

# Vale's Performance in 2Q23

July 28th , 2023



# Disclaimer

“This presentation may include statements that present Vale's expectations about future events or results, including without limitation our maintenance plan in some sites on slide 5, production plan at Salobo III on slides 6, GISTM implementation plan on slide 7, cost guidance on slides 13, 14 and 15. 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

## Strengthening the core

- Major milestone achieved by signing strategic partnership for the Energy Transition Metals business
  - Attractive valuation at US\$ 26.0 billion (Enterprise Value)

## Iron Solutions

- On track to deliver the guidance: production up 6% y/y
- Lower costs y/y and q/q
- Improving portfolio quality after Torto dam commissioning at Brucutu

## Energy Transition Metals

- Copper production up 41% y/y: Successful ramp up of Salobo III
- Nickel production up 8% y/y: better operational performance in Sudbury and Indonesia

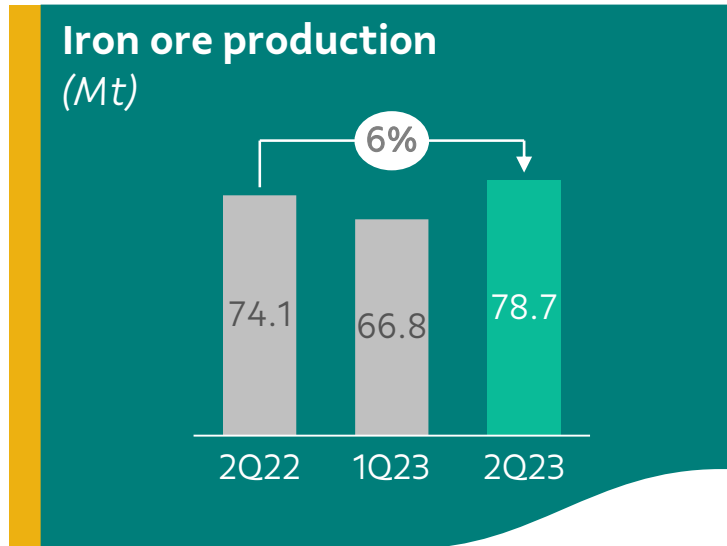
## Sustainable mining

- Global Industry Standard for Tailings Management (GISTM) implemented for all prioritized tailings facilities, adherent to the industry's timeframe

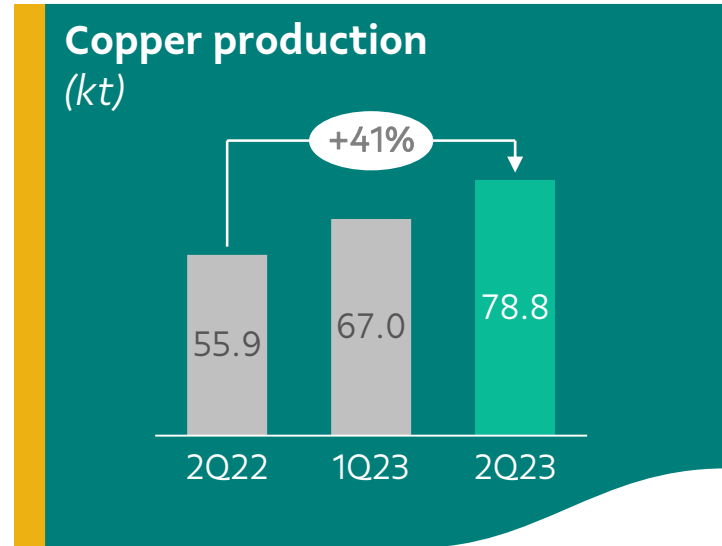
## Stay disciplined

- US\$ 1.74 billion announced for 1H23 as Interest on Capital
- 3<sup>rd</sup> buyback program 69% completed<sup>1</sup>

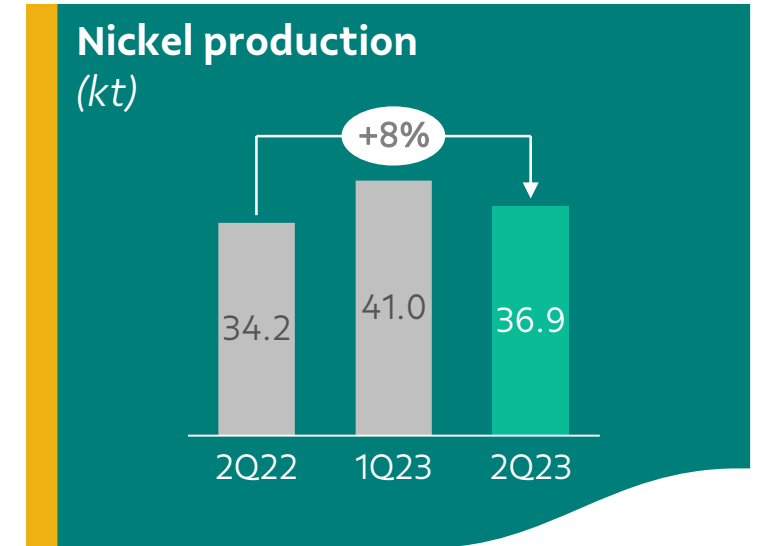
# A solid operational performance in 2023



- Record Q2 production from S11D
- Strong output from Itabira and Vargem Grande Complexes
- Average quality improvement
- Torto dam commissioning



- Successful ramp-up of Salobo III
- Improved performance at Sossego
- Maintenance activities at Salobo I & II and Sudbury mines in Q3

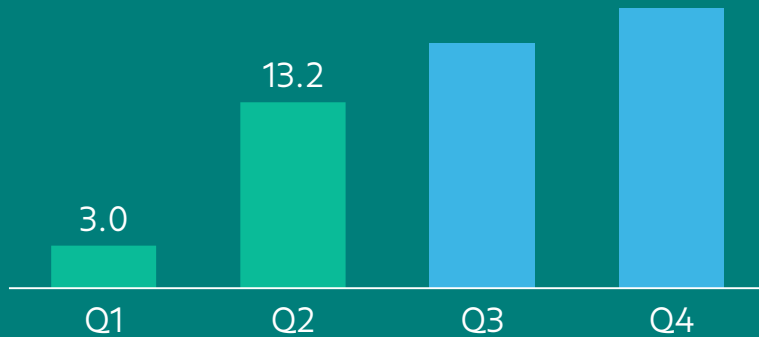


- Sudbury and PTVI production up y/y
- Maintenance activities in Sudbury and Thompson mines in Q3
- Onça Puma furnace revamp in Q4

# Salobo III ramping up ahead of schedule

## Planned ramp-up progress in 2023

Production, in kilotons of copper per quarter  
Salobo III plant only



✓ 16 kt of copper produced in 1H23

✓ Full capacity in Q4 2024

# Milestone achieved for safer tailings management

Vale successfully delivered the first round of the GISTM<sup>1</sup> implementation within the deadline<sup>3</sup>

To learn about Vale's tailings facilities, please visit [www.vale.com/esg](http://www.vale.com/esg)

Sul Superior dam, Gongo Soco mine  
Barão de Cocais (Minas Gerais, Brazil).

All tailings facilities not in a state of safe closure in conformance with GISTM<sup>3</sup>

Aug/25

All prioritized tailings facilities<sup>2</sup> with GISTM implemented<sup>3</sup>

Aug/23

Starting of External Verification

Dec/22

Gap assessment by third-party

GISTM baseline disclosed for all tailings facilities<sup>2</sup>

Jan/22

Nov/21

Jan/21

Internal self-assessment

Commitment with GISTM implementation

Aug/20

<sup>1</sup> Global Industry Standard for Tailings Management. <sup>2</sup> Prioritized facilities are those with the consequence classification as "Extreme" and "Very high" according to the GISTM consequence classification table. Including all tailings facilities within the GISTM Conformance Protocols criteria. Conformance is determined by evaluating whether Vale can demonstrate the implementation of all applicable Requirements in a manner that aligns with the Standard and is not in conflict with the law, using Conformance Protocols to support the integration of the Standard into the assurance and validation processes. The outcome for each requirement can fall into one of three categories: "Meets," "Partially Meets," or "Does not Meet." In some cases, a requirement may not be applicable depending on the circumstances of a tailings facility.

## 2. Unlocking value in Energy Transition Metals



# Unlocking value and accelerating growth

## Unique attributes...



Large resources and reserves in key critical minerals jurisdictions



Robust pipeline to grow copper from ~350ktpy to 900ktpy and nickel from ~175ktpy to 300ktpy



Verified low-carbon products and sustainable relationships with communities

## ...in a more focused, agile and efficient company...



Single vehicle with a leaner structure



Fully dedicated governance with industry expertise



Readiness to attract and retain top talent in the industry

## ...boosted by new investments



Partnership with global diversified investors to accelerate growth



Access to more competitive capital to fund US\$ 25–30 bn capex over the next decade



Execution of the long-term strategy faster and at scale

# Strategic investment to further strengthen the Energy Transition Metals business

## Transaction summary

- 13% equity interest; 10% Manara Minerals<sup>1</sup> and 3% Engine No. 1
- Enterprise Value: US\$ 26.0 billion
- Pre-money equity value: US\$ 25.1 billion
- Net proceeds: US\$ 3.4 billion
- Closing expected for the 1Q24

## Use of proceeds

US\$ 1 billion will be retained in VBM to establish a healthy capital structure

Excess cash to be used for intercompany loan repayment with Vale

## Vale + Manara Minerals + Engine No. 1: A Groundbreaking Partnership



Validation of VBM investment thesis at **attractive valuation**



Access to **competitive capital**



Commitment and alignment to long-term **decarbonization strategy**



Proven **track record in previous partnerships**



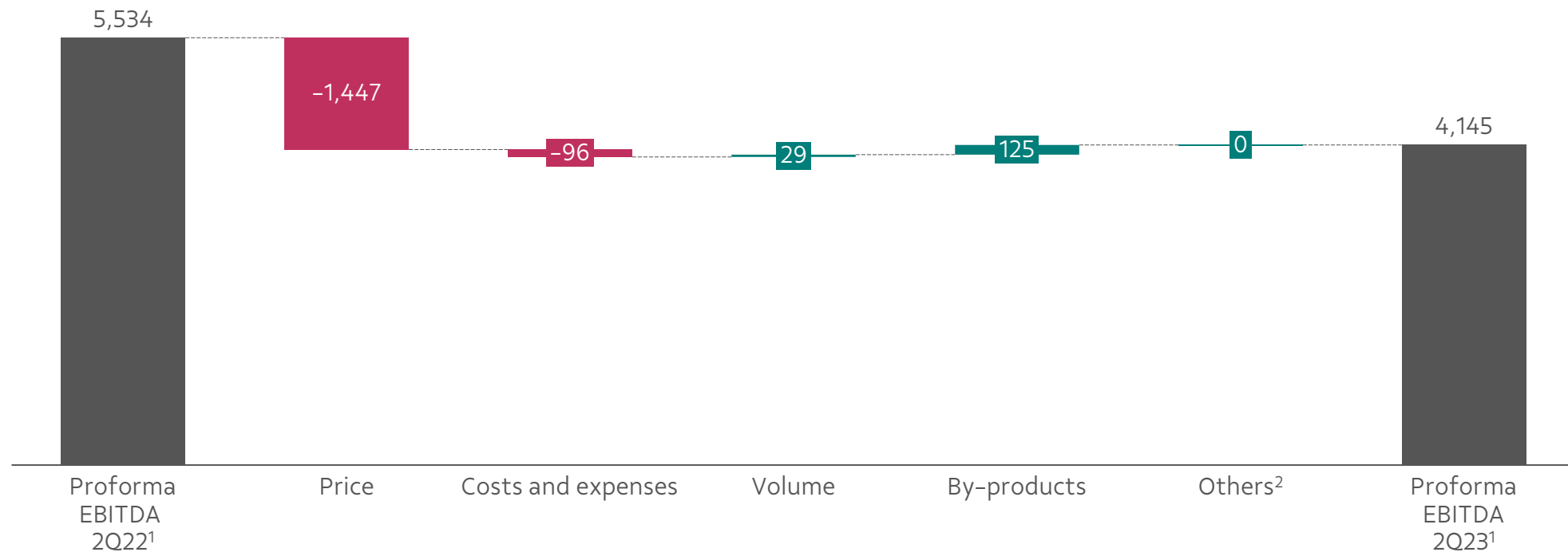
Pathway to extend partnerships in **key geographies** for our portfolio

# 3. Financial Performance

# EBITDA mostly impacted by lower market prices

## Proforma EBITDA – 2023 vs. 2022

US\$ million



<sup>1</sup>Excluding Brumadinho expenses. <sup>2</sup> Includes US\$ 31 million of FX effect, US\$ 34 million of dividends and a negative effect of US\$ 65 million including energy and the divestment of segments.

# Significant q/q improvement of iron ore costs despite the negative FX effect

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

	2Q22	1Q23	2Q23
Vale's C1 cash cost ex-third-party purchase cost	20.9	23.6	23.5
Third-party purchases cost adjustments	3.3	3.1	3.0
<b>Vale's iron ore cash cost (ex-ROM, ex-royalties), FOB</b>	<b>24.2</b>	<b>26.7</b>	<b>26.5</b>
Iron ore fines freight cost	21.3	17.8	17.6
Iron ore fines distribution cost	2.2	3.2	2.5
Iron ore fines expenses & royalties	6.9	7.6	6.2
Iron ore fines moisture adjustment	4.9	5.0	4.7
Iron ore fines quality adjustment	(1.1)	1.4	(0.6)
<b>Iron ore fines EBITDA all-in costs (US\$/dmt)</b>	<b>58.4</b>	<b>61.7</b>	<b>56.9</b>
Iron ore fines pellet adjustment	(6.2)	(3.5)	(3.9)
<b>Iron ore fines and pellets EBITDA all-in costs (US\$/dmt)</b>	<b>52.2</b>	<b>58.2</b>	<b>53.0</b>

- Slightly lower q/q despite BRL appreciation of US\$ 0.7/t
- Significant reduction expected in the 2H

- Improved product mix, with more Northern System ore
- Pellet premiums increased expected in Q3

**C1 guidance 2023: US\$ 21.5-22.5/t**  
• Changes in FX assumption

**All-in guidance 2023: US\$ 52-54/t**  
• Changes in FX assumption  
• Lower premiums expectation

# Lower COGS after by-products y/y and q/q on the back of production increase and by-products revenues

## Copper all-in costs US\$/t

	2022	1Q23	2Q23	
COGS	7,734	6,256	6,046	<ul style="list-style-type: none"> <li>Increased production diluted fixed costs at both operations</li> </ul>
By-product revenues	-2,977	-2,664	-3,177	
<b>COGS after by-product revenues</b>	<b>4,757</b>	<b>3,592</b>	<b>2,869</b>	<ul style="list-style-type: none"> <li>Higher gold volumes and prices</li> </ul>
Other expenses <sup>1</sup>	1,051	782	-325	<ul style="list-style-type: none"> <li>Supported by one-off tax credits in Q2</li> </ul>
<b>Total costs</b>	<b>5,808</b>	<b>4,374</b>	<b>2,544</b>	
TC/RCs penalties, premiums and discounts	465	518	544	
<b>All-in costs (EBITDA break-even)<sup>2</sup></b>	<b>6,273</b>	<b>4,892</b>	<b>3,088</b>	
<b>All-in costs (EBITDA break-even) ex-Hu'u</b>	<b>5,657</b>	<b>4,464</b>	<b>3,112</b>	

**All-in guidance 2023: US\$3,200/t<sup>3</sup>**  
Higher production as Salobo III ramps up

<sup>1</sup> Includes sales expenses, R&D, pre-operational and stoppage expenses as well as other expenses.

<sup>2</sup> Considering only the cash effect of streaming transactions, copper operations EBITDA break-even would increase to US\$ 4,445/t.

<sup>3</sup> Guidance for all-in costs (EBITDA breakeven) ex-Hu'u.

# Ni all-in costs increase y/y and flat q/q mainly due to own sourced production impact on fixed cost dilution

## Nickel all-in costs

US\$/t

	2022	1Q23	2Q23
COGS ex-third party	15,809	22,434	21,135
COGS <sup>1</sup>	16,591	23,653	21,969
By-product revenues	-5,863	-7,687	-7,232
<b>COGS after by-product revenues</b>	<b>10,728</b>	<b>15,966</b>	<b>14,737</b>
Other expenses <sup>2</sup>	592	1,117	2,516
<b>Total costs</b>	<b>11,320</b>	<b>17,083</b>	<b>17,253</b>
Nickel average aggregate (premium) discount	(100)	60	(170)
<b>All-in costs (EBITDA breakeven)</b>	<b>11,220</b>	<b>17,143</b>	<b>17,083</b>

- Lower fixed cost dilution of own source production y/y
- Longer maintenance at Long Harbour (2wks vs. 8wks.) and VBME transition

- Write-down of inventories resulting from continued mine transition at Voisey's Bay and Long Harbour maintenance

**All-in guidance for 2023 : US\$15,500-16,000/t**

- *Mostly due to lower-than-expected by-products prices and volumes*

<sup>1</sup>Excluding marketing activities

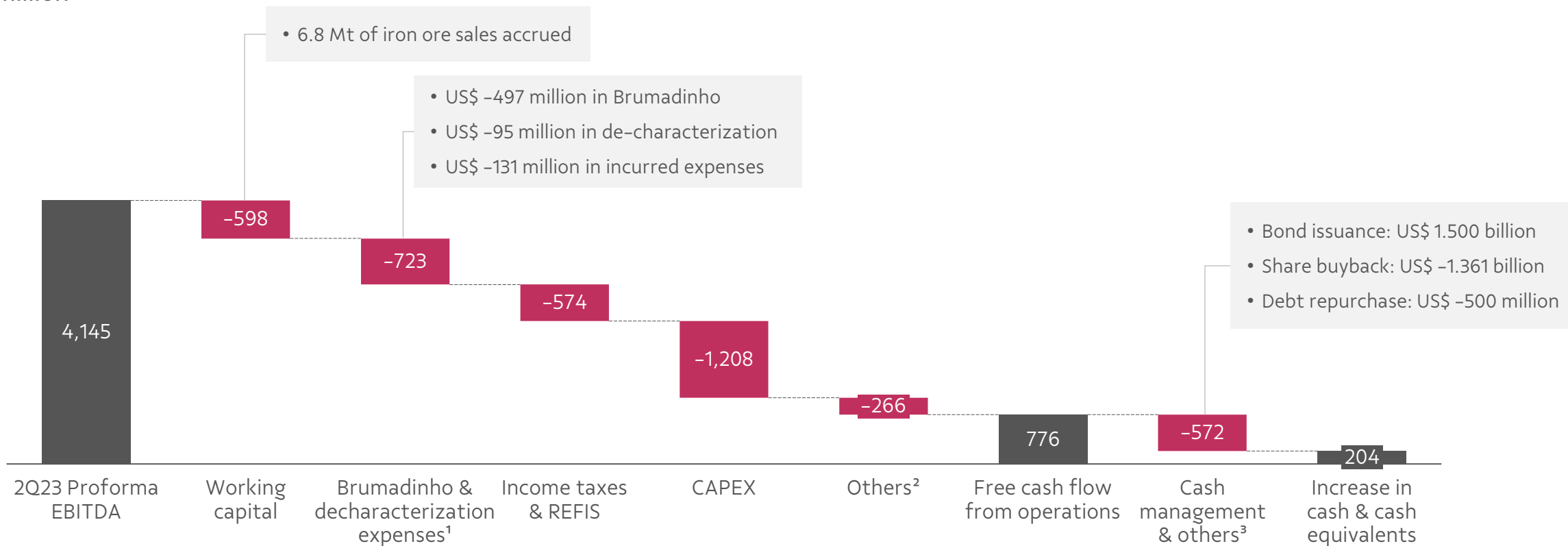
<sup>2</sup>Includes sales expenses, R&D, pre-operational and stoppage expenses as well as other expenses.

<sup>3</sup>Considering only the cash effect of streaming transactions, nickel operations EBITDA break-even would increase to US\$17,391/t.

# FCF used for liability management and shareholder return

## Free cash flow – 2Q23

US\$ million



<sup>1</sup> Includes US\$ 592 million of disbursement of Brumadinho and de-characterization provisioned expenses and US\$ 131 million of Brumadinho incurred expenses.

<sup>2</sup> Includes interest on loans, derivatives, leasing, dividends paid to noncontrolling interest, shareholders debentures, payments to Renova and others.

<sup>3</sup> Includes US\$ 130 million for the stake acquisition on Oman pellet plant.

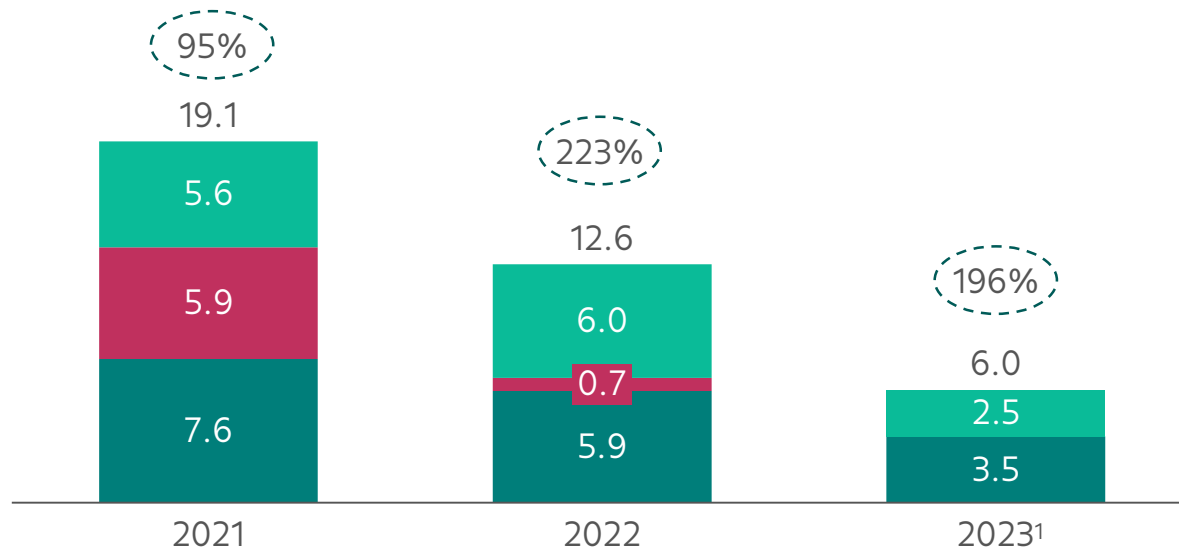


# Generating and distributing value while maintaining the discipline capital allocation

## Shareholder remuneration

US\$ billion

- Share buyback
- Extraordinary dividends
- Dividends
- 95% Free cash flow returned to shareholder (%)



**27%** of dividend yield accumulated in 3 years<sup>2</sup>

**16%** of outstanding shares bought since April 2021

<sup>1</sup> Includes dividends announced in Jul/23 and the share buyback up to Jul 27<sup>th</sup>, 2023.

<sup>2</sup> Considers the sum of dividends and Vale's share price on December 30<sup>th</sup>, 2020. Includes dividends announced in Jul/23.

# Closing remarks

**Significant progress on operational performance**

**Transformational partnership in ETM to speed up growth and value creation**

**Conformance with GISTM on all prioritized structures**

**Remain committed to a disciplined capital allocation process**



VALE