

SUZANO

2Q24 Preview: Breaking the record for the worst timing ever

LatAm Pulp & Paper

(i) Pulp shipments expected to grow: 2,554Kt Genial Est. (+6.4% q/q; +1.6% y/y);(ii) Realized pulp prices rising in 2Q24: R\$3,468/t Genial Est. (+13.1% g/g; +22.8% y/y; (iii) Exchange rate effect driving the realized price in the paper business: R\$6.958/t Genial Est. (+3.6% q/q; -0.6% y/y); (iv) Revenue progressing double digits: R\$11.1bn Genial Est. (+17.4% q/q; +21.3% y/y); (v) Influence of Brent and stoppages on COGS/t: COGS incl. stops of R\$929/t Genial Est. (+12.3% q/q; -7.6% y/y); (vi) **EBITDA expanding considerably**: R\$5.8bn Genial Est. (+26.4% q/q; +47.0% y/y); (vii) Strong loss in bottom line, at -R\$3.0bn Genial Est. due the exchange rate variation (explained throughout the report); (viii) We see the price of BHKP decelerating in 2H24 to US\$705/t (vs. average of US\$720/t in 2Q24); (ix) Slight cash flow burn (FCFE) is expected in 2Q24, driven by the Swap marked to market and the 6th debenture settled; (x) What is the company's M&A strategy from now on? We discussed in the "Our Take" section our belief that Suzano should focus on smaller acquisitions compared to the negotiations with IP; (xi) We know that in the next 6M the shares do not have major bullish catalysts, however, by 2025 we should see a very considerable expansion of the 25E FCF yield to 13.25% (vs. 5% 24E). The fundamentals for the company are positive, since we're already factoring in our proprietary model of BHPK's fall in 2H24 and even so, the company looks discounted to us, with an EV/EBITDA 25E of 5.2x (vs. historical average of 7.5x). This leads us to reiterate our BUY rating, with a 12M Target Price of R\$72.00.

Suzano will release its **2Q24 results on August 8th**, **after the market closes**. We expect better shipment figures q/q, due to the reduction in the pace of restocking and a still justifiable demand for BHKP. Even so, excluding the seasonal factor in the y/y comparison, we expect a slight increase in volume (+1.6% y/y). In addition to improvements in shipments, the trend is for a **significant increase in net revenue**, driven by the **upward movement in the realized price** (BHKP), which should rise by +13.1% q/q and +22.8% y/y, already converted into BRL.

Table 1. Shipments Summary (2Q24 Genial Est.)

(Thousand Tonnes - kt)	Genial Est.				
Summary	2Q24E	1Q24A	% q/q	2Q23A	% y/y
Pulp Shipments	2.554	2.401	6,4%	2.513	1,6%
Paper Shipments	323	313	3,4%	294	10,0%

Source: Suzano, Genial Investimentos

Analysts

Igor Guedes

+55 (11) 3206-8286 igor.guedes@genial.com.vc

Rafael Chamadoira

+55 (11) 3206-1457 rafael.chamadoira@genial.com.vc

lagoSouza

+55 (11) 3206-8244 iago.souza@genial.com.vc

Company

SUZB3 BZ Equity

Buy

Price: R\$ 52.20 (07-Aug-2024) Target Price 12M: R\$ 72.00

SUZ US Equity

Target Price 12M: US\$ 14.30

Table 2	Income	Statement Sum	mary (2024	Genial Fst.)

(R\$ millions)	Genial Est.				
Income Statement	2Q24E	1Q24A	% q/q	2Q23A	% y/y
Net Revenue	11.304	9.459	19,5%	9.160	23,4%
Adjusted EBITDA	5.762	4.558	26,4%	3.919	47,0%
Net Income	(3.023)	220	-	5.078	-159,5%

Source: Suzano, Genial Investimentos



We project a **strong negative line for the exchange rate variation** of the debt, causing the financial result to come in at -R\$6.8bn Genial Est., which should basically remove all the good operational performance from EBITDA, **causing a reversal from net profit to a large loss**. It's important to remember that this situation **has no cash flow effect** and is part of the usual financial result dynamics for Suzano, which has ~81% of its debt in USD.

Valuation and rating. We project a realized pulp price of US\$680/t Genial Est. (+9.8% q/q; +18.9% y/y), further increasing after the USD/BRL conversion, reaching R\$3,468/t Genial Est. (+13.1% y/y; +22.8% y/y). The company had announced another price increase in April, which should take effect now in 2Q24. However, signs such as tight margins for small players in China and the entry of the Cerrado project in 2H24 indicate that **further price increases may be unfeasible from now on**, suggesting that the pulp boom cycle is probably over.

On the cost side, despite the sequential increase in the price of a barrel of Brent oil, which raises fuel and wood transportation costs, we project that the impact on COGS/t will not be fully reflected. Continuous improvements in the efficiency of the company's assets have reduced the need for chemicals and the purchase of wood from third parties. Thus, we estimate a COGS/t ex. stoppages of R\$859/t Genial Est. (+5.7% q/q; -6.5% y/y), while, when considering maintenance stoppages at Aracruz (ES), COGS/t incl. stoppages should be R\$929/t Genial Est. (+12.3% q/q; -7.6% y/y).

For the last line, we expect a strong loss of -R\$3.0bn Genial Est. in 2Q24, mainly due to the effects of exchange rate variations. This is because Suzano maintains 81% of its total debt in USD, which means that the exchange rate variation on gross debt significantly impacts net income. With the USD/BRL exchange rate reaching R\$5.56 at the end of the period, we project a negative financial result of -R\$6.8bn Genial Est. During 2Q24, Suzano carried out the early maturity of the 6th debenture and the settlement of the associated swap, resulting in a **negative effect of -R\$1.3bn** on **cash flow (FCFE)**. In addition, the company issued the 11th unsecured debenture in the amount of R\$5.9bn. We believe that these combined effects should generate a slight cash burn in the period.

While the price of pulp was surging, Suzano ventured into a negotiation for the purchase of International Paper (IP), which led to investor distrust of the company's capital allocation, causing the stock not to take advantage of the commodity's performance. This scenario, which we believe generated an excessive discount on the stock, is linked to investors' total disregard for the reduction in fixed costs through the Cerrado project, which will come in 2025.

We know that in the **next 6M the stock will not have any major upward catalysts**, but by 2025 we should see a **very considerable expansion** of the **25E FCF yield** to **13.25%** (vs. 5% 24E). The fundamentals for the company are positive, since we're already factoring in our proprietary model of BHPK's fall in 2H24 and even so, the company looks discounted to us, with an **EV/EBITDA 25E** of **5.2x** (vs. historical average of 7.5x). This leads us to reiterate our **BUY rating**, with a **12M Target Price** of **R\$72.00**.



Pulp shipments drive by with seasonal improvement and reduction in inventory levels. We are estimating pulp shipments at 2,554Kt Genial Est. (+6.4% q/q; +1.6% y/y). As in the previous quarter, the company should continue the restocking process, although we anticipate a lower intensity this time. In addition, the company faced maintenance stoppages on the Aracruz (ES) lines during 2Q24. On the other hand, the 2Qs usually already show a seasonal improvement, with the absence of the Chinese New Year (which occurs in the 1Qs, within the lunar calendar), resulting in a typical increase in volume.

Realized pulp prices are rising strongly but will probably hit the ceiling for this cycle. As for the realized pulp price, we project US\$680/t Genial Est. (+9.8% q/q; +18.9% y/y), further accelerating when observed after the USD/BRL conversion, reaching R\$3,468/t Genial Est. (+13.1% q/q; +22.8% y/y), due to the rise in the exchange rate. After several rounds of price increases announced by Suzano in 2H23 and during 1Q24 for BHKP, we saw the company announce another increase in April (+US\$80/t for North America, +US\$60/t for Europe and +US\$30/t for Asia), which should take effect now in 2Q24. It's still too early to tell, but events such as (i) smaller players in China's non-integrated paper segment experiencing tight margins, especially for tissue and (ii) the entry of Suzano's Cerrado project in 2H24 indicate that further increases may be unfeasible from now on.

Paper with a slight increase in sequential volume. We don't believe in a major sequential change in the sales pace for the paper business. From the point of view of the annual base, growth is still continuing, due to the consolidation of Kimberly-Clark's (K-C) assets in Brazil. We are projecting sales at 323Kt Genial Est. (+3.4% q/q; +10.0% y/y). Although softly, we believe that 2Q24 will already begin to show an improvement for the paper trade, linked to the tissue segment. In addition, the difference observed on a year-on-year basis is due to the addition of 130Ktpa capacity from the new mill that Suzano acquired from K-C in Brazil.

USD/BRL conversion will help boost realized prices in the paper business. Nevertheless, we also see a stable trend for the realized price in the paper business segment in USD. We are estimating a price of R\$6,958/t Genial Est., with growth of +3.6% q/q, and a slight contraction of -0.6% y/y. We estimate this sequential increase due to the exchange rate effect, with the USD/BRL conversion on shipments to foreign markets.

Net revenue up by double digits. We expect consolidated revenue of R\$11.1bn Genial Est. (+17.4% q/q; +23.4% y/y), with a very satisfactory level of expansion, both sequentially and y/y. We can attribute this result to two factors: (i) very favorable conditions for numerous rounds of price pass-throughs made between 2H23 and 1H24 and (ii) exchange rate variation, with the USD/BRL exchange rate reaching R\$5.21 vs. R\$4.95 (+5.3% vs. 1Q24). Our projection indicates an increase of +23.0% q/q and +27.5% y/y for pulp net revenue, reaching R\$9.0bn Genial Est. The paper segment appears calculated in our model with net revenue of R\$2.2bn Genial Est (+7.2% q/q; +9.3% y/y).



Table 3. Revenue Suzano (2Q24 Genial Est.)

(R\$ millions)	2Q24E Genial Est.	1Q24 Reported	% q/q	2Q23 Reported	% y/y
Net Revenue	11.304	9.459	19,5%	9.160	23,4%
Pulp	9.054	7.360	23,0%	7.101	27,5%
Paper	2.250	2.099	7,2%	2.058	9,3%

Source: Suzano, Genial Investimentos

Influence of Brent and stoppages on COGS/t. Despite the sequential increase in the price of Brent oil, which is expected to increase fuel costs and, consequently, the cost per km of transporting wood, we believe that the impact on COGS/t will be minimal. This is due to the company's continuous improvements in asset efficiency, which reduce the need for chemicals and the purchase of wood from third parties. We therefore project a COGS/t ex. stoppages of R\$859/t Genial Est. (+5.7% t/t; -6.5% y/y). When we add the stoppages that occurred on the Aracruz (ES) lines during 2Q24, we find a COGS incl. stoppages of R\$929/t Genial Est., an increase of +12.3% t/t, despite the slowdown of -7.6% y/y. Our model indicates a total nominal COGS of R\$6.3b Genial Est. (+10.2% t/t; +0.8%).

EBITDA expanding almost +50% y/y. We project consolidated EBITDA of R\$5.8bn Genial Est., evolving +26.4% q/q and +47.0% y/y. The business unit that contributes most to the increase seen in our model is pulp, which stands with an EBITDA of R\$5bn Genial Est. (+28.6% q/q; +57.4% y/y). The paper business unit comes in at R\$743mn Genial Est. (+13.3% q/q; +1.9% y/y). Just as we explained in the dynamics for net revenue, we attribute this pulp performance to the price increases made after the global commodity market conjunctures, which allowed these successions of transfers (disruption in the supply system in Finland and increased demand in China).

Table 4. EBITDA Suzano (2Q24 Genial Est.)

	2Q24E	1Q24		2Q23	
(R\$ millions)	Genial Est.	Reported	% q/q	Reported	% y/y
Adjusted EBITDA	5.762	4.558	26,4%	3.919	47,0%
Pulp	5.019	3.902	28,6%	3.190	57,4%
Paper	743	656	13,3%	729	1,9%

Source: Suzano, Genial Investimentos

Strong loss, caused by exchange rate variation. Our projection points to a strong loss in 2Q24. Due mainly to the effects of exchange rate variations, we expect a loss of -R\$3.0bn Genial Est. Suzano maintains 81% of the company's total debt in USD (89% considering the effect of the hedge). Therefore, the exchange rate variation on gross debt will pass through the P&L, affecting net income. The USD/BRL EoP exchange rate reached R\$5.56 (vs. R\$5.00 in 1Q24), accelerating +11.3% q/q. That said, we project a financial result of -R\$6.8bn. This strong impact of the exchange rate variation has no cash flow effect, so it doesn't imply a significant reduction in FCF or in the valuation level.



Table 5. Income Statement Suzano (2Q24 Genial Est.)

(R\$ millions)	2Q24E Genial Est.	1Q24 Reported	% q/q	2Q23 Reported	% y/y
Net Revenue	11.304	9.459	19,5%	9.160	23,4%
COGS	(6.279)	(5.700)	10,2%	(6.228)	0,8%
Adjusted EBITDA	5.762	4.558	26,4%	3.919	47,0%
EBITDA Margin (%)	51,0%	48,2%	2,79p.p	42,8%	8,19p.p
EBIT	3.735	2.552	46,3%	3.069	21,7%
EBIT Margin (%)	33,0%	27,0%	6,06p.p	33,5%	-0,46p.p
D&A	(2.027)	(1.982)	2,3%	(1.846)	9,8%
Financial Result	(6.758)	(3.040)	122,3%	4.536	-
Net Income	(3.023)	220	-	5.078	-
Net Margin (%)	-26,7%	2,3%	-29,07p.p	55,4%	-82,18p.p

Source: Suzano, Genial Investimentos

Our take on Suzano

Is the pulp bullish cycle over? The pulp business has been in a positive trend recently, driven by (i) supply restrictions in Finland and (ii) the reheating of demand in China and Europe. From the end of 2023 until 1H23, these factors created a bullish cycle for pulp prices, significantly benefiting companies in the sector, including Suzano. However, we believe that this growth phase may be coming to an end, and we therefore expect a slowdown in 2H24. We consider the possibility of further increases in pulp prices to be remote, and it is likely that prices will begin to fall slightly in the coming months. Small paper producers in China, especially those focused on tissue, are facing tight margins, making it difficult to continue to pass on prices. In addition, the entry of the Cerrado project into the market in 2H24, even in the initial ramp-up phase, will add a significant supply of pulp, putting further pressure on commodity prices.

New supply additions in 2H24 should push the break-even point in pulp prices downwards. According to our estimates, 2H24 could see a total supply of ~28Mt of market pulp, if we check the additions of new capacities to the supply system for the coming months. If they are launched, we believe that competition in the market will intensify. The main projects include: (i) Suzano's Cerrado in Mato Grosso do Sul (MS), which started up in July and has +2.55Mtpa of BHKP after full ramp up, adding +22% capacity in the largest global hardwood pulp player, as well as (ii) +1.8Mtpa in a project in China, in Fujian, which will start up soon. Our analysis suggests that global production could increase by +12% in 2H24 vs. 1H24, with pulp imports to China reaching half of this increase (+6% vs. 1H24).



On the demand side, we expect economic improvements for retail activities in China to gently boost pulp consumption, especially after the recent drop in the short-term interest rate (-0.10p.p cut in the 1-Y LPR, to 3.35%). In general, however, we maintain our view, which has been widespread since the beginning of the year, that the pulp market will increase oversupply in 2H24. We project **supply to increase by +7.8% y/y** to ~28Mt, while **demand may only rise by +4.5%** to ~22Mt. The imbalance between supply and demand should push the **equilibrium price down** to **US\$705/t in 4Q24** vs. the average of ~US\$720/t in 2Q24 for BHKP China.

Suzano vs. Klabin: Which should do better in 2H24? Given this scenario, our expectation is that Suzano's shares will not rise in the short term and will remain sideways. The high correlation between the company's results and the pulp prices indicates that, with BHKP's downward trend expected in 2H24, Suzano's results are likely to slow down. However, we believe that the market is underestimating the cost efficiencies that the Cerrado project could bring from 2025 onwards.

Caution is recommended for investors at the moment, as the pulp market is likely to go through a period of cycle transfer, moving from a bullish moment to a period of slightly cooler prices. Fundamentally, we feel that **Suzano's shares are overly discounted when attributing cost dilution** through the Cerrado project, even with the potential fall in the price of BHKP. We project that the reduction in **COGS/t should reach ~R\$500/t by 2025E** (vs. ~R\$850/t currently), which implies a **sharp rise** in the **25E FCF yield** to **13.25%** (vs. 5% 24E). However, the **cost reduction will still take a few months to show up in the results**, given the level of ramp-up that the Ribas do Rio Pardo (MS) plant needs to reach in order to produce this effect.

On the other hand, we have always been categorical in recommending an allocation bias to investors in each of the companies at the most opportune moments. When there are prospects of a fall in the pulp prices, as we see for 2H24, Suzano's results tend to slow down much more than Klabin's. Investors who wish to remain in the sector are more likely to invest in Klabin. Investors who want to stay in the sector have more reason to buy Klabin now than Suzano (even though Suzano is also heavily discounted).

We project a slight FCFE burn. Swap disarmament of the 6th debenture settled. During 2Q24, the company settled the 6th debenture early. It also settled the swap associated with this debenture, which should result in a negative effect of -R\$1.3bn on FCFE. We understand that, as the debenture was repurchased, the structure that ensured the exchange rate hedge for this debt ceased to exist and, therefore, was settled by marking to market. As the USD/BRL was more depreciated in the past, now settled at a more appreciated exchange rate, there is a discount since the debenture was issued in BRL. On the other hand, the company even issued an 11th unsecured debenture worth +R\$5.9bn. We believe that all these effects combined could lead to a slight FCFE burn in 2Q24, given an estimated CAPEX of R\$3.9bn.



What is the company's M&A strategy from now on? In inorganic growth, Suzano has shifted to focused on diversifying its portfolio, in an attempt to increase its participation in the paper sector, to reduce the volatility associated with the pulp market and provide greater stability to EBITDA. We see this movement, as long as it is smooth and does not affect the deleveraging process, as something very positive for the investment thesis. Although we believe that there are no major acquisitions on the horizon, the company remains active in the search for new growth opportunities, albeit in smaller proportions compared to the potential deal with International Paper (IP), which was once thought to be between US\$15-20bn. Following the withdrawal from the IP purchase, officially announced by Suzano at the end of June, in July the company announced the purchase of assets from Pactiv Evergreen (manufacture of coated and uncoated paperboard), for US\$110mn (much less than it would have paid for IP).

Breaking the record for the worst time. While the pulp price was riding successive rounds of highs, Suzano ventured into a round of negotiations to try to buy International Paper (IP), which led to investor distrust in deleveraging, causing the stock to fail to take advantage of the commodity's bullish performance at the time. The lack of confidence in the allocation of capital was such that Suzano lost ~20% of its market value during the time it tried to negotiate the purchase with IP. In addition to other secondary issues, the biggest concern for investors was the change in narrative.

The consensus is that there will be **strong FCF generation in 2025**, given the rampup of the Cerrado project, and this would be in line with the expectation of reducing leverage, which would have **reached its peak in 1Q24**, at **3.5x Net Debt/EBITDA**. The **(i)** reduction in leverage + **(ii)** strong FCF could result in Suzano remunerating its shareholders through a **share buyback or dividend program**. This was the consensus expectation for 2025 (we slightly disagree with this line, as we never believed that Suzano would pay strong dividends). If Suzano had managed to engage in a deal with IP, this consensus expectation would not have materialized. The possible frustration caused **several investors to exit their positions in the shares**, leading to an intense fall between May and June.

Now, even though Suzano has officially given up on acquiring IP, all this discussion has taken the shine off the shares just when pulp price transfers were underway in 1H24. For this reason, we believe that the company was unable to make use of the right timing for the case in the short term to have a more bullish bias, as we expected before the IP acquisition rumor surfaced. Thus, taking the opportunity to refer to the Paris 2024 Olympics, we believe that Suzano broke the record for the worst possible timing, since in 2H24 the price of pulp is expected to fall (as we explained above) and during 1H24, when the cycle was favorable for the commodity, investors were weighing the IP deal more heavily than the pulp price. This scenario, which we believe generated an excessive discount on the stock, is still linked to a vestige of investor distrust over capital allocation, plus the expectation of the end of the bullish pulp cycle. However, from a fundamentalist point of view, the shares are still heavily discounted, linked to the reduction in fixed costs through the Cerrado project, which should only come more strongly during 2025. With an EV/EBITDA 25E of 5.2x (vs. historical average of 7.5x), we reiterate our **BUY rating**, with a **12M Target Price** of **R\$72.00**.



Appendix: Suzano

www.bancogenial.com

Figure 1. Suzano - Income Statement in R\$ Millions (Genial Est. 2024-2028)

Income Statement	2024E	2025E	2026E	2027E	2028E
Net Revenue	44.034	51.068	53.783	56.737	57.702
(-) COGS	(27.659)	(31.324)	(31.487)	(30.557)	(30.374)
Gross Profit	16.375	19.745	22.297	26.180	27.328
(-) Expenses	(5.251)	(6.155)	(6.620)	(7.074)	(7.191)
Adjusted EBITDA	18.953	21.703	23.749	27.164	28.172
(-) D&A	(7.829)	(8.113)	(8.072)	(8.059)	(8.035)
EBIT	11.124	13.590	15.677	19.105	20.137
(+/-) Financial Result	(5.031)	(1.661)	(3.534)	(1.342)	143
(-) Taxes	(1.024)	(2.006)	(2.042)	(2.987)	(3.410)
Net income	5.068	9.923	10.101	14.776	16.870
Profitability					
Net margin (%)	11,51%	19,43%	18,78%	26,04%	29,24%

Figure 2. Suzano- Cash Flow in R\$ Millions (Genial Est. 2024-2028)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E
Net Revenue	44.034	51.068	53.783	56.737	57.702
(-) COGS	(27.659)	(31.324)	(31.487)	(30.557)	(30.374)
Adjusted EBITDA	18.953	21.703	23.749	27.164	28.172
EBIT	11.124	13.590	15.677	19.105	20.137
(-) Taxes	(1.024)	(2.006)	(2.042)	(2.987)	(3.410)
(+) D&A	7.829	8.113	8.072	8.059	8.035
(+/-) ∆ WK	(867)	(634)	(474)	(114)	(116)
(-) Capex	(13.547)	(8.244)	(8.065)	(7.791)	(7.954)
FCFF	3.514	10.818	13.169	16.273	16.692



Disclosure Section

1. GENERAL DISCLAIMER

This report has been produced by the research department ("Genial Institutional Research") of Genial Institutional Corretora de Câmbio, Títulos e Valores Mobiliários S.A. ("GENIAL INSTITUTIONAL CCTVM"). Genial Institutional is a brand name of Genial Investimentos CCTVM.

Genial Rating

	Definition	Coverage
Buy	Expected return above +10% in relation to the Company's sector average	49%
Neutral	Expected return between +10% and -10% relative to the Company's industry average	41%
Sell	Expected return below -10% in relation to the Company's sector average	5%
under Review	Under review	5%

This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of GENIAL INSTITUTIONAL CCTVM. GENIAL INSTITUTIONAL CCTVM accepts no liability whatsoever for the actions of third parties in this respect.

This research report is for distribution only under such circumstances as may be permitted by applicable law. This research report has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient, even if sent only to a single recipient. This research report is not guaranteed to be a complete statement or summary of any securities, markets, reports or developments referred to in this research report. Neither GENIAL INSTITUTIONAL CCTVM nor any of its directors, officers, employees or agents shall have any liability, however arising, for any error, inaccuracy or incompleteness of fact or opinion in this research report or lack of care in this research report's preparation or publication, or any losses or damages which may arise from the use of this research report

GENIAL INSTITUTIONAL CCTVM may rely on information barriers, such as "Chinese Walls" to control the flow of information within the areas, units, divisions, groups, or affiliates of GENIAL INSTITUTIONAL CCTVM.

Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the U.S. Securities and Exchange Commission. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the United States.

The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments.

Past performance is not necessarily a guide to future performance and no representation or warranty, express or implied, is made by GENIAL INSTITUTIONAL CCTVM with respect to future performance. Income from investments may fluctuate. The price or value of the investments to which this research report relates, either directly or indirectly, may fall or rise against the interest of investors. Any recommendation or opinion contained in this research report may become outdated as a consequence of changes in the environment in which the issuer of the securities under analysis operates, in addition to changes in the estimates and forecasts, assumptions and valuation methodology used herein.

The locally listed shares of Brazilian companies may only be purchased by investors outside of Brazil who are "eligible investors" within the meaning of applicable laws and regulations.



2. ANALYST(S) DISCLOSURES AND CERTIFICATION

The principal analyst, IGOR GUEDES, is responsible for the content of this report and for meeting the requirements of Securities and Exchange Commission of Brazil (CVM) Instruction 598/2018.

The analysts hereby certify that the views expressed in this research report accurately reflect their personal views about the subject securities or issuers and it was prepared in an independent manner, including with respect to the person and to GENIAL INSTITUTIONAL.

The analyst hereby certifies that he (she) has no connection with any individual who works for the issuer(s) discussed in this report.

The analyst hereby certifies that he (she), or his (her) spouse or companion, either directly or indirectly, in his or her own name or on behalf of a third party, does not hold any of the securities covered in this report.

The analyst hereby certifies that he (she), or his (her) spouse or companion, is not directly or indirectly involved in the purchase, disposal or brokering of the securities covered in this report.

The analyst hereby certifies that he (she), or the his (her) spouse or companion, has no direct or indirect financial interest in the issuer covered in this report (other than trading shares in investment funds, in which the analyst cannot control, directly or indirectly, the administration or management of the fund, or which do not concentrate investments in sectors or companies that are covered by reports produced by the analyst).

The analyst's compensation is, directly or indirectly, determined by income from GENIAL INSTITUTIONAL's business and financial operations.

In addition, the analysts certify that no part of their compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

The compensation of the analyst who prepared this report is determined by research management and senior management (not including investment banking). Analyst compensation is not based on investment banking revenues, however, compensation may relate to the revenues of GENIAL INSTITUTIONAL CCTVM, its affiliates and/or subsidiaries as a whole, of which investment banking, sales and trading are a part. Compensation paid to analysts is the sole responsibility of GENIAL INSTITUTIONAL CCTVM.

The analyst hereby certifies that he (she), or his (her) spouse or companion, does not serve as an officer, director, or advisory board member of the subject company.

The principal analyst is responsible for the content of this report and for meeting the requirements of Securities and Exchange Commission of Brazil (CVM) Instruction 598/2018.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.



3. ADDITIONAL DISCLOSURE

- (i) This document was prepared by GENIAL INSTITUTIONAL Research and is hereby supplied for the sole purpose of providing information about companies and their securities.
- (ii) The information contained herein is provided for informational purposes only and does not constitute an offer to buy or sell, and should not be construed as a solicitation to acquire, any securities in any jurisdiction. The opinions expressed herein regarding the purchase, sale or holding of securities, or with respect to the weighting of such securities in a real or hypothetical portfolio, are based on careful analysis by the analysts who prepared this report and should not be construed by current or future investors as recommendations for any particular investment decision or action. The investor's final decision should be made considering all of the risks and fees involved. This report is based on information obtained from primary or secondary public sources, or directly from companies, and is combined with estimates and calculations prepared by GENIAL INSTITUTIONAL CCTVM. This report does not purport to be a complete statement of all material facts related to any company, industry, security or market strategy mentioned. The information has been obtained from sources believed to be reliable, but GENIAL INSTITUTIONAL CCTVM does not make any express or implied representation or warranty as to the completeness, reliability or accuracy of such information. The information, opinions, estimates and projections contained in this document are based on current data and are subject to change. Prices and availability of financial instruments are indicative only and subject to change without notice. GENIAL INSTITUTIONAL CCTVM is under no obligation to update or revise this document or to advise of any changes in such data.
- (iii) The securities discussed in this report, as well as the opinions and recommendations contained herein, may not be appropriate for every type of investor. This report does not take into account the investments objectives, financial situation or particular needs of any particular investor. Investors who wish to buy, sell or invest in securities that are covered in this report should seek independent financial advice that takes individual characteristics and needs into consideration, before making any investment decision with respect to the securities in question. Each investor should make independent investment decisions after carefully analyzing the risks, fees and commissions involved. If a financial instrument is denominated in a currency other than an investor's currency, changes in exchange rates may adversely affect the price or value of, or the income derived from the financial instrument, and the reader of this report assumes all foreign exchange risks. Income from financial instruments may vary, and therefore their price or value may rise or fall, either directly or indirectly. The information, opinions and recommendations contained in this report do not constitute and should not be interpreted as a promise or guarantee of a particular return on any investment. Past performance does not necessarily indicate future results, and no representation or warranty, express or implied, is made herein regarding future performance. Therefore, GENIAL INSTITUTIONAL CCTVM, its affiliated companies, and the analysts involved in this report take no responsibility for any direct, indirect or consequential loss resulting from the use of the information contained in this report, and anyone using this report undertakes to irrevocably indemnify GENIAL INSTITUTIONAL CCTVM and its affiliates from any claims and demands.
- (iv) Prices in this report are believed to be reliable as of the date on which this report was issued and are derived from one or more of the following: (i) sources as expressly specified alongside the relevant data; (ii) the quoted price on the main regulated market for the security in question; (iii) other public sources believed to be reliable; or (iv) GENIAL INSTITUTIONAL CCTVM's proprietary data or data available to GENIAL INSTITUTIONAL CCTVM.



- (v) No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein, except with respect to information concerning GENIAL INSTITUTIONAL CCTVM, its subsidiaries and affiliates. In all cases, investors should conduct their own investigation and analysis of such information before taking or omitting to take any action in relation to securities or markets that are analyzed in this report.
- (vi)GENIAL INSTITUTIONAL CCTVM makes no representations herein that investors will obtain profits. GENIAL INSTITUTIONAL CCTVM will not share with investors any investment profits nor accept any liability for any investment losses. Investments involve risks and investors should exercise prudence in making their investment decisions. GENIAL INSTITUTIONAL CCTVM accepts no fiduciary duties on behalf of recipients of this report and in communicating this report is not acting in a fiduciary capacity. This report is not to be relied upon in substitution for the exercise of recipient's independent judgment. Opinions, estimates, and projections expressed herein constitute the current judgment of the analyst responsible for the substance of this report as of the date on which the report was issued and are therefore subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of GENIAL INSTITUTIONAL CCTVM as a result of using different assumptions and criteria. The information, opinions and recommendations contained in this report do not constitute and should not be interpreted as a promise or guarantee of a particular return on any investment.
- (vii)Because the personal views of analysts may differ from one another, GENIAL INSTITUTIONAL CCTVM, its subsidiaries and affiliates may have issued or may issue reports that are inconsistent with, and/or reach different conclusions from, the information presented herein. Any such opinions, estimates, and projections must not be construed as a representation that the matters referred to therein will occur. Prices and availability of financial instruments are indicative only and subject to change without notice. Income from financial instruments may vary, and therefore their price or value may rise or fall, either directly or indirectly.
- (viii) This document may not be: (a) photocopied or duplicated in any manner, in whole or in part, and/or (b) distributed without GENIAL INSTITUTIONAL CCTVM's prior written consent. GENIAL INSTITUTIONAL CCTVM accepts no liability whatsoever for the actions of third parties in this respect.
- (ix) Neither GENIAL INSTITUTIONAL CCTVM nor any of its affiliates, nor any of their respective directors, employees or agents, accepts any liability for any loss or damage arising out of the use of all or any part of this report.
- (x) GENIAL INSTITUTIONAL CCTVM (or its affiliates, officers, directors or employees) may, to the extent permitted by law, have acted upon or used the information herein contained before the publication of this report and may have a position in securities issued by the companies mentioned herein and may make a market or act as a principal in any transactions in any such securities. Genial Institutional may from time to time perform investment banking or other services to, or solicit investment banking or other business from, the companies mentioned herein.



4. IMPORTANT DISCLOSURES FOR U.S. PERSONS

This research report was prepared by Genial Institutional CCTVM, a company authorized to engage in securities activities in Brazil. Genial Institutional CCTVM is not a registered broker-dealer in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and is not being provided pursuant to a soft-dollar arrangement.

Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Brasil Plural Securities LLC, a registered broker dealer in the United States with an office at 545 Madison Ave., New York, NY 10022, (212) 897-3737. Under no circumstances should any recipient of this research report effect any transaction to buy or sell securities or related financial instruments through Genial Institutional CCTVM.

Brasil Plural Securities LLC accepts responsibility for the contents of this research report, subject to the terms set out below, to the extent that it is delivered to a U.S. person other than a major U.S. institutional investor.

The analyst whose name appears in this research report is not registered or qualified as a research analyst with the Financial Industry Regulatory Authority ("FINRA") and may not be an associated person of Brasil Plural Securities LLC and, therefore, may not be subject to applicable restrictions under FINRA Rules on communications with a subject company, public appearances and trading securities held by a research analyst account.

The disclosures contained in research reports produced by GENIAL INSTITUTIONAL CCTVM and distributed by Brasil Plural Securities LLC in the U.S. shall be governed by and construed in accordance with U.S. law. This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of GENIAL INSTITUTIONAL CCTVM. Additional information relative to the financial instruments discussed in this report is available upon request.

UK Disclaimer:

- (i) This document is STRICTLY CONFIDENTIAL to the recipient, may not be distributed to the press or other media and may not be reproduced in any form. this document is directed only at persons who are "INVESTMENT PROFESSIONALS" falling within article 19(5) of the FSMA 2000 (FINANCIAL PROMOTION) ORDER 2005, or HIGH NET WORTH BODIES falling within ARTICLE 49(2) of that order (together THE "RELEVANT PERSONS"). This document must not be acted on or relied on by persons who are not RELEVANT PERSONS.
- (ii) The distribution of this document in other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of any such other jurisdiction.

Copyright 2023 GENIAL GENIAL INSTITUTIONAL CCTVM