND FINANCING

Loans and financing are instruments used by the Company to finance its projects and various needs.

With the halt of its operating activities, the Company was unable to comply with certain obligations contained in its loan and financing agreements. As a consequence of these non-compliances, all loans and financing were reclassified to short term, reflecting an increase in the amounts of interest provision.

Loans and Financing		Parent and Consolidated 2018	2017
Overseas loans and financing	Bonds	8,837,406	8,488,689
	EPPs (export revenue)	6,432,040	6,183,223
Local loans and financing	BNDES FINAME	139,323	139,323
	Petrobras Loan	6,249	6,881
	DEBENTURES (note 30)	4,818,120	3,712,111
Total		**20,233,138**	**18,530,227**
Current		**20,233,138**	**18,530,227**

In 2019, the Company entered into loan agreements with its shareholders Vale and BHP Billiton Brasil through issues of private, non-convertible debentures, with the 11th issue being executed with BHP Billiton Brasil and the 12th issue with Vale, in amount of R$ 805,530 maturing on January 22, 2020. On this date, they were renegotiated with new maturity on January 22, 2021.The issues of Vale and BHP have identical conditions regarding value, term (1 year), and interest (LIBOR plus 1.15% per year).

In 2019, some issues also matured and all of them were renegotiated, with their maturities extended for another year:

- 1st and 2nd issues, executed in 2016 with BHP Billiton Brasil and Vale respectively, matured on August 2, 2019 and were renegotiated with new maturity on August 2, 2020 and total amount of R$ 1,174,136.
- 3rd and 4th issues, executed in 2017 with BHP Billiton Brasil and Vale respectively, matured on January 3, 2019 and were renegotiated with new maturity on January 3, 2021.
- 5th and 6th issues, executed in 2017 with BHP Billiton Brasil and Vale respectively, matured on July 12, 2019 and were renegotiated with new maturity on July 12, 2020 and a total amount of R$ 592,325.

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As of December 31, 2019, the provision for interest on loans and financing in foreign currency, which represented 75.5% of total loans and financing (79.2% on December 31, 2018), was as follows:

Financial charges payable – foreign currency (USD)	Parent Company and Consolidated			
	2019		2018	
Interest rate (per annum)	Principal value	Provision for interest	Principal value	Provision for interest
2% to 3%	1,958,629	291,067	-	-
3% to 4%	4,473,411	623,055	5,698,948	492,892
Above 4%	8,837,406	1,771,720	8,972,964	1,248,395
	15,269,446	**2,685,842**	**14,671,912**	**1,741,287**

As of December 31, 2019, the provision for interest on local currency loans and financing, which accounted for 24.5% (20.8% on December 31, 2018) of interest on total loans and financing, was as follows:

Financial charges payable – local currency	Parent Company and Consolidated			
	2019		2018	
Interest rate (per annum)	Principal value	Provision for interest	Principal value	Provision for interest
3% to 4%	4,719,632	134,829	3,742,940	95,968
Above 4%	244,060	11,037	115,375	7,073
	4,963,692	**145,866**	**3,858,315**	**103,041**

The issues of debentures in local currency have interest rates pegged to LIBOR.

The average cost of the debt in 2019 in foreign currency was 3.7% p.a. and in local currency was 4.3% p.a. (the consolidated cost in 2018 was 4.2% p.a.).

In 2019, the movement of loans and financing and financial charges payable is represented as shown in the table below:

	Parent Company and Consolidated
	2019
Loans and financing, financial charges payable at 01 de january	**20,374,555**
Additions of loans and financing	1,027,139
Payment of loans and financing	(632)
Interest Accrued	1,023,697
Payment of financial charges	(949)
Exchange variance, net	639,332
Currency translation amortized cost	1,706
Loans and financing, einancial charges payable at 31 de december	**23,064,848**

Guarantees and obligations - loans and financing
As a result of the interruption of the Company's operations, since the Fundão dam failure, certain covenants in loan and financing agreements have not been met, such as the debt ratio (Net Debt/EBITDA limited to 4:1). In addition, the Company ceased to pay principal and interest on loans due in the year.

For the calculation of Net Debt/EBITDA, the Company uses an adjusted EBITDA as a basis for calculation of financial covenants, in accordance with the definitions included in the various contracts with lenders. Extraordinary non-cash gains and losses, such as provisions, are excluded for this criterion, in order to reflect the expectation of cash generation based on EBITDA, thereby evaluating the Company's financial health and liquidity and its capacity to repay the entire debt in a given period.

The Company has hired J.P. Morgan to act as its financial advisor in the renegotiation of its debt. The discussions with its creditors, banks and bondholders are in progress.

Class Action Complaint
On November 14, 2016, a putative class action complaint was filed in the U.S. District Court for the Southern District of New York on behalf of all purchasers of Samarco's 10-year bond Notes due 2022, 2023 and 2024 bought between October 31, 2012 and November 30, 2015, against Samarco and its former chief executive officer. The complaint is presented under U.S. federal securities laws and indicates that the plaintiff will seek certification to proceed as a class action.

On March 6, 2017, the putative class action complaint was amended to include BHP Group Ltd, BHP Group Plc, BHP Billiton Brasil Ltda, and Vale S.A. as well as Samarco officers, including four members of its Board of Directors, which is formed by representatives of Vale and BHP Billiton Brasil. On April 5, 2017, the complaint by Safra against natural persons was withdrawn, keeping in effect only the actions related to corporate entities (Samarco, Vale and BHP Billiton Brasil).

On August 31, 2017, there was a motion to dismiss the amended complaint, developed jointly by Samarco, Vale and BHP Billiton Brasil. In June 2019, Samarco's prior defense was granted, judging the lawsuit dismissed at its preliminary phase.

The aforementioned decision of dismissal was the object of an appeal by the Plaintiffs. Samarco is waiting for the opening of its term for submittal of a reply to said appeal.

If the decision of dismissal is overruled, the case returns to the evidentiary phase, to determine the amount of the damages claimed.

Given the preliminary status of this action, it is not possible at this time to provide a range of possible outcomes or a reliable estimate of potential future exposures to Samarco.

16. EMPLOYEE BENEFITS

16.1 Retirement benefits
Samarco sponsors Fundação Vale do Rio Doce de Seguridade Social (ValiaPrev), a multi-sponsor, multi-plan entity managing benefit plans with segregated assets and providing participants and their dependents with benefits supplementary, or similar, to Official Basic Social Security benefits. The plan is a defined-contribution plan and offers the following benefits:

- Normal retirement income.
- Early retirement income.
- Supplementary disability retirement.
- Supplementary pension for death.
- Pension income for death.
- Deferred benefit income for severance.
- Supplementary annual bonus.
- Annual income bonus.
- Redemption.

(a) Defined-contribution plan
The plan is supported by regular contributions precisely matching participant contributions and limited to 9% of the amount by which contribution salaries exceed ten reference plan units, as well as by contributions to support risk benefits (disability and death at work and annual bonus) and plan administration expenses.

During 2019 the Company made contributions to the defined contribution plan of R$ 5,118 (R$ 7,838 in 2018).

(b) Defined-benefit plan portion
The cost and obligations related to the pension benefits offered to its employees when they retire, based on a specific actuarial appraisal report.

The actuarial appraisal report calculated the retirement benefits considering the definitions contained in the regulations that concern eligibilities, benefit formulas and means of readjustment.

The actuarial report appraised the defined-benefit portion in the plan, which denotes the constructive obligation referring to supplementary retirements, pension for death and annual bonus, denominated Risk Plan and retirement income.

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1 – Change in present value of the obligations

	2019	2018
Present value of the actuarial liability at the beginning of the year	45,127	37,449
Current service cost	427	584
Interest on actuarial obligation	4,028	3,589
Actuarial (gains)/losses - experience	7,219	5,522
Actuarial (gains)/losses - demographic assumptions	-	(632)
Actuarial (gains)/losses - financial assumptions	11,082	1,961
Benefits paid by the plan	(3,688)	(3,346)
Previous service cost - plan shortening	-	-
Present value of the actuarial liability at the end of the year	**64,195**	**45,127**

2 – Change in fair value of the assets

	2019	2018
Fair value of assets at start of year	86,553	77,525
Real return on investments	12,085	11,816
Contributions paid by the Company	291	557
Benefits paid by the plan	(3,688)	(3,346)
Fair value of assets at end of year	**95,241**	**86,552**

3 – Change in non-recoverable surplus

	2019	2018
Non-recoverable surplus at end of previous year	41,426	40,076
Interest on non-recoverable surplus	3,832	3,980
Change in non-recoverable surplus during period	(9,817)	(2,629)
Non-recoverable surplus at end of current year	**35,441**	**41,427**

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4 – Costs of defined benefit

4.1 – Results for the year	2019	2018
Current service cost of the Company	427	584
Net interest of net liabilities/(assets)	(15)	(36)
Cost of defined benefit in results	**412**	**548**

4.2 – Other comprehensive income (ORA)	2019	2018
Actuarial gains(losses) of change in liabilities	7,219	5,522
Actuarial gains(losses) of changes in hypothesis	11,082	1,329
Actuarial gains(losses) arising in the period	18,301	6,851
Yields on plan assets (greater)/smaller than discount rate	(8,606)	(4,212)
Change in non-recoverable surplus	(9,816)	(2,630)
Re-measurement of effects on Other comprehensive income	**(121)**	**9**

4.3 – Cost of defined benefit	2019	2018
Current service cost	427	584
Net interest on net value of liabilities/(asset)	(15)	(36)
Remuneration of effects recognized in ORA	(121)	9
Cost of defined benefit	**291**	**557**

5 – Change in net liability/asset

5.1 – Net liability/assets	2019	2018
Present value of obligation (VPO)	(64,195)	(45,127)
Fair value of the assets	99,636	86,554
Net total (liability)/assets to be recognized	**35,441**	**41,427**

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5.2 – Reconciliation in net total (liability)/assets	**2019**	**2018**
Net total (liability)/asset at beginning of year	-	-
Service Cost	(427)	(584)
Net interest on net value of liabilities/(asset)	15	36
Remuneration of effects recognized in ORA	121	(9)
Contributions paid by the Company	291	557
Net total (liability)/asset at end of year	**-**	**-**

6 – Estimated cost of defined benefit for 2020

Current service cost	737
Net interest of net liabilities (assets)	(12)
Cost to be recognized in profit or loss	**725**

7 – Expected cash flows for 2020

Company contributions	332
Benefits paid by the plan	3,637

8 – Actuarial assumptions

	2019	**2018**
Economic		
Discount rate	5.25% p.a.	5.68% p.a.
Salary growth rate	6.080% p.a.	6.34% p.a.
Inflation	4.00% p.a.	4.25% p.a.
Benefits growth	4.00% p.a.	4.25% p.a.
Return on noncurrent assets	9.25% p.a.	9.93% p.a.
Demographic		
Mortality table	AT-2000 (H)	AT-2000 (H)
Mortality table of disabled people	CSO-1980	CSO-1980
Disability rate table	RGPS 1992-2002 0.55	RGPS 1992-2002 0.55
Turnover rate	0% up to 55 years	0% up to 55 years
% of active participants married at retirement	100%	100%
Age difference between participant and spouse	Wives are 5 years younger than husbands	Wives are 5 years younger than husbands

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9 - Summary of participants´ data

	2019	2018
Active and self-sponsored employees		
Number	1,328	1,231
Average age	40.84	40.42
Average length of service (years)	11.45	11.85
Annual average payroll	86,929	84,951
Participants with assisted benefits		
Number	123	119
Annual average payroll	30,913	28,114

10 – The plan's assets are as follow:

Assets per category	2019	2018
Fixed income	659,271	652,768
Variable income	131,068	104,309
Structured investments	83,668	-
Loans	20,085	21,664
	894,092	**778,741**

16.2 Other employee benefits

The Company offers employee benefits through a health care plan (self-managed and contributed to by employees for co-participation in expenses incurred), Assistência Médica Supletiva ("AMS"), which also covers dependents. The plan provides outpatient, inpatient and dental care as well as medication for beneficiaries and is covered by a Collective Labor Agreement. Plan management fees are fully borne by the Company. Expenses with other benefits were recognized in the income statement as follows:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Compensation and charges	(155,378)	(122,332)	(157,896)	(124,152)
Social security charges	(35,801)	(28,960)	(35,801)	(28,960)
Retirement plan benefits	(5,772)	(8,444)	(5,786)	(8,504)
Meal vouchers	(12,064)	(10,265)	(12,064)	(10,265)
Health insurance	(11,331)	(14,632)	(11,332)	(14,635)
Other	(14,706)	(19,617)	(14,809)	(19,800)
	(235,052)	**(204,250)**	**(237,688)**	**(206,316)**

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16.3 Share-based payments

In 2011, the long-term incentive plan (ILP) was implemented in order to attract, retain and share the growth of Samarco with its executives. The quota of theoretical actions (phantom stocks) granted to the participant is based on a formula that takes into account a multiple of the participant's annual salary, calculated according to the regulation of the plan. The theoretical shares become exercisable on the third anniversary of the grant date. The Company may at any time amend its regulations, suspend or terminate the plan.

The theoretical actions are extinguished when the participant disconnects from the Company, either on the initiative of the Company or the participant. If a participant is dismissed for just cause, retires, dies or becomes permanently incapacitated, under certain conditions his theoretical options may become exercisable in proportion to the period between the date of grant and the date of termination of his employment contract. The Remuneration Committee determines, in its sole discretion, the rights of executives and key professionals with respect to their theoretical actions in case of dismissal for reasons not provided for in the regulation of the long-term theoretical stock plan. In addition, the Remuneration Committee may, at any time and in its sole discretion, amend the regulation, suspend or terminate the long-term theoretical stock plan.

The fair value at the grant date of the theoretical shares was calculated based on Monte Carlo sampling. The expected volatility is estimated by considering the volatility of the average historical price of the shares of our Vale shareholder in the market, considering a term of three years.

As a result of the losses generated in 2019 and 2018, the value of the share is equal to zero, consequently, there were no payments in the respective years.

17. PAYROLL, PROVISIONS AND "SOCIAL CONTRIBUTIONS" (PAYROLL TAXES)

The balance of payroll taxes, provisions and contributions is shown below:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Provision for vacations	18,494	16,696	18,541	16,809
Employees INSS	3,732	3,163	3,732	3,163
FGTS payable	1,480	514	1,480	514
Other	935	929	939	932
	24,641	**21,302**	**24,692**	**21,418**

Since the failure of the Fundão dam, Samarco has made an effort to retain its employees, by providing vacation, collective vacation leave and three stays or furloughs (called a "layoff" in Brazil and understood as a temporary suspension of the employment agreement while providing professional skills training). In addition, it eliminated 1,800 positions through a Voluntary Dismissal Program (PDV) and PDI – Involuntary Dismissal Program, agreed with the respective unions in Minas Gerais and Espirito Santo. This downsizing seeks to conform to the needs of a future resumption of operations at 26% of its production capacity.

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18. TAXES PAYABLE

The balance of taxes payable is shown below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
ICMS payable		4	9,062	4	9,062
ICMS DIFAL payable		531	210	531	210
REFIS - Tax recovery – taxes paid in installments	(a)	143,985	217,591	143,985	217,591
IRRF on interest and remittances abroad	(b)	295,532	203,018	295,532	203,018
IRRF payable		4,421	2,611	4,421	2,651
ISS withheld		2,773	935	2,773	935
INSS retained from third parties payable		2,198	1,058	2,198	1,058
Installment plan ISS Anchieta	(c)	39,885	-	39,885	-
PIS/COFINS on financial income		4,858	3,701	4,858	3,701
Tax over nationalization of consumables	(d)	78,415	-	78,415	-
Others		6,432	3,060	6,429	3,058
Total		**579,034**	**441,246**	**579,031**	**441,284**
Current liabilities		451,911	240,199	451,908	240,237
Noncurrent liabilities		127,123	201,047	127,123	201,047
Total		**579,034**	**441,246**	**579,031**	**441,284**

(a) On 20 December 2013, Samarco adhered to a Federal Tax Amnesty and Installment Program named Programa de Parcelamento REFIS IV, under Law nº 12.865/13. The first installment was paid at the time it opted to join. On December 31, 2019 the amount was R$ 127,123 (R$ 201,047 at December 31, 2018) refers to the long-term installments updated by the SELIC rate. The short term installments amount to 16,862 (R$ 16,544 on December 31, 2017). Debt consolidation was carried out with the Federal Revenue of Brazil ("other debts" and "social security" modalities) and the Attorney General of the National Treasury ("other debts" modality), respectively, in September 2017 and February 2018, and the company is up to date with this installment plan.

(b) Refers basically to the tax levied on:

(i) services provided by the subsidiary Samarco Europe related to the intermediation of sales of iron ore.
(ii) the provision for interest on loans and financing in the country.

(c) The mutual interest between Samarco and the Municipality of Anchieta in putting an end to the disputes regarding the IPTU discussions of the company's real properties in this municipality culminated in a tax transaction between the parties in June 2019. After the transaction, duly instructed by a technical report, arrived at the definition that the territorial extension subject to taxation, corresponding to the area of industrial expansion, would be 133 ha.

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d) Taxes payable related to the nationalization of consumables imported by the Company under the customs procedure, which were not consumed due to the stoppage of operations after failure Fundão dam.

19. PROVISIONS FOR CONTINGENCIES

The Company is a party in judicial and administrative proceedings in various courts and government agencies, arising from the normal course of operations, basically involving tax, civil, labor and environmental issues.

Based on the information and positions of its internal and external legal advisors, management has recorded a provision for contingencies in an amount considered sufficient to cover cases assessed as involving probable losses.

In 2019, the provisions for probable contingencies are shown net of the corresponding judicial deposits of R$ 89,631 (R$ 83,913 in 2018). The balance of judicial deposits for which no corresponding provisions were made is recorded in assets totaling R$ 1,906,183 (R$ 1,849,787 in 2018) and is broken down as below:

	Parent Company and Consolidated	
	2019	2018
Tax Judicial deposits	1,558,689	1,503,828
Civil judicial deposits	336,941	334,022
Labor Judicial Deposits	10,385	8,276
Environmental Judicial deposits	168	3,661
	1,906,183	**1,849,787**

Please find below the changes in the provisions for probable contingencies of the Company.

	Parent Company and Consolidated				
	2017	Additions	Reversals	Charges	2018
Tax proceedings	82,442	3,933	-	237	86,612
(-) Judicial tax deposits	(70,693)	-	-	(1,738)	(72,431)
Civil claims	58,725	376	(6)	(4,890)	54,205
(-) Judicial deposits - civil claims	(114)	-	-	-	(114)
Labor claims	61,748	12,453	(15,687)	(4,124)	54,390
(-) Judicial deposits - labor claims	(10,666)	(2,270)	4,036	(2,468)	(11,368)
Environmental proceedings	2,013	42	(64)	241	2,232
	123,455	**14,534**	**(11,721)**	**(12,742)**	**113,526**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

	Parent Company and Consolidated				
	2018	Additions	Reversals	Charges	2019
Tax proceedings	86,612	62,138	(4,359)	2,013	146,404
(-) Judicial tax deposits	(72,431)	(2,248)	-	(3,132)	(77,811)
Civil claims	54,205	-	(35,110)	(12,003)	7,092
(-) Judicial deposits - civil claims	(114)	-	9	-	(105)
Labor claims	54,390	7,863	-	-	62,253
(-) Judicial deposits - labor claims	(11,368)	(1,125)	3,219	(1,508)	(10,782)
Environmental proceedings	2,232	-	(1,482)	(481)	269
	113,526	**66,628**	**(37,723)**	**(15,111)**	**127,320**

The provisions are detailed as follows:

		Parent Company and Consolidated					
		2019			2018		
		Provision	Court deposits	Net	Provision	Court deposits	Net
ECE - ES	(a.1)	41,995	(41,995)	-	39,481	(39,481)	-
ECE - MG	(a.1)	33,567	(33,567)	-	32,951	(32,951)	-
Attorney fees	(a.2)	4,578	-	4,578	8,287	-	8,287
Other		66,264	(2,249)	64,015	5,893	1	5,894
Tax Proceedings		**146,404**	**(77,811)**	**68,593**	**86,612**	**(72,431)**	**14,181**
Civil claims	(a.3)	**7,092**	**(105)**	**6,987**	**54,205**	**(114)**	**54,091**
Labor claims		**62,253**	**(10,782)**	**51,471**	**54,390**	**(11,368)**	**43,022**
Environmental claims		**269**	**-**	**269**	**2,232**	**-**	**2,232**
		216,018	**(88,698)**	**127,320**	**197,439**	**(83,913)**	**113,526**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

(a) Provisions recognized by the Company for litigation proceedings:

			Parent Company and Consolidated	
Note	**Description**	**Status**	**2019**	**2018**
(a.1)	Court proceeding filed to declare the unconstitutionality and illegality of the requirement to pay charges and acquisition of emergency energy, due to technical defects when these requirements were introduced.	Both proceedings (ES and MG) are awaiting judgment at another appeals court (3rd judicial instance).	75,562	72,432
(a.2)	Provision is made for lawyers' fees referring to proceedings classified as having a remote chance of defeat.	-	4,578	8,287
Other	Proceedings related to the former Guilman-Amorim hydroelectric power plant, closed down as a result of a spin-off and subsequent merger, relative to the inclusion in the calculation base for COFINS of the income from leasing.	Proceedings awaiting review of the preliminary injunction at the second judicial instance.	66,264	5,893
(a.3)	Provision made to cover potential losses on civil proceedings.	Proceedings at the judicial courts at several stages.	7,092	54,205
Labor	Labor claims primarily related to the application of fines by the authorities, in addition to labor claims filed by employees and service providers.	Proceedings at the judicial and administrative courts at several stages.	62,253	54,390
Environmental	Provision constituted to cover potential losses with environmental lawsuits.	Proceedings at the judicial and administrative courts at several stages.	269	2,232
			216,018	**197,439**

(b) Possible contingenciess:

The Company is a party in other actions for which management, based on the information and position of its internal and external legal advisors, has not set up a provision for contingencies, since the chance of loss has been rated as possible. The main such cases are described below:

Description	**Status**	**2019**	**2018**
Infraction Notices referring to the alleged lack of payment of the "CSLL" in the calendar years 2007 to 2014 and a writ of mandamus involving the period from 2013 onwards.	The payments of CSLL 2007/2008 and 2009/2010 are suspended due to an injunction. Pending analysis regarding the isolated fine in the last administrative instance for the 2007/2008 period. The 2011/2012 CSLL requirement is suspended at the administrative level awaiting analysis of leading cases by the STF. Pending appreciation regarding the isolated fine in the last administrative instance. For the period from 2013 onwards, Samarco has a writ of mandamus with a favorable decision in the first and second instances, considering the unconstitutionality of the CSLL collection vis-à-vis the Company.	5,771,753	5,491,463

>> TO BE CONTINUED

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

>> CONTINUATION

Description	Status	2019	2018
Tax enforcement for the years 2000 to 2003, 2007 to 2008 and Tax assessments for the periods 2009 to 2014 for allegedly incorrect calculation of the IRPJ due to the application of the 18% rate on the profit from mineral exports and discussion to respect of the deductibility of the acquisition cost of mining rights.	Proceedings related to the period from 2000 to 2003 and 2007 to 2008 subject to collection in the judicial sphere with full guarantee of the debt. 2009 and 2010 period with a favorable decision at the first court pending confirmation at the second instance. In relation to the period from 2011 to 2014, a final administrative decision is awaited.	4,480,468	4,231,469
Infraction notices drawn up by the National Mining Agency (ANM) for alleged underpayment of the Financial Compensation for the Exploration of Mineral Resources (CFEM).	Collections related to the period from 1991 to 2017. Regarding tax foreclosures that charge debts related to the period from 1991 to 2005, there was recognition of the prescription from the period from Jan/91 to Sep/98. The remaining period from Oct/98 to Dec/2005 is awaiting judgment in the lower court. The collection for the period 2008 and 2009 is still under analysis of appeal at the administrative level. On Dec/2019, Samarco received CFEM collection processes from the period 2010 to 2017. Administrative challenges were presented, which are still pending analysis by ANM.	1,640,765	874,453
Tax Foreclosures related to the PIS contribution calculation basis for the periods from September 1989 to December 1993.	1 case awaiting decision at the lower court and 1 case pending consideration by the lower court.	22,805	22,574
Tax assessment notices relating to the requirement for social security contributions on payments made to its insured employees as Profit Sharing and the "Campo de Ideias" Award, among other matters, such as (i) social contributions allegedly due to the National Social Security Fund Development, incidents on the referred payments; (ii) fine for failing to collect social contributions; and (iii) fine for lack of information in the GFIPs.	Awaiting analysis of administrative resources.	5,824	25,973
Disallowance of compensation of the negative balance of IRPJ and CSLL of the extinct Guilman-Amorim Hydroelectric Plant (observing the legally established limit of 30%).	Pending analysis of administrative appeals filed by the company.	11,028	9,017
Disallowance of PIS and COFINS credits from April 2006 to December 2007 and 2008 to 2010 with IRPJ debts of monthly estimate calculated in the same period, delivering individual PER / DCOMPs by quarter and source of credits (credits from PIS and COFINS).	Processes awaiting analysis of administrative resources.	310,429	303,378
Assessment regarding the collection of ICMS in the electricity transfer operations of SHP Muniz Freire, owned by it, for consumption at its industrial establishment in Ponta Ubu, Anchieta/ES.	A favorable decision was published in the first instance, awaiting an appeal from the State of Espírito Santo for the second instance.	36,188	33,296

>> TO BE CONTINUED

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

>> CONTINUATION

Description	Status	2019	2018
Tax foreclosure and tax assessment issued by the Municipality of Anchieta in which it criticizes the area where Samarco's industrial plant is located in Ubu, which is subject to tax, also requiring tax on the area for which the ITR is paid. 3 cases (1999 to 2004, 2007 to 2011 and 2012 to 2015) pending consideration at the judicial level and 3 at the administrative level (2016 to 2018). 161,162 138,718.	Tax foreclosures (2007 to 2011 and 2012 to 2015) and 3 administrative proceedings (2016 to 2018) extinguished in 2019 due to the payment of the debt.	-	161,162
Civil Proceedings related, mainly to compensation to third parties. According to the opinion of the Company's legal advisors, the likelihood of loss in these disputes is possible.	Proceedings in the judicial sphere in several procedural stages.	1,475,385	1,114,457
Labor lawsuits related to the application of fines by the controlling bodies, in addition to labor claims filed by own employees and third parties.	Proceedings in the judicial sphere in several procedural stages.	606,489	415,132
Processes involving environmental risks referring to the States of Minas Gerais and Espirito Santo, with respect to assessments by the inspection bodies.	Proceedings in the judicial sphere in several procedural stages.	1,074,161	1,132,733
Notice charging a regulatory fine for the transmission of EFD-Contributions with inaccuracies, referring to the period of 2013.	Partially favorable judgment obtained in the 2nd instance to rule out part of the collection. Remaining amount pending analysis in Administrative Appeal to the higher instance.	57,360	138,638
Other	-	128,330	126,255
		15,620,985	**14,080,000**

The provisions for contingencies and deposits relating to the failure of the Fundão dam are described in Note 3(g).

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20. OTHER PROVISIONS

		Parent Company and Consolidated	
		2019	**2018**
Provision for electricity	(a)	949	695
Provision for social, environmental and socioeconomic remediation	(b)	4,023,333	2,752,791
Provision for environmental liability – Germano Dam	(c)	247,429	-
Total current		**4,271,711**	**2,753,486**

		Parent Company and Consolidated	
		2019	**2018**
Provision for mining rights	(d)	112,222	112,222
Provision for asset retirement obligation	(e)	1,477,776	381,297
Provision for social, environmental and socioeconomic remediation	(b)	8,148,418	6,787,344
Provision for environmental liability – Germano Dam	(c)	2,286,382	-
Total noncurrent		**12,024,798**	**7,280,863**

(a) Acquisition of energy for use in production, not invoiced by the concession operators in the period.
(b) Provision for the failure of the Fundão tailings dam, as disclosed in note 3(e).
(c) In February 2019, there was a change in legislation involving dam safety policies (Law No. 23,291, of February 25, 2019, created the State Dam Safety Policy). In line with the aforementioned law, SEMAD/FEAM Joint Resolution No. 2,784, of March 21, 2019 decrees, among other determinations, the de-characterization of all tailings dams that use or used the upstream raising method, related to mining activities in the State of Minas Gerais.

In this regard, the closure of the Germano dam presupposes taking away its function as a dam, interrupting the tailings disposal process (rendering it an inactive structure), with no more water accumulation resulting in the formation of a permanent lake. It also requires, within a long-term view, the joint adoption of solutions aimed at the physical, chemical and biological stability of the structure.

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In 2019 the provision for decommissioning of the Germano dam was constituted and the movement is represented as shown in the table below:

	Parent Company and Consolidated
	2019
Balance on January 1st	-
Creation of provision	2,557,646
Realization of provision	(23,835)
Balance on December 31st	**2,533,811**
Current Liability	**247,429**
Noncurrent Liability	**2,286,382**

(d) The Company pays its stockholder Vale for the assignment of mining rights to geological iron ore resources. These amounts are calculated at the rate of 4% of dividends paid (Note 30).
(e) The changes in the provision for asset retirement obligations were as follows:

	Parent Company and Consolidated	
	2019	2018
Balance on January 1st	381,297	350,580
Addition of provision (financial update)	28,156	30,717
Estimated revisions in cash flows	1,068,323	-
Balance on December 31st	**1,477,776**	**381,297**
Noncurrent Liability	**1,477,776**	**381,297**

The units' conceptual closure plan is drawn up by successive approximations, evolving the levels of studies aimed at closing actions over the life of the project until the level of detail for executive designs close to the closing period is reached, which depend on the type of operation, the socio-environmental scope, and the useful life of the project. This plan includes a diagnosis of the current situation of the sites, evaluates potential impacts, and risks of the closure of projects in various spheres, such as economic, environmental, social, legal and engineering, establishes measures to be taken before, during and after the closure to achieve the desired objectives, and minimize the risks, estimates a closing physical-financial schedule based on the useful life of the project's assets and estimates the closing costs according to the plan phase.

The Company's policy is to review this plan every three years, or whenever there are significant changes in the project or in the surrounding conditions. In December 2019, the decommissioning assessment study for the Germano, Ubu and Minerodutos industrial plants was reviewed by a specialized company, hired by Samarco. This resulted in an increase of R$ 1,068,323 in the provision for demobilization of assets.

The provision for asset retirement was based on current information, including the technology available and current prices. The provision made was discounted to present value at the discount rate of 6.701 % per annum, based on the parameters adopted by the Company for economic and financial valuations.

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21. OTHER LIABILITIES

Other liabilities are shown below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
Commission/services payable overseas to related parties (note 30)	(a)	17,108	17,196	-	-
Demurrage payable	(b)	895	1,011	895	1,011
Amounts payable (material/services)	(c)	737	722	737	722
Consortium UHE Guilman Amorim (note 2.3(b))		3,510	3,680	3,510	3,680
Installment payments on environmental fines - SEMAD	(d)	75,500	100,571	75,500	100,571
Leasing liability		8,240	-	8,240	-
Other		5,225	6,857	5,307	6,950
Total		**111,215**	**130,037**	**94,189**	**112,934**
Current liability		61,741	53,433	44,715	36,330
Noncurrent liability		49,474	76,604	49,474	76,604

(a) Marketing services provided by subsidiary Samarco Europe.
(b) Amount owed by Samarco for the demurrage port fees (excess time used unloading or loading the product).
(c) Amounts referring to materials and goods acquired which were not recorded, as the respective invoice had not been issued by the supplier. The goods and services have been recorded under inventory and cost.
(d) Environmental fines related to the damage caused by the dam failure, as disclosed in note 3(f).

22. EQUITY

22.1 Capital

The fully subscribed and paid-up share capital on December 31, 2019 and 2018 amounts to R$ 297,025 consisting of registered ordinary shares divided as follows:

	Number of shares	% of total capital
BHP Billiton Brasil Ltda.	2,621,653	50
Vale S.A.	2,621,653	50
	5,243,306	**100**

22.2 Dividends

In a General Shareholders Meeting held on April 28, 2015, the motion was approved to distribute dividends related to the fiscal year of 2014 in the amount of R$ 2,805,548, of which (i) R$ 2,104,161 refers to supplemental dividends and (ii) R$ 701,387 refers to mandatory dividends. Due to the failure of the Fundão dam (Note 3), the dividends declared in the Annual Stockholders' Meeting (AGO) and not yet paid out were reclassified to non-current.

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According to the Company's By-Laws, the mandatory dividends are 25% of the net profit according to Law 6.404/76.

On December 31, 2019, the Company retains an accumulated loss of R$ 38,262,780 (R$ 19,038,849 on December 31, 2018).

22.3 Carrying value adjustments

		Parent Company and Consolidated	
		2019	2018
Inventory		131,923	119,792
Property, plant and equipment and Intangible Assets		10,394,926	9,732,415
Loans and Financing		12,418	14,124
Cost		1,119,875	974,089
Exchange variance		(11,077,396)	(9,340,802)
Other	(a)	307,412	127,257
Accumulated translation adjustments	(b)	**889,158**	**1,626,875**
Re-measurement of retirement benefit	(c)	**(4,020)**	**(4,141)**
		885,138	**1,622,734**

(a) The amount refers to cumulative adjustments for advances to suppliers, amortized cost of loans, anticipated revenue, cost of goods sold and other (revenue) expenses, net.
(b) These adjustments are made for exchange variance resulting from translating the balance sheet and income statement for the year from the functional currency (USD) to the reporting currency, the Real.
(c) Refers to the actuarial gains and losses, increase in liabilities, change in assumptions, earnings on the plan's asset and change in the non-recoverable surplus (Note 16).

23. REVENUE

The Company operates in the mining sector, deriving its revenue from the sale of two types of iron ore pellets: PDR - Pellets for direct reduction and PBF - Pellets for the blast furnace. The surplus production of iron ore concentrate is sold as fines (pellet feed).

Due to the failure of the Fundão dam and subsequent suspension of the exploration licenses, operations have been temporarily suspended, with no production in the period, as disclosed in note 1.

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In 2019 and 2018, the Company sold products to the domestic and foreign markets, such as pellet to Brazil and pellet feed to the Americas. In addition to the revenue from products and sub products, the Company also obtained revenue from the sale of surplus electric energy and logistic services at its port, such as lease of tugs and real property.

	Parent Company and Consolidated	
	2019	2018
Pellets - Brazil	10,843	-
Fines – Overseas	-	18,781
Electricity	38,545	59,981
Port Berth availability	12,139	26,536
Other products and services	3,752	11,116
Total gross revenue	**65,279**	**116,414**
Sales taxes	(8,088)	(11,141)
Freight on sales	-	(386)
Net revenue	**57,191**	**104,887**

24. COST OF GOODS SOLD

The cost of goods sold is broken down below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
Currency translation		(145,786)	(114,542)	(145,786)	(114,542)
Electricity sales		(8,986)	(17,215)	(8,986)	(17,215)
Port berth availability		(4,985)	(4,196)	(4,985)	(4,196)
CFEM		(300)	(898)	(300)	(898)
Idle capacity	(a)	(768,531)	(566,032)	(768,531)	(566,032)
Amortization right of use	(b)	(19,582)	-	(19,582)	-
Provision (reversal) for reinforcing dam facilities	(c)	(10,561)	46,171	(10,561)	46,171
Other		2,750	(24,081)	2,722	(24,042)
Cost of goods sold		**(955,981)**	**(680,793)**	**(956,009)**	**(680,754)**

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(a) The operations in Mariana were suspended following the Fundão dam failure (Note 1). Operations of the Ubu plant in ES were also affected as a result. The fixed costs of both Samarco sites incurred after the failure of the Fundão dam up to December 31, 2019 and 2018 were therefore allocated directly to costs of Idle capacity, as follows:

	2019	2018
Consumables	(974)	(1,478)
Materials	(56,197)	(29,053)
Services	(201,421)	(131,787)
Labor	(148,994)	(137,989)
Electricity	(30,713)	(27,612)
Depreciation	(179,823)	(183,510)
Structural reinforcement of dams	(76,629)	(48,993)
Other	(73,780)	(5,610)
Total current	**(768,531)**	**(566,032)**

Part of the balance recorded under “idle capacity”, totaling R$ 76,629 (R$ 48,993 in 2018), refers to outsourced services to maintain and repair Samarco facilities affected by the failure of the dam, as disclosed in note 3(i).

(b) Amortization of leasing agreements as explained in note 12.

(c) Provisions for the Fundão tailings dam failure, as disclosed in note 3(i).

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25. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

	Parent Company		Consolidated	
	2019	2018	2019	2018
Selling expenses				
Outsourced services	(15,716)	(13,403)	(15,950)	(13,603)
Personnel expenses	(13,897)	(12,078)	(16,533)	(14,144)
Depreciation and amortization	(9,142)	(9,151)	(9,175)	(9,272)
Auxiliary supplies	(6,036)	(3,509)	(6,036)	(3,509)
Shipment expenses, net	-	(101)	-	(101)
Provision (reversal) for doubtful debts	(3)	10,948	(3)	10,948
Reversal (provision) taxes on remittances abroad	45	(2,746)	45	(2,746)
Commercial expenses of subsidiaries (nota 30)	(3,744)	(5,136)	-	-
Expenses maintenance activities	(4,612)	(3,636)	(4,612)	(3,636)
General expenses	(3,499)	(1,645)	(4,073)	(2,814)
Total	**(56,604)**	**(40,457)**	**(56,337)**	**(38,877)**
General and administrative expenses				
Outsourced services	(10,857)	(8,561)	(10,857)	(8,561)
Personnel expenses	(42,612)	(41,577)	(42,612)	(41,577)
Depreciation and amortization	(752)	(672)	(752)	(672)
Auxiliary supplies	(131)	(57)	(131)	(57)
General expenses	(5,400)	(4,568)	(5,400)	(4,568)
Total	**(59,752)**	**(55,435)**	**(59,752)**	**(55,435)**

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26. OPERATING EXPENSES (INCOME)

Details of other net operating expenses are shown below:

		Parent Company		Consolidated	
		2019	2018	2019	2018
Provision for restructuring of PDV plan		(123)	(629)	(123)	(629)
Provisions (reversal) for losses re ICMS ES		4,530	1,685	4,530	1,685
Provisions (reversals) for contingencies		(29,096)	5,862	(29,096)	5,862
Provision for socio-environmental and socio-economic remediation	(a)	(1,955,076)	2,894,783	(1,955,076)	2,894,783
Expenses with socio-environmental and socio-economic recovery	(a)	(200,210)	(146,602)	(200,210)	(146,602)
Provision resource input shareholders Renova Foundation	(a)	(2,508,000)	(2,091,011)	(2,508,000)	(2,091,011)
Germano dam decommissioning provision		(2,533,811)	-	(2,533,811)	-
Germano dam environmental liability expenses		(23,835)	-	(23,835)	-
Provision for impairment loss - UGC (notes 12 and 13)		(9,705,110)	-	(9,705,110)	-
Tax expenses		(190,691)	(33,748)	(190,691)	(33,736)
Expenses with investments and social projects		(13,603)	(6,811)	(13,603)	(6,811)
Expenses Renova Foundation	(a)	(490,000)	(323)	(490,000)	(323)
Fines related to environmental and socioenvironmental remediation	(a)	(195)	-	(195)	-
Expenses with research (note 13)		(19,602)	(27,471)	(19,602)	(27,471)
Legal and expert fees		(10,075)	(3,436)	(10,075)	(3,436)
Inventory adjustment (stockroom)		(3,657)	(108)	(3,657)	(108)
Reversal impairment provision		-	(5,459)	-	(5,459)
Sale of property, plant and equipment		134	-	134	-
Reversal for capitalization of expenses (note 12)		329,290	-	329,290	-
Other provisions		(27,135)	(944)	(27,135)	(944)
Other, net		940,624	115,878	940,610	114,903
Currency conversion	(b)	(194,525)	(2,218)	(194,525)	(2,218)
Total		**(16,630,166)**	**699,448**	**(16,630,180)**	**698,485**

(a) Provisions and expenses related to the failure of the Fundão dam, as disclosed in note 3.
(b) The effect of changes in the exchange rate refers to the conversion of the financial statements from the functional currency (US dollar) to the presentation currency (real).

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27. FINANCIAL RESULT

The Company's detailed finance result is shown as follows:

		Parent Company and Consolidated	
Finance income		**2019**	**2018**
Yields on judicial deposits	(a)	71,878	87,302
Earnings on investments		1,326	272
Discounts obtained		196	98
Other financial revenue		4,642	3,588
Finance income - consolidated		**78,042**	**91,260**
Registered income of subsidiaries		(4)	(3)
Finance income - parent company		**78,038**	**91,257**

		Parent Company and Consolidated	
Financial expenses		**2019**	**2018**
Charges on loans and financing		(1,023,697)	(900,807)
Interest on contingencies	(a)	10,517	(564)
Delinquent interest and tax charges		(13,517)	(30,055)
Commission and bank interest		(19,825)	(35,932)
IRRF on interest - remittance abroad		(92,450)	(85,749)
PIS and COFINS on financial revenue		(1,834)	(23,216)
Financial expenses provision for environmental and socio-economic remediation	(b)	(665,979)	(1,227,167)
Other financial expenses with leasing liabilities		(843)	-
Other financial expenses		(38,297)	(38,743)
Finance expenses – consolidated		**(1,845,925)**	**(2,342,233)**
Registered expenses of subsidiaries		6	5
Finance expenses - parent company		**(1,845,919)**	**(2,342,228)**

(a) Refers to the interest accruals of court deposits and provisions for contingencies in respect of tax, civil, labor and environmental proceedings.
(b) Interest accruals of provisions for the failure of the Fundão tailings dam, as disclosed in note 3.

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The exchange variation balance is represented as follows:

Exchange variance	2019	2018
Cash	(4)	(6,826)
Clients	184	(46,879)
Recoverable taxes	(4,540)	(268,501)
Court deposits	(83,845)	(301,140)
Trade payables	1,162	2,257
Payroll, provisions and social contributions	791	2,940
Taxes payable	(6,097)	36,313
Dividends	119,204	452,334
Contingency	3,312	4,287
Deferred income tax	39,566	63,990
Other accounts payable domestic – related parties	195,483	406,043
Miscellaneous Provisions	628,508	-
Other	(3,270)	67,745
Net exchange variance – consolidated	**890,454**	**412,563**
Net exchange variance of registered subsidiaries	63	5
Net exchange variance - parent company	**890,517**	**412,568**

28. INCOME TAX

The Company is subject to income tax at the rate of 18% on income derived from subsidized (tax incentive) exportations and 25% on the unsubsidized portion.

28.1 Income tax payable

The changes in income tax payable are as follows:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Balance at beginning of year	**-**	**-**	**143**	**104**
Provisions in the period	-	7,093	23	7,132
Payments	-	(7,093)	-	(7,093)
Balance at end of year	**-**	**-**	**167**	**143**

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28.2 Deferred income tax

The Company has deferred income tax recorded under noncurrent assets constituted on temporarily nondeductible provisions, at the rates of 18% and 25%, according to the nature of each provision as an adjustment of the net income from subsidized exports or adjustment of taxable income, respectively.

In line with the expectation of resumption of the Company's operations (Note 1b), an analysis was carried out relative to the realization of the deferred income tax constituted up to December 31, 2019.

And, with the understanding that future tax profits subject to taxation at the rate of 25% will not be sufficient to support the use of the deferred income tax arising from the Provision for socio-environmental and socio-economic recovery and tax losses, the Company has chosen to not recognize the deferred income tax under these accounts in its bookkeeping.

28.3 Deferred income tax on nonmonetary items

The financial statements have been translated from the functional currency (USD) to the presentation reporting currency (R$). The basis for calculating income tax and assets and liabilities is denominated in Brazilian Reais (R$). A change in the exchange rate could therefore have a significant effect on the income tax expenses, especially on nonmonetary assets:

Composition of deferred income tax related to net monetary and non-monetary items:

	2019			2018		
Amounts recorded at the tax rate of:	**25%**	**18%**	**Total**	**25%**	**18%**	**Total**
Provision for ICMS losses - ES	371,535	-	371,535	372,667	-	372,667
Provision for write-off of fixed asset	1,365	-	1,365	1,365	-	1,365
Provision for civil claims	1,713	-	1,713	13,481	-	13,481
Provision for tax proceedings	15,895	9,827	25,722	13,271	1,129	14,400
Provision for labor claims	15,538	-	15,538	13,573	-	13,573
Provision for environmental proceedings	67	-	67	558	-	558
Provision for mining rights	28,055	-	28,055	28,055	-	28,055
Provision for social, environmental and socio-economic recuperation	5,265,515	-	5,265,515	3,347,159	-	3,347,159
Provision for obligation for asset retirement	60,435	-	60,435	53,396	-	53,396
Unrealized exchange rate variation	861,939	-	861,939	574,423	-	574,423
Provision for Impairment	2,426,280	-	2,426,280	-	-	-
Tax losses	3,048,001	-	3,048,001	2,592,281	-	2,592,281
Provision for tax loss	(3,048,001)	-	(3,048,001)	(2,592,281)	-	(2,592,281)
Other	117,606	-	117,606	67,125	-	67,125
Provision for loss of asset	(9,014,430)	-	(9,014,430)	(3,921,581)	-	(3,921,582)

>> TO BE CONTINUED

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

>> CONTINUATION

	2019			2018		
Total assets Consolidated	**151,513**	**9,827**	**161,340**	**563,491**	**1,129**	**564,620**
Conversion from the functional currency	-	(1,894,321)	(1,894,321)	-	(1,775,950)	(1,775,950)
Depreciation for tax purposes	**-**	**(1,082,854)**	**(1,082,854)**	**-**	**(926,851)**	**(926,851)**
Financial revenue on court deposits	(151,296)	-	(151,296)	(129,843)	-	(129,843)
Total consolidated liabilities	**(151,296)**	**(2,977,175)**	**(3,128,471)**	**(129,843)**	**(2,702,801)**	**(2,832,644)**
Consolidated net total	**217**	**(2,967,348)**	**(2,967,131)**	**433,648**	**(2,701,672)**	**(2,268,024)**
Provisions registered in subsidiaries	(217)	-	(217)	(206)	-	(206)
Parent company net total	**-**	**(2,967,348)**	**(2,967,348)**	**433,442**	**(2,701,672)**	**(2,268,230)**

The expected realization of deferred income tax of conversion and Tax Depreciation is shown below:

	Up to 1 year	1 to 3 years	3 to 5 years	5 to 8 years	8 to 10 years	Over 10 years	Total 2019
Other	-	-	-	-	-	9,827	9,827
Conversion from the functional currency	-	-	-	-	-	(1,894,321)	(1,894,321)
Depreciation for tax purposes	-	-	-	-	-	(1,082,854)	(1,082,854)
Total consolidated	**-**	**-**	**-**	**-**	**-**	**(2,967,348)**	**(2,967,348)**
Provisions of subsidiaries	217	-	-	-	-	-	217
Total parent company	**217**	**-**	**-**	**-**	**-**	**(2,967,348)**	**(2,967,131)**

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28.4 Income tax in the income statement

	Parent Company		Consolidated	
	2019	2018	2019	2018
Net income (loss) before taxation	**(18,522,577)**	**(1,810,158)**	**(18,522,516)**	**(1,810,104)**
Functional currency effects - art. 62 of Law 12973/2014	(1,395,505)	(2,909,139)	(1,395,505)	(2,909,139)
Net taxable loss	**(19,918,082)**	**(4,719,297)**	**(19,918,021)**	**(4,719,243)**
Permanent differences:				
Equity in the results of investees	(876)	(3,176)	-	-
Overseas profits	186	673	186	673
Non-deductible tax fines	8,452	1	8,452	1
Non-deductible donations	5,477	4,122	5,477	4,122
Other permanent additions (exclusions)	147	250	(782)	(2,980)
Temporary differences:				
Inclusion of provision for socioenvironmental and socioeconomic recovery	7,673,427	377,224	7,673,427	377,224
Impairment provision	-	5,459	-	5,459
Tax depreciation	(623,560)	(654,320)	(623,560)	(654,320)
Yield from court escrow deposits	(68,213)	(87,037)	(68,213)	(87,037)
Other temporary additions (exclusions)	244,095	104,043	244,095	104,043
Unrealized exchange rate variation	834,153	2,297,692	834,153	2,297,692
Impairment	**9,705,110**	**-**	**9,705,110**	**-**
Tax loss	**(2,139,684)**	**(2,674,366)**	**(2,139,676)**	**(2,674,366)**
Statutory rate	25%	25%	25%	25%
Income tax calculated	**534,921**	**668,592**	**534,921**	**668,592**
Deferred income tax on tax depreciation	(156,005)	(163,693)	(156,005)	(163,693)
Deferred income tax yield on judicial deposits	(17,053)	(21,759)	(17,053)	(21,759)
Deferred income tax depreciation temporary additions (exclusions)	5,178,145	126,086	5,178,145	126,086
Unrealized exchange rate variation	208,538	574,423	208,538	574,423
Tax paid by companies overseas	-	-	(61)	(54)
Deferred income tax depreciation temporary additions (exclusions)	(5,875,808)	(668,729)	(5,875,808)	(668,729)
Provision for loss of tax losses	(455,721)	(664,699)	(455,721)	(664,699)
Deferred income tax on conversion	(118,371)	(517,171)	(118,371)	(517,171)
Income tax on income	**(701,354)**	**(666,950)**	**(701,415)**	**(667,004)**
Actual rate	4.47%	36.84%	4.47%	36.84%

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Income tax revenue (expense) segregated between current and deferred:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Current income tax	-	-	(61)	(54)
Deferred income tax losses	532,685	668,592	532,685	668,592
Provision for loss Deferred income tax losses	(534,921)	(664,675)	(534,921)	(664,675)
Provision for deferred income tax	5,295,061	515,032	5,295,061	515,032
Provision for loss deferred income tax	(5,875,808)	(668,729)	(5,875,808)	(668,729)
Deferred income tax on non monetary items	(118,371)	(517,170)	(118,371)	(517,170)
Current and deferred income tax	**(701,354)**	**(666,950)**	**(701,415)**	**(667,004)**

29. COMMITMENTS

The Company is party to long-term contracts for the supply of raw materials and services and the acquisition of fixed assets, as shown below:

	Up to 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total 2019
Capital expenditure for expansion and overhaul of property, plant and equipment	111,425	16,834	-	-	-	128,259
Services and other	1,022,376	398,244	189,695	38,082	-	1,648,397
Iron ore acquisition	-	177,152	163,528	337,302	525,300	1,203,282
Supply of energy and raw materials	188,357	217,244	312,853	238,735	-	957,189
Freight and logistics costs	2,692	-	-	-	-	2,692
	1,324,850	**809,474**	**666,076**	**614,119**	**525,300**	**3,939,819**

These commitments consists of long-term contractual obligations to suppliers to renew and expand fixed assets, in addition to the provision of various services to maintain the manufacturing and administrative facilities, to acquire iron ore from third parties, to supply energy, consumables and costs on cargo chartering.

Due to the failure of the Fundão dam, the Company implemented a number of initiatives in relation to its commitments, as disclosed in note 3.

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30. RELATED PARTIES

The main balances of transactions with related parties are detailed below:

		Shareholders		Subsidiaries		Parent Company		Consolidated	
Current assets		BHP	Vale	Samarco Finance	Samarco Europe	2019	2018	2019	2018
Accounts receivable (Note 6)	(a)	-	88	1,656	-	1,744	1,649	88	88
Non-current assets									
Advance to suppliers	(b)	-	44,085	-	-	44,085	44,085	44,085	44,085
Fixed Assets	(c)	-	12,026	-	-	12,026	12,627	12,026	12,627
Current liabilities									
Trades payable (Note 14)		-	323	-	-	323	2,028	323	2,028
Other liabilities (commissions/services payable) (Note 21)		-	-	-	17,108	17,108	17,196	-	-
Loans and Financing (Note 15)		2,409,060	2,409,060	-	-	4,818,120	3,712,111	4,818,120	3,712,111
Financial charges		59,734	59,734	-	-	119,468	82,954	119,468	82,954
Non-current liabilities									
Dividends (Note 22)		1,402,774	1,402,774	-	-	2,805,548	2,805,548	2,805,548	2,805,548
Mining Rights (Note 20)	(d)	-	112,222	-	-	112,222	112,222	112,222	112,222
Other accounts payable Related Parties	(e)	3,178,250	3,178,249	-	-	6,356,499	3,848,499	6,356,499	3,848,499
Income statement									
Revenue	(a)	-	-	-	-	-	1,373	-	1,373
Selling, general and administrative expenses (Note 25)		-	-	-	(3,744)	(3,744)	(5,136)	-	-
Other net operating expenses (income) (Note 26)	(e)	(1,254,000)	(1,254,000)	-	-	(2,508,000)	(2,091,011)	(2,508,000)	(2,091,011)
Financial expenses		(58,263)	(58,266)	-	-	(116,529)	(42,509)	(116,529)	(42,509)

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(a) The balance of accounts receivable and income of the subsidiary Samarco Finance refers to the sale of iron ore, acquired from Parent Company and sold on the foreign market to third parties.
(b) Prepayment of R$ 44,085, to Vale for the partial lease of the mining rights of "Conta História Norte" and "Alegria" (mining areas). Vale is responsible for the full maintenance of the rights until the date of registration of the lease by the competent authority.
(c) Assets loaned to Vale.
(d) In November 1989, the Company entered into an agreement with Vale for the transfer of mining rights for the exploration of iron ore deposits. The agreement governs that Vale assigned and transferred exploration rights of two mineral reserves to Samarco.
The contract value observed the payment of mining rights: (i) Lump sum payment made in the amount of R$ 19,972, and (ii) Variable payments corresponding to 4% on the gross amount of dividends paid by Samarco to its shareholders until the exhaustion of the reservations.
The price agreed in the contract is not fixed, being established as a percentage of the gross dividends paid. For the fiscal year ended December 31, 2019 and 2018, there were no payments.
(e) Funding from Vale and BHP Billiton Brasil shareholders to the Renova Foundation, as disclosed in note 3 (h):

Compensation of key management personnel
The amounts related to the compensation of key management personnel are shown below:

	2019	2018
Compensation (i)	11,287	4,979
Health Plan	53	47
Private pension plan	470	1,789
Life Insurance	72	56
	11,882	**6,871**

(i) Includes wages, salaries and compensation.

Executive board members (officers) and general managers are considered key management personnel.

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31. FINANCIAL INSTRUMENTS

31.1 Financial risk management
The Company has financial instruments inherent to its operations, represented by cash and cash equivalents, restricted marketable securities, trade accounts receivable, other assets, trade payables, loans and financing, financial charges payable, and other liabilities.

The management of these instruments seeks to ensure maximum possible liquidity, profitability and security. Financial oversight takes into account the analysis of the risk exposure that management intends to mitigate (exchange, interest rate, etc.) and the policies and strategies determined by Company management, always duly approved by the finance committee.

The Company and its subsidiaries do not invest in derivatives or any other high-risk assets on a speculative basis.

31.2 Financial instruments by category
The financial instruments have been classified as follows:

	Parent Company		Consolidated	
	2019	2018	2019	2018
Current assets	Amortized Cost	Amortized Cost	Amortized Cost	Amortized Cost
Cash and cash equivalents	62,617	79,981	65,792	82,322
Restricted short-term investments	2,505	1,919	2,505	1,919
Accounts receivable	11,126	7,654	9,502	6,093
Other accounts receivable (note 9)	14,662	10,688	14,662	10,688
Other assets (note 10)	10,330	7,021	10,395	7,089
Total current assets	**101,240**	**107,263**	**102,856**	**108,111**
Noncurrent assets				
Other assets (note 9)	16,416	16,747	16,416	16,942
Total assets	**117,656**	**124,010**	**119,272**	**125,053**
Current liabilities				
Trade payables	252,065	76,439	252,122	76,455
Loans and financing	20,233,138	18,530,227	20,233,138	18,530,227
Financial charges payable	2,831,708	1,844,328	2,831,708	1,844,328
Other liabilities (note 21)	61,741	53,433	44,715	36,330
Total current assets	**23,378,652**	**20,504,427**	**23,361,683**	**20,487,340**
Noncurrent assets				
Other assets (note 9)	49,474	76,604	49,474	76,604
Total liabilities	**23,428,126**	**20,581,031**	**23,411,157**	**20,563,944**

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

31.3 Financial risk factors

The Company's normal activities expose it to a variety of financial risks: credit risk, market risk (including price risk, interest rate risk, exchange rate risk) and liquidity risk, as follows:

(a) Credit risk

The Company's sales policy is governed by the credit policies determined by management with the objective of mitigating the risks of failing to receive payment on pending sales and those yet to be made. The Company uses an internal methodology for credit risk classification for each counterparty, based in quantitative information (such as market prices, external credit ratings and financial information on the counterparty), as well as qualitative information (strategic position of the counterparty and the history of commercial relationship). Based on the credit risk attributed to the counterparty, the Company uses the following strategies to mitigate the risk: prepayment, discounts of receivables, insurance, letters of credit, corporate and bank guarantees, among others.

Gross sales revenue amounted to R$ 65,279 in 2019 (R$ 116,414 in 2018), while the consolidated allowance for doubtful accounts made in 2019 was R$ 13,490 (R$ 13,423 in 2018), in Consolidated.

The exposure of the receivables to credit risk is distributed as shown below:

	Parent Company and Consolidated	
	2019	2018
Middle East / Africa	20.2%	20.4%
Asia (except China)	79.8%	79.6%

(i) Interest rate risk

This risk arises from the possibility the Company or its subsidiaries sustain unforeseen impacts arising from fluctuations in interest rates on their financial assets and liabilities and from inflation. Most of the Company's loans and financings as of December 31, 2019 are denominated in United States Dollars. An amount of loans and financings of R$ 8,977 million bears interest at fixed rates and R$ 11,256 million at floating rates corresponding mostly to the variance in the LIBOR plus a contractual spread. The Company has no hedge against LIBOR variance, in accordance with its internal and its stockholders' guidelines. Interest-rate risk also derives from the small amount of debt referenced to the IGP-DI price index and short-term investments referenced to the Selic base interest rate.

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

(ii) Exchange rate risk
Arising from the possibility of fluctuations in exchange rates for the foreign currencies (other than the functional currency) used by the Company to acquire domestic consumables and/or services, pay taxes, dividends, etc. The Company has the following assets and liabilities, in Reais, which can affect its results due to exchange rate variations:

(1) Asset exposure	Consolidated	
Current assets	**2019**	**2018**
Cash and cash equivalents	564	34
Restricted cash	1,355	838
Domestic accounts receivable	4,081	1,087
Recoverable taxes	6,056	80,552
Prepaid expenses	3,175	1,457
Other receivables	14,662	10,688
Other assets	10,395	7,021
Noncurrent assets		
Court deposits	1,906,183	1,849,787
Recoverable taxes	76,743	76,741
Other assets	16,416	16,747
	2,039,630	**2,044,952**

(2) Liability exposure	Consolidated	
Current liabilities	**2019**	**2018**
Trade payables	(250,918)	(70,333)
Loans and financing and charges	(5,109,558)	(3,961,355)
Salaries and payroll contributions	(24,692)	(21,302)
Taxes payable	(451,908)	(240,199)
Other provisions	(4,271,711)	(2,753,486)
Other liabilities	(43,820)	(34,595)
Noncurrent liabilities		
Taxes payable	(127,123)	(201,047)
Provisions for contingencies	(127,320)	(113,526)
Deferred income tax	(2,967,131)	(2,268,230)
Dividends	(2,805,548)	(2,805,548)
Other provisions	(12,024,798)	(7,280,863)
Other liabilities – Domestic – Related parties	(6,356,499)	(3,848,499)
Other liabilities	(49,474)	(76,604)
	(34,610,500)	**(23,675,587)**

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([3]) Exposure not recorded in the balance sheet:

	2019	2018
Tax proceedings		
Chance of defeat remote	(2,663,665)	(2,308,485)
Chance of defeat possible	(12,464,950)	(11,417,678)
Labor claims		
Chance of defeat remote	(6,575)	(5,121)
Chance of defeat possible	(606,489)	(415,132)

	2019	2018
Civil claims		
Chance of defeat remote	(10,072)	(8,805)
Chance of defeat possible	(1,475,385)	(1,114,457)
Environmental proceedings		
Chance of defeat remote	(340)	(2,470)
Chance of defeat possible	(1,074,161)	(1,132,733)

Summary of the exchange rate exposure	2019	2018
Exposure recorded in the balance sheet ([1] + [2])	(32,570,870)	(21,630,635)
Exposure not recorded in the balance sheet ([3])	(18,301,637)	(16,404,881)
Total net exposure	(50,872,507)	(38,035,516)

The Company does not hedge its assets and liabilities in Reais, in accordance with its internal guidelines. Foreign currency assets and liabilities are translated to the functional currency at the exchange rate as of the balance sheet date, with US$ 1.00 being equal to R$ 4.0301 at 31 December 2019 and US$ 1.00 equivalent to R$ 3.8742 at December 31, 2018.

(iii) Credit quality of financial assets

Cash and cash equivalents

	Parent Company		Consolidated	
	2019	2018	2019	2018
Current account and short-term bank deposits				
Investment Grade	62,616	79,981	65,792	82,322
	62,616	**79,981**	**65,792**	**82,322**

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This category includes current accounts and short-term investments at banks.

Trade accounts receivable

	Parent Company		Consolidated	
	2019	2018	2019	2018
Counterparties with independent credit rating (S&P)				
Investment Grade	-	-	7	7
Counterparties without independent credit rating (S&P)				
Group 1 - clients with relationship of up to five years	1,656	1,592	1,666	1,602
Group 2 - clients with more than five years without history of default	-	-	-	-
Group 3 - clients with more than five years with little history of default	10,659	10,246	10,659	10,246
Group 4 - domestic clients not purchasing iron ore	10,569	7,661	10,659	7,661
	22,975	**19,499**	**22,991**	**19,516**

(b) Liquidity risk

The liquidity risk arises if the Company does not have sufficient funds to honor its obligations in a timely fashion.

Company Management has faced challenges in its liquidity risk management due to the suspension of production operations following the failure of the Fundão dam, including defaulting on certain obligations in the Company's loan and financing agreements. The Company's liquidity in 2019 was maintained by resources provided by its Stockholders via the placement of private non-convertible debentures, as detailed in note 15.

The carrying amounts of the cash flows from financial liabilities (excluding shareholder loans and payables) are:

	Consolidated		
	2020		
	Amount	Up to 12 months	1 – 10 years
Supplier/Trade payables	252,122	252,122	-
Loans and financing	20,233,138	20,233,138	-
Financial charges payable	2,831,708	2,831,708	-

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The value of the undiscounted cash flows are as follows:

Financial liabilities	Consolidated				
	Carrying value	Contractual cash flow	2020		2021
			0 - 6 months	6- 12 months	
Trade payables	252,122	252,122	250,610	1,495	-
Loans and financing	20,233,138	20,233,138	20,233,138	-	-
Financial charges	2,831,708	2,831,708	2,831,708	-	-
Total	**23,316,967**	**23,316,967**	**23,315,455**	**1,495**	**-**

As explained in note 3 (e), in addition to these financial obligations in the table, there are those established under the TTAC, which affect the liquidity of the Company. It is important to note that, to the extent that Samarco does not have the funds to meet these financial obligations, each of its shareholders, Vale and BHP Billiton Brasil must do so, according to their 50% equity interest in Samarco.

(c) Sensitivity analysis

The Company's financial instruments consist of cash and cash equivalents, restricted short-term investments, accounts receivable, accounts payable and loans and financing.

The main risks facing the Company's operations are from changes in the LIBOR rate for long-term financing and IGP-DI for domestic operations.

In order to identify the sensitivity of the index for short-term investments, in Brazil and abroad, to which the Company was exposed as of December 31, 2019, three different scenarios were determined to cover the following 12-month period. Based on the accumulated IGP-DE accumulated index and the LIBOR rate valid for 6 months, in effect as of December 31, 2019, the Company defined a probable base scenario and two stressed scenarios: Scenarios II and III, with increases of 25% and 50%, respectively, over the base.

	Risk	Probable scenario I	Scenario II	Scenario II
Loans and financial investments abroad	Libor	1.9121% a.a.	2.3901% a.a.	2.8681% a.a.
Yields as of December 31, 2019		125,039	156,298	187,558
Loans and investments available in Brazil	IGP-DI	5.3598% a.a.	6.6997% a.a.	8.0397% a.a.
Yields as of December 31, 2019		335	419	502

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The simulation considers the balance of the respective debts (in US dollars and in local currency) at December 31, 2019, with repayment only at the end of the period.

In order to identify the sensitivity of the changes in foreign currency to which the Company was exposed as of December 31, 2019, three different scenarios were determined for the assets and liabilities, in which Scenarios II and III entail an exchange-rate decrease of 25% and 50% respectively, based on the first, called probable scenario I.

	Exposure (R$)	Probable Scenario (USD)	Scenario I(USD)	Exposure (R$)
Exchange rate - (Risk - R$ / US$)		4,0301	3,0226	2,0151
Total Assets	2,039,630	506,099	674,799	1,012,198
Total liabilities	(34,610,500)	(8,588,000)	(11,450,667)	(17,176,001)
Net exposure in Reais recorded in the balance sheet	(32,570,870)	(8,081,901)	(10,775,868)	(16,163,803)

31.4 Bank sureties

As shown in the table below, the Company has bank sureties from financial institutions issued for an indefinite term mainly to guarantee the suspension of mandatory collection of amounts demanded under tax enforcement proceedings in the total updated amount on December 31, 2019 of R$ 1,219,870 (R$ 2,039,114 on December 31, 2018). The total amount originally contracted is R$ 1,080,468.

The guarantees were renegotiated during 2019 for more attractive rates, and their balances were updated according to the balances of the CDAs. There was also a write-off of guarantees contracts of which were terminated.

Bank	Amount secured	Current amount	Index	Term
Bradesco	607,850	518,804	Selic	Indeterminate
Bradesco	27,956	51,007	VRTE	Indeterminate
Votorantim	100,948	215,380	Selic	Indeterminate
Itaú	276,052	434,679	Selic	Indeterminate
Itaú	67,662	-	IPCA-E	Indeterminate
Total	**1,080,468**	**1,219,870**		

ALL AMOUNTS IN THOUSANDS OF REAIS, UNLESS OTHERWISE STATED

31.5 Capital management

The Company administers its capital with a view to safeguarding liquidity, optimizing the use of capital while yielding sustainable returns for stockholders and benefits for other stakeholders.

In order to maintain or adjust the Company's capital structure, Management constantly monitors its debt levels, aligned with its dividends policy, which in turn follows stockholder guidelines.

Under normal operating conditions, the Company monitors and manages its level of financial leverage in accordance with market standards, its strategy and compliance with the financial metrics outlined in the loan agreements in the form of financial covenants (Net Debt/EBITDA). The Net Debt/EBITDA is a metric, which corresponds to the net debt compared to the cash generation of the Company, measured by the EBITDA. The net indebtedness, in turn, corresponds to the total of loans and financing (including short and long term loans, as shown in the consolidated balance sheet), subtracted from the total of cash and cash equivalents.

In 2019, with its operational activities still stopped, the Company was unable to meet its Net Debt / EBITDA covenant of 4:1 in all loan and financing agreements.

The calculation of the financial leverage index considers net debt as a percentage of total capitalization. Total capitalization is calculated by summing consolidated net debt and stockholders' equity, as shown below:

	2019	2018
Total loans and financing	**23,064,846**	**20,374,555**
(-) Cash, cash equivalents, restricted short-term investments	(68,297)	(84,241)
Net debt	**22,996,549**	**20,290,314**
Total stockholders' equity	(37,078,141)	(17,116,614)
Total capitalization	**(14,081,592)**	**3,173,700**
Financial leverage index	(163%)	639%

In standard conditions, the analysis of these indicators is used to determine the working capital management to maintain the degree of leverage of the Company at levels equal to or below the leverage index considered adequate by management.

31.6 Fair value hierarchy

The Company considers fair value as the price that would be obtained from the sale of an asset or paid to transfer a liability in an arm's length transaction on the measurement date (sale price). The Company uses market data or assumptions that market participants would use to price the asset and liability, including assumptions about the risks in general and risks inherent to the inputs used in the valuation method. The Company mainly applies the market approach to measure fair value and makes every effort to use the best information available. The Company consequently uses valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The Company can classify the fair value balances based on observable inputs. The fair value hierarchy is used to prioritize the inputs used to measure fair value. The three levels of fair value hierarchy are as follows:

- Level 1. Active market: quoted price - A financial instrument is deemed to be quoted in an active market if the quoted prices are readily and regularly disclosed by a stock exchange or organized over-the-counter market by operators, brokers or market associations, by entities with disclosed prices by regulatory agencies, providing that these prices represent market transactions which take place frequently between independent parties, on an arm's length basis.

- Level 2. No active market: valuation method - A valuation/pricing method should be used to determine the fair value of an instrument which is not traded in an active market. Other criteria can be used, such as data on the current fair value of another similar instrument, discounted cash flow analyses and options pricing models. The valuation method aims to establish what the transaction price at the measurement date would be in an arm's length transaction.

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- Level 3. No active market: equity instruments - Fair value of equity interests/equity instruments not quoted in an active market and underlying derivatives which should be settled by delivering unquoted equity instruments.

	Balance in 2019	Fair value hierarchy		
		Level 1	Level 2	Level 3
Cash, cash equivalents, restricted short-term investments	68,297	68,297	-	-
Loans and financing	20,233,138	8,837,406(*)	11,395,732	-

(*) Amount referring only to Bonds, other loans and financing were classified as level 2.

The fair value of the financial liabilities related to loans and financing, with accounting balances measures at amortized cost, is calculated as shown below:

	2019		2018	
	Book value	Estimated fair value	Book value	Estimated fair value
Bonds (i)	10,609,125	7,028,624	9,696,246	7,497,124
EPPs (export pre payments) (ii)	7,346,162	6,336,065	6,716,954	6,348,052
Other	5,109,556	4,732,669	3,961,355	3,938,687
	23,064,843	**18,097,358**	**20,374,555**	**17,783,863**

(i) The fair value of the bond operations is obtained by listing the bond in the secondary market (using the closing value, as reported by Bloomberg).

(ii) For loan operations under the EPP (Export Pre-Payment) modality, debenture operations and other operations of less significant amounts, which are not disclosed in the secondary debt market, or for which said market does not present sufficient liquidity, the calculation of the fair value was also carried out based on the quotation of bonds on the secondary market.

Management understands that other financial instruments, such as accounts receivable and suppliers, which are recognized in the financial statements at their carrying amounts, do not present significant variations in relation to the respective fair values.

32. INSURANCE COVERAGE

In order to partially mitigate risks and given the nature of its operations, the Company maintains several different types of insurance policies. The policies are in line with the risk management policy and are similar to the policies taken out by other companies in the same line of business as Samarco. The coverage of these policies includes operational risk of material damages and loss of earnings, domestic transportation, international transportation, life and personal accident insurance, vehicle fleet, civil liability insurance, all risks, surety bonds and others.

The Civil Liability policy for the inactive plant expiring on October 10, 2020, is in the process of being renewed with the insurance market. The coverage of (i) sudden pollution and (ii) dams, due to the incident occurred, were excluded from the current policy.

In addition, Samarco maintains a Directors and Officers Liability Insurance, in effect until March 2021. This insurance covers members of the Board of Directors, Executive Board, Supervisory Board and any other body mentioned in the Bylaws, as well as certain employees at the management and strategic levels, in both the Company and its parent Companies (collectively referred to as the "Insured"). The policy covers financial losses resulting from claims against the Insured for acts or omissions in the exercise of their functions of employment. It also covers agreements previously authorized by the insurer for the purpose of bringing to a close judicial or administrative suits and coverage for payment of defense costs of the Insured, if and when incurred.

The operational risk insurance of Samarco is suspended due to the temporary interruption of Samarco's operational activities. However, the Company maintains a relationship with the insurance market with regard to asset security, for the purpose of reestablishing the insurance for its activities, as soon as possible.

Since 2017, it has been in place a financial guarantee insurance in compliance with the terms of the Framework Agreement – TTAC, signed with the Public Prosecution Service at the 12th Federal District of Belo Horizonte/MG, as describe in note 3(m).

33. SUBSEQUENT EVENTS

On 12 March 2020, the World Health Organization (WHO) declared the Coronavirus (COVID-19) pandemic. Samarco is monitoring the outbreak of COVID-19, as well as its possible impacts on the Company's business.

To this effect, Samarco created a Crisis Committee on March 16, 2020, composed of professionals from different specialties who work continuously to manage the actions responding to the pandemic. To ensure the health and safety of its workforce, the Company has implemented some actions such as (i) determining work from home for its employees and contractors in the administrative area, employees over 60 and pregnant women; (ii) professionals who are part of the risk group but whose activities do not allow them to work from home were temporarily put on leave; and (iii) work at Samarco´s operating facilities on a staggered schedule, using a weekly rotation system, with regard to priority, mandatory and legally allowed activities.

To date, Management has not had sufficient and necessary elements to reliably assess the potential impacts of this pandemic on the Company´s equity and financial positions.

On April 13, 2020, the judge of the 12th Federal Court issued a decision allocating part of the resources of the guarantee provided in court, within the scope of the agreements signed in the public civil action (ACP) of R$ 20,000,000 and R$ 155,000,000 for the funding of the repair programs resulting from the failure of the Fundão Dam, for public health actions in the states of Minas Gerais and Espírito Santo due to the pandemic of the new coronavirus.

Will be allocated R$ 120 milions, invested in CDBs owned by BHP and Vale, to support state measures to combat the Covid-19 crisis, with Minas Gerais receiving R$ 84 million and Espírito Santo, R$ 36 million. Judge Mário de Paula Franco Júnior's decision meets the request made by the state governments for the amount to be applied exclusively to the acquisition of capital goods and consumer durables, such as, for example, lung ventilators and multiparameter monitors.

BOARD OF DIRECTORS

Serving members
David James Crawford
Ivan Malekzadeh Fadel
Paulo Fernando Teixeira Souto de Souza
Vagner Loyola

Alternates
Atif Nazir Janjua
Josimar Pires
Luis Fernando Madella Athayde

EXECUTIVE BOARD

Rodrigo Alvarenga Vilela
CEO and Operations Officer

Cristina Morgan Cavalcanti
CFO

Reuber Luiz Neves Koury
Chief Planning and Project Officer

ACCOUNTANT RESPONSIBLE

Lucas Brandão Filho
Accountant - CRC-MG 046442/O – TES