Vale informs on estimates update

Rio de Janeiro, November 29th, 2021 - Vale S.A. (Vale) informs that it has updated its estimates and that these must be considered as such:

Estimated production volumes

Production	2021E	2022E
Iron Ore (Mt)[1]	315-320	320-335

Production	2022E	2023E onwards
Pellets (Mt)	34-38	50+

Production	2022E	2023-2026E	After 2027
Copper (kt)	330-355	390-420	450+

Production	2022-2023E	After 2024
Nickel (kt)	175-190	200+

Iron ore Business estimated costs:

C1 cash cost without 3rd party purchase costs of: (i) approximately US$ 17/t in 2021, (ii) between US$ 15.5/t – US$ 16.0/t in 2023[2] and (iii) between US$ 14.0/t – US$ 15.0/t once Vale reaches production level of 400 Mtpy[3].

-Unitary maritime freight costs of approximately US$ 19/t in 2021 and of approximately US$ 16/t in the medium term[4].

- EBITDA break-even of iron ore and pellets[5] of approximately US$ 45/t in 2021 and of approximately US$ 35/t when Vale reaches the production level of 400 Mtpa.

Iron ore premium[6]

Premium[7]	US$/t
2021	~6
2023-2026	8-12
After 2029	12-18

CAPEX estimate

US$ billion	2022E	Next year's average
Vale Total[8]	5.8	5.0-6.0

[1] Includes third party purchase, run-of-mine and feed for pelletizing plants.
[2] Assuming: (i) US$ 0.7/t decrease of fixed cost dilution; (ii) US$ 1.0/t removal of inefficiencies and productivity gains; (iii) US$ 0.5/t increase with filtrations, dry concentration, geotechnical analysis, drillings and others compared to 2021 and (iv) annual average FX BRL/USD of 5.00.
[3] Assuming: (i) US$1.0/t reduction in fixed cost dilution, (ii) US$1.0/t reduction in inefficiency removal and productivity gains relative to 2023 and (iii) annual average FX BRL/USD of 5.00.
[4] Assuming: US$ 2.4/t decrease related to lower spot freight and bunker fuel costs.
[5] Assuming: (i) approximately US$ 3/t reduction in C1 without third party purchases, (ii) approximately US$3.0/t reduction due to higher maritime freight efficiency, (iii) premiums between US$2/t and US$ 6/t (iv) approximately US$2.5/t reduction in stoppage expenses, expenses dilution, distribution costs and moisture adjustments and (v) iron ore price level in 2021 and its consequent impact on costs and royalties equal to the year in which Vale produces 400 Mt.
[6] Vale's weighted average iron ore premiums for the current and future portfolio, including IOCJ, BRBF, pellets, iron ore briquettes and others, on top of 62% Fe benchmark index.
[7] Considering different steel production scenarios with steel margins between $25-100/t and carbon prices between $0-60/t CO2eq.
[8] Average BRL/USD exchange rate of 5.00 (2023).

EBITDA

Vale's 2023 EBITDA ranging from US$ 16.5 billion to US$ 24.0 billion, depending on the following assumptions: (i) annual average iron ore price ranging from US$ 80/t to US$ 100/t; (ii) iron ore sales volumes ranging between 340 Mt and 360 Mt, (iii) average copper price (LME) of US$ 10,000/t, (iv) average nickel price (LME) of US$ 17,500/t and (v) annual average FX BRL/USD of 5.00 in 2023.

Estimated impact in Vale's cash flow profile

US$ million	2021E	2022E	2023E
VNC[9]	-70	0	0
Coal	-320	0	0
Samarco[10]	-20	0	0
Others[11]	-40	0	0

Vale informs that it has discontinued all previous guidance, except of Nickel, Copper and CAPEX (up to US$ 5.4 billions) for 2021.

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 Instruction CVM number 480 of December 7, 2009, as amended.

Gustavo Duarte Pimenta

Executive Officer of Investor Relations

Ever since the Covid-19 outbreak began, our highest priority is the health and safety of our employees. Our IR team adopted work-from-home, and as we continue to face these new circumstances, we strongly recommend you prioritize e-mail and online engagement.

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9 The result of VNC in 2021 does not consider the payment of US$ 555 million in the divestment process.
10 Includes Samarco's working capital needs.
11 Includes Biopalma and CSP needs.