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

Balance Sheet
In thousands of reais

		Parent		Consolidated	
ASSETS	Note	12/31/2022	12/31/2021	12/31/2022	12/31/2021
CURRENT					
Cash and cash equivalent	9	355.370	129.806	474.102	216.512
Financial Investments	10	393.461	385.730	393.461	385.730
Accounts receivable	11	201.761	278.283	211.934	288.003
Inventories	12	579.161	421.404	579.161	421.404
Recoverable taxes	13	13.770	65.924	18.324	69.150
Prepaid expenses		5.595	7.779	5.595	7.779
Advances to suppliers		2.000	2.000	2.000	2.000
Other assets		6.572	7.838	10.370	11.276
Total current assets		1.557.690	1.298.764	1.694.947	1.401.854
NON-CURRENT					
Advances to suppliers		167	2.167	167	2.167
Financial Investments	10	365.358	162.427	417.569	211.409
Inventories	12	8.738	6.834	8.738	6.834
Recoverable taxes assets	13	6.662	3.840	6.662	3.840
Deferred taxes	14	17.845	17.806	17.845	16.982
Judicial deposits	15	46.448	45.677	46.544	45.773
Other credits		819	625	826	632
		446.037	239.376	498.351	287.637
Investments	16	552.603	552.588	124	124
Property, plant and equipment and intangible assets	17	824.124	699.494	1.545.738	1.455.943
Right of use assets	17	40.617	15.481	51.946	27.341
Biological asset	18	276.279	223.683	276.279	223.683
		1.693.623	1.491.246	1.874.087	1.707.091
Total non-current assets		2.139.660	1.730.622	2.372.438	1.994.728
TOTAL ASSETS		3.697.350	3.029.386	4.067.385	3.396.582

		Parent		Consolidated	
LIABILITIES AND EQUITY	Note	12/31/2022	12/31/2021	12/31/2022	12/31/2021
CURRENT					
Suppliers	19	122.617	106.570	129.638	110.710
Advances from customers	20	61.209	4.889	61.209	4.889
Loans and borrowings	21	43.071	49.778	69.829	75.234
Derivative and non-derivative financial instruments	25	-	9.669	-	9.669
Labor and actuarial liabilities	23	135.628	113.217	136.180	113.847
Income taxes and social contributions	24	58.095	68.945	59.084	69.829
CCEE reimbursement account	28	-	-	12.870	24.896
Proposed dividends and interest on equity		-	48.268	47	48.275
Lease liabilities	22	26.643	11.828	27.417	12.616
Other liabilities		8.733	3.859	9.677	4.772
Total current liabilities		455.996	417.023	505.951	474.737
NON-CURRENT					
Loans and borrowings	21	61.116	98.088	268.163	330.085
Obligations with acquisition of subsidiary		4.978	4.978	4.978	4.978
Labor and actuarial liabilities	23	45.962	65.051	45.962	65.051
Taxes and social contributions	24	-	-	87	87
Deferred taxes liabilities	14	-	-	1.022	-
CCEE reimbursement account	28	-	-	60.645	24.619
Provisions for contingencies	27	60.717	56.492	60.717	56.492
Provision for environmental liabilities	26	15.666	15.953	56.313	57.415
Lease liabilities	22	13.239	2.582	22.660	12.839
Total non-current liabilities		201.678	243.144	520.547	551.566
EQUITY	30				
Share capital		1.225.444	1.225.444	1.225.444	1.225.444
Retained earnings		1.792.591	1.129.261	1.792.591	1.129.261
Equity assessment adjustment		47.395	40.268	47.395	40.268
Treasury shares		(25.754)	(25.754)	(25.754)	(25.754)
Equity attributable to owners of the Company		3.039.676	2.369.219	3.039.676	2.369.219
Participation of non-controlling shareholders		-	-	1.211	1.060
Total Equity		3.039.676	2.369.219	3.040.887	2.370.279
TOTAL LIABILITIES AND EQUITY		3.697.350	3.029.386	4.067.385	3.396.582

The notes are an integral part of these financial statements.

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

Income statements
(In thousands of Reais - R$, except earnings per share)

		Parent		Consolidated	
	Note	12/31/2022	12/31/2021	12/31/2022	12/31/2021
NET SALES REVENUE	32	3.042.485	2.296.413	3.139.016	2.389.477
Cost of sales	33	(1.650.688)	(1.313.664)	(1.724.090)	(1.383.827)
Variation in the fair value of biological assets	18	38.003	27.802	38.003	27.802
GROSS PROFIT		1.429.800	1.010.551	1.452.929	1.033.452
OPERATING EXPENSES	33				
Selling expenses		(17.083)	(18.662)	(17.083)	(18.662)
General and administrative expenses		(208.669)	(167.936)	(217.414)	(176.119)
Other operating income (expenses)		(55.955)	(33.873)	(57.463)	(37.829)
		(281.707)	(220.471)	(291.960)	(232.610)
Equity	16	159	(9.773)	-	-
OPERATING PROFIT		1.148.252	780.307	1.160.969	800.842
FINANCE RESULT	34				
Finance income		190.109	74.397	208.764	80.341
Finance costs		(95.936)	(152.748)	(125.371)	(179.522)
		94.173	(78.351)	83.393	(99.181)
PROFIT BEFORE PROFIT TAXES		1.242.425	701.956	1.244.362	701.661
INCOME TAX AND SOCIAL CONTRIBUTION	14				
Current		(183.862)	(100.292)	(185.403)	(100.699)
Deferred		3.713	41.214	3.515	41.945
		(180.149)	(59.078)	(181.888)	(58.754)
PROFIT FOR THE PERIOD		1.062.276	642.878	1.062.474	642.907
Profit attributable to owners of the Company		1.062.276	642.878	1.062.276	642.878
Profit attributable to non-controlling interests				198	29
BASIC/DILUTED PROFIT PER ON SHARE - BRL	31			11,71632	7,09059
BASIC/DILUTED PROFIT PER PN SHARE - BRL	31			12,88795	7,79965

The notes are an integral part of these financial statements.

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

Statements of comprehensive income
In thousands of Reais

	Note	Parent		Consolidated	
		12/31/2022	12/31/2021	12/31/2022	12/31/2021
NET INCOME FOR THE YEAR		1.062.276	642.878	1.062.474	642.907
Derivative and non-derivative financial instruments	25	9.669	78.879	9.669	78.879
Effect of income tax and social contribution on derivative and non-derivative financial instruments"		(3.288)	(26.819)	(3.288)	(26.819)
Actuarial obligations	23	1.135	37.594	1.135	37.594
Effect of income tax and social contribution on actuarial obligations		(386)	(12.781)	(386)	(12.781)
Other comprehensive income for the year, net of taxes		7.130	76.873	7.130	76.873
TOTAL COMPREHENSIVE INCOME		1.069.406	719.751	1.069.604	719.780
Profit attributable to owners of the Company				1.069.406	719.751
Profit attributable to non-controlling interests				198	29

The notes are an integral part of these financial statements.

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

Statement of changes in equity
In thousands of Reais

			Attributable to controllers									
			Profit reserves									
	Note	Share capital	Legal	Tax incentive	Investments	Profits to be realized	Asset valuation adjustments	Treasury shares	Retained earnings	Total equity	Attributable to non-controlling interests	Total consolidated equity
BALANCES ON DECEMBER 31st 2020	31	1.225.444	119.925	159.361	273.609	49.595	(36.605)	(25.754)	-	1.765.575	6.250	1.771.825
Tax incentive reclassification		-	-	(652)	652	-	-	-	-	-	-	-
Capitalization of reserves		-	-	-	1.338	-	-	-	(1.338)	-	-	-
Other comprehensive income		-	-	-	-	-	76.873	-	-	76.873	-	76.873
Capital reduction		-	-	-	-	-	-	-	-	-	(2.712)	(2.712)
Prescribed dividends		-	-	-	-	-	-	-	1.338	1.338	-	1.338
Dividends / Complementary JCP		-	-	-	-	-	-	-	-	-	(2.500)	(2.500)
Net income for the year		-	-	-	-	-	-	-	642.878	642.878	29	642.907
Profit Allocation:												-
Booking formation		-	32.144	156.856	336.433	-	-	-	(525.433)	-	-	
Proposed dividends		-	-	-	-	-	-	-	(42.793)	(42.793)	(7)	(42.800)
Interest on equity		-	-	-	-	-	-	-	(74.652)	(74.652)	-	(74.652)
BALANCES ON DECEMBER 31st 2021	31	1.225.444	152.069	315.565	612.032	49.595	40.268	(25.754)	-	2.369.219	1.060	2.370.279
Tax incentive reclassification		-	-	386	(386)	-	-	-	-	-	-	-
Capitalization of reserves		-	-	-	1.531	-	-	-	(1.531)	-	-	-
Other comprehensive income		-	-	-	-	-	7.130	-	-	7.130	-	7.130
Asset valuation adjustment		-	-	-	-	-	(3)	-	-	(3)	-	(3)
Prescribed dividends		-	-	-	-	-	-	-	1.531	1.531	-	1.531
Complementary dividends		-	-	-	(86.800)	-	-	-	-	(86.800)	-	(86.800)
Net income for the year		-	-	-	-	-	-	-	1.062.276	1.062.276	198	1.062.474
Profit Allocation:												
Booking formation		-	53.113	226.755	468.731	-	-	-	(748.599)	-	-	-
Proposed dividends		-	-	-	-	-	-	-	(193.364)	(193.364)	(47)	(193.411)
Interest on equity		-	-	-	-	-	-	-	(120.313)	(120.313)	-	(120.313)
BALANCES ON DECEMBER 31st 2022	31	1.225.444	205.182	542.706	995.108	49.595	47.395	(25.754)	-	3.039.676	1.211	3.040.887

The notes are an integral part of these financial statements.

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

Cash flow demonstrations
In thousands of Reais

	Note	Parent 12/31/2022	Parent 12/31/2021	Consolidated 12/31/2022	Consolidated 12/31/2021
CASH FLOWS FROM OPERATING ACTIVITIES					
Profit for the period		1.062.276	642.878	1.062.474	642.907
Adjustments to reconcile profit to cash provided by operating activities:					
net cash generated by operating activities:					
Interest, inflation adjustments and exchange rate changes, net		(75.596)	(19.828)	(53.971)	(223)
Depreciation, amortization and depletion (mines)	17	78.963	74.015	121.275	115.632
Depletion of biological assets	18	51.910	41.504	51.910	41.504
Change in the fair value of biological assets	18	(38.003)	(27.802)	(38.003)	(27.802)
Equity	16	(159)	9.773	-	-
Gain (loss) on write-off or disposal		3	2.182	3.895	2.289
Deferred taxes	14	(3.713)	(41.214)	(3.515)	(41.945)
Allowance (reversal) for doubtful accounts	11	(3.952)	-	(3.952)	-
Provision (reversal) for inventory loss	12	(165)	(1.564)	(165)	(1.564)
Lease payable update	22	7.012	5.106	7.283	5.278
Update of postemployment benefit plans	23	(17.954)	7.717	(17.954)	7.717
Recognition (reversal) of provision for contingencies	27	951	206	951	206
Others		(1.615)	(143)	3.258	4.730
Decrease (increase) in asset accounts:					
Accounts receivable		83.406	(127.512)	82.953	(128.261)
Inventories		(157.549)	(132.498)	(157.549)	(132.498)
Recoverable taxes assets		51.695	127.653	51.395	127.339
Advance to suppliers		2.000	13.025	2.000	13.025
Judicial deposits		6.381	(2.359)	6.381	(2.359)
Other assets		2.169	(7.155)	1.703	(7.610)
Increase (decrease) in liability accounts:					
Suppliers		17.228	36.205	20.186	37.399
Taxes and social contributions		6.481	7.616	6.258	7.633
Income tax and social contribution		183.861	100.293	185.401	100.700
Labor and actuarial obligations		22.411	65.824	22.333	66.042
CCEE reimbursement account		-	-	19.175	12.515
Advances from customers		56.321	354	56.321	354
Other liabilities		5.460	1.018	4.681	1.885
Income tax and social contribution paid		(202.505)	(53.702)	(204.652)	(54.572)
Interest paid in the period		(14.365)	(10.748)	(35.468)	(30.590)
Net cash from operating activities		1.122.952	710.844	1.194.604	759.731
CASH FLOWS FROM INVESTMENT ACTIVITIES					
Acquisition of property, plant and equipment and intangibles	17	(180.433)	(78.444)	(195.731)	(81.321)
Cost of planting and maintenance of biological assets	18	(64.519)	(45.802)	(64.519)	(45.802)
Receipt for sale of property		1.381	439	1.381	439
Receivable redemptions		42	2.690	-	-
Short-term investments and redemptions		(125.727)	(305.704)	(123.022)	(250.098)
Capital reduction		-	2.852	-	-
Net cash used in investing activities		(369.256)	(423.969)	(381.891)	(376.782)
CASH FLOWS FROM FINANCING ACTIVITIES					
Fundraising	21	-	2.785	-	2.785
Amortization of financing	21	(45.836)	(100.476)	(71.663)	(126.299)
Amortization of leases	22	(33.551)	(25.131)	(34.707)	(26.149)
Capital reduction (minority)		-	-	-	(2.712)
Dividends and interest on shareholders' equity paid		(448.745)	(102.003)	(448.753)	(104.559)
Net cash used in financing activities		(528.132)	(224.825)	(555.123)	(256.934)
NET INCREASE IN CASH BALANCE AND CASH EQUIVALENTS		225.564	62.050	257.590	126.015
Cash and cash equivalents at the beginning of the year	9	129.806	67.756	216.512	90.497
Cash and cash equivalents at the end of the period	9	355.370	129.806	474.102	216.512
NET INCREASE IN CASH BALANCE AND CASH EQUIVALENTS		225.564	62.050	257.590	126.015

The notes are an integral part of these financial statements.

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

Statements of added value
In thousands of Reais

	Note	Parent		Consolidated	
		12/31/2022	12/31/2021	12/31/2022	12/31/2021
SALES REVENUE		3.423.258	2.626.860	3.524.381	2.724.110
Other income		11.257	9.392	15.645	9.392
Allowance / reversal or doubtful accounts		3.952	-	3.952	-
		3.438.467	2.636.252	3.543.978	2.733.502
INPUTS PURCHASED FROM THIRD PARTIES					
Costs of sales and raw materials		(959.860)	(722.627)	(884.644)	(650.706)
Materials, energy, third-party services and others		(596.382)	(468.798)	(705.494)	(570.203)
GROSS VALUE ADDED		1.882.225	1.444.827	1.953.840	1.512.593
Depreciation, amortisation and depletion	17 e 18	(130.874)	(115.519)	(173.185)	(157.136)
Realization of added value	16	-	-	(4.418)	(4.418)
NET VALUE ADDED PRODUCED BY THE COMPANY		1.751.351	1.329.308	1.776.237	1.351.039
ADDED VALUE RECEIVED IN TRANSFER					
Financial income	34	190.109	74.397	208.764	80.341
Equity	16	159	(9.773)	-	-
TOTAL ADDED VALUE TO DISTRIBUTE		1.941.619	1.393.932	1.985.001	1.431.380
DISTRIBUTION OF ADDED VALUE					
Employees:					
Salaries and wages		343.554	295.571	348.742	301.131
Benefits		47.202	40.704	47.666	40.764
FGTS (Service Time Guarantee Fund)		19.187	16.781	19.297	16.907
		409.943	353.056	415.705	358.802
Taxes, fees and contributions:					
Federal		281.696	164.847	289.248	169.367
State		89.211	79.080	89.251	79.080
Municipal		420	762	580	919
		371.327	244.689	379.079	249.366
Third-party capital remuneration		98.073	153.309	127.743	180.305
Own capital:					
Interest on Equity/Dividends		313.677	117.445	313.724	117.452
Retained earnings		748.599	525.433	748.552	525.426
Attributable to noncontrolling interests		-	-	198	29
		1.062.276	642.878	1.062.474	642.907
DISTRIBUTED VALUE ADDED		1.941.619	1.393.932	1.985.001	1.431.380

The notes are an integral part of these financial statements.

1. OPERATIONAL CONTEXT

Cia de Ferro Ligas da Bahia S.A. - FERBASA ("Ferbasa" or "Company") is a publicly traded company, based in Pojuca - BA, registered with the Brazilian Securities and Exchange Commission (***CVM*** – Comissão de Valores Mobiliários) and listed on the São Paulo Stock Exchange (B3 S.A. – Brasil, Bolsa, Balcão). Ferbasa started its activities 61 years ago, on February 23rd, 1961 and operates sustainably in the areas of chromite mining, in the manufacturing and sales of ferroalloys, renewable forest resources projects and wind power generation, all located in the State of Bahia. Its Parent is the José Carvalho Foundation, a non-profit organization with an indefinite duration, with the primary objective of providing quality education to children and underprivileged young people.

These individual and consolidated financial statements were approved by the Company's Board of Directors on March 3rd, 2023.

1.1 The effects of the conflict between Russia and Ukraine

The conflict between Russia and Ukraine has been resulting in many impacts in a number of spheres of the planet's life. In addition to its inherent humanitarian disaster, important global supply chains and the international relationships arising from them were destabilized. The effects of the war sum up to the inflationary outbreak that had been ravaging many countries, provoking the increase in the prices of worldwide relevant goods, such as feeding commodities, mining, metal goods and electricity, and intensifying the instability in the international business environment. The attempts of Fighting back inflation has been causing increases in the interest rates all around the globe and, therefore, showing signs of a scenery of recess expectations, which has been converting into worries of the market.

At Ferbasa, the increase in costs can be seen, for example, in the increase in the prices of cement, herbicide, coke, electrodic paste, quartz, etc., as well as the price of diesel, which is reflected in the freight costs of materials. One action to face this scenario was to establish anticipated purchase strategies, in order to mitigate the risk of shortage of materials important to the production process.

In this context, the Company accused the inflationary effects on its cost structure and on the supply and sales logistics, but, on the other hand, it took advantage of a more favorable moment for the prices of the products it sells.

The Company continues to monitor events to assess possible future impacts that may arise from the conflict.

1.2 Accounting impacts related to climate change and the ESG agenda

FERBASA historically prioritizes in its corporate agenda actions that contribute to the evolution of the ESG agenda. As a result of the first diagnosis focused on the theme, roadmaps were drawn up that aim to accelerate advances related to sustainability. As one of the consequences of this work, we incorporated a specific topic in the quarterly earnings release that aims to inform and disclose to our shareholders the main updates related to the matter. The main highlights are shown below:

a) ESG Diagnosis: Hiring an external consultancy to carry out a diagnosis of **FERBASA**'s ESG factors, completed in 2022. Based on this work, an agenda was set up for the years 2023 and 2024, with coordinated actions in the areas of governance, environment, social and transparency.

b) Noise Management/Circular Economy: Carrying out projects and studies for the disposal of waste and by-products generated at **FERBASA**, taking advantage of them in its production chain or giving them other destinations. With this, the use of natural resources is optimized and technological development is stimulated across the board..

As of December 31st, 2022, the Company does not have: (i) loans or financing linked to green goals or commitments; (ii) insurance related to ESG aspects; (iii) carbon credit transactions; (iv) ESG risk linked to inventories or impact on the useful or residual life of its assets; (v) provisions or contingent liabilities constituted related to ESG, in addition to the environmental provision already disclosed by the Company; and (vi) risk of discontinuing its operations. The Company understands that there is no significant impact on the Company's individual and consolidated financial statements arising from the ESG theme or climate change for December 31st, 2022.

2. DECLARATION OF CONFORMITY AND BASIS OF PREPARATION

2.1. Conformity declaration

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

The accounting practices adopted in Brazil comprise those included in the Brazilian corporate law and the pronouncements, guidelines and technical interpretations issued by the Accounting Pronouncements Committee (In Portuguese CPC stands for *Comitê de Pronunciamentos Contábeis*) and approved by the Federal Accounting Council (In Portuguese CFC stands for Conselho Federal de Contabilidade) and by the Brazilian Securities and Exchange Commission (in Portuguese CVM stands for *Comissão de Valores Mobiliários*).

Management declares that all relevant information specific to the financial statements, and only them, are being evidenced and correspond to those used by Management in its management.

2.2. Basis of preparation

The individual and consolidated financial statements were prepared considering the historical cost as a value basis and adjusted to reflect the deemed cost of certain property, plant and equipment on the date of transition to the CPC/IFRS, except for certain financial assets and liabilities (including derivative financial instruments and non-derivative) and biological assets that are measured at fair value.

The presentation of the Statement of Value Added (DVA), individual and consolidated, is required by Brazilian corporate law and by accounting practices adopted in Brazil, applicable to publicly-held companies. IFRS do not require the presentation of this statement. As a result, under IFRS, this statement is presented as supplementary information, without prejudice to the set of financial statements.

The preparation of the financial statements requires the use of certain critical accounting estimates and also the exercise of judgment by Management in the process of applying the accounting policies of the Company and its subsidiaries. Those areas that require a higher level of judgment and are more complex, as well as the areas in which assumptions and estimates are significant for the financial statements, are disclosed in Note No. 4.

The main accounting policies applied in the preparation of these financial statements are described in Note 6. These policies were consistently applied in the years presented.

3. FUNCTIONAL CURRENCY AND FOREIGN CURRENCY CONVERSION

The functional currency of the Company and all its subsidiaries is the Real, the currency of the main economic environment in which the Company and its subsidiaries operate, and the same currency used in the preparation and presentation of the financial statements.

Transactions with foreign currencies are translated into the functional currency using the exchange rates prevailing on the transaction dates or on the valuation date, when the items are remeasured. Exchange gains and losses resulting from the settlement of these transactions and from the translation at year-end exchange rates, referring to monetary assets and liabilities in foreign currencies, are recognized in the statement of income in the period in which they occur.

4. MAIN ACCOUNTING JUDGMENTS AND SOURCES OF UNCERTAINTY IN ESTIMATES

Accounting estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events considered reasonable under the circumstances. The effects arising from reviews made to accounting estimates are recognized in the period in which the estimates are reviewed, if the review affects only that period, or also in subsequent periods, if the review affects both the present period and future periods..

By definition, accounting estimates will rarely equal actual results. The estimates and assumptions that present a significant risk, likely to cause a material adjustment to the carrying amounts of assets and liabilities for the next fiscal year, are included below:

4.1. Biological asset

The calculation of the fair value of biological assets takes into account several assumptions with a significant degree of judgment, such as estimated selling price, cubic quantity of wood, average annual increment (in Portuguese IMA stands for *Incremento Médio Anual*) per forest garden and business risk rate. Any changes in these assumptions used may imply a change in the result of the discounted cash flow and, consequently, in the appreciation of these assets.

Biological assets can also be impacted by climate change, particularly with regard to physical impacts related to extreme weather events and those related to chronic risks resulting from long-term changes in weather patterns. The Company considered the main risk data and assumptions highlighted below:

- losses of biological assets due to fires and impacts arising from the greater presence and resistance of pests and other forest diseases favored by the gradual increase in temperature;

- reduction in productivity and expected growth (IMA) due to reduced availability of water resources in basins; and

- interruption in the production chain due to adverse weather events.

Although the effects of climate change represent a source of uncertainty, the Company does not consider that there is a material impact on its judgments and estimates on the physical risks mentioned above in the short and medium term, considering the climate history of the regions where the plantations are located. With regard to the occurrence of pests and diseases, the Company has a technical team made up of employees and consultants, who work in the diagnosis and quick actions against possible occurrences and losses..

4.2. Lifespan of fixed assets

The Company recognizes the depreciation of its property, plant and equipment based on the estimated useful life for use of each asset. In the case of fixed assets, the assessment is made by management or by third-party specialists and considers how these assets are used in its operations. In the case of intangible assets, such as software, the assessment is based on the average time of use of these assets, which considers the terms of the contracts.

Regarding lease improvements in third-party properties, amortization is calculated and recorded according to the period of the lease agreements, the depreciation/amortization periods are reviewed in each period.

As described in Note 6.6, the Company reviews the estimated useful life of property, plant and equipment items and the estimated mineable reserve of the mines, annually, at the end of each reporting period.

4.3. Fair value of financial instruments

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

4.4. Provision for inventory obsolescence

The Company maintains provisions for obsolescence and slow turnover, related to maintenance items that have not been rotated for more than 5 years. The determination of this provision is made using the best information available on the date of the financial statements, involving experiences of past events, in addition to specialists in the area, when applicable.

4.5. Provision for actuarial obligations

The current value of obligations of post-employment benefit plans with defined benefit characteristics, referring to the health care plan, private pension plan, retirement premium and FGTS fine (Service Time Guarantee Fund), depend on a series of factors that are determined based on actuarial calculations, which use a series of assumptions. Among the assumptions used in determining the net cost (income) for post-employment benefit plans is the discount rate. Any changes in these assumptions will affect the carrying amount of the post-employment benefit plan obligations (Note No. 23).

The Company determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows likely to be required to settle post-employment benefit plans. In determining the appropriate discount rate, the Company considers government bond interest rates. The discount rate for securities compatible with the estimated average term of payment of post-employment benefit plans – "duration" is adopted. For cases where there are no government bonds with the same duration assessed for the plan, linear interpolation was adopted in the estimate.

In thousands of reais, except as otherwise indicated

4.6. Provision for contingencies

The Company has the practice of internally managing its legal claims and makes use of specialized offices on a timely basis, generally in cases related to the tax nature. The Company's procedures are to analyze, based on the history of the claim, what is the expected cash disbursement for each of the existing lawsuits and the respective probability of loss. In this way, the Legal Department prepares an analysis based on the value of the claim, the risk and the provision necessary for recording in the financial statements, this value being normally inconsistent with the value of the claim.

The Company is a party to labor, civil and tax proceedings. These proceedings, when applicable, are supported by judicial deposits (Note No. 27).

4.7. Provision for closing mines and decommissioning wind farms

The Company considers the estimates of the costs of closing mines and decommissioning wind farms as critical accounting practices because they involve significant amounts of provision and because they are estimates that involve several assumptions, such as interest rate, inflation, useful life of the asset considering the current stage of your exhaustion and the projected dates of exhaustion. The main activities to be completed in the disassembly process are the removal of: (i) blades; (ii) axis; (iii) engine; (iv) steel tower sections; (v) electrical panels; and (vi) others. Due to the lack of historical decommissioning costs in the market (the wind sector in Brazil is quite new), as well as the company itself, it was necessary to consider the costs of installation services to assess the cost of decommissioning wind power plants, including crane mobilization, labor, etc. Asset decommissioning costs are capitalized as part of the carrying amount of the related asset and will be depreciated over its remaining useful life. Although the estimates are reviewed annually, this provision requires the assumption of premises to project the cash flows applicable to the operations.

5. FINANCIAL ASSETS AND LIABILITIES

The main financial instruments assets and liabilities are shown below:

		Parent		Consolidated	
	Accounting measurement	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Assets					
Cash and cash equivalents	Amortized cost	355,370	129,806	474,102	216,512
Short term investments	Fair value through profit or loss	393,461	385,730	393,461	385,730
Non-current financial investments	Fair value through profit or loss	365,358	162,427	417,569	211,409
Accounts receivable	Amortized cost	201,761	278,283	211,934	288,003
Judicial deposits	Amortized cost	46,448	45,677	46,544	45,773
Liabilities					
Suppliers	Amortized cost	122,617	106,570	129,638	110,710
Customer Advances	Amortized cost	61,209	4,889	61,209	4,889
Current loans and financing	Amortized cost	43,071	49,778	70,284	75,689
Cost of raising	Amortized cost	-	-	(455)	(455)
Current loans and financing	Amortized cost	43,071	49,778	69,829	75,234
Non-current loans and financing	Amortized cost	61,116	98,088	271,750	334,127
Cost of raising	Amortized cost	-	-	(3,587)	(4,042)
Non-current loans and financing	Amortized cost	61,116	98,088	268,163	330,085
Current refund assets CCEE	Amortized cost			12,870	24,896
Non-current refund assets CCEE	Amortized cost			60,645	24,619

In thousands of reais, except as otherwise indicated

		Parent		Consolidated	
	Accounting measurement	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current leases liabilities	Amortized cost	26,643	11,828	27,417	12,616
Leases payable non-current current assets	Amortized cost	13,239	2,582	22,660	12,839
Derivative and non-derivative financial instruments current liabilities (i)	Fair value through other comprehensive results	-	9,669	-	9,669

(i) Level 2 - Financial instruments that are not traded in active markets (e.g. over-the-counter derivatives), the valuation of which is based on techniques that, in addition to prices quoted in active markets for identical assets or liabilities, use other market-adopted information for direct assets or liabilities (such as prices) or indirectly (derived from prices).

6. MAIN ACCOUNTING PRACTICES

6.1. Cash and cash equivalents and financial investments

Cash and cash equivalents include cash on hand, bank deposits and other highly liquid short-term investments with original maturities of less than 3 months, which are readily convertible into a known amount of cash and which are subject to an insignificant risk of value change.

The Company has with banks, first class issuers (CDB - Bank Deposit Certificate Transactions, financial bill, debentures, open fund and exclusive investment fund), in line with its Risk Management and Financial Management Policy, classified as cash and cash equivalents and investments financial statements in current and non-current assets. The ownership of these funds belongs to the Company and the profitability of the portfolio is included in Notes No. 9 and No. 10.

6.2. Accounts receivable from customers

Accounts receivable from customers correspond to amounts receivable for the sale of products in the normal course of business, plus exchange variation when denominated in foreign currency. The average receipt period is 30 days. They are, therefore, presented in current assets and initially recognized at fair value and subsequently at amortized cost.

Expected losses with doubtful accounts (henceforth PECLD) are constituted based on an individual analysis of the amounts receivable, considering: (i) the concept of incurred loss and expected loss, taking into account default events that are likely to occur in the twelve months following the date of disclosure of said financial statements, (ii) Financial instruments that had a significant increase in credit risk, but do not present objective evidence of impairment, and; (iii) financial assets that already present objective evidence of impairment on December 31st, 2022.

The PECLD were constituted in an amount considered by Management to be necessary and sufficient to cover probable losses on the realization of these credits, which may be modified due to the recovery of credits from debtor customers or changes in the financial situation of customers.

The adjustment to present value of the balance of accounts receivable from customers is not relevant due to the short period of realization.

6.3. Inventories

Inventories are stated at cost or net realizable value, whichever is lower. The inventory valuation method is the weighted average. The cost of finished goods and work in progress comprises costs, raw materials, direct labor, other direct costs and related direct production expenses (based on normal operating capacity). Net realizable value is the estimated selling price in the ordinary course of business, less estimated completion costs and estimated costs necessary to effect the sale.

The cost of wood transferred from biological assets is its fair value plus harvesting and freight costs.

Inventory balances are presented net of expected losses set up to cover any probable losses identified or estimated by Management.

6.4. Cash advances to electricity suppliers

Advances to these suppliers correspond to advances based on contractual conditions to guarantee future energy delivery. They are classified in current or non-current assets, depending on the compensation term, defined in previously negotiated contracts. They are initially recognized at amortized cost.

6.5. Biological asset

Biological assets correspond to eucalyptus forests, which are intended for the production of bio-reducer, used as a basic input in the production of ferroalloys, in addition to the sale of wood not consumed to third parties. The harvesting process has an approximate cycle of 07 (seven) years, which may vary depending on the crop and genetic material to which it refers. Biological assets are measured at fair value, less estimated selling costs at the time of harvest.

Significant assumptions in determining the fair value of biological assets are shown in Note No. 18.

The evaluation of these assets is carried out annually by the Company, with the gain or loss on the variation in the fair value of biological assets recognized in profit or loss for the period in which they occur, in a specific line of the statement of income called "Variation in the Fair Value of Biological Assets". The value of depletion of biological assets is measured by the volume of wood cut, valued at its fair value.

6.6. Fixed assets

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

Depreciation of assets begins when they are ready for their intended use on the same basis as other property, plant and equipment. It is recognized based on the estimated useful life of each asset, using the straight-line method, so that the cost value less the residual value after its useful life is fully written off (except for land and construction in progress that are not subject to depreciation).

Mine depletion is calculated at the rate corresponding to the ratio between the amount of depleted ore and the estimated mineable reserve.

The write-off of an item of property, plant and equipment occurs after disposal. Gains and losses arising from disposals are determined by comparing them with the carrying amount and are recognized in the income statement under "Other operating income (expenses)".

Fixed assets in progress, for the purpose of supplying products or services, are recorded at cost.

Repairs and maintenance are appropriated to profit or loss during the year in which they are incurred. The cost of major renovations is added to the asset's carrying amount when future economic benefits exceed the performance standard initially estimated for the asset. Renovations are depreciated over the remaining useful life of the related asset.

6.7. Leasings

The Company and its subsidiaries assess, on the contract start date, whether this contract is or contains a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

6.7.1. Right of use in lease

The Company and its subsidiaries recognize right-of-use assets on the lease commencement date (i.e., on the date on which the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred and lease payments made up to the commencement date. Right-of-use assets are depreciated on a straight-line basis over the shorter period between the lease term and the estimated useful life of the assets.

6.7.2. Leases to be paid

On the lease start date, the Company and its subsidiaries recognize lease liabilities measured at the present value of lease payments to be made during the lease term. Variable lease payments that do not depend on an index or rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that generates those payments occurs.

When calculating the present value of lease payments, the Company and its subsidiaries use both the initial measurement and the remeasurement of observable nominal rates.

6.7.3. Short-term and low-value asset leases

The Company and its subsidiaries apply the short-term lease recognition exemption to their short-term leases of machinery and equipment (that is, leases whose lease term is equal to or less than 12 months from the start date and which do not contain a purchase option). It also applies the Low Value Asset Recognition Exemption Grant to low value office equipment leases. Short-term lease payments and low-value asset lease payments are recognized as an expense on a straight-line basis over the lease term.

6.8. Impairment of non-financial assets

Non-financial assets that have a finite useful life are reviewed for impairment indicators at each balance sheet date and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If there is an indicator, the assets are tested for impairment.

An impairment loss is recognized when the asset's carrying amount exceeds its recoverable amount, which represents the higher of an asset's fair value less costs to sell and its value in use. For impairment assessment purposes, assets are grouped at the lowest levels for which there are separately identifiable cash flows (Cash Generating Units – CGUs. In Portuguese UGCs stands for *Unidades Geradoras de Caixa*). Additionally, no indications of impairment were identified for any company of the Company. Ferbasa has recorded a gain on advantageous purchase arising from the acquisition of BW Guirapá, therefore there is no goodwill accounted for.

6.9. Suppliers

Accounts payable to suppliers are obligations to pay for goods or services that were acquired in the normal course of business, being classified as current liabilities as they are due within 01 year. They are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method.

6.10. Distribution of dividends and interest on equity

The distribution of dividends to shareholders is recognized based on Brazilian corporate law and the Company's bylaws. At the end of the balance sheet, the amount of the mandatory minimum dividend is recorded as a current liability in the “dividends and interest on equity” account, as it is considered a legal obligation provided for in the Company's Bylaws. The portion of dividends that exceed the mandatory minimum is presented under the caption “additional proposed dividend”, in the group “profit reserves” in shareholders' equity. Once approved by the general meeting, this portion is transferred to current liabilities.

The Company may anticipate to its shareholders, based on current corporate legislation and its Bylaws, the payments of interest on capital and/or dividends.

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

6.11. Income tax and social contribution

The provision for income tax and social contribution is based on the taxable profit for the year, which differs from the profit presented in the income statement because it excludes taxable or deductible income or expenses in other years, in addition to permanently excluding non-taxable or non-deductible items.

The provision for income tax and social contribution is individually calculated by the Company and its subsidiaries based on the rates in effect at the end of the year, considering the tax benefits granted by SUDENE. The portion of income tax reduction corresponding to tax incentives is recognized in income, but transferred from the retained earnings account to the profit reserve at the end of the year as it cannot be distributed to shareholders.

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

6.12. Provisions

Provisions for mine closure, demobilization and contingencies (labor, civil and tax) are recognized when: (i) the Company has a present obligation, even if not formalized, as a result of events that have already occurred; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) the amount can be reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation, using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the obligation due to the passage of time is recognized as a financial expense.

The provision for environmental recovery comprises expenses related to mine closure resulting from the completion of activities. The decommissioning cost of an asset equivalent to the obligation is capitalized as part of the asset's carrying amount, being amortized over its useful life. Provisions for contingencies are recognized in income for the year.

6.13. Loans and financing

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

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

6.14. Employee benefits

6.14.1. Post-employment benefit

For the defined contribution plan, the Company pays contributions to a privately managed pension plan on a contractual or voluntary basis. From the cessation of contributions and agreed deadlines, the Company has no obligations related to additional payments.

The Company offers post-employment benefits to employees based on length of service provided. The expected costs of these benefits are accumulated over the period of employment, estimating how many employees will achieve this entitlement and discounting the amount to present value.

6.14.2. Retirement health care benefit

The Company offers a post-retirement medical assistance benefit to its employees, in accordance with the relevant legal precepts. Entitlement to these benefits is generally conditional on the employee remaining in employment until retirement age and completing a minimum period of service. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology used for defined benefit pension plans. Actuarial gains and losses resulting from adjustments based on experience and changes in actuarial assumptions are charged or credited to shareholders' equity, in other components of comprehensive income. These obligations are valued annually by qualified and independent actuaries.

6.14.3. Retirement bonus and FGTS fine – Collective agreements

According to the Company's agreements and conventions, when an employee retires from the company, due to disability, length of service or old age, he/she will be entitled to a premium in the amount of 10% (ten percent) of the nominal salary for each year of service, limited to 01 (one) nominal salary. Additionally, the employee opting for the FGTS, upon being permanently retired, and not remaining with the Company at the time of termination, will be entitled to the indemnity funds to which he is entitled as if he had been terminated for the Company's convenience. To be entitled to these benefits, the length of service provided must exceed 05 (five) years (Metallurgy) and 08 (eight) years (Mining).

6.14.4. Profit sharing

The Company recognizes a liability and a profit-sharing expense based on a methodology that takes into account the profit attributed to the Company's shareholders. The Company recognizes a provision when it is contractually obligated or when there is a previous practice that has generated a non-formalized obligation, which corresponds to a maximum of 10 (ten) years of the employee in the same company.

6.15. Share capital

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

6.16. Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of products and for the supply of energy in the normal course of the activities of the Company and its subsidiaries. Revenue is shown net of taxes, returns, rebates and discounts, as well as elimination of leases between subsidiaries. The result of the ***ICMS DESENVOLVE tax incentive*** is also recognized in the sales revenue line. There is no incidence of PIS and COFINS on this result. Subsidiaries recognize revenue arising from the supply of electricity considering the amount in MWh generated and supplied valued at the contracted price.

The Company and its subsidiaries recognize revenue when: (i) the amount of revenue can be reliably measured; (ii) it is likely that future economic benefits will flow to the Company and its subsidiaries; (iii) when the Company transfers to the buyer the control related to the ownership of the products, that is, upon the effective delivery of the products; and (iv) when specific criteria have been met for the activities of the Company and its subsidiaries.

6.17. Presentation of information by segments

Information by operating segments is presented consistently with the internal report provided to the main operating decision maker. The main operating decision maker, responsible for allocating resources and evaluating the performance of the operating segments, is represented by the Board of Directors, which is also responsible for making the Company's strategic decisions.

6.18. Government grants

As a result of the industrial enterprise installed in the area covered by the Superintendence of Development of the Northeast (in Portuguese SUDENE stands for *Superintendência do Desenvolvimento do Nordeste*), the Company enjoys the tax benefit of reducing income tax, with a percentage reduction of 75% on income tax and non-refundable surcharges, incident on the revenue detailed in Note No. 32.

The Company has a government subsidy called *ICMS - DESENVOLVE*, systematically recognized in income when it is calculated.

The benefits of the Industrial Development and Economic Integration Program of the State of Bahia (*ICMS DESENVOLVE*), with the purpose of expanding the industrial process, aiming to increase the production of ferroalloys, are based on the following terms:

i. Deferment of the assessment and payment of ICMS on imports and acquisitions produced in this State, of goods intended for fixed assets, for the moment when their disincorporation occurs.

ii. Deferment of the entry and payment of ICMS on acquisitions in another unit of the Federation in relation to the difference in rates, of goods destined to fixed assets, for the moment in which their disincorporation occurs.

iii. Extension of the period of 72 (seventy-two) months for payment of the ICMS debt balance related to own operations, generated due to the investments foreseen in the encouraged project, as established in Class I, of Table I, attached to the *ICMS DESENVOLVE* Regulation.

iv. Portion of the monthly ICMS debit balance eligible for the incentive, in excess of R$3,414, adjusted annually by the IGPM.

v. Granting of a period of 12 (twelve) years to enjoy the benefits, counted from the use of Concession Resolution No. 59/2015 of the Federal Official Gazette, of May 12th, 2015.

vi. Each ICMS installment with an extended term will incur an interest rate of 80% (eighty percentage points) of the TJLP per year or another that may replace it, according to Table II, attached to the *ICMS DESENVOLVE* Regulation.

vii. With regard to the extension of the period of 72 (seventy-two) months, if the installment is paid in advance with the extended period, the Company will benefit from a 90% (ninety percent) discount on the amount subject to extension, collect the remaining 10% (ten percent) as ICMS. The discount portion is being recorded under “Net sales revenue”.

viii. Law 13,564, of June 20th, 2016, established the obligation to deposit, in favor of the State Fund for Combating and Eradicating Poverty, established by Law No. 7,988 of December 21st, 2001, the corresponding value of 10% (ten percent) inherent to the respective incentive or benefit, under penalty of loss thereof, in case of non-compliance. The State of Bahia regulated through Decree No. 16,970 of August 19th, 2016, the procedures to be adopted in the calculation and collection of the deposit amount. The Company complies with the provisions set forth in the legislation in force.

6.19. Consolidation and investments in subsidiaries

The consolidated financial statements include the financial statements of the Company and its subsidiaries, as well as exclusive funds measured in accordance with the criteria disclosed in Note 6. The disclosure of the Company's shareholding percentages in each of its subsidiaries is disclosed in Note 16.

The Company controls an entity when it is exposed or is entitled to variable returns as a result of its involvement with the entity and is able to affect those returns through its power over it.

In the Company's individual financial statements, the financial statements of subsidiaries are recognized using the equity method.

In the consolidation process, the balances of equity accounts and income accounts corresponding to transactions carried out with subsidiaries are eliminated, as well as unrealized gains and losses and investments in these subsidiaries and their respective equity income.

The accounting policies of the subsidiaries are changed, when necessary, to ensure consistency with the policies adopted by the Company.

6.20. Financial assets

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

6.20.1. Amortized cost

The financial instruments included in this group are balances arising from common transactions such as accounts receivable from customers, judicial deposits, suppliers, loans and financing, cash and cash equivalents and financial investments held by the Company. All are recorded at their nominal values plus, when applicable, contractual charges and interest rates, whose appropriation of expenses and revenues is recognized in profit or loss for the period (Note No. 5).

6.20.2. Measured at fair value through profit or loss

These assets are measured at fair value. Net income, including interest, is recognized directly in income (Note No. 5.4).

6.20.3. Measured at fair value through other comprehensive income

These assets are measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net income is recognized in other comprehensive income. Upon derecognition, accumulated income in other comprehensive income is reclassified to income (Note No. 5.4).

6.20.4. Recognition and measurement

Regular purchases and sales of financial assets are recognized on the trade date. Financial assets are initially recognized at fair value, plus transaction costs for all financial assets not classified as at fair value through profit or loss. Financial assets are derecognized when the rights to receive cash flows have expired or have been transferred; in the latter case, provided that the Company has transferred, significantly, all the risks and rewards associated with the financial assets.

6.20.5. Impairment of financial assets

The Company measures the loss allowance at an amount equal to the expected lifetime credit loss. When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating expected credit losses, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes quantitative and qualitative information and analysis, based on the Company's historical experience, credit assessment and considering forward-looking information. The provision for credit risks was calculated based on an analysis of credit risks, which includes the history of losses, the individual situation of the customers, the situation of the economic group to which they belong, the real guarantees for the debts and the consultants' assessment legal requirements, and is considered sufficient to cover possible losses on amounts receivable, in addition to a prospective assessment that takes into account the change or expected change in economic factors that affect expected credit losses, which will be determined based on weighted odds.

6.20.6. Derecognition

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or when the Company transfers to third parties the contractual rights to receive the contractual cash flows on a financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor maintains substantially all the risks and rewards of ownership of the financial asset and also does not retain control over the financial asset.

6.21. Financial liabilities

Financial liabilities are classified as measured at amortized cost or at fair value through profit or loss. A financial liability is classified as measured at fair value through profit or loss if it is classified as held for trading, is a derivative or is designated as such upon initial recognition. Financial liabilities measured at fair value through profit or loss are measured at fair value and the net profit, including interest, is recognized in profit or loss.

The Company's financial liabilities are represented by loans and financing and suppliers, which are classified in the amortized cost category.

The Company derecognizes a financial liability when its contractual obligation is withdrawn, canceled or expired. The Company also derecognizes a financial liability when the terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value. On derecognition of a financial liability, the difference between the extinct carrying amount and the consideration paid (including assets transferred that do not carry cash or liabilities assumed) is recognized in profit or loss.

6.22. Derivative and non-derivative financial instruments

When it's appropriate, the Company uses derivative and non-derivative financial instruments to minimize risks involving the impact of exchange rate fluctuations on the conversion of its sales prices in the foreign market, in accordance with an internal policy approved by Management. In the first quarter of 2022, export restrictions were settled, which impacted financial expenses by R$9,201. In the fourth quarter of 2022, there was also liquidation of import restrictions to minimize the risks involving the impact of exchange rate fluctuations on the conversion of the acquisition price of equipment for mining, with no effect on the financial result. As of December 31, 2022, the Company had no outstanding derivative and non-derivative financial instruments.

These instruments are initially recognized at fair value on the date the contracts are entered into and are subsequently remeasured at their fair values.

The method for accounting for the gain or loss resulting from this remeasurement depends on whether or not the derivative is designated as a derivative and non-derivative hedge instrument, in the case of adoption of hedge accounting..

The Company designates derivatives as hedge accounting, when related to highly probable future transactions (cash flow hedge) and documents at the beginning of the transaction the relationship between the derivative and non-derivative hedge instruments and the protected items by hedge, as well as its objectives and risk management strategies. The Company also documents, both at the inception of the hedge and on an ongoing basis, whether the derivatives that are used in hedge transactions are highly effective in offsetting changes in cash flows from hedged items..

The effective portion of changes in the fair value of derivatives that are designated and qualified as a cash flow hedge is recognized as "Carrying value adjustments" (in "Other comprehensive income") in shareholders' equity, net of deferred taxes. The gain or loss related to the ineffective portion is immediately recognized in profit or loss as "Finance result".

The amounts accumulated in equity are reclassified to profit or loss in the periods in which the hedged contracts are settled, in the "Financial result" line, in accordance with the Company's accounting policy. When the hedge no longer meets the criteria for hedge accounting, it is prospectively discontinued and any gain or loss accumulated in shareholders' equity remains there, and, from that moment on, the respective gains and losses calculated are recognized. in the result for the period. When the planned operation is no longer expected to occur, the accumulated gains or losses that are reported in equity are immediately transferred to income and presented in "Financial income".

The market values of derivative and non-derivative financial instruments are disclosed in Note 25. The total fair value of derivative and non-derivative instruments is classified as a non-current asset or liability when the remaining maturity of the hedged item is greater than 12 months.

7. NEW TECHNICAL PRONUNCIATION

7.1. Rules in force in 2022

The following amendments to standards were adopted for the first time for the financial year beginning January 1st, 2022:

• Amendment to IAS 16/CPC 27 "Fixed Assets": the amendment prohibits an entity from deducting from the cost of fixed assets amounts received from the sale of items produced while the asset is being prepared for its intended use. Such revenues and related costs must be recognized in profit or loss for the year.

• Amendment to IAS 37/CPC25 "Provision, Contingent Liabilities and Contingent Assets": clarifies that, for the purposes of assessing whether a contract is onerous, the cost of performing the contract includes the incremental costs of performing that contract and an allocation of other costs that relate directly to its fulfillment.

• Amendment to IFRS 3/CPC 15 "Business Combination": replaces references from the old version of the conceptual framework with the most recent one issued in 2018.

• Annual improvements - 2018-2020 cycle:

(i) IFRS 9/CPC 48 - "Financial Instruments" - clarifies which rates must be included in the 10% test for analysis of write-off of financial liabilities.

(ii) IFRS 16/CPC 06 - "Leases" - amendment to example 13 in order to exclude the example of lessor payments related to improvements in the leased property.

(iii) IFRS 1/CPC 37 "Initial Adoption of International Financial Reporting Standards" - simplifies the application of said standard by a subsidiary that adopts IFRS for the first time after its parent company, in relation to the measurement of the accumulated amount of exchange rate variations.

(iv) IAS 41/CP 29 - "Biological Assets" - removal of the requirement to exclude taxes (IR/CS) from cash flow estimates when measuring the fair value of biological assets and agricultural products, thus aligning the measurement requirements of fair value in IAS 41 with those of other IFRS standards.

The changes mentioned above did not have material impacts on the Company..

7.2. Standards issued but not yet effective

The following amendments to standards were issued by the IASB but are not effective for the 2022 financial year. Early adoption of standards, although encouraged by the IASB, is not permitted in Brazil by the Accounting Pronouncement Committee (in Portuguese CPC stands for *Comitê de Pronunciamento Contábeis*):

7.2.1. Amendments to IAS 1: Classification of liabilities as current or non-current

In January 2020, the IASB issued amendments to paragraphs 69 to 76 of IAS 1, related to CPC 26, in order to specify the requirements for classifying the liability as current or non-current. The changes clarify:

- What does a right to postpone settlement mean;

- That the right to postpone must exist on the base date of the report;
- That classification is not affected by the likelihood that an entity will exercise its right of postponement
- That only if a derivative embedded in a convertible liability is itself an equity instrument would the terms of a liability not affect its classification

The changes are effective for periods beginning January 1st, 2023 and must be applied retrospectively. The changes mentioned above did not have material impacts on the Company.

7.2.2. Amendments to IAS 8: Definition of Accounting Estimates

In February 2021, the IASB issued amendments to IAS 8 (corresponding standard to CPC 23), which introduces the definition of 'accounting estimates'. The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and error correction. In addition, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments will be effective for periods beginning on or after January 1st, 2023 and will apply to changes in accounting policies and estimates that occur on or after the beginning of that period. Early adoption is permitted if disclosed. The changes are not expected to have a significant impact on the Company's individual and consolidated financial statements.

7.2.3. Amendments to IAS 1 and IFRS Practice Statement 2: Disclosure of Accounting Policies

In February 2021, the IASB issued amendments to IAS 1 (corresponding standard to CPC 26 (R1)) and IFRS Practice Statement 2 Making Materiality Judgements, which provide guides and examples to help entities apply materiality judgements to the disclosure of accounting policies. The amendments are to help entities disclose accounting policies that are more useful by replacing the requirement to disclose significant accounting policies for material accounting policies and adding guidance for how entities should apply the concept of materiality to make decisions about disclosing accounting policies.

Amendments to IAS 1 are applicable for periods beginning on or after January 1st, 2023 with early adoption permitted. Since the amendments to Practice Statement 2 provide non-mandatory guidance on applying the material definition to accounting policy reporting, an adoption date for this amendment is not required. Currently, the Company will assess the potential impact that the changes will have on practice throughout the 2023 financial year.

7.2.4. IFRS 17 - Insurance contracts

In May 2017, the IASB issued IFRS 17 - Insurance Contracts (a standard not yet issued by the CPC in Brazil, but which will be codified as CPC 50 - Insurance Contracts and will replace CPC 11 - Insurance Contracts), a new standard Comprehensive accounting for insurance contracts that includes recognition and measurement, presentation and disclosure. Once effective, IFRS 17 (CPC 50) will replace IFRS 4 - Insurance Contracts (CPC 11) issued in 2005. IFRS 17 applies to all types of insurance contracts (such as life, property and casualty , direct insurance and reinsurance), regardless of the type of entity that issues them, as well as certain guarantees and financial instruments with characteristics of discretionary participation. Some scope exceptions apply. The overall objective of IFRS 17 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements of IFRS 4, which are largely based on local accounting policies in effect in prior periods, IFRS 17 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. The focus of IFRS 17 is the overall model, complemented by:

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- A specific adaptation for contracts with direct participation features (variable rate approach).
- A simplified approach (premium allocation approach) primarily for short-term contracts.

IFRS 17 is effective for periods starting from January 1st, 2023, requiring the presentation of comparative values. Early adoption is permitted if the entity also adopts IFRS 9 and IFRS 15 on the same date or before the initial adoption of IFRS 17. This standard does not apply to the Company.

8. RISK MANAGEMENT

The Company's activities expose it to various financial risks, such as: (i) exchange rate risk, (ii) interest rate risk, (iii) credit risk, (iv) liquidity risk, (v) concentration risk, (vi) commodity price risk and (vii) other non-financial risk factors.

Risk management focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance.

8.1. Currency Risk

Currency risk is the risk of the effect of exchange rate fluctuations on the value of the Company's financial assets and liabilities or future cash flows and revenues.

For sensitivity analysis purposes, the Company adopted as scenario I (probable) the expected exchange rate at the end of the period, according to the Focus Report issued on January 20th, 2023.

	12/31/2022		Scenario I	
	US$ Thousand	R$	Rate	Gain/ (Loss) R$
Parent and Consolidated				
Accounts receivable from clients (net PECLD)	9,176	47,870	5.28	579

The Company values derivative financial instruments at fair value, using B3 as its main data source. The fair values of publicly quoted non-derivative financial instruments are based on current purchase prices. If the market for a financial asset and securities, not listed on the Stock Exchange, are not active, the Company establishes the fair value through valuation techniques. These techniques include the use of recently contracted transactions with third parties, with reference to other instruments that are substantially similar.

The Company had no outstanding derivative or non-derivative financial instruments on December 31st, 2022.

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8.2. Interest rate risk

For the balance invested on December 31st, 2022, the Company and its subsidiaries consider as scenario I (probable) the basic final interest rate for the year 2023 of 12.5% per year, according to the Focus Report of January 20th, 2023.

Interest rate risks	Closing rate 12/31/2022 – p.a.	Scenario I Most Likely
Average basic interest rate – (% p.a.)	13.75%	12.50%
Parent		
Balance of Financial Investments (notes 9 and 10)	1,100,541	1,230,725
Net effect		130,184
Consolidated		
Balance of Financial Investments (notes 9 and 10)	1,266,954	1,416,959
Net effect		150,005

For the balance of loans and borrowings as of December 31st, 2022, the Company and its subsidiaries consider as scenario I (most likely) the end TJLP (*Long Term Interest Rate*) for the year 2023 of 7.37% p.a. and for CDI (Interbank Deposit Certificate), 12.40%.

Interest rate risks	Closing Rate 12/31/2022 – p.a.	Scenario I Most Likely
Interest rate - TJLP - (% p.a.)	7.20%	7.37%
Parent:		
Balance of loans and borrowings (note 21 (ii))	13,643	14,649
Net effect	-	1,006
Interest rate - TJLP - (% p.a.)		
Consolidated:		
Balance of loans and borrowings (note 21 (ii))	251,490	270,025
Net effect	-	18,535
Interest rate - CDI - (% p.a.)	13.65%	12.40%
Parent and Consolidated:		
Balance of loans and borrowings (note 21 (ii))	89,489	100,586
Net effect	-	11,097

8.3. Credit risk

The risk arises from the possibility of the Company incurring losses resulting from the choice of assets to compose the investment portfolio, the financial capacity of the counterparties of the derivative contracts and the difficulty of receiving in the settlement of sales and the nonfulfillment of obligations for the delivery of goods or services paid through advances to suppliers.

In thousands of reais, except as otherwise indicated

The Company limits the allocation of its financial investments to each issuer of financial bills, debentures or bonds to a maximum of 30% of the volume of investments. This limit does not apply to securities issued by the National Treasury. In derivative operations, the Company works with top-notch financial institutions. The Company had no outstanding derivative transactions on December 31st, 2022.

Customer credit risk is monitored and there is no material history of losses.

Additionally, the Company maintains an adequate relationship with top-notch banking institutions for credit availability.

8.4. Liquidity risk

The Company's aim is to maintain a robust position in cash and financial investments in order to meet its financial, operational and investment commitments. The amount held in cash is intended to honor disbursements expected in the normal course of operations, while the surplus is invested in longer-term financial investments.

The Company's financial liabilities with an expiration date of more than 1 year and settled in cash are loans and financing, leases to be paid. The maturities of these liabilities are shown in Notes 21 and 22, respectively. Future disbursements of loans and financing are shown below:

Calendar Year	Parent	Consolidated
2023	53,239	98,145
2024	51,984	94,618
2025	15,804	56,257
2026	-	38,269
2027 onwards	-	161,418
Total	120,027	448,707

8.5. Concentration risk

The Company's revenues are concentrated in a few customers, which were representative in 2022. In the domestic market, for Ferrochrome, these are Aperam Inox and Magoteux Brasil and, in the foreign market, for Ferrosilicon, Marubeni Corporation and CCMA. Any reductions on demand from these customers could significantly impact the Company's cash generation capacity.

In this context, the Company has maintained a constant focus on initiatives to reduce costs with a view to increasing international competitiveness, in addition to improving its strategy of diversification in the client portfolio, with emphasis on the foreign market.

In addition, the Company has financial investments with immediate liquidity and maintains an adequate relationship with top banking institutions for credit availability.

8.6. Commodity price risk

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

8.7. Capital management

The Company manages its capital structure by monitoring the ratio between its net debt (loan and financing balances –Note no. 21 – deducted by cash and cash equivalents – Note no. 9 – and financial investments –Note no. 10) and EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization or *Lucro Antes dos Juros, Impostos, Depreciação e Amortização - LAJIDA*), based on its Financial Risk Management Policy.

The Company adopts a maximum debt limit of 1.5 x EBITDA.

8.8. Other non-financial risk factors

i. Regulatory risks: the Company is subject to strict laws and regulations at the federal, state and municipal levels. Additionally, non-compliance with these laws or regulations, or the occurrence of accidents that affect the environment, arising from the Company's operations (mining, forest resources and metallurgy), may result in sanctions of an administrative, civil and/or criminal nature with fines, obligations to indemnify and/or financial disbursements by the Company, which may adversely affect its operating results and financial condition.

ii. Environmental risks: the Company is subject to the laws and regulations relevant to the activities in which it operates, having established environmental measures and procedures aimed at mitigating this risk. Management performs periodic analyzes to identify environmental risks and to ensure that its existing systems are sufficient to manage these risks. The Company, attentive to the global problems related to the Environment and, in accordance with the environmental legislation, operates according to its environmental licenses and has the environmental management of the forestry and metallurgy areas certified by ISO 14001.

iii. Climate and nature risks: the Company's operating activities are exposed to risks of damage arising from climate change, such as high temperatures, floods and extreme rains, and risks from nature, such as damage arising from pests, diseases, forest fires and other forces of nature (mine collapses, floods, among others). The Company has processes aimed at mitigating these risks, including regular inspections in the planting areas and hiring a specialized company to analyze the structural conditions of the mine and develop contingency plans.

iv. Fair value risk of biological assets: although the biological asset is substantially planted for own consumption (bioreducer), the Company is subject to impacts on net income and, consequently, on the distribution of dividends, due to changes in the assumptions for calculating the fair value of biological assets: market prices, forest productivity, discount rates, etc. Assumptions are reviewed annually to anticipate possible impacts.

In thousands of reais, except as otherwise indicated

v. Risk of non-maintenance of tax incentives: the Company has an income tax incentive for being located in an area covered by SUDENE. In the case of ICMS, there is a benefit called ***ICMS DESENVOLVE*** that extends the deadlines for payment of 90% of the tax in up to 72 months, with a 90% discount on the extended installment if payment is made by the 20th day of the month of anticipation. If these incentives are not renewed, the Company's results will be negatively impacted.

vi. Electric energy risk: due to its electro-intensive characteristic, the Company depends on energy at prices compatible with its competitors in Brazil and abroad. To minimize exposure to energy supply or a significant increase in prices, the Company maintains a long-term contract with CHESF. On August 21st, 2015, the Company, together with other electricity-intensive companies in the Northeast of Brazil, signed an extension of the contract, whose term was extended to the year 2037. Additionally, in 2018, the Company acquired the BW Guirapá wind farm, reinforcing its intention to perpetuate its activities and also become a generator of electricity.

vii. Transport logistics risk: Chromium ore is transported approximately 390km (242mi) from the mines operated by the Company to the Metallurgical Plant, located in the municipality of Pojuca, in the State of Bahia. This freight is primarily carried out by rail, being provided by a private company, through Federal Public Concession (*Malha Centro-Leste*, Mid-East Railway), whose regulation and inspection are in charge of the National Land Transport Agency – ANTT (in Portuguese it stands for *Agência Nacional de Transporte Terrestre*). Any discontinuity in the provision of transport services by the concessionaire will oblige the Company to seek economically viable alternatives.

9. CASH AND CASH EQUIVALENTS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Cash and Banks	13,648	798	18,178	5,221
Short-term financial investments in CDB (i)	36,474	82,759	89,690	129,959
Investment funds (ii)	305,248	46,249	366,234	81,332
	355,370	129,806	474,102	216,512

(i) Bank Deposit Certificate Transactions ("CDB"), whose weighted average rate of remuneration was 102.1% of CDI (101.8% as of December 31st, 2021), whose redemption has daily liquidity without material change in the nominal value.

(ii) Securities transactions through investment funds, whose redemption has daily liquidity without material change in nominal value. The average weighted interest in mark-to-market was 111.1% of CDI (112.5% as of December 31st, 2021).

10. FINANCIAL INVESTMENTS

Parent		Consolidated	
12/31/2022	12/31/2021	12/31/2022	12/31/2021

In thousands of reais, except as otherwise indicated

Current:				
Investment funds (i)	182,838	242,346	182,838	242,346
CDB (iii)	3,466	-	3,466	-
Financial bills (iii)	130,298	97,868	130,298	97,868
Others (iv)	76,859	45,516	76,859	45,516
	393,461	385,730	393,461	385,730
Non-current:				
Investment funds (i)	-	-	30,375	28,858
Financial bills(iii)	325,325	134,611	347,161	153,692
CDB (ii)	40,033	27,816	40,033	28,859
	365,358	162,427	417,569	211,409
	758,819	548,157	811,030	597,139

(i) Transactions in securities, whose due dates exceed 90 days and the weighted average remuneration was 108.0% of CDI (101.4% as of December 31st, 2021). Although the Company and its subsidiaries select securities with liquidity on the secondary market, uncertainty regarding market conditions and prices at a liquidity event suggests that these investments are not registered as cash and cash equivalents.

(ii) Bank Deposit Certificate ("CDB") transactions with no liquidity until expiration date, whose average interest rates were 81.8% of the CDI (110.6% on December 31st, 2021).

(iii) Financial bills with weighted average remuneration, marked to market, of 108.2% of the CDI (114.5% on December 31st, 2021).

(iv) Agribusiness Receivables Certificate (CRA in Portuguese stands for *Certificado de Recebíveis do Agronegócio*), Debentures and Treasury papers with weighted average remuneration, marked to market, of 95.9% of the CDI (114,0% on December 31 st, 2021).

11. ACCOUNTS RECEIVABLE FROM CUSTOMERS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Domestic Market	154,125	233,263	164,298	242,983
Foreign Market	47,870	49,206	47,870	49,206
Allowance for doubtful debts (PECLD)	(234)	(4,186)	(234)	(4,186)
	201,761	278,283	211,934	288,003

On December 31st, 2022, the Company had R$15,931 (R$21,509 on December 31st, 2021) receivable from related parties, as per Note 29.

Accounts receivable from foreign markets are denominated in US dollars (US$), converted into Reais (R$) on the date of preparation of the financial statements. On December 31st, 2022 and December 31st, 2021, the Company did not have any operations that would generate a significant effect of adjustment to present value.

Accounts receivable by expiration date are shown below:

In thousands of reais, except as otherwise indicated

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
To expire	195,752	273,264	205,925	282,984
Expired from 0-30 days	6,009	5,019	6,009	5,019
Expired for more than 60 days	234	4,186	234	4,186
PECLD	(234)	(4,186)	(234)	(4,186)
	201,761	278,283	211,934	288,003

During the last quarter of 2022, the Company received the amount of R$3,952 from a customer in the foreign market, previously classified in the provision for doubtful accounts and carried out the due reversal. On December 31st, 2022, the Company had a provision for expected loss on doubtful accounts, in the amount of R$234 (R$4,186 on December 31st, 2021), considered sufficient to cover possible losses on accounts receivable, in accordance with internal analysis carried out by the Management.

12. INVENTORY (PARENT COMPANY AND CONSOLIDATED)

Inventories are shown at the average cost of purchases or production, lower than the replacement cost or the execution value.

	12/31/2022	12/31/2021
Current:		
Finished goods	267,470	201,886
Raw supplies	157,626	112,421
Chrome ore	55,191	42,651
Maintenance supplies (i)	98,874	64,446
	579,161	421,404
Non-current:		
Maintenance supplies (i)	15,407	13,668
Provision for obsolescence (ii)	(6,669)	(6,834)
	8,738	6,834
	587,899	428,238

(i) Inventories of maintenance supplies are classified in current or non-current assets, taking into account the history of consumption.

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

The value of the cost of goods sold is presented in explanatory note N° 33.

13. RECOVERABLE TAXES

In thousands of reais, except as otherwise indicated

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current:				
Recoverable taxes on revenue (PIS and COFINS) (i)	1,440	49,351	1,440	49,351
Income tax and social contribution (IRPJ and CSLL)	9,182	13,949	13,699	17,145
Recoverable VAT (ICMS)	2,868	2,373	2,868	2,373
Other	280	251	317	281
	13,770	65,924	18,324	69,150
Non-current:				
Recoverable VAT (ICMS)	6,597	3,744	6,597	3,744
Others	65	96	65	96
	6,662	3,840	6,662	3,840
	20,432	69,764	24,986	72,990

(i) In 2019, the Company was informed about the final and unappealable court decision, which was in progress at the Federal Regional Court of the 1st Region, which decision: (a) determined the deduction of the ICMS amount from the PIS and COFINS tax base - cumulative (Supplementary Laws 7/70 and 70/91 and subsequent amendments) and non-cumulative regimes (Laws 10.627/2002 and 10.833/03 and subsequent amendments); and (b) acknowledged the Company's right to offset the amounts unduly paid as PIS/COFINS on the ICMS-related portion since May 1997, adjusted for inflation. This credit was fully realized in the first quarter of 2022.

14. URRENT AND DEFERRED INCOME TAX AND SOCIAL CONTRIBUTION

Deferred income tax and social contribution are calculated on temporary differences between the tax bases and the carrying amounts of assets and liabilities disclosed in the financial statements. Income tax (IRPJ) is calculated at the rate of 25%, whereas social contribution (CSLL) is calculated at the rate of 9%.

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Deferred tax assets (*)				
Provision for contingencies	(60,717)	(56,492)	(60,717)	(56,492)
Provision for losses in the inventories (i)	(6,669)	(6,834)	(6,669)	(6,834)
Provision for profit sharing and employee bonus (ii)	(97,700)	(80,500)	(97,700)	(80,500)
Provision for environmental liabilities	(15,390)	(15,677)	(15,390)	(15,677)
Labor and actuarial obligations	(45,962)	(65,051)	(45,962)	(65,051)
Non-derivative financial instruments	-	(9,669)	-	(9,669)
Realization of added value	(20,986)	(16,568)	(20,986)	(16,568)
Allowance for doubtful debts PECLD	(234)	(4,186)	(234)	(4,186)
Suspended-payment taxes (PIS/COFINS)	(4,358)	(4,342)	(4,358)	(4,342)
Tax Losses	-	-	(1,567)	(2,151)
Other temporary provisions	(24,231)	(10,596)	(24,231)	(10,596)
Tax base	(276,247)	(269,915)	(277,814)	(272,066)

In thousands of reais, except as otherwise indicated

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Deferred income tax at the 25% tax rate	65,387	64,494	65,779	65,031
Deferred social contribution at the 9% tax rate	24,862	24,292	25,003	24,486
Deferred income tax and social contribution assets(A)	90,249	88,786	90,782	89,517

(i) Allowance for doubtful debts of obsolescence related to maintenance items with low turnover and allowance for doubtful debts of inventories.

(ii) The participation in the directors' profits in the amount of R$14,700 (R$11,940 as of December 31st, 2021) is based only on the calculation of the deferred CSLL. In the case of IRPJ, this is a permanent difference.

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Deferred tax liabilities (*)				
Fixed assets - “deemed cost”	58,811	58,811	63,385	63,385
Biological assets - “fair value”	72,515	67,519	72,515	67,519
Advantageous purchase	75,143	75,143	75,143	75,143
Accelerated depreciation	6,484	7,291	6,484	7,291
Tax base	212,953	208,764	217,527	213,338
Deferred income tax at the 25% tax rate	(53,238)	(52,191)	(54,382)	(53,335)
Deferred social contribution at the 9% tax rate	(19,166)	(18,789)	(19,577)	(19,200)
Deferred liabilities IRPJ/CSLL (B)	(72,404)	(70,980)	(73,959)	(72,535)
Liquid deferred IRPJ/CSLL (A+B)	17,845	17,806	16,823	16,982

(*) The balance of deferred taxes liabilities for the Consolidated for the Parent is R$17.845 (deferred taxes assets R$17,806 as of December 31st, 2021) and the balance of the subsidiaries recorded in the deferred tax liability is R$ 1,022 (deferred tax assets is R$731 and deferred tax liabilities is R$1,555 as of December 31st, 2021).

Management, based on the best estimate, in an individual analysis of the provisions, believes that it will realize the tax credits arising from temporary differences as shown below:

	Parent		Consolidated	
	IRPJ/CSLL - deferred		IRPJ/CSLL - deferred	
Calendar year	Asset	Liability	Asset	Liability
2023	41,713	281	41,713	281
2024	350	5,560	883	5,560
2025	292	9,294	292	9,294

In thousands of reais, except as otherwise indicated

2026	235	9,123	235	9,123
2027	177	1,074	177	1,074
2028 onwards	47,482	47,072	47,482	48,627
	90,249	72,404	90,782	73,959

The values of IRPJ and CSLL that affected the results of the respective exercises are shown below:

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Profit before IRPJ/CSLL	1,242,425	701,956	1,244,362	701,661
Combined IRPJ/CSLL rate	34%	34%	34%	34%
IRPJ/CSLL to the rates stipulated in the legislation	(422,425)	(238,665)	(423,083)	(238,565)
Interest on equity	40,906	25,382	40,906	25,382
Equity	54	(3,323)	-	-
Donations	(4,489)	(1,276)	(4,518)	(1,300)
Exclusion of ICMS financial income based on PIS/COFINS	-	31,235	-	31,235
Others	(4,919)	3,417	(6,967)	36
SUDENE tax incentive (i)	210,724	124,152	211,774	124,458
	(180,149)	(59,078)	(181,888)	(58,754)
IRPJ and CSLL results				
SUDENE tax incentive (i)	210,724	124,152	211,774	124,458
Current	(394,586)	(224,444)	(397,177)	(225,157)
Deferred	3,713	41,214	3,515	41,945
IRPJ and CSLL expense	(180,149)	(59,078)	(181,888)	(58,754)

(i) Due to the industrial enterprise installed in the area of operation of the Northeast Development Superintendence (SUDENE), the Company enjoys the tax benefit of reducing income tax, with a percentage reduction of 75% on income tax and additional non-refundable, incident in revenues:

- From the manufacture of ferroalloys and their by-products, from January 1st, 2015 to December 31st, 2024, according to Constitutive Report of No. 0200/2015.
- From the exploration and processing of Chrome ore and its by-products, from January 1st, 2016 to December 31st, 2025, according to Constitutive Report of No. 0131/2016.
- From the generation of electricity, from January 1st, 2018 to December 31st, 2027, according to Constitutive Reports of No. 487, 488, 489, 490, 491, 492 and 428/2018, replaced by paragraphs 291, 292, 293, 300, 301, 302, and 303/2019.

The portion corresponding to income tax reduction incentives is recognized in profit or loss and at the end of each fiscal year is transferred from accumulated profits to profit reserve (tax incentive), and cannot be distributed to shareholders. On December 31st, 2022, the Company transferred the total amount of R$226,755 (2021, R$156,856) in the parent company and R$227,804 (2021, R$157,162) in the consolidated, which correspond to: (i) SUDENE of R$210,724 (2021, R$124,152) from the parent company and R$211,774 (2021, R$124,458) from the consolidated; (ii) income tax reduction of R$219 (2021, R$219) in the parent company and consolidated; and (iii) ICMS ***DESENVOLVE*** at R$15,812 (2021, R$32,485) in the parent company and consolidated.

In thousands of reais, except as otherwise indicated

The movement of deferred taxes during 2022 and 2021 are presented below:

	Parent	Consolidated
Balance on 12/31/2020 - Deferred Taxes Assets	16,192	14,637
Recognized in other comprehensive results	(39,600)	(39,600)
Recognized in the result	41,214	41,945
Balance on 12/31/2021 - Deferred Taxes Assets	17,806	16,982
Balance on 12/31/2021 - Deferred Taxes Assets	17,806	16,982
Recognized in other comprehensive results	(3,674)	(3,674)
Recognized in the result	3,713	3,515
Balance on 12/31/2022 – Deferred Taxes Liabilities	17,845	16,823
Balance on 12/31/2022 – Deferred Taxes Assets	17,845	17,845
Balance on 12/31/2022 – Deferred Taxes Liabilities	-	(1,022)

Uncertainty about Treatment of Taxes on Income

Non-incidence of IRPJ and CSLL on the update by Selic (Brazilian basic interest rate) on the return of unduly paid taxes

On September 24th, 2021, the Federal Superior Court ("STF") judged the merits of Extraordinary Appeal (in Portuguese *RE* stands for *Recurso Extraordinário*) 1,063,187 that established the thesis of Theme No. 962 in the sense that the levy of IRPJ and CSLL on amounts relating to monetary restatement at the Selic rate received due to repetition of tax overpayment. The decision, under the general repercussion system, was unanimous among the ministers of the STF.

Although the judgment of the RE judged by the STF, published on December 16th, 2021, has not become final and the PGFN (Attorney General of the National Treasury, in Portuguese it stands for *Procuradoria-Geral da Fazenda Nacional*) is left with the possibility of filing a motion for clarification and modulation of the effects of the decision to the STF, the decision on the merits has already been favorable to all taxpayers, with no material uncertainties regarding the merits of the matter that are not under the control of the entities.

Regarding to the eventual modulation of the effects of said decision, other judgments on tax matters by the STF indicate that it is likely that taxpayers who filed their own lawsuit by September 24th, 2021, will be protected the right to refund the IRPJ and CSLL for the period of 5 years prior to the filing date of the lawsuit, even if the entities do not have their lawsuit final and unappealable.

The Company had filed a writ of mandamus in 2019, precisely aiming to question the levy of IRPJ and CSLL on the monetary restatement by Selic of tax undue debt (exclusion of ICMS from the PIS and COFINS calculation base), having made the respective judicial deposits that in December 31st, 2021 totaled R$31,373. After the injunction was denied in a sentence, the Company was successful in its appeal before the Federal Court (TRF-1), judged on April 13th, 2022, with a final and unappealable decision of the action being certified, with a favorable decision, on July 1st, 2022, after the lower court records were lowered, the amount of the judicial deposit was fully reversed in favor of the Company on 2023.

In thousands of reais, except as otherwise indicated

15. JUDICIAL DEPOSITS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Labor	558	698	567	707
Tax	45,890	44,979	45,977	45,066
	46,448	45,677	46,544	45,773

They refer to deposits associated with tax, labor and questioning processes regarding the legality and constitutionality of certain taxes, which are recorded in the Company's non-current assets, until the court decision to redeem these deposits by one of the parties involved occurs.

16. INVESTIMENTS

Bellow, a brief comment on these subsidiaries is shown below:

(i) The company *Silício de Alta Pureza da Bahia S.A.* ("Silbasa") is a privately held company, located in Pojuca-BA, is the result of a technological partnership with Marubeni Corporation, a Japanese company whose purpose is the sale of high purity ferrosilicon alloys and Japan Metals & Chems - JMC .

(ii) The company *Mineração Vale do Jacurici S.A.* ("Jacurici") is a privately held company whose corporate purpose is the research and mining of chrome ore deposits.

(iii) The company *Reflorestadora e Agrícola S.A.* ("Reflora") is a privately-held company whose purpose is the elaboration and/or execution of reforestation projects, as well as the production of bio-reducer. Since November 1997, Reflora has been leased to the Company for an indefinite period.

(iv) The company *Indústria de Minérios Damacal Ltda.* ("Damacal") is socially engaged in the seizing and exploitation of limestone deposits for the production of lime.

(v) The company *Ferbasa & CO S.A.S.* ("Ferbasa &CO"): **FERBASA** opened a wholly-owned subsidiary in the city of Bogotá. The purpose of the Colombian company is to constitute and be part of all types of companies, including sole proprietorships, as well as to open branches and agencies that are necessary for the proper development of its corporate purpose; manufacture and sale of different types of iron and iron alloys, research and exploration of mineral deposits, production and national and international sale of coal and coke, as well as carrying out any lawful activity.

Additionally, there is information about its wind energy generating subsidiary below:

BW Guirapá I S.A. is a privately held company whose corporate purpose is to hold 100% of the capital stock of the following companies ("Subsidiaries"): Central Eólica Angical S.A., Central Eólica Caititu S.A., Central Eólica Coqueirinho S.A., Central Eólica Corrupião S.A., Central Eólica Inhambu S.A., Central Eólica Tamanduá Mirim S.A. and Central Eólica Teiú S.A., whose main operating characteristics are listed below:

Wind farm	Installed capacity (MW) (*)	1st MME Authorization Ordinance (1)	Energy contracted 1st year of the 3rd	Initial Contract Price (R$/MWh)	Updated price (R$/MWh) (2)

			quadrennium (MW average) (3)		
Angical	12.95	37, de 02/03/2012	5.0	99.98	193.41
Caititu	22.2	54, de 02/09/2012	9.8	99.98	193.41
Coqueirinho	29.6	53, de 02/09/2012	12.4	96.97	187.59
Corrupião	27.75	70, de 02/22/2012	11.7	96.97	187.59
Inhambu	31.45	69, de 02/22/2012	15.0	96.97	187.59
Tamanduá Mirim	29.6	52, de 02/09/2012	12.3	96.97	187.59
Teiú	16.65	36, de 02/03/2012	7.1	99.98	193.41
	170.2		73.3		

(*) According to MME Authorization Ordinance.

(1) Authorized to establish itself as an independent electricity producer for a period of 35 years since the 1st Ordinance of the MME – Ministry of Mines and Energy. The 2nd Ordinance changed the technical characteristics to suit the reality of the parks.

(2) Value updated annually by the Extended Consumer Price Index ("IPCA") since July 2011. Values updated by CCEE base date July 2022.

(3) According to the purchase and sale agreement, the 3rd quadrennium comprises the period between July 2022 and June 2026, with each annual cycle starting in July and ending in June of the following year.

	Participation %	Assets	Liabilities	Net worth	Revenues	Expenses	Profit (losses)	Participation in shareholders' equity of subsidiaries	Company interest (equity equivalence)
December 31st, 2021									
Silbasa	51.26	2,215	35	2,180	1,000	(940)	60	1,117	31
Jacurici	100.00	26,309	1,510	24,799	1,360	(1,431)	(71)	24,799	(71)
Reflora	99.98	3,531	24	3,507	190	(95)	95	3,506	95
Damacal	100.00	2,677	278	2,399	104	(38)	66	2,399	66
Ferbasa & CO	100.00	11	-	11	-	-	-	11	-
BW Guirapá	100.00	822,574	365,366	457,208	97,652	(103,128)	(5,476)	520,678	(9,894)(*)
								552,510	(9,773)
December 31st, 2022									
Silbasa	51.26	2,622	131	2,491	894	(486)	408	1,276	209
Jacurici	100.00	27,124	1,017	26,107	4,313	(3,004)	1,309	26,107	1,309
Reflora	99.98	3,716	56	3,660	401	(201)	200	3,660	200
Damacal	100.00	2,845	306	2,539	240	(56)	184	2,539	184
Ferbasa & CO	100.00	21	84	(63)	-	(71)	(71)	(63)	(71)
BW Guirapá	100.00	826,391	366,437	459,954	116,157	(113,411)	2,746	519,006	(1,672)(*)
								552,525	159

(*) Adjusted for assets measured at fair value in the acquisition of BW Guirapá and its respective realization of the net amount of R$59,052 and R$4,418 (R$63,470 and R$4,418 on December 31st, 2021).

The movement of investments is shown below:

	Silbasa	Jacurici	Reflora	Damacal	BW Guirapá	Ferbasa & CO	Others	Total
Balances on December 31st, 2020	6,575	24,869	3,431	2,348	530,572	-	78	567,873
Equity:								
Investiment	-	-	-	-	-	11	-	11
Execution added value	-	-	-	-	(4,418)	-	-	(4,418)
Capital reduction	(2,852)	-	-	-	-	-	-	(2,852)
Dividends	(2,637)	-	(18)	(16)	-	-	-	(2,671)
Income for the year	31	(71)	95	66	(5,476)	-	-	(5,355)
Balances on September 30th, 2021	1,117	24,798	3,508	2,398	520,678	11	78	552,588
Balances on December 31st, 2021	1,117	24,798	3,508	2,398	520,678	11	78	552,588
Equity:								
Execution added value	-	-	-	-	(4,418)	-	-	(4,418)
Asset valuation adjustment						(3)	-	(3)
Dividends	(50)	-	(48)	(43)	-	-	-	(141)
Income for the year	209	1,309	200	184	2,746	(71)	-	4,577
Balances December 31st, 2022	1,276	26,107	3,660	2,539	519,006	(63)	78	552,603

In thousands of reais, except as otherwise indicated

17. FIXED, INTANGIBLE AND RIGHT OF USE FOR LEASE

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Land for planting	115,419	115,419	115,571	115,571
Land	26,357	26,357	32,127	32,127
Buildings	148,189	147,452	286,892	288,105
Machinery and Equipment	259,289	257,104	786,222	818,668
Vehicles and tractors	823	1,494	823	1,494
Furniture and utensils	2,284	2,895	2,459	3,001
Computing	3,979	3,523	4,074	3,564
Mine development	76,328	67,556	76,328	67,556
In progress and others	191,456	77,694	241,242	125,857
Total fixed assets and intangible assets (17.1)	824,124	699,494	1,545,738	1,455,943
Right of use - lease (17.2)	40,617	15,481	51,946	27,341
	864,740	714,975	1,597,684	1,483,284

The table below shows the economic useful life of the assets, and the annual depreciation rates were calculated by the linear method (Consolidated):

	Average lifespan (years)
Fixed	
Machinery and equipment	21
Vehicles and tractors	5
Buildings	25
Furniture and utensils	10
Computing	5
Others	5
Right of use on lease	
Right of use of machinery and equipment	4
Right of using the land	29
Right of using buildings	5

In thousands of reais, except as otherwise indicated

17.1. Fixed and intangible

	Parent									
	Land for planting	Land	Buildings	Machinery and equipment	Vehicles and tractors	Furniture and utensils	Computing	Mines	Fixed assets in progress, intangible assets and others	Total
Cost										
Balance on 12/31/2020	115,419	26,357	224,919	663,617	74,519	13,059	14,554	114,400	62,181	1,309,025
Additions and transfers	-	-	1,186	23,344	341	260	691	7,391	45,231	78,444
Casualties and reclassifications	-	-	-	(2,904)	(1,268)	-	-	-	-	(4,172)
Balance on 09/30/2021	115,419	26,357	226,105	684,057	73,592	13,319	15,245	121,791	107,412	1,383,297
Balance on 12/31/2021	115,419	26,357	226,105	684,057	73,592	13,319	15,245	121,791	107,412	1,383,297
Additions and transfers	-	-	9,712	37,699	9	37	1,889	14,296	116,791	180,433
Casualties and reclassifications	-	-	-	(1,001)	(1,634)	-	(26)	-	-	(2,661)
Balance on 12/31/2022	115,419	26,357	235,817	720,755	71,967	13,356	17,108	136,087	224,203	1,561,069
Accumulated depreciation and depletion										
Balance on 12/31/2020			(70,014)	(391,154)	(72,099)	(9,716)	(10,419)	(48,588)	(27,280)	(629,270)
Depreciation and depletion expense			(8,639)	(36,855)	(1,152)	(708)	(1,303)	(5,647)	(2,438)	(56,742)
Amortization Reinvestment			-	219	-	-	-	-	-	219
Casualties and reclassifications			-	837	1,153	-	-	-	-	1,990
Balance on 12/31/2021			(78,653)	(426,953)	(72,098)	(10,424)	(11,722)	(54,235)	(29,718)	(683,803)
Balance on 12/31/2021			(78,653)	(426,953)	(72,098)	(10,424)	(11,722)	(54,235)	(29,718)	(683,803)
Depreciation and depletion expense			(8,975)	(35,730)	(680)	(648)	(1,433)	(5,524)	(3,029)	(56,019)
Amortization Reinvestment			-	219	-	-	-	-	-	219
Casualties and reclassifications			-	998	1,634	-	26	-	-	2,658
Balance 12/31/2022			(87,628)	(461,466)	(71,144)	(11,072)	(13,129)	(59,759)	(32,747)	(736,945)
Net balances on 12/31/2021	115,419	26,357	147,452	257,104	1,494	2,895	3,523	67,556	77,694	699,494
Net balances on 12/31/2022	115,419	26,357	148,189	259,289	823	2,284	3,979	76,328	191,456	824,124

In thousands of reais, except as otherwise indicated

	Consolidated									
	Land for planting	Land	Buildings	Machinery and equipment	Vehicles and tractors	Furniture and utensils	Computing	Mines	Fixed assets in progress, intangible assets and others	Total
Balance on 12/31/2020										
Additions and transfers	115,571	32,127	383,032	1,386,438	83,306	13,252	14,858	114,400	76,461	2,219,445
Casualties and reclassifications	-	-	1,186	23,439	341	260	702	7,391	48,002	81,321
Balance on 12/31/2020	-	-	-	(2,917)	(1,268)	-	-	-	(97)	(4,282)
Provision for BW demobilization	-	-	-			-	-	-	33,968	33,968
Balance on 12/31/2021	115,571	32,127	384,218	1,406,960	82,379	13,512	15,560	121,791	158,334	2,330,452
Balance on 12/31/2021	115,571	32,127	384,218	1,406,960	82,379	13,512	15,560	121,791	158,334	2,330,452
Additions and transfers	-	-	10,326	47,492	9	118	1,966	14,296	121,524	195,731
Casualties				(4,477)	(1,634)	-	(26)	-	(1,271)	(7,408)
Reclassifications	-	-	-	-	-	-	-	-	(77)	(77)
Balance on 12/31/2022	115,571	32,127	394,544	1,449,975	80,754	13,630	17,500	136,087	278,510	2,518,698
<u>Accumulated depretiation and depletion</u>										
Balance on 12/31/2020			(84,912)	(510,367)	(80,886)	(9,792)	(10,669)	(48,588)	(29,295)	(774,509)
Depreciation and depletion expense			(11,615)	(74,151)	(1,152)	(719)	(1,328)	(5,647)	(3,182)	(97,794)
Casualties and reclassifications			-	840	1,153	-	-	-	-	1,993
Execution of Added value			414	(4,833)	-	-	1	-	-	(4,418)
Amortization Reinvestment				219	-	-		-	-	219
Balance on 12/31/2021			(96,113)	(588,292)	(80,885)	(10,511)	(11,996)	(54,235)	(32,477)	(874,509)
Balance on 12/31/2021			(96,113)	(588,292)	(80,885)	(10,511)	(11,996)	(54,235)	(32,477)	(874,509)
Depreciation and depletion expense			(11,953)	(72,699)	(680)	(660)	(1,458)	(5,524)	(4,791)	(97,765)
Casualties and reclassifications			-	1.852	1,634	-	27	-	-	3,513
Execution of Added value			414	(4,833)	-	-	1	-	-	(4,418)
Amortization Reinvestment			-	219	-	-	-	-	-	219
Balance on 12/31/2022			(107,652)	(663,753)	(79,931)	(11,171)	(13,426)	(59,759)	(37,268)	(972,960)

In thousands of reais, except as otherwise indicated

Net balances on 12/31/2021	115,571	32,127	288,105	818,668	1,494	3,001	3,564	67,556	125,857	1,455,943
Net balances on 12/31/2022	115,571	32,127	286,892	786,222	823	2,459	4,074	76,328	241,242	1,545,738

In thousands of reais, except as otherwise indicated

Goods offered under warranty

In the period ended December 31st, 2022, , goods of fixed assets that were offered in guarantee of loan transactions and lawsuits totaled R$43,437 (R$59,208 December 31st, 2021).

17.2. Right of use on lease

The movement of the right of use, during the quarter ended on December 31st, 2022, was as follows:

	Parent	Consolidated			
	Machinery and equipment	Machinery and equipment	Lands	Buildings	Total
Cost					
Cost on 12/31/2020	71,155	71,155	12,153	186	83,494
Addition/Remeasurement	4,231	4,231	956	(3)	5,184
Cost on 12/31/2021	75,386	75,386	13,109	183	88,678
Cost on 12/31/2021	75,386	75,386	13,109	183	88,678
Additions/Remeasurement	52,011	52,011	42	(7)	52,046
Cost 12/31/2022	127,397	127,397	13,151	176	140,724
Depretiation					
Depretiation on 12/31/2020	(40,624)	(40,624)	(799)	(68)	(41,491)
Additions	(19,281)	(19,281)	(528)	(37)	(19,846)
Depretiation on 12/31/2021	(59,905)	(59,905)	(1,327)	(105)	(61,337)
Depretiation on 12/31/2021	(59,905)	(59,905)	(1,327)	(105)	(61,337)
Additions	(26,875)	(26,875)	(530)	(36)	(27,441)
Depretiation on 12/31/2022	(86,780)	(86,780)	(1,857)	(141)	(88,778)
Net balances on 12/31/2021	15,481	15,481	11,782	78	27,341
Net balances on 12/31/2022	40,617	40,617	11,294	35	51,946

The recognized amounts of additions and remeasurement in the individual amount of R$52,011 (R$4,231 on December 31st, 2021) and consolidated amounts of R$52,046 (R$5,184 on December 31st, 2021) did not affect the cash flow statements and part of the depreciation of the right to use leased in the amount of R$3,931 (R$2,008 on December 31st, 2021) was appropriated in the cost of inventory.

18. BIOLOGICAL ASSETS (PARENT AND CONSOLIDATED)

Biological assets are represented by the forests formed and in formation, destined to the supply of wood for the production of bioreducer, which, in turn, is a raw material in the manufacture of silicon ferroalloys. The forests are located in Bahia. The movement of the balance of biological assets and the net effect of the change in fair value on profit or loss are shown below:

	12/31/2022	12/31/2021
At the beginning of the financial year	223,683	193,222
Planting and maintenance	64,519	45,802
Depletion	(49,926)	(43,143)
Fair value variation	38,003	27,802
At the end of the financial year	276,279	223,683

In thousands of reais, except as otherwise indicated

(*) In the period ended December 31st, 2022, the depletion of biological assets was R$49,926 (2021, R$43,143), with (i) R$16,918 (2021, R$13,916) referring to the historical cost; (ii) R$33,008 (2021, R$29,227) of fair value for sale/consumption. Additionally, on December 31st, 2021, there was a transfer of the fair value to the inventory in the amount of R$1,639 and on December 31st, 2022, there was the realization of the fair value of the inventory in the amount of R$1,984.

Forests under two (2) years of age are maintained at historical cost due to the Management's understanding that during this period the historical cost of the forest in formation approaches fair value.

To determine the fair value of biological assets, we used the cash flow model, whose projections are based on a single projective scenario, with productivity and eucalyptus planting area for a cutting cycle of approximately 7 (seven) years. The period of cash flows was designed according to the productivity cycle of forestry projects. The production volume of eucalyptus "standing wood" to be harvested was estimated considering the average productivity per m3 of wood of each garden at the cutting age.

The average productivity varies according to the genetic material, soil and climate and, mainly, silvicultural management. This projected volume component consists of the Average Annual Increment (IMA) by region. Annual inventories are carried out to validate growth rates.

The prices of biological assets, denominated in R$/cubic meter, are obtained from the prices practiced by the Company in sales to third parties, considering the price scenario for the allocation of eucalyptus for wood production. The discount rate used in the cash flows corresponds to the weighted average cost of capital of the Company's forest resources segment.

The estimated average standard cost includes expenses with mowing activities, chemical control of weeds-competition, combating ants and other pests, fertilization, road maintenance, inputs, services and own labor. The estimated costs for the remuneration of the own land used for cultivation were also considered.

The Company assesses the fair value of biological assets in September and updates it to December 31st of each year. The main assumptions considered in calculating the fair value of biological assets are:

	Parent and Consolidated	
	12/31/2022	12/31/2021
Effective planting area (hectare)	25,670	25,670
Annual average increment (IMA – *Incremento Médio Anual*) - m^3/hectare year	30.11	31.52
Average sales price - R$/m3	90.61	85.13
Remuneration for own land - R$/hectare	885.00	945.00
Deflated discount rate - %	7.70%	7.83%

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

In thousands of reais, except as otherwise indicated

19. SUPPLIERS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Electrical energy	26,059	20,900	26,059	20,900
Raw material and inputs	82,267	66,737	82,267	66,737
Other suppliers (i)	14,291	18,933	21,312	23,073
	122,617	106,570	129,638	110,710

(i) These are various services (consulting, transport, research and prospecting, etc.) as well as suppliers not linked to production. On December 31st, 2022, the Company had the amount of R$ 1,238 (R$ 265 on December 31st, 2021) payable to related parties, as per Note 29.

20. CASH ADVANCE FROM CUSTOMERS (PARENT COMPANY AND CONSOLIDATED)

	12/31/2022	12/31/2021
Cash advance from customers	61,209	4,889

Advances from customers refer to funds received from goods still in transit on the base date of December 31st, 2022 and December 31st, 2021 without the corresponding recognition of revenue for the year. The Company only recognizes revenue from these sales in transit when there is no longer a performance obligation to be met, therefore, when control of the products is transferred to the customer and the customer has the ability to determine their use and obtain substantially all the benefits of the product.

21. LOANS AND FINANCING

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current:				
Financings (i)	43,071	49,778	43,071	49,778
Financing BNDES BW Guirapá (ii)	-	-	27,213	25,911
Subtotal Financing	43,071	49,778	70,284	75,689
Cost of Money raising	-	-	(455)	(455)
Current Total	43,071	49,778	69,829	75,234
Non-current:				
Financings (i)	61,116	98,088	61,116	98,088
Financing BNDES BW Guirapá (ii)	-	-	210,634	236,039
Subtotal Financing	61,116	98,088	271,750	334,127
Cost of Money raising		-	(3,587)	(4,042)
Non-current total	61,116	98,088	268,163	330,085
Total	104,187	147,866	337,992	405,319

(i) Long-term third-party capital for investment in forest investment and for the acquisition of machinery and equipment allocated in metallurgy and mining.

In thousands of reais, except as otherwise indicated

(ii) Financing with the National Bank for Economic and Social Development (BNDES) raised by the subsidiary BW Guirapá and its subsidiaries on October 6, 2015 to finance the construction of wind farms. The guarantees offered for the payment of the debt were: pledge of BW Guirapá shares, pledge of credit rights (O&M contract), pledge of emerging rights (authorization of independent producer), pledge of machinery and equipment (wind turbines), fiduciary assignment of credit rights (revenues from the sale of energy and CER, and constitution of reserve accounts) and bank bail.

The table below shows the main characteristics of the debts of the Company and its subsidiaries:

Modality	Salaries	Charges (annual)	Amortization	Guarantees	Parent	Consolidated
FINAME	2021 to 2024	TJLP + 3.4% to 3.9%.	Monthly	Statutory lien	1,199	1,199
FINEM	2022 to 2025	TJLP + 2.26%	Monthly	Land mortgage	12,444	12,444
FINEM	2032	TJLP + 2.65%	Monthly	Vide (ii) above	-	237,847
				Subtotal TJLP (note 4.3)	13,643	251,490
NCE	2024	CDI + 0.70%	Annual	Export historical	56,772	56,772
CCB	2025	CDI + 1.86%	Annual	Clean	32,717	32,717
				Subtotal CDI (note 4.3)	89,489	89,489
FINAME	2022 to 2024	2.5% to 6%	Monthly	Statutory lien	1,055	1,055
				Subtotal	104,187	342,034
				(-) Cost of Money raising	-	(4,042)
				Total	104,187	337,992

As loans and financing do not have derivative financial instruments linked to them, the book value recorded on December 31, 2022 and 2021 is in line with the fair value of these debts.

The movement in loans and financing is shown below:

	Parent	Consolidated
Balances on December 31st, 2020	245,820	528,659
Money raising	2,785	2,785
Accrued interest and monetary variations	9,955	29,779
Amortization cost of funding	-	455
Interest paid	(10,218)	(30,060)
Amortization of main	(100,476)	(126,299)
Balances on December 31st, 2021	147,866	405,319
Accrued interest and monetary variations	16,029	38,856
Amortization cost of funding	-	455
Interest paid	(13,872)	(34,975)
Amortization of main	(45,836)	(71,663)
Balances on December 31st, 2022	104,187	337,992

The amounts classified in non-current liabilities are broken down as follows, by year of maturity:

Expiration year	Parent	Consolidated
2024	45,311	71,286
2025	15,805	41,780
2026	-	25,975
2027	-	25,975

In thousands of reais, except as otherwise indicated

2028 onward	-	103,147
Total	61,116	268,163

Restrictive contractual clauses – “covenants”

The Company has financings which include restrictive clauses requiring compliance with the performance of annual indices, subject to the anticipation of debt maturity in the event of non-compliance with the “covenants”.

On December 31st and December 31st, 2021, Ferbasa met the index required in the financing contracts (Finame) in which the ratio between consolidated net financial debt and EBTIDA is expected to be less than or equal to 2.5x during the entire term of the contracts.

Specifically, BW Guirapá and the Wind Power Plants are required to maintain, throughout the term of the BNDES financing agreement, a consolidated annual debt service coverage ratio (ICSD) equal to or greater than 1.30, which was met on December 31st, 2022 and December 31st, 2021. In addition, they have as relevant obligations, compliance with deadlines to start and execute the commercial operation; presentation to BNDES of the respective operating licenses; remain in good standing with the environmental bodies, CCEE, ANEEL, the MME, the National Electric System Operator (“ONS”) and/or any other bodies and entities that are part of the Direct or Indirect Public Administration; as well as adopt measures and actions aimed at preventing or correcting damage to the environment, safety and occupational medicine. These clauses were met on December 31st, 2022 and December 31st, 2021.

22. PAYABLE LEASINGS

	Parent	Consolidated			
	Machinery and Equipment	Machinery and Equipment	Lands	Buildings	Total
Balance on 12/31/2020	30,204	30,204	10,817	121	41,142
Additions/Remeasurement	4,231	4,231	956	(3)	5,184
Payments	(25,131)	(25,131)	(974)	(44)	(26,149)
Execution AVP			165		
(Adjustment to Present Value)	5,106	5,106		7	5,278
Balance on 12/31/2021	14,410	14,410	10,964	81	25,455
Balance on 12/31/2021	14,410	14,410	10,964	81	25,455
Additions/Remeasurement	52,011	52,011	42	(7)	52,046
Payments	(33,551)	(33,551)	(1,105)	(51)	(34,707)
Execution AVP (Adjustment to Present Value)	7,012	7,012	260	11	7,283
Balance on 12/31/2022	39,882	39,882	10,161	34	50,077
Current	26,643				27,417
Non-current	13,239				22,660

On December 31st, 2022, the Company estimated the discount rates, based on the risk-free interest rates observed in the Brazilian market, for the term of its contracts. At the subsidiary, the average rates for leasing machinery and equipment are 16.71% p.a. for expiration dates of up to 2 years and 17.70% p.a. for expiration dates of up to 5 years. At the subsidiary BW, the fees for operations with land and buildings are 8.65% p.a.

The amounts classified in non-current liabilities are broken down by expiration year:

In thousands of reais, except as otherwise indicated

Expiration year	Parent	Consolidated
2024	11,145	12,272
2025 to 2029	2,094	5,225
2030 to 2034	-	2,517
2035 to 2039	-	2,024
2040 to 2044	-	539
2045 onwards	-	83
Total	13,239	22,660

The table below shows the estimated value of the potential PIS/COFINS right to be recovered, which is included in the lease consideration for the Parent Company, according to the expected payment periods:

	Parent				Consolidated			
	Nominal		Adjustment to Present Value		Nominal		Adjustment to Present Value	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022	31/12/2021	12/31/2022	12/31/2021
Consideration	47,445	21,736	39,882	14,410	62,208	37,258	50,077	25,455
PIS/COFINS potential (9.25%)	4,389	2,011	3,689	1,333	5,754	3,446	4,632	2,355

In compliance with Circular Letter/CVM/SNC/SEP n° 02/2019, the Company presents the comparative balances of the lease liability, the right of use, the financial expense and the depreciation expense, considering the projected future inflation effect on cash flows of lease contracts, discounted at the nominal rate:

	2023	**2024**	**2025 onward**
Lease liability			
Accounting - IFRS 16/ CPC 06(R2)	16,201	3,115	-
Real rate (inflation effects)	16,782	3,334	-
Variation	581	219	-
Right of use – final net			
Accounting - IFRS 16/ CPC 06(R2)	11,523	1,584	-
Real rate (inflation effects)	12,128	1,794	-
Variation	605	210	-
Financial expenses			
Accounting - IFRS 16/ CPC 06(R2)	6,740	2,738	526
Real rate (inflation effects)	7,059	2,940	563
Variation	319	202	37
Depreciation expense			
Accounting - IFRS 16/ CPC 06(R2)	31,276	10,695	1,730
Real rate (inflation effects)	32,931	11,589	1,924
Variation	1,655	894	194

In thousands of reais, except as otherwise indicated

23. LABOR AND ACTUARIAL OBLIGATIONS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current:				
Salaries and wages	11,648	9,958	11,884	10,395
Labor provisions and charges	26,280	22,759	26,448	22,860
Profit sharing (i)	97,700	80,500	97,848	80,592
	135,628	113,217	136,180	113,847
Non-current:				
Labor and actuarial obligations (ii)	45,962	65,051	45,962	65,051
	181,590	178,268	182,142	178,898

(i) The Company's Bylaws establish that the profit for the year is allocated up to 10% (ten percent) for distribution to employees and up to 10% (ten percent) of the resulting balance to reward the managers. As of December 31st, 2022, the balance under the heading of management interests is R$14,700 (R$11,940 on December 31st, 2021) and the balance of the heading of employee equity is R$61,000 (R$54,560 on December 31st, 2021). Additionally, for December 31st, 2021, there was a bonus to employees in the amount of R$ 22,000 (R$14,000 on December 31st, 2021).

(ii) The Company maintains labor and actuarial obligations as follows:

a. Private pension: The Company maintains a defined contribution plan for supplementary retirement, managed by *BRASILPREV Seguros e Previdência S.A*. and assistance of the Health Insurance managed by *Bradesco Saúde*.

b. Retirement premium: The Company also stipulates an additional post-employment benefit for employees who receive a salary below the social security ceiling (maximum level) and who have worked at the Company for at least 10 (ten) uninterrupted years. This is a single payment to the employee at the end of their employment relationship.

c. FGTS fine: The Company set up a post-employment benefit provision related to the FGTS fine upon retirement for employees exposed to harmful risks (special retirement), opting for the FGTS (*Service Time Guarantee Fund*), terminated at their request, and not remaining on the occasion of their termination . These special retirees will be entitled to the benefit as if they were terminated, as long as the length of service exceeds 5 or 8 years, depending on the location where they work.

d. Healthcare: In the first quarter of 2022, there was a review and change in the rules of the Healthcare plan managed by *Bradesco Saúde*. The plan changed from a contributory to a non-contributory one, there were changes in the discounts table and the rules of permanence for the terminated and retired were revised, which caused a reduction in actuarial obligations, generating a reversal of R$ 22,056 in other operating income. Employees who join the Company as a result of the aforementioned changes will not be entitled to remain in the plan when retired or terminated. Employees with more than 30 years of uninterrupted employment, when terminated due to retirement and as long as they assume the full cost of the plan, will have the right to remain in the plan. . On the other hand, active employees before the changes, when terminated as retired or non-retired, will have the respective time limiters (1 year for each contribution year limited to 9 years and 1/3 of the contribution time with a minimum of 6 months and a maximum of 2 years, respectively) of permanence in the plan provided that the legal requirements established for such are met and assuming the full cost of the health care plan.

In thousands of reais, except as otherwise indicated

(a) The table below shows the changes in the present value of actuarial obligations (parent company and consolidated):

	Healthcare	Private Pension, retirement premium and FGTS fine	Total
Value of actuarial obligations at the beginning of the year	41,310	23,741	65,051
Current service expense and interest on the obligation recognized in profit or loss for the year	5,396	2,987	8,383
Contributions made by the employer in the year (-)	(23,668)	(2,669)	(26,337)
(Gain)/Loss on actuarial obligations	(4,994)	3,859	(1,135)
Present value of actuarial obligations at the end of the year	18,044	27,918	45,962

(b) Below are the actuarial gains and losses for the year on the present value of the defined benefit obligation, with identification of those occurring due to changes in demographic and financial assumptions and those due to experience adjustment, as well as identification of the amounts to be recognized in Other Comprehensive Income (parent company and consolidated):

	Healthcare	Private Pension, retirement premium and FGTS fine	Total
Actuarial gain/(Loss) due to change in financial assumptions	1,367	1,181	2,548
Actuarial gain/(Loss) due to experience adjustments	3,627	(5,040)	(1,413)
Amounts to be recognized in ORA at the end of the year	4,994	(3,859)	1,135

(c) Sensitivity analysis of actuarial valuation results of post-employment benefit liabilities; for this analysis, variations on the general mortality assumptions, interest rates, medical inflation and option to remain in the retirement plan were considered in relation to the baseline scenario (parent company and consolidated):

	Healthcare		Private Pension, retirement premium and FGTS fine	
	Passive	Impact	Passive	Impact
Base scenario	18,044		27,918	
Overall Mortality – 10% smoothing of death rates	18,255	1.2%	28,101	0.7%
Overall Mortality – 10% worsening in death rates	17,843	(1.1%)	27,514	(1.4%)
Real interest rates – reduction of 0.50% p.a.	18,890	5.2%	28,979	3.8%
Real interest rates – increase of 0.50% p.a.	17,183	(4.8%)	26,510	(5.0%)
Medical inflation – reduction of 1.00% p.a.	16,396	(9.1%)	-	-
Medical inflation – increase of 1.00% p.a.	19,968	10.7%	-	-

(d) Actuarial assumptions

In thousands of reais, except as otherwise indicated

	12/31/2022	12/31/2021
Expected inflation rate - % p.a.	4.00	4.00
Actual discount rate - Pension Plan - % p.a.	6.10	5.20
Actual discount rate - Health insurance cost - % p.a.	6.19	5.47
Actual discount rate - Retirement premium - % p.a.	6.07	5.18
Actual discount rate - FGTS fine - % p.a.	6.07	5.18
Turnover rate - % p.a.	5.00	5.00
Real wage growth - % p.a.	0.50	0.50
Permanence in the plan after retirement - % (indirect subsidy)	42.00	42.00
Eligibility for retirement	65 normal 25.20 and 15 special	65 normal 25.20 and 15 special

24. TAXES AND SOCIAL CONTRIBUTIONS

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current:				
IRPJ and CSLL	29,260	46,591	29,300	46,806
IPI	1,891	3,519	1,891	3,519
ICMS	12,781	8,993	12,820	8,993
IRRF to collect	4,530	3,413	4,710	3,575
PIS and COFINS	7,080	5,401	7,568	5,815
Others	2,553	1,028	2,795	1,121
	58,095	68,945	59,084	69,829
Non-current:				
PIS and COFINS	-	-	87	87
	58,095	68,945	59,171	69,916

25. DERIVATIVE AND NON-DERIVATIVE FINANCIAL INSTRUMENTS (PARENT AND CONSOLIDATED)

The Company had non-derivative financial instruments (export hedges) to minimize the risks involving the impact of exchange rate fluctuation on the conversion of its sales prices in the foreign market, in accordance with an internal policy approved by Management. In the first quarter of 2022, export restrictions were settled, which impacted financial expenses by R$9,201.

On December 31st, 2022, the Company recorded the total amount of R$9,669 (R$78,879 on December 31st, 2021) which was considered effective for hedge accounting purposes, in shareholders' equity.

During the year, derivative and non-derivative financial instruments contracts were settled, whose net losses were recognized in income, in the amount of R$9,201 (R$95,208 on December 31st, 2021).

In the fourth quarter of 2022, there was also liquidation of import restrictions to minimize the risks involving the impact of exchange rate fluctuations on the conversion of the acquisition price of equipment for mining, with no effect on the financial result. As of December 31st, 2022, the Company had no outstanding derivative and non-derivative financial instruments.

In thousands of reais, except as otherwise indicated

Information on operations with derivatives designated and not designated for hedge accounting ("cash flow hedge") on December 31st, 2021 is shown in the table below:

Derivative and non-derivative hedge instrument				Risk Object
Salaries	Operation	Notional (US$)	Fair value through other comprehensive income	Operation
1st quarter of 2022	Export hedges	8,402	(9,669)	Cash flow
	Total	8,402	(9,669)	

As it follows is the movement of derivative and non-derivative financial instruments during the period between 2022 and 2021:

Balance on December 31st, 2020 (liabilities)	(88,547)
Movement of derivative and non-derivative financial instruments	78,878
Balance on December 31st, 2021 (liabilities)	(9,669)
Movement of non-derivative financial instruments	9,669
Balance on December 31st, 2022	-

26. PROVISION FOR ENVIRONMENTAL LIABILITIES

The Company uses judgments and assumptions when measuring its obligations related to the provision for closing mines and wind farms, as well as the decommissioning of assets linked to its operations. The costs potentially covered by insurance or indemnities are not deducted from the amount provisioned, as their recovery is considered uncertain.

Decommissioning costs were measured based on information available for the costs of dismantling equipment and civil works, inflated and discounted at the average rate of capital cost of each project. Thus, the Company applied the technical interpretation ICPC 12 - Changes in Liabilities for Deactivation, Restoration and Other Similar Liabilities, recording the provision calculated from its best estimate of the costs to be incurred in the dismantling of this equipment at the end of the authorization, discounted to present value considering a long-term rate of the direct treasury discounted by inflation measured according to the IPCA.

The movements in these provisions are shown below:

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Current				
At the beginning of the year	-	-	-	579
Losses	-	-	-	(579)
Total current	-	-	-	-
Non-current				
At the beginning of the year	15,953	15,354	57,415	22,848

In thousands of reais, except as otherwise indicated

BW demobilization provision	-	-	-	33,968
Losses	(944)	(901)	(1,759)	(901)
Monetary adjustment, AVP and others	657	1,500	657	1,500
Total non-current	15,666	15,953	56,313	57,415
Total	15,666	15,953	56,313	57,415

27. PROVISION FOR CONTINGENCIES (PARENT AND CONSOLIDATED)

The Management of the Company and its subsidiaries, based on the position of its legal advisors, classified the lawsuits according to the degree of risk of loss, as follows:

	Possible		Most likely	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Tax / Administrative	28,695	31,742	48,571	46,072
Labor	896	484	7,449	6,366
Civil	465	441	4,697	4,054
	30,056	32,667	60,717	56,492

27.1. Provisioned lawsuits with a probable risk of loss

	12/31/2022	12/31/2021
Tax/Administrative:		
CFEM (i)	-	6,440
PIS and COFINS (ii)	14,536	12,934
CDE and TUST taxes (iii)	20,020	21,677
INSS over 1/3 vacation (iv)	8,547	-
Others	5,468	5,021
Labor (v)	7,449	6,366
Civil:		
Deconstitution of land deed (vi)	2,464	2,336
BW Guirapá (vii)	1,309	1,309
Others	924	409
	60,717	56,492

(i) The Company was notified, in July 2007, by the DNPM - National Department of Mineral Production (currently the National Mining Agency - ANM) to settle, in the context of administrative proceedings 971,135/2006 and 971,137/2006, the alleged debt for undue payment of the Compensation Finance for the Exploitation of Mineral Resources between January 1991 and December 2005. The main items under discussion are: (a) the incidence milestone, with the DNPM considering the stage after the electric reduction furnaces, while the Company considers the ore sintering stage; and (b) prescription/expiration. The Company filed administrative appeals requesting the nullity of the notifications and the archiving of the respective collection processes, which in the sum of the notices of infraction, totals R$80,801 (amount declared by the ANM of the debts in October 2018, updated to December 31st, 2021 in the amount of R$157,429). Having overcome the unsuccessful administrative phase, the Company filed a judicial precautionary measure -

preparatory to the main annulment action of the respective infraction notices - through which it presented a guarantee insurance for the disputed portion. ANM, in the first manifestations of the process, partially recognized the Company's right due to the statute of limitations, reducing the amount required by the CFEM debt to R$39,146. Still, the Company understands, based on the position of its legal advisors, that a substantial part of this assessment has a possible risk. Based on the position of its legal advisors, the Company had made a provision of R$6,440 on December 31st, 2021, however, during the year 2022 there was a total write-off of this amount since the amount was recognized as uncontroversial, deposited in court and it was determined the conversion into income in favor of the Union.

(ii) PIS and COFINS: The Company provisioned R$14,536 (2021, R$12,934) referring to a risk assessment carried out by Management, supported by a tax office on extemporaneous credits posted and offset with federal taxes.

(iii) The Company participates in declaratory actions with a request for advance relief filed by ABRACE - Brazilian Association of Large Industrial Energy Consumers and Free Consumers as plaintiff, through which it contests the amount calculated by ANEEL, related to the Energy Development Account - CDE (for the years 2015 and 2016) and the Tariff for the Use of the Transmission System (TUST). The Company made a provision for disputed amounts in the amount of R$19,192 (2021, R$19,192) referring to the CDE, whose enforceability is ruled out due to injunctions granted in favor of ABRACE. With regard to the TUST, in November 2019 a judgment was handed down in the respective lawsuit, which determined the revocation of the injunction that excluded the portion of remuneration from the TUST base, calculated on reversible assets, not yet amortized or depreciated, and that was appealed by ABRACE. With the revocation of the injunction, in July 2020, ANEEL reinserted the cost of equity capital and is charging over the next 3 cycles (2020 to 2023). Based on the individual calculation by company carried out by ABRACE, the Company adjusted the provision and is promoting the monthly reversal as payments are being made. As of December 31st, 2022, the Company has provisioned for the TUST in the amount of R$828 (2021, R$2,485).

(iv) On December 31st, 2022, the Company accrued the amount of R$8,547 referring to the social security contribution levied on the third of vacations, because despite the Company's debate with the Tax Authorities on a Writ of Mandamus not yet being final, Theme 985 was judged by the STF, which established the incidence of social contribution as legitimate. about the holiday third. The Theme 985 process is still pending appreciation of Motions for Clarification in the STF to establish a possible modulation of the effects of the decision. Although the discussion does not conform specifically to Items 881 and 885 of the STF and the Company does not have a res judicata, based on the aforementioned decision of the STF, as well as on the opinion of its legal advisors, the appropriate provision was recorded.

(v) Labor: The Company and its subsidiaries have several labor lawsuits brought by former employees, by employees of outsourced companies (subsidiary liability), or class actions that deal with the payment of labor rights (separation sums, overtime, additional, among others). In addition, the Company has class actions against itself, proposed by the Public Ministry of Labor, namely: (a) the Public Civil Action that questions alleged irregularity in the outsourcing of Silviculture activities and asks for the conviction of the Defendant for collective moral damages with an amount of cause declared in the initial petition updated by R$16,099 (2021, R$15,834). Considering the stage and procedural history, a provision of R$1,037 (2020, R$ 1,020) was made; and (b) the Public Civil Action that seeks to impute to the Company the responsibility for the occurrence of a fatal accident with its former employee with a value of cause declared in the updated initial petition of R$3,050 (2021, R$3,000), claiming compliance of obligations to do, in addition to payment of collective moral damages. Considering the stage and procedural history, a provision of R$305 (2021, R$300) was made. The other lawsuits have a claim amount of R$15,008 (2021, R$7,733) and considering the phase and procedural history, a provision of R$6,107 (2021, R$5,046) was made.

In thousands of reais, except as otherwise indicated

There are a total of 117 lawsuits on December 31st, 2022 (2021, 154) and the amount provisioned for those considered as a probable loss - in whole or in part - is R$7,449 (2021, R$6,336).

(vi) Deconstitution of land deed: The Company acquired, in good faith, properties in Bahia for planting eucalyptus. Even though there was no real encumbrance on these properties at the time of transfer, the Company was sued by a company seeking to annul the purchase and sale contracts for having these lands as guarantees in a bankruptcy process of former owners. The Company maintains a provision of R$2,464 (2021, R$2,336) to cover the probable losses involved in this dispute.

(vii) In the acquisition of BW Guirapá, the Company recorded a provision in the amount of R$1,309 referring to indemnification processes for damages related to the implementation of wind farms.

The movement of provisions is shown below:

	Labor	Tax	Civil	Total
Balances on December 31st, 2020	5,727	46,098	3,639	55,464
New processes/additions	828	810	415	2,053
Reversals	(189)	(1,658)	-	(1,847)
Currency updates	-	822	-	822
Balances on December 31st, 2021	6,366	46,072	4,054	56,492
New processes/additions	1,479	10,666	643	12,788
Reversals	(396)	(11,441)	-	(11,837)
Currency updates	-	3,274	-	3,274
Balances on December 31st, 2022	7,449	48,571	4,697	60,717

27.2. Risks of losses considered possible and, therefore, not provisioned for:

	Possile	
	12/31/2022	12/31/2021
Tax / Administrative	28,695	31,742
Labor	896	484
Civil	465	441
	30,056	32,667

- Tax / Administrative:

In thousands of reais, except as otherwise indicated

- IPI premium credit: This is a decision that recognized the credit right, corresponding to the IPI premium credit granted by means of a court decision fully approving the compensation requests in the updated amount of R$17,318 (2021, R$16,422). The amount was previously excluded from compensation due to alleged duplicity. Considering the initial stage of processing of the action and understanding of the Company's legal advisors on the merits of the demand, there is no amount of risk involved to be considered until the moment of issuance of these financial statements.

- Tax administrative: The Company responds to a series of questions involving payments considered to be undue or excessive and fines, largely due to differences between statements and ancillary obligations. The Company considers that part of the risk is possible, totaling R$12,909 (2021, R$18,595).

- PIS and COFINS: In the case of assessments related to PIS and COFINS for the base years 2004 and 2006, the possible risk totals R$14,983 (2021, R$12,386).

- The Municipality of Queimadas filed a fine for irregularity in its mining processes and the Company considers that part of the risk is possible, totaling R$803 (2021, R$761).

- Labor: The Company has lawsuits filed by former employees, by employees of outsourced companies (subsidiary liability) or class actions with an initial claim value of R$14,235, for which the Company's legal advisors understand that the loss is possible, and for these processes, the estimated risk is R$896 (2021, R$484).

- Civil: The Company has lawsuits for damages for moral and possessory damages filed against it, whose risk is considered possible by its legal advisors. Despite the procedural claims indicating total amounts of relevant causes, the Company, with the support of its legal advisors, considers that the possible risk totals R$465 (2021, R$441). Additionally, the lawsuit classified as a possible risk that is being processed in secrecy before the civil court of Pojuca, Bahia, filed on April 27th, 2016, has an updated claim value of R$182,821 on December 31st, 2022 (2021, R$173,358), however, considering the initial stage of processing of the action and the understanding of the Company's legal advisors on the merits of the demand, there is no value of risk involved to be considered until the moment of issuance of these financial statements.

Additionally, on September 23rd, 2022, the Company released a Notice to the Market informing that it was cited in a lawsuit whose purpose is to discuss the allocation of José de Carvalho's shares to the creation of the José Carvalho Foundation, in the 1970s. A preliminary hearing was held to attempt conciliation on December 14th, 2022, without success. The Company then filed its defense on February 1st, 2023, presenting facts and evidence that confirm its complete confidence in the groundlessness of the allegations portrayed in the action. The lawsuit classified as a “possible” risk has the value of the cause declared by the Plaintiff, in the initial petition, of R$1,771,825, however, considering the initial stage of the processing of the action and understanding of the Company's legal advisors on the merits of the demand, there is no amount of risk involved to be considered until the time of issuance of these financial statements. The Company reiterates the information that third-party conflicts with its parent company are matters beyond its control.

28. REIMBURSEMENT ACCOUNT - CCEE (CONSOLIDATED)

	Consolidated

	12/31/2022	12/31/2021
Opening balance	49,515	31,582
Reimbursement	18,015	14,897
Penalty (note No. 33)	2,443	2,651
Update	4,825	5,418
Constrained-off rollback	(1,283)	(5,033)
Final balance	73,515	49,515
Current	12,870	24,896
Non-current	60,645	24,619
	73,515	49,515

Under authorization, the BW Guirapá Wind Complex has all its production contracted for a period of twenty years with the Electric Energy Commercialization Chamber ("CCEE"), within the scope of the Reserve Auction – 2011 ("LER 2011") in the regulated environment. Reimbursement accounts – CCEE refer to the differences between the contracted amount and the amount of electricity actually generated. The calculation criteria are contractually defined, through a tolerance limit between the energy actually generated and the energy contracted, as shown below:

(a) The contractual limit accepted, without the incidence of penalties or bonuses, is equivalent to the supply of 90% to 130% of the energy contracted for one year, calculated at the end of each four-year period. In these cases, the positive or negative deviation between the energy supplied and the energy contracted is recognized in assets or liabilities, respectively, by applying the updated contractual price on the calculated MWh. Any differences between the supply of electricity and the contracted energy will be compensated for each contractual four-year term, with the first four-year term ending on June 30th, 2018 the second four-year term ended on June 30th, 2022 and the third four-year term began in July 2022.

(b) If the energy supplied is less than 90% of the contracted energy, a penalty will be applied, equivalent to the application of 115% of the current contractual price on the amount in MWh that is less than 90%. If the energy supplied exceeds 130% of the contracted energy, the Companies will receive 70% of the contracted price on the amount in MWh that exceeds 130%. In both cases, the financial settlement takes place from July of the current year until June of the following year.

Additionally, as of June 2023, the CCEE will begin reassessing the reimbursement calculations considering the energy not supplied by constrained off wind farms. The effects of constrained off will be calculated for CCEARs and CERs with the contractual year ending by September 2021. For the period from October 2021, the recalculation schedule has not yet been released, since the ANEEL Public Consultation process no. 22/2022 was not completed. The Company reflected in the segregation between current and non-current the schedule already disclosed.

29. BALANCES AND TRANSACTIONS WITH RELATED PARTIES

	Result			Assets	Liabilities
	Leasing costs (i)	Sales revenue (ii)	Other (revenues)/expenses	Leasing costs (i)	Sales revenue (ii)

In thousands of reais, except as otherwise indicated

			operational (iii)		
Parent:					
José Carvalho Foundation	-	75	9,726	13	1,238
Subsidiaries:					
BW Guirapá S.A.	-	-	(513)	-	-
Silício de Alta Pureza da Bahia S.A.	840	-	-	-	-
Mineração Vale do Jacurici S.A.	1,524	-	-	-	-
Reflorestadora e Agrícola S.A.	60	-	-	-	-
Indústria de Minérios Damacal Ltda.	36	-	-	-	-
Related party:					
Marubeni Corporation (iv)	-	562,954	-	15,918	-
Total on December 31st, 2022	2,460	563,029	9,213	15,931	1,238
Total on December 31st, 2021	1,296	319,737	8,106	21,509	265

(i) Refers to the leasing of operations of the subsidiaries.

(ii) Refers to revenue and accounts receivable from the sale of alloys (FeSi75) to the related company abroad and accounts receivable from the sale of wood, quicklime and slag dust to the Parent.

(iii) It refers to: (a) Term of Cooperation and Partnership for the reservation and guarantee of enrollments in José Carvalho Foundation schools for dependents of the Company's employees residing in the municipalities where the school headquarters are located (Pojuca, Catu and Andorinhas); (b) Agreement for socio-educational-sports training for children aged between 8 and 14, public school students, aiming at the development of learning and sports practice; (c) Term of Cooperation and Partnership for the implementation of the José Carvalho Memorial, whose objective is to preserve the memory, the cultural heritage, the existing collection, the founder's residence in life, in addition to hosting the permanent organizational culture program; (d) Infrastructure Sharing Agreement and Administrative Structure of corporate activities between Ferbasa and BW.

(iv) Maurubeni Corporation has a stake in *Silício de Alta Pureza da Bahia S.A. ("Silbasa")* in conjunction with Ferbasa and Japan Metals & Chems - JMC.

The transactions with subsidiaries below occurred during the year referring to dividends received from subsidiaries, JCP and dividends paid and payable to the parent company and investment in subsidiary:

	12/31/2022	12/31/2021
Dividends received		
Subsidiary Damacal	16	-
Subsidiary Reflora	18	-
Subsidiary Silbasa	8	61
	42	61
Dividends and JCP paid		

	12/31/2022	12/31/2021
Dividends received		
Parent José Carvalho Foundation	448,745	102,003
Dividends and JCP paid		
Parent José Carvalho Foundation	-	48,268
Investiment		
Parent Ferbasa & CO	-	11

Additionally, the Company has, in its staff, members close to the family of key management personnel, who occupy managerial positions and remuneration compatible with their respective functions. Ferbasa made payments as remuneration in the amount of R$2,590 in fiscal year 2022 (R$1,474 in fiscal year 2021).

The Company does not have guarantees granted or received to/from related parties.

29.1. Management Remuneration

Approved at the Annual Shareholders' Meeting, the global compensation of key management personnel, which includes statutory directors and officers, is shown below:

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Global Remuneration	31,167	25,841	34,666	29,996
Social security charges	3,106	2,645	3,801	3,048
	34,273	28,486	38,467	33,044

The Company and its subsidiaries do not have key personnel that are not statutory, nor do they have share-based compensation plans or other long-term benefits, in addition to that disclosed in Note No. 23.

30. NET WORTH

30.1. Share Capital

The Company's authorized capital limit is R$1,500,000 (one billion five hundred million reais). The Company's subscribed and paid-in capital stock, on December 31st, 2022 and December 31st, 2021, totals R$1,225,444 (one billion, two hundred twenty-five million, four hundred and forty-four thousand reais), with the subscribed and paid-in capital being represented by 88,320 thousand registered shares with no par value, of which 29,440 thousand are common shares and 58,880 thousand are preferred shares, distributed as follows:

12/31/2022	12/31/2021

In thousands of reais, except as otherwise indicated

Shareholders	Ordinary shares	Preferred shares	Shareholders	Ordinary shares
José Carvalho Foundation	29,086,696	15,162,000	29,086,696	15,162,000
Trígono Capital	3,000	8,296,600	464	8,051,000
Vanguard Group	-	1,525,772	-	1,405,572
Dimensional Funds	-	706,927	-	1,057,882
Outros acionistas	310,304	30,005,401	312,840	30,020,246
Other Shareholders	40,000	3,183,300	40,000	3,183,300
	29,440,000	58,880,000	29,440,000	58,880,000

The Company may, by deliberation at the General Meeting, promote the increase of the various existing types and classes, without keeping proportion with the others or create a new class of preferred shares, observing the limit of 2/3 of the total shares issued for the shares non-voting preferred shares, or subject to restrictions on such right.

30.2. Shares in treasury

The Company has shares acquired through a share buyback program. The shares acquired under the program will remain in treasury, and the decision on the sale and/or cancellation of these shares will be taken in due course and will be duly communicated to the market. The volume of treasury shares and respective market values, considering the closing price quoted on B3, is as follows:

	12/31/2022		12/31/2021	
	PN	ON	PN	ON
Number of shares in treasury	3,183,300	40,000	3,183,300	40,000
Quote on B3 – BRL/share	59.17	53.47	48.82	56.94
Average acquisition cost - BRL/share	8.07	0.06	8.07	0.06

Preferred shares are non-voting and have a statutory guarantee of payment of dividends 10% higher than those paid to holders of common shares and priority in capital reimbursement.

30.3. Profit reserves

(a) The legal reserve is constituted with an increase in capital stock and the allocation of 5% of the profit for the year, until it reaches 20% of the capital stock, and its use is restricted to offsetting losses, after the profit balances have been absorbed accrued and other profit reserves.

(b) The SUDENE tax incentive profit reserves, related to income tax, refers to the portion of the tax incentive of the income tax (exploitation profit) and ICMS DESENVOLVE related to the gain of the tax incentive of the debit balance of the tax on circulation of goods. These reserves are constituted by transferring the tax incentive portion that affected the income tax and ICMS expense for the year and cannot be distributed to shareholders. The reserve referring to SUDENE also includes the value of reinvestment of income tax.

(c) Profits, after appropriation of the legal reserve, profit reserve (tax incentive) and allocation of dividends to be distributed to shareholders, are transferred to the profit retention reserve account for investments, to be carried out in accordance with the Company's capital budget and strategic planning. In 2022, the prescribed dividends in the amount of R$1,531 (R$1,338 on December 31st, 2021) were reversed to the profit reserve account according to Law 6.404/76.

In thousands of reais, except as otherwise indicated

30.4. Other comprehensive income and equity valuation adjustment

Other comprehensive income comprises income and expense items (including reclassification adjustments), which are not recognized in the income statement as required or permitted by the pronouncements, interpretations and guidelines issued by the CPC (*Brazilian Civil Procedure*). Created by Law No. 11,638/07, the group of "Equity valuation adjustments" held in the Company's equity includes valuation adjustments with increases and decreases in assets and liabilities, when applicable, while not included in the income for the year, until their effective execution.

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Attributable cost of parent land (i)	58,811	58,811	63,385	63,385
Assigned cost of controlled land (i)	3,019	3,019	3,019	3,019
Adjustments to financial instruments (Note No. 25)	-	(9,669)	-	(9,669)
Adjustments to actuarial obligations (Note No. 23)	8,430	7,294	8,430	7,294
Asset valuation adjustments	(3)	-	(3)	-
Deferred taxes	(22,862)	(19,187)	(24,417)	(20,744)
	47,395	40,268	50,414	43,285

(i) Attributed cost of fixed assets (deemed cost) for forest land, option exercised in the initial adoption of new accounting pronouncements convergent to IFRS on January 1st, 2009.

30.5. Unearned profit reserve

The Company constituted a reserve for unrealized profits arising from the gain on advantageous purchase of the acquisition of the BW Guirapá complex in the amount of R$49,595 in the fiscal year of 2018.

30.6. Dividends and interest on equity

The Company grants its shareholders the right to receive a mandatory minimum dividend of 25% of adjusted annual net income each year. Interest on shareholders' equity is considered as distribution of profits for purposes of determining the minimum mandatory dividend. The preferred share has dividends 10% (ten percent) higher than that attributed to the common share.

Remaining as a regular payer of dividends to shareholders, the Company distributed R$448,745 in 2022, of which R$313,677 as an advance of dividends related to the 2022 profit. Additionally, the following were paid during the 2022 financial year: (i) R$86,800 as additional dividends based on profit reserve; (ii) R$42,793 as a supplement to the mandatory minimum dividends for 2021; and (iii) R$5,475 referring to the deliberated JCP supplement for the 2021 fiscal year and paid in 2022.

As decided by the Company's Board of Directors, the following distributions of supplementary dividends and interest on equity, gross of Withholding Income Tax (IRRF), respectively, were approved for the year 2022:

			Value per share (in BRL)	
Description	Date of	Value	Ordinary	Preferential

	Approval			
Interest on equity		120,313		
Regarding Fiscal Year 2022	05/30/2022	51,812	0.57145806392	0.62860387031
Regarding Fiscal Year 2022	08/29/2022	33,121	0.36530265334	0.40183291868
Regarding Fiscal Year 2022	11/29/2022	30,645	0.33799637096	0.37179600805
Regarding Fiscal Year 2022	12/12/2022	4,735	0.05222290434	0.05744519478
Dividends		322,957		
Regarding Fiscal Year 2021	04/18/2022	42,793	0.47198668558	0.51918535414
Regarding retained earnings	04/18/2022	86,800	0.95735529613	1.05309082574
Regarding Fiscal Year 2022	05/30/2022	26,620	0.29360390187	0.32296429205
Regarding Fiscal Year 2022	08/29/2022	46,879	0.51705317495	0.56875849245
Regarding Fiscal Year 2022	11/29/2022	38,600	0.42573668715	0.46831035587
Regarding Fiscal Year 2022	12/12/2022	81,265	0.89630961116	0.98594057228

	12/31/2022	12/31/2021
(=) Net income for the year	1,062,276	642,878
(-) Constitution of legal reserve (5% net income)	(53,113)	(32,144)
(-) Tax incentive reserve (SUDENE and reinvestment)	(226,755)	(156,856)
(=) Base profit adjusted for distribution (A)	782,408	453,878
Mandatory minimum dividends (25%)	195,602	113,470
Interest on shareholders' equity / dividends distributed from adjusted base earnings Common shares – R$3.4597 (2021 – R$0.8234) per share	101,715	24,207
Preferred shares – R$3.8057 (2021 - R$0.9057) per share	211,962	50,445
Total (B)	313,677	74,652
Percentage of net income adjusted for distribution (B/A)	40%	16%
Complement mandatory minimum dividends		
Common shares - R$0.00 (2021 R$0.4720) per share	-	13,876
Preferred shares – R$0.00 (2021 R$0.5192) per share	-	28,917
Total (C)	-	42,793
Total interest on equity/dividends on adjusted net income (B+C)	313,677	117,445
Percentage of adjusted net income (A/A)	40%	26%
Dividends distributed by profit reserve		
Common shares - R$0.9574 (2021 R$0.00) per share	28,146	-
Preferred shares - R$1.0531 (2021 R$0.00) per share	58,654	-
Dividends distributed by profit reserve (D)	86,800	-
(=) Total Interest on Equity / Dividends (B+C+D)	400,477	117,445

In calculating the minimum mandatory dividend supplement for December 31st, 2021, interest on gross equity was deducted from the portion referring to Withholding Income Tax (IRRF) in the amount of R$3,975.

In thousands of reais, except as otherwise indicated

31. EARNINGS PER SHARE

As defined by technical pronouncement CPC 41 - Earnings per Share, the basic calculation of earnings per share is made by dividing the net profit for the three-month period attributable to holders of common and preferred shares of the Company, by the weighted average number of common shares and preferred options available during the period. In the case of the Company, diluted earnings per share is equal to basic earnings per share, as it does not have dilutive potential common or preferred shares.

	12/31/2022	12/31/2021
Profit from operations attributable to the Parent's shareholders	1,062,276	642,878
Reconciliation of distributable income, by class (numerator):		
Attributable profit from operations:		
To common shares	344,460	208,463
To preferred shares	717,816	434,415
Weighted average number of shares, by class (denominator):		
Weighted average number of shares without shares in treasury:		
Ordinaries issued	29,400,000	29,400,000
Preferred issued	55,696,700	55,696,700
Basic results/diluted* earnings per share (in BRL)		
Ordinary shares	11.71632	7.09059
Preferred shares	12.88795	7.79965

(*) The Company does not hold any potential dilutive shares outstanding or other instruments that could result in the dilution of earnings per share.

32. NET REVENUE OF SALES

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Gross sales revenue				
Domestic Market	1,855,580	1,718,192	1,956,703	1,815,442
Foreign Market	1,614,483	929,060	1,614,483	929,060
	3,470,063	2,647,252	3,571,186	2,744,502
Sales deductions				
Returns and reductions	(46,805)	(20,392)	(46,805)	(20,392)
Sales tax	(380,773)	(330,447)	(385,365)	(334,633)
	(427,578)	(350,839)	(432,170)	(355,025)
	3,042,485	2,296,413	3,139,016	2,389,477

In thousands of reais, except as otherwise indicated

33. COSTS OF GOODS SOLD AND EXPENSES

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Cost of Goods Sold (i)	(1,650,688)	(1,313,664)	(1,724,090)	(1,383,827)
Selling Expenses	(17,083)	(18,662)	(17,083)	(18,662)
General and Administrative Expenses	(91,396)	(70,890)	(95,799)	(74,423)
Employee allowance (Note No. 23)	(22,000)	(14,000)	(22,000)	(14,000)
Employee profit sharing	(61,000)	(54,560)	(61,148)	(54,652)
Management remuneration	(34,273)	(28,486)	(38,467)	(33,044)
Total general and administrative expenses	(208,669)	(167,936)	(217,414)	(176,119)
Other revenue (expenses) (iv)	(55,955)	(33,873)	(57,463)	(37,829)
	(1,932,395)	(1,534,135)	(2,016,050)	(1,616,437)

Henceforth, the breakdown by nature of costs of goods sold and operating expenses:

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Variable costs and indirect product expenses	(1,027,272)	(782,082)	(1,032,445)	(786,683)
Personnel expenses (ii)	(430,265)	(385,976)	(438,952)	(394,094)
Depreciation and depletion expenses	(130,873)	(115,519)	(173,185)	(157,136)
Expenses with provision of services (iii)	(158,626)	(116,882)	(182,034)	(138,218)
Maintenance and repair expenses	(91,050)	(71,797)	(93,512)	(74,412)
Fuels and lubricants	(35,132)	(23,330)	(35,237)	(23,389)
Cost of idle capacity	(3,222)	(4,676)	(3,222)	(4,676)
Other revenue (expenses) (iv)	(55,955)	(33,873)	(57,463)	(37,829)
	(1,932,395)	(1,534,135)	(2,016,050)	(1,616,437)

(i) Costs of goods sold include:

a) Electricity cost for consumption in the 14 electric furnaces. In addition to electric furnaces, energy is consumed in the areas of auxiliary and other services, as well as in mining.

b) The Company imports reactive metallurgical coke (met coke) (commodity available on the international market) for the production of ferrochrome.

c) Cost of transporting Chrome ore between the mines (City of Campo Formoso) and the metallurgy (Pojuca - BA), by rail.

d) The consolidated includes the costs of depreciation, amortization, energy transmission, system use charges, operation and maintenance, etc. for the generation of wind energy in the amount of R$75,547 (R$71,134 on December 31st, 2021).

(ii) Includes personnel expenses, management fees and employee and administrators' profit sharing.

In thousands of reais, except as otherwise indicated

(iii) Expenses with the provision of services increased in the period resulting from the inflationary surge that plagues the country and affects all service provision contracts

(iv) Next, the breakdown by nature of other net income (expenses):

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Post-employment benefit (Note No. 23)	17,954	(7,717)	17,954	(7,717)
Constrained-Off Reversal (*)	-	-	1,283	5,032
Social and business responsibility	(21,294)	(10,650)	(21,382)	(10,723)
Transfer of energy	(16,583)	49	(16,583)	49
Consulting and research	(14,638)	(3,387)	(14,828)	(3,387)
Other taxes and contributions	(7,117)	(2,686)	(8,599)	(3,439)
Realization of added value	-	-	(4,418)	(4,418)
Penalty (Note No. 28)	-	-	(2,443)	(2,651)
Other expenses	(14,277)	(9,482)	(8,447)	(10,575)
	(55,955)	(33,873)	(57,463)	(37,829)

(*) In 2022, the Company reversed the provision for reimbursement and penalty in the amount of R$1,283 (2021 - R$5,032) based on ANEEL's Technical Note No. 110/2021, which established the Commercialization Rule that establishes the Methodology for Calculating Unsupplied Energy Due to Constrained-off of Wind Power Plants.

34. FINANCIAL RESULT

	Parent		Consolidated	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Financial income				
Income from financial investments (*)	120,675	24,304	139,001	30,200
Exchange variation	57,852	27,029	57,852	27,029
Other financial income	11,441	8,044	11,770	8,092
	189,968	59,377	208,623	65,321
Financial expenses				
Exchange variation	(56,954)	(21,483)	(56,954)	(21,483)
Interest incurred	(13,464)	(10,834)	(36,253)	(30,794)
Other financial expenses	(16,176)	(10,203)	(22,822)	(17,017)
	(86,594)	(42,520)	(116,029)	(69,294)
Derivative and non-derivative financial instrument				
Variation in derivative and non-derivative financial instruments asset	141	15,020	141	15,020
Variation in derivative and non-derivative financial instruments liability	(9,342)	(110,228)	(9,342)	(110,228)
	(9,201)	(95,208)	(9,201)	(95,208)
	94,173	(78,351)	83,393	(99,181)

(*) There was an increase in income from financial investments due to the increase in the amount invested and the change in the mix of financial investments with an increase in IPCA-linked securities, as well as the growth in the interest rate.

35. OPERATING SEGMENTS

Operations are managed by the executive board, led by the CEO, to comply with the guidelines established in the Company's operating and investment budget, which are approved annually by the Board of Directors. The Company proceeded with the segmentation of its operational structure, which is verticalized, taking into account the products that were commercialized:

- Ferroalloys segment - involves the operations of high carbon chrome ferroalloys, low carbon ferroalloys and chrome ferrosilicon, special silicon and standard silicon.
- Wind energy segment – involves operations of electric energy genereation of the subsidiary BW Guirapá.
    - Other - Refers to the sale of standing wood, chromium ore, chromite sand, quicklime and hydrated lime, which were not consumed in the production process of ferroalloys.

Information about the financial result (financial income and expenses), income tax and social contribution, total assets and liabilities are analyzed in a corporate manner, that is they encompass all the organization.

In thousands of reais, except as otherwise indicated

	Consolidated							
	Ferroalloys		Wind energy		Other segments		Total	
	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Liquid Sales								
Domestic Market	1,411,878	1,344,299	96,759	93,184	47,250	38,804	1,555,887	1,476,287
Foreign Market	1,583,129	878,672	-	-	-	34,518	1,583,129	913,190
	2,995,007	2,222,971	96,759	93,184	47,250	73,322	3,139,016	2,389,477
Cost of Goods Sold	(1,571,140)	(1,224,908)	(75,547)	(71,134)	(77,403)	(87,785)	(1,724,090)	(1,383,827)
Variation in the fair value of biological assets	-	-	-	-	38,003	27,802	38,003	27,802
Gross profit	1,423,867	998,063	21,212	22,050	7,850	13,339	1,452,929	1,033,452
Operational expenses	(284,246)	(220,460)	(3,230)	(4,878)	(4,484)	(7,272)	(291,960)	(232,610)
Operational result before the financial result	1,139,621	777,603	17,982	17,172	3,366	6,067	1,160,969	800,842
Product sales (tons)								
Domestic Market	141,215	160,575						
Foreign Market	128,700	111,545						
	269,915	272,120						

In thousands of reais, except as otherwise indicated

36. LONG TERM COMMITMENTS

As of December 31st, 2022, the Company has long-term commitments with suppliers in the form of take or pay with rail transport and power reserve and energy transmission contracts. The contracts provide for termination clauses and suspension of supply due to non-compliance with essential obligations. There are no liabilities recorded beyond the amount that is recognized monthly. These long-term commitments total R$83,524 in the parent company and R$86,964 in the consolidated per year.

37. INSURANCE COVERAGE

The Company and its subsidiaries have insurance coverage against equipment fire, explosions, electrical damage, vehicles, international import transport, civil and corporate liability, guarantee insurance and operational risks insurance of wind energy generation, as of December 31st, 2022 in the amount of R$170,865 (R$87,784 on December 31st,2021) in the parent company and R$1,033,503 (R$950,064 on December 31st,2021) in the consolidated.

38. TRANSACTIONS THAT DID NOT AFFECT THE CASH

During fiscal year 2022 and fiscal year 2021, the Company carried out the following transactions that did not involve cash, therefore they are not reflected in the cash flow statements.

		Parent		Consolidated	
Description	Note	12/31/2022	12/31/2021	12/31/2022	12/31/2021
Gain (loss) with actuarial liabilities	23	1,135	37,594	1,135	37,594
Provision for environmental liabilities	27(*)	-	-	-	33,968
Dividends / Interest on equity declared in the year	31.6(*)	-	48,268	-	48,275
Right of use in leases according to IFRS 16	12.2	52,011	4,231	52,011	5,184
Depreciation Right-of-use appropriate to inventory cost	17.2	3,931	2,008	3,931	2,008
Depletion appropriate to inventory cost	18(*)	1,984	1,639	1,984	1,639
Execution of Added value	17.1	4,418	4,418	4,418	4,418

(*) Notes to the Financial Statement as of December 31st, 2021

39. SUBSEQUENT EVENTS

On February 8th, 2023, the Federal Supreme Court (“STF”) considered Themes 881 and 885, which address the impacts of the decisions of the STF in relation to *res judicata*, in particular regarding the possibility of charging the Social Contribution on the Net Income (“CSLL”). In this regard, **FERBASA** has no final and unappealable decision or lawsuit questioning the non-payment of CSLL.

As mentioned in Note 27, the Company provisioned the amount of R$ 8,547 referring to the social security contribution levied on the third of vacations, because despite the Company's debate with the Tax Authorities in the Writ of Mandamus not yet having become final and unappealable, Theme 985 it was judged by the STF, which established the thesis as legitimate the incidence of the social contribution.

Additionally, **FERBASA** informs that it also did not identify the existence of other final and unappealable court decisions that contradict other decisions of the STF, handed down in direct action or with general repercussions, which is why the aforementioned decision does not imply an impact on the Company.

Accountant:
Arnaldo Pereira Anastácio
Accouting Manager
CRC-RJ 61263/O - 0-T-BA