genial | Equity Research

VALE

Mariana settlement: Another brick in the wall

LatAm Metals & Mining

Main takeaways:

(i) It is important to remember that the companies (Vale +BHP) presented a proposal with a terminal value of R$127bn on April 29 to the TRF-6, which we will call the initial proposal for 2024. Last week (June 6) the Federal Attorney General's Office (AGU), in turn, expressed a counterproposal of R$109bn still to be paid. However, this excluded R$37bn already disbursed + R$18bn of "to do" obligations. **(ii)** If we add the three ends all together, the potential terminal agreement signed by the AGU would total R$164bn (+29% vs. the initial proposal). **(iii)** Therefore, in response to this counterproposal, Vale + BHP presented this Tuesday (June 11) the second attempt at a proposal this year. The additional payment would be made in cash and would amount to R$82bn (~US$15.3bn) over 20 years (vs. R$109bn or ~US$20.3bn over 12 years in the AGU's counterproposal). In addition, the "to do" obligations would rise to R$21bn (+17% vs. initial proposal). **(iv)** When added to the R$37bn already disbursed, the terminal value of the new settlement attempt came to R$140bn or ~US$26bn (+10% vs. initial proposal). Although it was higher than the initial proposal, Vale + BHP's second attempt to reach an agreement would still be aiming for a terminal value -14.6% lower than the AGU's counterproposal made last week. **(v)** Therefore**, our bias is positive for the value**, as we believe it offers an interesting middle ground (higher than the initial proposal, but lower than the AGU's counterproposal), with greater chances of adherence. **(vi)** As for the deadline, although the new proposal would certainly benefit Vale + BHP, we believe that the AGU and other government entities are likely to differ, initiating yet another phase of discussions. **(vii)** As the discussions progressed, **we cooled down the very harsh assumptions we used before** (more on this throughout the report), and saw a gentle value release in our model of **~US$1bn of Equity Value** (~2% of the market cap), causing the **12M Target Price to rise to R$73.50** (vs. R$72.30 previously) considering **VALE3-B3**, confirming our **BUY rating**, with an **upside of +20.83%**. Curiously, however, **we are cutting the 12M Target Price** of **ADRs-NYSE** to **US$13.70** (vs. US$14.50 previously), due to the **recent sharp rise in the USD/BRL exchange rate**.

On Tuesday (June 11), Vale, BHP and Samarco presented a new proposal to the Federal Regional Court of the 6th Region (TRF-6), the mediator of the settlement related to the collapse of the Fundão Dam in Mariana (MG), an accident that occurred in 2015. The new proposal was officially disclosed by Vale through a material fact on Wednesday (June 12), due to the repercussions of the press on the subject, even though the conditions should have remained under secrecy backed by the Brazilian justice system.

Analysts

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

Lucas Bonventi
+55 (11) 3206-8244
lucas.bonventi@genial.com.vc

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

Company

VALE US Equity
Buy

Price: US$ 11.32 (13-Jun-2024)
Target Price 12M: US$ 13.70 (NYSE)

VALE3 BZ Equity
Target Price 12M: R$ 73.50 (B3)

What is this report about? In this report we talk about **(i)** changes we made to assumptions regarding our base case for the final conditions to be entered into in the agreement (more on this later); **(ii)** we have also changed scenarios for the NPV of provisioning, showing the reflection with and without Samarco's contribution, considering the new Vale+ BHP offer announced material on Wednesday (June 12); **(iii)** we explain the calculation methodologies we use in relation to discounting the flow of provisioning and disbursement, and why we believe that the way we do it is more in line with good practices compared to the alternatives used by some other market members. **(iv)** In addition to other points, as an effect of the modification in the base scenario we had foreseen for the agreement, we changed our 12M Target Price. **We raised VALE3-B3 to R$73.50** (vs. R$72.30 previously), despite cutting **ADRs-NYSE** to **US$13.70** (vs. US$14.50 previously), due to the recent sharp rise in the USD/BRL exchange rate.

What are the new conditions of the second proposal? The attempt at negotiation, in the context of mediation by the TRF-6, contemplates a new terminal value of R$140b (~US$26b), this time including the R$37b already disbursed in reparation and compensation through Vale, BHP, Samarco and the Renova Foundation. The additional payment would take place in cash, and would amount to R$82b (~US$15.3b) over 20 years (vs. R$109b or ~US$20.3b over 12 years in the AGU's counter-proposal), as a form of compensation to the states of Minas Gerais (MG) and Espírito Santo (ES) and the municipalities affected, as well as R$21b (~US$4b) in "to do" obligations (vs. R$18b in the previous proposal), which in turn are reparatory in nature. We made it clear that, as the dam was operated by Samarco (Vale's JV with BHP), the amounts include a 50% contribution by Vale and 50% by BHP Brasil, with potential additional aid from Samarco (as we will comment on later).

The biggest wrestle is over the term. Although, in our perception, many investors focus more on the magnitude of the terminal value of the agreement, we believe that the major discussion between the proposals should be about the payment term. In the counterproposal sent by the Public Authorities (AGU + governments of the states involved + Public Prosecutor's Office-MPF), the deadline requested for payment of the R$109bn was 12 years, considering a 20-year claim made by Vale + BHP, discounting the 8 years that have passed since the accident to the present date. However, Vale, BHP and Samarco are now requesting an extended period of 20 years in the second proposal, without the discount.

Samarco's contribution to better accommodate Vale and BHP disbursements. It is important to clarify that Samarco's Judicial Recovery Plan, which the link is attached (Recovery Plan), contains clauses (more specifically 5.10., page 38) that set annual limits for Samarco to meet its obligations for reparations and compensation related to the accident in Mariana (MG). The conditions imposed for Samarco's assistance in the disbursement flow still to be paid under the terminal agreement + "to do" obligations are separated into 3 phases: Phase **(i)**, which runs from 2024 to 2026, the JV has an annual limit of US$200mn (~R$1bn at today's values). In phase **(ii)**, which runs from 2027 to 2030, there is an annual limit of US$100mn (~R$535m at today's values).

For phase **(iii)**, which only runs from January to June 2031, the company can disburse US$200mn (~R$1bn at today's values). Therefore, if phases (i) + (ii) are added together, Samarco has a lock-up of US$1bn (~R$5.3bn at today's values) over 6 years (2024-2030). After phase (iii), Samarco exits the so-called "restriction period".

Samarco's "restriction period" runs until June 2031. In July 2031, the restriction period ends as Samarco finishes paying off the senior debt securities subordinated to the judicial reorganization plan. Therefore, from July 2031 onwards, Samarco would no longer have cash flow retention limits to preserve its creditors, explained in the 3 phases of the paragraph above, and would be able to make a full and unrestricted contribution to the cost of the obligations related to the Mariana (MG) agreement.

Beyond the NPV: Samarco's "restriction period" is essential to understanding Vale's mindset. Therefore, by stretching the term as far as possible, which is the goal of the "arm wrestling" over the 20-year horizon (vs. 12 years in the AGU's counterproposal), Vale and BHP are able to benefit from Samarco's assistance for longer to meet the settlement's payment flow, also reducing the need for provisions. Putting this into perspective , in addition to the issue of **(i)** value for money over time, brought up by the concept of NPV by amortizing the total value of the proposal over a longer period, there is also **(ii)** a reduction in the need to tie up the balance sheets of the associated companies (Vale and BHP) to directly fund the settlement amounts, since Samarco would have more time to contribute outside the "restriction period", through the profitability of its own operation. In other words, this situation potentially removes Vale's weight in funding the total amount of the Mariana (MG) settlement. Therefore, as we have been arguing for some time, a longer term tends to be more beneficial than a lower value.

Samarco's financial performance should change for the better (and fast). Samarco restarted operations in December 2020, and since then the restructuring has led to better operational figures. The guidance for iron ore production is 4-4.5Mt in 2024. We note that production increased by +13% y/y in the last 6M to 2.5Mt (vs. 2.2Mt), as a result of the higher throughput of the concentrator, which is currently in operation. Although we estimate net revenue of ~US$500mn for Samarco in 2024, the company has considerable expansion projects. The restart of the second concentrator, expected in 3Q25, would bring pellet production capacity to ~16 Mtpa through a dry stack tailings and filtration solution, more than 3x current capacity. This could possibly bring net revenue to ~US$2bn by 2026, according to our calculations.

If this were to happen, how much would Samarco contribute after the "restriction period"? Therefore, in a scenario where Samarco contributed to the dissolution of the payment obligations of the Mariana (MG) agreement, we believe it is feasible to spend ~US$1bn (~R$5.3bn) per year directed to the payment flow from 2032 onwards, 6 years after the expansion project related to the restart of the second concentrator, as commented above. Until then, other new production expansions will also take place, optimizing the company's EBITDA and increasing the cash flow reserve after the end of senior's debt securities payment, subordinated to the judicial reorganization plan. Following this logic, Vale's outlook (50% of the figures), can be assumed at ~US$500mn per year from 2032 onwards.

Table 1 . Samarco's Total Contribuition

Samarco Year	Samarco´s Total Contribution (US$ Million) Annual Contribution	Vale´s Perspective (US$ Million) Annual Contribution
2024	200	100
2025	200	100
2026	200	100
2027	100	50
2028	100	50
2029	100	50
2030	100	50
2031	*	*
2032	1.000	500
2033	1.000	500
2034	1.000	500
2035	1.000	500
2036	1.000	500
2037	1.000	500
2038	1.000	500
2039	1.000	500
2040	1.000	500
2041	1.000	500
2042	1.000	500
2043	1.000	500

*Starting from the fiscal year 2031 (inclusive) and during the Restriction Period (until July), the maximum amount of the annual Obligation Limits balance that Samarco may use to meet the repair obligations (total contribution) is US$200 billion or US$100 billion from Vale's perspective (50%).

Source: Genial Investimentos

Our Take on Vale

New proposal vs. old Genial Est. Considering Vale + BHP's new proposal adds up to a terminal value of R$140bn (+7% vs. old Genial Est.), we found the Post-Final Agreement condition to be R$103bn (+10% vs. old Genial Est.), after deducting the R$37bn already disbursed. On the other hand, the term of the new proposal is 20 years (vs. 7 years Genial Est. old), which is almost 3x more than we had in our proprietary model as a base scenario. In other words, although the value has gone up, the term we were projecting was excessively short. So, even if the value is 10% higher than our previous estimate, Vale would (in this proposal) have much more time to pay. The additional elasticity in the term more than compensates for the surplus value when we look at the NPV dynamics.

Old Genial Est. vs. the street. We've always mentioned that we were using more conservative assumptions than the consensus in our Vale model in order to demonstrate the upside that exists in the shares even in the worst scenarios that we can draw up as possible (even the unlikely ones). It is worth remembering that, according to passages in other reports published by us over the last few months, the R$126-155bn range could be attributed as the spacing measured by the vast majority of investors in relation to the agreement's terminal value. Therefore, although our previous assumption of R$130bn was not situated in the upper band of this range, we still believed that we were purposely penalizing the NPV as we projected as a base scenario a payment term that seemed excessively short (7 vs. 12 years in the AGU's counterproposal).

It is possible to argue that a cap has already been set. Let's remember that last week the government, represented by the AGU + the states of Minas Gerais (MG) and Espírito Santo (ES), made a counterproposal with a terminal value of R$164bn. After deducting the R$37bn already disbursed, the counterproposal orders a Post-Final Agreement of R$127bn (R$109bn of unpaid additional + R$18bn of "to do" obligations), paid over 12 years. We can then consider these conditions as the worst case sicario today for Vale, therefore establishing a cap for the agreement. This is because, once the circumstances that allowed the government to close the deal were revealed to the market, it is understood that there would be no reason to project something more severe than these "value vs. term" variables. This rationale led us to make changes to our base scenario.

Changes to the base scenario: New Genial Est. As we commented in the report we published at the time, which is attached (Mariana Settlement: Counterproposal raises value), we believed that the conditions of the counterproposal from the AGU and other government entities would put too much pressure on NPV for Vale and BHP, so that the companies would argue with the TFR-6 to cool the payment flow conjunction, putting "**another brick in the wall"** in the construction of the final agreement. Vale's officialization of a second proposal proves that we were assertive in anticipating this dynamic. On the other hand, we believe that this time it will be more difficult for the AGU to give in on the deadline.

As a result, our new base scenario now includes precisely the official term requested by the Government in the counterproposal (12 years vs. 7 years Old Genial Est.), expanding by +5 years the payment timeframe in our proprietary model, which was already much more pessimistic than the consensus (as we have already explained, this was on purpose). As for the terminal value of the agreement, we believe that the bias is positive towards the R$140b present in the second proposal made by Vale + BHP, as it seems to offer an interesting middle ground, standing above the initial proposal, but below the AGU's counterproposal. In short, our new base scenario changes to a terminal agreement of R$140b Genial Est. (+7% vs. old Est.), in line with this second proposal from Vale + BHP, but with a term of 12 years Genial Est. (vs. 7 years previously), which in turn also differs from the 20 years claimed by the companies. It's important to mention that our base scenario still doesn't include any aid from Samarco in the payment flow.

Why are we not considering any contribution from Samarco? We know that a significant part of the consensus uses Samarco's direct aid as a base scenario in their respective models as a way of mitigating the weight of Vale's payment flow and provisions. In fact, the most recent talks with the company have made us more bullish about the possibility of Samarco helping to cushion the weight of the disbursement, as well as the provisioning of the additional amount by Vale.

Even so, as we have long sought to adopt as much of a conversational tone as possible in the assumptions we use, in order to prove a point to investors (that Vale's shares continue to be excessively penalized by the market), our base scenario will remain with an NPV excluding any contributions from Samarco. In this way, we continue to ensure that the NPV we calculate still remains one of the most bearish in the market, in order to create a foundation for our Buy recommendation for the shares, justified by the stress test of variables and the large level of discount of Vale's multiples in the face of these already pessimistic variables.

Once again, where did we diverge from the consensus? Regardless of the incompatibilities about Samarco's contribution or not in the provision and disbursement flow, our figures have also diverged since the last report from the central basis found by the street for 2 reasons. We are aware that other sell-side firms and some investors are projecting the NPV with some conceptual errors, at least in our interpretation. This is because, as we made clear earlier, **(i)** both the provisioning flow and the disbursement rate will not be linear. We know that some market participants are projecting flows with constant values. In addition, **(ii)** we differ from the consensus opinion on using the Kd equivalent to 5.75% of the expanded net debt, offered by Vale itself, to bring the flows related to the Mariana (MG) agreement to present value.

Mistake 1: Considering that the provisioning and disbursement flows both going to be linear. It's very clear to us that if we divide the time horizon into two halves, whether it's 12 years or 20 years (in 6 or 10 years), the first half will always have a more intense flow of provisioning and disbursements than the second half. This is reinforced by Vale's own provisioning guidance, which is for 14 years (2024-2038). In the guidance, the first 7 years amounted US$3.6bn and the final 7 years totaled only US$800mn. This is because the need for reparation and compensation will be much greater in the short and medium term than in the long term. So, it seems wrong to assume that the cash flows will remain constant from start to finish, even in real terms (without adding inflation).

Financial mathematics 1o1. According to the principles of financial mathematics, the closer a given cash flow is to Year 1 in the ordering, the greater the impact of that particular figure within the total sum of all cash flows brought to present value. The converse is also true. Therefore, we believe it is a methodological error to apply constant values to the NPV calculation in this situation. By doing so, market participants are most likely reducing the negative impact that NPV causes.

Better understanding the expanded net debt used by Vale. It is important to mention that the 5.75% of Kd that appears in Vale's expanded net debt reflects the real rate (without inflation), weighted by various obligations, to bring to present value the flows that have already been provisioned by the company within the balance sheet, according to accounting standards. This includes obligations that go beyond the renegotiation of the Mariana (MG) agreement. In other words, the rate also considers the provisions of the Brumadinho (MG) agreement and the dam de-characterization program, for example. Therefore, it is a rate used by Vale that reflects the transposition of money over time, according to the company's own point of view and ratified by the auditors, in order for the provisions to appear on the balance sheet at today's values. In the case of the provisioning for the obligations of the Mariana (MG) agreement, which today totals ~US$4bn, if it were not recorded at present value, it would be equivalent to ~US$5bn.

Provisions vs. disbursements. The mechanism connecting the P&L, balance sheet and cash flow is as follows: **(i)** First, the amount provisioned goes through the P&L. At this point there is no cash flow effect since the company has made a provision for an amount that will eventually be paid in the future (but has not yet been paid). **(ii)** As soon as the amount passes through the P&L, reducing net income, it is also added to the amount accumulated in liabilities, recognized as "future obligations payable".

The counterbalance to the closing balance sheet is the reduction in shareholder's equity, which is influenced by the net income for the period. **(iii)** The third phase is precisely when the date to pay the obligation arrives. In other words, the event that the company has planned to pay for becomes material and there is a cash flow outlay for that amount. It is important to understand that the time that elapses between phases I + II and phase III is variable and can be years apart in some cases. At this stage, liabilities decrease, since the company is paying off an obligation, and cash and cash equivalents also decrease in the same proportion, generating the counterbalance for the balance sheet. It can be concluded that there is only a cash flow effect, which reduces the company's fair value measured by the DCF methodology, when there is a disbursement, not during the provision (phase I).

Error 2: Discount rate using Kd of expanded net debt. While Error 1 seems obvious to us, Error 2 is relatively debatable. The points that we bring to the discussion with the market on this subject are summarized as follows: **(i)** the use of a real rate within a nominal model (which seems wrong to us); as well as **(ii)** the discounting of the forward provisioned flow using the Kd of the expanded net debt, which is characterized as an accounting figure from Vale's own perspective, put merely as a reflection of the transposition of values over time, not reflecting for us, therefore, the shareholder's true risk of investing in the business combined with its opportunity cost. As we explained above, the company's value is only reduced by the DCF during the cash flow disbursement phase (phase III), and for this long, we believe that the discount rate to bring the impact of the Mariana (MG) agreement to present value within the valuation should be the WACC or Ke, and not the Kd of the expanded net debt.

If we're doing it differently from part of the street, how are we doing it? Basically, we use a non-linear and decreasing provisioning rate curve, inflating both the provisioning and the disbursement of payments by the cash flow, which is adjusted by the projected CPI (IPCA index for that matter, close to 4% in all years). Therefore, as our model is nominal, our discount rate must also be nominal. Furthermore, as the NPV detractor of the EV is measured by the cash flow (FCFE), the rate to bring it to present value is the same rate that configures the shareholder's risk of investing in the business, weighted by the opportunity cost, and not the Kd of the expanded net debt (5.75%). In other words, we used Ke, which in our model is equivalent to 11.75% in nominal terms, unlike the 5.75% used by some investors (which is in real terms).

3 NPV calculation scenarios, all excluding contributions from Samarco. Based on the assumptions and understandings mentioned above, we carried out exercises to demonstrate the provisioning flow of the AGU's counterproposal scenario and Vale's new proposal, as well as updating the assumptions of the proprietary model for our new base case. This resulted in 3 scenarios (all excluding Samarco's contribution). According to our calculations, **scenario 1**, which is equivalent to **Vale's new proposal**, would clock in at with a **NPV** of **-US$3.7bn** (~8% of the market cap) in additional provisions, excluding the ~US$4.2bn (or ~R$22.6bn) that would already have been provisioned in the balance sheet up to 2Q24E.

This NPV value seems much more reasonable than the **-R$5.9bn NPV** (~10% of market cap) we found in **scenario 2**, when we calculated the provision flow using the parameters offered by the AGU's **counterproposal**, made last week. **Scenario 3**, on the other hand, is made up of our new base hypothesis, from which we believe the final agreement would finally be sewn up (**New Genial Est. base scenario**). We calculate an **NPV** of **-US$4.2bn Genial Est.**, representing ~9% of the market cap. The conclusion is that our base scenario would be in the middle between Vale's new proposal and the AGU's counterproposal.

Table 2 . Mariana Agreement (Ex. Samarco) Summary

Mariana Agreement (Ex. Samarco)	New Vale´s Proposal	Last AGU Counter-proposal	Genial´s New Base Scenario
	R$ Million	**R$ Million**	**R$ Million**
Agreement´s Terminal Value	140.086	164.086	140.086
(-) Accumulated Disbursements 2023	(37.000)	(37.000)	(37.000)
(=) Post Final Agreement	103.086	127.086	103.086
Vale's Stake (50%)	**R$ Million**	**R$ Million**	**R$ Million**
(+) Payment Due Post Agreement	51.543	63.543	51.543
(-) Disbursements made up to 2Q24E	(974)	(974)	(974)
(=) Amount to Pay 3Q24E Onwards	50.569	62.569	50.569
(-) Accumulated Provisions up to 2Q24E	(22.617)	(22.617)	(22.617)
(=) Vale's Provision 3Q24E Onwards	27.952	39.952	27.952
(-) Samarco´s Contribution	-	-	-
Conditions			
Upfront (%)	5%	5%	5%
Timeframe -(Quarters)	79	47	47
Calculations	**R$ Million**	**R$ Million**	**R$ Million**
Upfront Provision	1.398	1.998	1.398
Base for Provision 4Q24E Onwards	26.555	37.955	26.555
Percentage of Porvision in 4Q24E	5%	5%	5%
Ke	11,75%	11,75%	11,75%
NPV (US$)	**(3.738)**	**(5.990)**	**(4.264)**
% of Mkt Cap	-8%	-12%	-9%
% of Fair Value	-6%	-10%	-7%

Source: Genial Investimentos

Table 3 . Scenario 1 -New Vale's Proposal (Ex. Samarco) Summary

New Vale´s Proposal (Ex. Samarco)	Provision (US$- Million)	
Period (Years)	P&L	P&L Discounted
1	(988)	(884)
2	(537)	(430)
3	(529)	(379)
4	(491)	(315)
5	(486)	(279)
6	(475)	(244)
7	(460)	(211)
8	(446)	(183)
9	(429)	(158)
10	(410)	(135)
11	(388)	(114)
12	(364)	(96)
13	(337)	(80)
14	(307)	(65)
15	(275)	(52)
16	(239)	(40)
17	(201)	(30)
18	(158)	(21)
19	(112)	(14)
20	(62)	(7)
	NPV =	(3.738)

Source: Genial Investimentos

Table 4 . Scenario 2 - Last AGU Counterproposal (Ex. Samarco) Summary

Last AGU Counter-proposal (Ex. Samarco)	Provision (US$- Million)	
Period (Years)	P&L	P&L Discounted
1	(1.424)	(1.275)
2	(1.253)	(1.004)
3	(1.185)	(849)
4	(1.050)	(673)
5	(981)	(563)
6	(898)	(461)
7	(800)	(368)
8	(699)	(287)
9	(585)	(215)
10	(461)	(152)
11	(326)	(96)
12	(179)	(47)
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
	NPV =	(5.990)

Source: Genial Investimentos

Table 5 . Scenario 3 – New Genial Est. (Ex. Samarco) Summary

Genial´s New Base Scenario (Ex. Samarco)	Provision (US$- Million)	
Period (Years)	P&L	P&L Discounted
1	(1.078)	(964)
2	(877)	(702)
3	(829)	(594)
4	(734)	(471)
5	(686)	(394)
6	(628)	(323)
7	(560)	(257)
8	(489)	(201)
9	(409)	(151)
10	(323)	(106)
11	(228)	(67)
12	(126)	(33)
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
	NPV =	(4.264)

Source: Genial Investimentos

If we include Samarco's contribution, what is the impact? In the scenarios where Samarco would also disburse, we see a very different situation, with much lower NPVs for the additional provisioning. In this case, Vale would be able to assign all responsibility for the payments to Samarco as of Year 8 (July 2031). This is because the clauses in the Judicial Recovery plan would no longer impose limits on the allocation of Samarco's cash for contributions related to the renegotiation of the Mariana (MG) agreement, and by then, Samarco is expected to be generating much more cash flow than it is today (as we have also discussed). **Scenario 1**, which refers to the flow of **Vale's new proposal**, resulted in the most detracting **NPV** of all, measured at **-US$2.4bn** or ~5% of the market cap (-35% vs. Scenario 1 without Samarco). **Scenario 2**, made up of the flow of the **AGU's counterproposal**, resulted in an **NPV** of **-US$4.9b**n or ~10% of the market cap (-18% vs. Scenario 2 without Samarco).

Table 6. Mariana Agreement (Incl. Samarco) Summary

Mariana Agreement (Incl. Samarco)	New Vale´s Proposal	Last AGU Counter-proposal
	R$ Million	R$ Million
Agreement´s Terminal Value	140.086	164.086
(-) Accumulated Disbursements 2023	(37.000)	(37.000)
(=) Post Final Agreement	103.086	127.086
Vale's Stake (50%)	**R$ Million**	**R$ Million**
(+) Payment Due Post Agreement	51.543	63.543
(-) Disbursements made up to 2Q24E	(974)	(974)
(=) Amount to Pay 3Q24E Onwards	50.569	62.569
(-) Accumulated Provisions up to 2Q24E	(22.617)	(22.617)
(=) Vale's Provision 3Q24E Onwards	27.952	39.952
(-) Samarco´s Contribution	(11.379)	(7.287)
(=) Vale's Provision 3Q24E Onwards After Samarco	16.573	32.665
Conditions		
Upfront (%)	5%	5%
Timeframe -(Quarters)	79	47
Calculations	**R$ Million**	**R$ Million**
Upfront Provision	1.398	1.998
Base for Provision 4Q24E Onwards	26.555	37.955
Percentage of Porvision in 4Q24E	5%	5%
Ke	11,75%	11,75%
NPV (US$)	**(2.432)**	**(4.911)**
% of Mkt Cap	-5%	-10%
% of Fair Value	-4%	-8%

Source: Genial Investimentos

Table 7. Scenario 1 -New Vale's Proposal (Incl. Samarco) Summary

New Vale´s Proposal (Incl. Samarco)	Provision (US$- Million)	
Period (Years)	P&L	P&L Discounted
1	**(913)**	**(817)**
2	**(437)**	**(350)**
3	**(441)**	**(316)**
4	**(441)**	**(283)**
5	**(436)**	**(250)**
6	**(425)**	**(218)**
7	**(373)**	**(171)**
8	**(63)**	**(26)**
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
	NPV =	**(2.432)**

Source: Genial Investimentos

Table 8. Scenario 2 - Last AGU Counterproposal (Incl. Samarco) Summary

Last AGU Counter-proposal (Incl. Samarco)	Provision (US$- Million)	
Period (Years)	P&L	P&L Discounted
1	(1.349)	(1.208)
2	(1.153)	(924)
3	(1.098)	(787)
4	(1.000)	(641)
5	(931)	(534)
6	(848)	(435)
7	(713)	(327)
8	(135)	(55)
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
	NPV =	(4.911)

Source: Genial Investimentos

Important steps towards eliminating the overhang. We consider the recent discussions between Vale + BHP and the Public Authorities, to be very positive. We believe that the latest developments show clear progress towards a reparation and compensation agreement for Mariana's tragedy. The disclosure of these figures over the last 2 months, from Vale + BHP's proposal of R$127bn in April, to this new proposal officially released by Vale on Wednesday (June 12), provides more accurate data for investors to establish a potential bottom and cap, both for the terminal value and for the timeframe, reducing market's asymmetry of information, although we believe that the overhang will be completely eliminated only when both parties finally agree to any of the versions proposed in the mediation held at TRF-6. Mr. Alexandre D'Ambrosio, Vale's Executive VP of Corporate and Institutional Affairs, stated yesterday (June 13) that the company hopes to reach a consensus with the AGU later this month.

Another brick in the wall. Regarding the new proposal, our bias is positive for the amount (R$140bn), as we believe it offers an interesting middle ground (above the initial proposal, but below the AGU's counterproposal). As for the term (20 years), although it would certainly benefit Vale + BHP, we believe that the AGU and other government entities will have to differ, starting another round of discussions. Even so, as we commented above, in view of the potential cap formed through the counterproposal made by the AGU last week, in this report we have changed our assumptions regarding our base scenario. Until then, we had been using an extremely conservative assumption on purpose (as has already been explained several times), especially with regard to the deadline.

Conclusion: Change in base scenario and TPs, conducted by reduction in NPV and FX effect. As such, we have now adopted a more elastic term compared to our previous estimates, due to the AGU's own counterproposal having a much longer time horizon for payment than we used in our base scenario (12 years for AGU vs. 7 years Genial Est. previous). Therefore, even though we also increased the terminal cost of the agreement (R$140bn vs. R$130bn Genial Est. before), the detractor NPV comparison was lower between the new Genial Est. base scenario vs. the old one.

Therefore, as a result of the change in assumptions, we observed a smooth release of value in our model by ~US$1bn of Equity Value (~2% of the market cap), causing an **increase** in the **12M Target Price** to **R$73.50** (vs. R$72.30 previously) considering **VALE3-B3**, calculating an **upside** of **+20.83%**, keeping our **BUY rated**. However, interestingly, we are **cutting** the **12M Target Price** of the **NYSE ADRs** to **US$13.70 (**vs. US$14.50 previously), due to the recent sharp rise in the **USD/BRL exchange rate**, which not only means that the increase in VALE3's TP is not passed on to the ADRs, but also widens the gap that existed between the two price differences.

Source: Genial Investimentos

Appendix: Vale

Figure 1. Vale – Income Statement in US$ Millions (Genial Est. 2024-2029)

Income Statement	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**37.042**	**41.292**	**42.126**	**43.842**	**44.830**	**48.448**
(-) COGS	(23.944)	(26.237)	(26.383)	(27.586)	(29.085)	(31.495)
Gross Profit	**13.098**	**15.055**	**15.743**	**16.257**	**15.745**	**16.953**
(-) Expenses	(3.420)	(3.321)	(3.160)	(2.765)	(2.418)	(2.559)
Adjusted EBITDA	**12.824**	**15.437**	**16.030**	**17.078**	**17.049**	**18.243**
(-) D&A	(3.192)	(3.356)	(3.512)	(3.661)	(3.802)	(3.936)
EBIT	**9.633**	**12.081**	**12.518**	**13.417**	**13.247**	**14.307**
(+/-) Financial Result	(1.943)	(2.033)	(2.254)	(2.277)	(2.260)	(2.326)
(-) Taxes	(889)	(1.275)	(1.395)	(1.563)	(1.567)	(1.742)
Net income	**6.801**	**8.773**	**8.869**	**9.578**	**9.420**	**10.239**
Profitability						
Net margin (%)	18,36%	21,25%	21,05%	21,85%	21,01%	21,13%

Figure 2. Vale– Cash Flow in US$ Millions (Genial Est. 2024-2029)

Cash Flow (FCFF)	2024E	2025E	2026E	2027E	2028E	2029E
Net Revenue	**37.042**	**41.292**	**42.126**	**43.842**	**44.830**	**48.448**
(-) COGS	(23.944)	(26.237)	(26.383)	(27.586)	(29.085)	(31.495)
Adjusted EBITDA	**12.824**	**15.437**	**16.030**	**17.078**	**17.049**	**18.243**
Adjusted EBIT	**9.633**	**12.081**	**12.518**	**13.417**	**13.247**	**14.307**
(-) Taxes	(889)	(1.275)	(1.395)	(1.563)	(1.567)	(1.742)
(+) D&A	3.192	3.356	3.512	3.661	3.802	3.936
(+/-) Brumadinho and Samarco	(1.988)	(1.446)	(1.204)	(915)	(875)	(733)
(+/-) Δ WK	3.404	831	140	(27)	(149)	(51)
(-) Capex	(6.500)	(6.500)	(6.500)	(6.500)	(6.500)	(6.500)
FCFF	**6.852**	**7.048**	**7.071**	**8.074**	**7.958**	**9.216**

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.