Vale's Performance in 3Q23

October 27th, 2023



Disclaimer

"This presentation may include statements that present Vale's expectations about future events or results, including without limitation: (i) maintenance plan in some sites and production plan at Salobo III on slide 4; (ii) plans for implementing briquetting plants and for Mega Hub development on slide 5; (iii) our perspectives for deliveries in our Upstream Dam Decharacterization Program and for reduction of emergency levels of dams on slide 6; and (iv) cost guidance on slides 10, 11, 12 and 13. These risks and uncertainties include factors relating to our ability to perform our production plans and to obtain applicable environmental licenses. It include risks and uncertainties relating to the following: (a) the countries where we operate, especially Brazil, Canada and Indonesia; (b) the global economy; (c) the capital markets; (d) the mining and metals prices and their dependence on global industrial production, which is cyclical by nature; (e) global competition in the markets in which Vale operates; and (f) the estimation of mineral resources and reserves, the exploration of mineral reserves and resources and the development of mining facilities, our ability to obtain or renew licenses, the depletion and exhaustion of mines and mineral reserves and resources. To obtain further information on factors that may lead to results different from those forecast by Vale, please consult the reports Vale files with the U.S. Securities and Exchange Commission (SEC), the Brazilian Comissão de Valores Mobiliários (CVM) and in particular the factors discussed under "Forward-Looking Statements" and "Risk Factors" in Vale's annual report on Form 20-F."



1. Opening remarks



Business and Financial highlights

Iron Ore Solutions	 Iron ore fines and pellet sales up 6% y/y; production-to-sales gap reduced as expected On track to deliver production guidance with consistent quality improvement in 3Q23
Energy Transition Metals	 Copper production up 10% y/y: Salobo III continues its successful ramp up Nickel production is on track to reach guidance; Voisey's Bay mine transition is running according to plan Ongoing asset review to unlock value
Strengthening the core	 1st iron ore briquette plant: commissioning started at the Tubarão Unit Mega Hubs: agreements to study developing hubs with Porto do Açu and H2 Green Steel (Brazil and North America)
Sustainable mining	 Circular mining: launching of Agera and MoU with BluestOne Dam safety: B3/B4 dam with emergency level reduced to 1
Stay disciplined	 US\$ 2 billion in dividends and interest on capital approved for payment on Dec 1st Consistent buyback program



Leveraging operational excellence







Higher pellet feed from Brucutu, after Torto dam commissioning



Lower production-to-sales gap in Q3



One-off engineering issue at S11D and Viga + power outage in Brazil



- Continued ramp-up of Salobo III now at 80% of capacity
- Salobo I&II Plant availability up 5% y/y to 90%
- Lower ore extraction (\square) rates from Coleman

Sales up 3kt y/y



- <u>ر ک</u>
- Continued transition of Voisey's Bay to underground mining



Q3 impacted by additional maintenance in North Atlantic



Onça Puma furnace 1 revamp



Accelerating breakthrough iron ore solutions

Briquetting plants I & II



Mega Hubs – agreements to date





Advancing in sustainable mining

Agera

Created to develop our *Sustainable Sand business*. ~900kt already used in civil construction and road paving.

🔗 Blue

BluestOne

10-year offtake agreement with VBM to *repurpose refinery waste* (50ktpy of slag from Onça Puma).

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Strategic partnerships for decarbonization initiatives

Jointly assess with (i) **H2 Green Steel**, potential enablers of sustainable steel production, and with (ii) *Petrobras*, decarbonization opportunities, including sustainable fuels.





Progressing as a safer Vale

Upstream Dam Decharacterization Program¹



Dams at emergency level¹







¹ Dams include geotechnical facilities dedicated to mining processes. ² Considering the highest number of structures at emergency level in 2020. ³ As of October 27, 2023. ⁴ By 2025, no dam will be at emergency level 3.

2. Financial Performance



EBITDA up 12% y/y, on improved shipments and prices





C1 costs 7% lower sequentially; on track to deliver 2023 guidance

C1 cash cost, ex third-party purchase costs US\$/t





C1 guidance 2023 US\$ 21.5-22.5/t

¹Including costs related material, personnel, services and maintenance.

² Includes the consumption of inventories from the previous quarter at higher costs, energy costs, foreign exchange effect, and others.

Iron Ore Solutions: higher all-in costs driven by external factors

Iron ore fines & pellets EBITDA break-even US\$/t

	3Q22	2Q23	3Q23
Vale's C1 cash cost ex-third-party purchase cost	19.4	23.5	21.9
Third-party purchases cost adjustments	3.4	3.0	3.7
Vale's iron ore cash cost (ex-ROM, ex-royalties), FOB	22.8	26.5	25.6
Iron ore fines freight cost	22.4	17.6	18.9
Iron ore fines distribution cost	2.2	2.5	2.6
Iron ore fines expenses ¹ & royalties	5.8	6.2	7.7
Iron ore fines moisture adjustment	4.7	4.7	4.7
Iron ore fines quality adjustment	(0.6)	(0.6)	(0.8)
Iron ore fines EBITDA all-in costs (US\$/dmt)	57.3	56.9	58.7
Iron ore fines pellet adjustment	(6.0)	(3.9)	(3.0)
Iron ore fines and pellets EBITDA all-in costs (US\$/dmt)	51.3	53.0	55.7

- Higher bunker costs: +US\$ 0.9/t q/q
- Seasonally larger spot affreightment: +US\$ 0.6/t q/q
- \triangle US\$ 10/bbl in brent oil = \triangle US\$ 0.9/t freight costs

- Higher Fe content in production and sales mix
- Lower 65%Fe index spread: -US\$ 1.9/t q/q
- Absence of seasonal pellet JVs dividends: –US\$ 1.2/t q/q

All-in guidance 2023: US\$ 52-54/t

Copper: Salobo III ramp-up driving fixed cost dilution

Copper all-in costs US\$/t

	3Q22	2Q23	3Q23
COGS	5,170	6,046	5,512
By-product revenues	(2,390)	(3,177)	(2,960)
COGS after by-product revenues	(2,390) 2,780	2,869	2,552
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Other expenses ¹	_	(325)	812
Total costs	3,732	2,544	3,364
TC/RCs penalties, premiums and discounts	452	544	560
All-in costs (EBITDA break-even) ²	4,184	3,088	3,924
All-in costs (EBITDA break-even) ex-Hu'u	3,638	3,112	3,264

¹Includes sales expenses, R&D, pre-operating and stoppage expenses and other expenses.

² Considering only the cash effect of streaming transactions, copper operations EBITDA break-even would increase to US\$ 5,012/t.

Nickel all-in costs increase mainly due to maintenance works

Nickel all-in costs US\$/t

	3Q22	2Q23	3Q23
COGS ex-third party	21,717	21,135	23,039
COGS ¹	23,214	21,969	23,581
By-product revenues	(6,663)	(7,232)	(4,807)
COGS after by-product revenues	16,551	14,737	18,774
Other expenses ²	705	2,516	(81)
Total costs	17,256	17,253	18,693
Nickel average aggregate (premium) discount	190	(170)	(123)
All-in costs (EBITDA breakeven)	17,066	17,083	18,570

Healthy FCF generation allows for solid shareholder remuneration

Free cash flow – 3Q23 US\$ million





¹ Includes US\$ 438 million of disbursement of Brumadinho and de-characterization provisioned expenses and US\$ 121 million of Brumadinho incurred expenses. ² Includes interest on loans, derivatives, leasing, payments to Renova and others.

³ Includes US\$ 546 million in share buybacks and US\$ 1,678 million in dividends and US\$ 13 million debt repayment, partially offset by new debt of US\$ 150 million.

Solid shareholder remuneration via dividends and buybacks





4. Closing remarks





Stronger operational performance across all commodities

Cost efficiency initiatives and volume growth driving better unit cost results

Energy Transition Metals asset review confirming potential to unlock significant value

Committed to disciplined capital allocation



