

## Vale informs on estimates update

Rio de Janeiro, December 7<sup>th</sup>, 2022 - Vale S.A. ("Vale") informs that it has updated its estimates and that these must be considered as such:

### Estimated production volumes

Year	2022	2023	2026	2030+
Iron ore (Mt)	~310	310-320	340-360	>360
Pellets & briquettes (Mt)	~33	36-40	50-55	~100
Nickel (kt)	~180	160-175	230-245 <sup>1</sup>	>300 <sup>2</sup>
Copper (kt)	~260	335-370	390-420	~900

<sup>1</sup>Including indirect exposure to total nickel sourced from PTVI mines for Bahodopi and Pomalaa.

<sup>2</sup>Including indirect exposure to total nickel sourced from PTVI mines for Bahodopi, Pomalaa and Sorowako HPAL.

### All-in components

Year	2022	2023	2026	2030+
Iron ore Premiums <sup>1</sup> (US\$/t)	~7	~8	8 - 12	18 - 25
Iron ore C1 cash cost – ex 3 <sup>rd</sup> party purchase <sup>2</sup> (US\$/t)	19.5 - 20	20 - 21	-	-
Iron ore All-in costs <sup>3</sup> (US\$/t)	49	47	42	-
Nickel All-in costs <sup>4</sup> (US\$/t)	13,000	13,000	10,000	-
Copper All-in costs <sup>5</sup> (US\$/t)	4,000	3,200	2,600	-

<sup>1</sup>Including iron ore fines quality adjustment and iron ore fines pellet adjustment.

<sup>2</sup>2022 BRL/USD exchange rate of 5.16 and 2023 BRL/USD exchange rate of 5.20. In 2023 includes tailing filtration plants ramp-up, health & safety, dam management, geotechnics, risk and sustainability costs.

<sup>3</sup>Approximately all-in costs after by-products before sustaining investment. Decrease in next years considers higher premiums and share of agglomerated products, lower bunker costs, higher volumes, and fixed cost dilution.

<sup>4</sup>Approximately all-in costs after by-products before sustaining investment. Decrease in next years considers higher volume of premium materials in the mix including by-products, and fixed cost dilution (VBME and CCM 1 ramp-up), Onça Puma 2nd Furnace.

<sup>5</sup>Approximately all-in costs after by-products before sustaining investment. Decrease in next years considers higher volumes and fixed cost dilution, Salobo 3 ramp-up and productivity improvements.

### Potential contribution of EBITDA generated by higher Iron ore premiums and volumes

In Ferrous business, higher iron ore all-in premium and volumes could potentially contribute with US\$ 4 billion EBITDA by 2026, based on 3Q22 Iron Ore EBITDA margin of approximately US\$ 50/t and expected iron ore volumes of approximately 310Mt in 2022.

### Mineral exploration R&D expenses

Year	2022	2023	2024	2025	2026
Exploration (US\$ million)	~170	~180	~250	~300	~350

### Capital expenditure (US\$ billion)

Year	2022	2023	2024-2027 (average per year)
CAPEX (US\$ billion)	~5.5	6.0	6.0 – 6.5

**Brumadinho & Mariana commitments (US\$ billion)<sup>1</sup>**

Year	2022	2023	2024	2025	2026	2027+
Decharacterization (US\$ billion)	0.4	0.4	0.5	0.5	0.5	2.4 <sup>4</sup>
Brumadinho agreements <sup>2</sup> (US\$ billion)	1.4	1.1	0.9	0.6	0.9	0.0
Incurred expenses (US\$ billion)	0.6	0.5	0.5	0.4	0.3	0.3 <sup>5</sup>
Samarco & Renova <sup>3</sup> (US\$ billion)	0.4	1.9	1.0	0.3	0.1	0.1 <sup>6</sup>
<b>Total (US\$ billion)</b>	<b>2.8</b>	<b>3.9</b>	<b>2.9</b>	<b>1.8</b>	<b>1.8</b>	<b>2.8</b>

<sup>1</sup> Amounts stated include inflation adjustments, net of judicial deposits and without discount to present value, considering average BRL/USD exchange rate of 5.4066.

<sup>2</sup> Includes Integral Reparation Agreement, individual, labor and emergency indemnifications, tailing removal and containment works.

<sup>3</sup> Includes Germano dam decharacterization provision.

<sup>4</sup> Related to 2027-2035.

<sup>5</sup> Related to 2027.

<sup>6</sup> Mainly related to 2027.

**Free cash flow**

Vale's 2026 free cash flow<sup>1</sup> sensitivity ranging from US\$ 5.7 billion to US\$ 12.4 billion, depending on the following assumptions: (i) annual average iron ore pricing ranging from US\$ 90/dmt to US\$ 110/dmt; (ii) annual average nickel price (LME) ranging from US\$/t 20,000/t to US\$ 24,000/t; (iii) annual average copper price (LME) ranging from US\$ 7,500/t to US\$ 10,500/t.

Vale informs that it has discontinued all previous guidance.

Vale clarifies that the information provided in this document represent only an expectation, hypothetical data that by no means constitute a promise of performance by Vale and/or its management. The estimates presented involve market factors that are beyond Vale's control and, therefore, can be subject to new changes. Additionally, Vale informs that will file again in due course the item 11 of its Reference Form, in the period required by the Resolution CVM number 80.

Gustavo Duarte Pimenta  
Executive Officer of Investor Relations

For further information, please contact:

Vale.RI@vale.com

Ivan Fadel: ivan.fadel@vale.com

Mariana Rocha: mariana.rocha@vale.com

Samir Bassil: samir.bassil@vale.com

This press release may include statements that present Vale's expectations about future events or results. All statements, when based upon expectations about the future, involve various risks and uncertainties. Vale cannot guarantee that such statements will prove correct. These risks and uncertainties include factors related to the following: (a) the countries where we operate, especially Brazil and Canada; (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; and (e) global competition in the markets in which Vale operates. 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.

<sup>1</sup> The free cash flow estimated does not consider dividends, buybacks and other capital allocation options.