

Disclaimer

"This presentation may include statements that present Vale's expectations about future events or results, including without limitation: (i) our perspective for reduction of emergency level of dams on slides 9, 11 and 84; (ii) our perspectives for deliveries in our Upstream Dam Decharacterization Program on slide 11; (iii) iron ore projects capacity addition and start-up on slides 17, 55, 56, 57, 58, 84 and 88; (iv) the reparation and decharacterization expenses on slides 24, 84 and 90; (v) the Sol do Cerrado project contribution to our renewable electricity consumption on slide 25; (vi) expectations of operational KPIs improvement in Iron Ore Solutions business on slides 35, 37, 38 and 39; (vii) expectations for steel production on slides 44 and 45; (viii) expectations for supply and demand of agglomerates on slide 48; (ix) plans for implementing briquetting plants and for Mega Hub development on slide 51; (x) pellets and briquettes production plan on slide 52; (xi) iron ore production guidance on slide 53; (xii) expectations for iron ore product portfolio and premium on slide 61; (xiii) expectations for EV sales and nickel and copper demand on slide 64; (xiv) copper production guidance on slides 67 and 84; (xv) nickel production guidance on slides 68 and 84; (xvi) expectations of capacity and start-up of Energy Transitions Metals projects and initiatives on slides 69 and 88; (xvii) our long-term production volume ambition for nickel and copper on slide 70; (xviii) potential for increase in resources on slide 78; (xix) cost and expenses guidance on slides 84, 85, 86 and 87; (xx) expectation of iron ore product quality on slide 84; (xxi) expected return of the project portfolio on slide 88; (xxii) guidance for capital expenditures on slide 89; and (xxiii) price sensitivity of EBITDA generation and FCF yield on slide 91.

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 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.

valeday2023









Vale of the future: executing our strategy

Promote sustainable mining

- Benchmark in safety and dam management
- Regional social and economic development
- Shared value and trust
- People-driven culture
- Nature positive

Updates since 2022



- Iron ore solutions
- Energy transition metals
- Customer centricity
- Technology innovation
- Circular mining



- Reliable operations and consistent delivery
- Attractive cash return to shareholders
- Strong balance sheet
- Cost, capex and capital allocation efficiency







 \checkmark

8

Enhancing safety



Safety Journey

Substantial progress in dam safety and tailings management











Since 2019



Upstream dam decharacterization program







Geotechnical Monitoring Center (Nova Lima, Minas Gerais, Brazil)





Iron Ore Operational **Stability**



Designed for operational stability



Greater focus on core assets



Accelerating the implementation of the management model

Fostering execution and innovation



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Promoting technical excellence







Iron Ore Growth and Quality





Strategic projects to expand iron ore production and quality

+50 Mt capacity

2026

+20 Mt



+15 Mt



+15 Mt







Energy Transition Metals **Transformation**





Unlocking value in Energy Transition Metals



Exclusive mineral endowment
 Robust growth pipeline in key provinces
 Verified low-carbon products



Separate enterprise with a leaner structure
Top talents joining management
Dedicated governance



A platform for **growth and further value unlock** Partnership with diversified investors
 Access to competitive funding for investments
 Faster and at scale execution of the long-term strategy













ESG Leadership

Important deliveries in Mariana's reparation

~R\$ 34 billion

disbursed in 42 compensation programs

Compensation

+434,000 people indemnified

+R\$ 16 billion paid in compensation

Resettlement

0

+81% of housing solutions delivered (552 out of 675)



Quality similar to prerupture standards

Permanent infrastructure:

10 sewage treatment stations

17 water treatment systems

18 water distribution networks

Bento Rodrigues resettlement, Mariana, Minas Gerais, Brazil)



An expedited Brumadinho reparation

Individual compensations







Integral Reparation Agreement

(R\$ billion)



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ESG Leadership

Delivering on our Climate Change agenda



+176,000 ha of forests conserved and/or recovered since 2019¹



100% of electricity from **renewable** sources in **Brazil**



87% of electricity from renewable sources **globally**



CO₂

~20% of 2030 scopes 1 & 2 targets delivered²

Scope 3 target: transparent and measurable carbon footprint

¹ Figures dated October 31, 2023. ² Already reduce 20% of scopes 1 and 2 emissions (target 30%) delivered through the usage of electricity from renewable sources and operational improvements

The Sol do Cerrado solar project, with investments of ~US\$ 590 million: renewable energy to meet 16% of Vale's estimated consumption by 2025







27

Continuously improving our ESG rating

Vale's ESG rating

	2019	Today
Sustainalytics (the lower, the better)	54.5	35.3
ISS Governance (the lower, the better)	10	1
MSCI (AAA highest / CCC lowest)	ссс	В
DJSI¹ (the higher, the better)	45	51 ²
Moody's (the lower, the better)	NA	CIS-2 ³







Iron Ore Operational **Stability**

Carlos Medeiros



Operational excellence is paramount to unlock value and support efficient growth



Our approach to building a performance culture



Operational excellence is paramount to unlock value and support efficient growth



Our approach to building a performance culture



Safety is the basis of operational excellence



letizing Central Maintenance Workshop, parão, Espírito Santo, Brazil



55

times more N3¹ records vs. 2022

81% already addressed

Implementation²

~19,000 stations in operation and 99% with improved work conditions

Safet

72%

Fewer process safety events³ vs. 2022 through preventive actions and critical controls integrity

¹ 10M23 figures compared with 2022. N3 events measure the number of first-aid injuries and events with no potential loss. By registering them, Vale learns and carries out preventive actions to avoid N1 and N2 events. ² Part of the Vale's Management Model (VPS), the purpose of 5S is to guarantee safe and healthy working conditions.³ 10M23 figures compared with 2022. Process safety events that generate an unplanned or uncontrolled release of hazardous energy or material involving equipment or operating assets.

Operational excellence is paramount to unlock value and support efficient growth



Elevating the safety mindset as the ornerstone of excellence \bigotimes

Identifying and monitoring deviations to enhance asset reliability

reliability

Asset

operationa models

Implementing tailored solutions to improve efficiency in critical sites

Our approach to building a performance culture





Integrated monitoring supports early identification of failure risks...

Asset Monitoring Center (AMC)

16 centers, covering mine-plant and logistics operations





Decision-making with a holistic view, integrating operations







...resulting in increased reliability of critical assets



¹ Also known as CMR, the indicator is the relation between work-hours dedicated to unplanned activities vs. total work-hours as indicated by the maintenance control center. ² 10M23 figures. ³ Km per failure is the relation between kilometers traveled by the train between failures.

Operational excellence is paramount to unlock value and support efficient growth



Elevating the safety mindset as the ornerstone of excellence dentifying and monitoring deviations to enhance asset reliability



Implementing tailored solutions to improve efficiency in critical sites

Our approach to building a performance culture


Brucutu mine: reaching higher utilization after autonomous trucks implementation





Autonomous mine – Brucutu:



8 18 trucks

Improved mining operational performance

Asset utilization rate¹(%)



Bes

Best performance award: Ranked among the world's top performers



S11D: refining operational model to enhance performance

What are we doing to improve?

Enhancing orebody predictability through short-term drilling sample analysis

Adjusting blasting strategy for better operational efficiency



Implementing a hybrid approach • combining the original truckless system and mobile mining fleet

Installing new crushers

to better handle the orebody with the occurrence of compact material





Ponta da Madeira Port: securing overall operational stability

Shipping Upgrading the fleet with larger vessels



Yard management Slow moving SKUs¹ removal



Stockpiles

Geometry adjustments and improved drainage systems to increase loading rate



Maintenance

Reviewed strategy to leverage equipment reliability



39

Total Moisture Limit (TML) predictability Al predictive models





Historical record Highest discharging effectiveness rate since 2018, achieved in Oct 2023





Reducing impact of rainy season in our production plan:



- Enhanced de-watering plan, in line with the mining plan
- Increased ore extraction at the top of the pit
- Installation of lightning detection system



- Enhancement and upkeep of railway slopes
- Drainage channel maintenance
- Flooding prevention measures



- Low moisture ore stock for blending in wet season
- Storage yards with forced drainage system
- Storage yards expansion



MA. Brazi

Operational models

Non-exhaustive



Key levers to unlock value through 2026



Iron Ore Growth and Quality

Marcello Spinelli





Iron Ore Growth and Quality



Elements that are driving the demand



Our unique attributes



4 main initiatives of Iron Ore Solutions





Steel production continues to march up globally





Steel demand supported by China's resilient economic growth...





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Small-scale stimulus supporting construction
Urban village renovation campaign
Total construction only down 2.6% in 9M23²

Emergence of a new Chinese industry

- Rapid growth in new energy related sectors
- Continued manufacturing upgrading
- Strong indirect export of steel (e.g. EVs, machinery)



Supportive fundamentals into 2024

High BF utilization (~90%) and low inventories
Limited scrap, increased flat steel production



...while decarbonization shifts steel and iron ore demand profiles in the long-term

Steelmaking emissions





The steel industry will most likely decarbonize in steps



Step 1: Operational efficiency Up to 15% CO₂ reduction

- Burden mix optimization with high-quality ores
- Energy optimization
- Increased scrap usage



Step 2: New technologies (excluding green H₂) 15-60% CO₃ reduction

- Low carbon fuels & enhanced O₂ in BF
- CCS adoption



Step 3: 100% green H₂ 60-100% CO₂ reduction

• H_2 + DR route



Exploring multiple decarbonization solutions drives demand segmentation...

High-quality ore demonstrates superior operational and cost efficiency for producers

Metallic conversion costs (US\$/t of metallic)¹ Pig Iron



HBI²

¹ Assumptions: Steel margins = US\$ 0/t; CO₂ price = US\$ 100/t; Coke price = US\$ 350/t; Natural gas price = US\$ 3.2/MMBtu; Electricity price = US\$ 35/MWh; Iron ore price = US\$ 75/t. Not including premium differentials between iron ore products. Including direct reduction furnace and melter assets capital cost intensity. Assuming unconstrained supply for iron ore products. ² Considering the production of solid pig iron and HBI for usage in EAF. Including value in use (VIU) adjust to compare with pig iron in an EAF. Including conversion costs and investment capital charge.





Seaborne iron ore supply-demand (*Mt*)

CAGR

Supply

Demand

Vale's new initiatives to close the supply-demand gap





Our main differentials:



High iron content reserves Carajás basin has 6 Bt in reserves with ~66% Fe and low impurities

Ores suitable to beneficiation

Beneficiation economically viable: good metallic recovery Low LOI² and high-density differentials as advantages

Core competences in beneficiation methods Processing and agglomeration capacity operated for decades





Decarbonization drivers (*)

Building a customer-centric Iron Ore Solutions company

Repositioning our product portfolio to leverage on increasing premiums:



Mega Hubs Redesigning the steelmaking supply chain

Agglomerates Enabling the transition to low carbon emission routes



High-quality production growth Increasing operating reliability and flexibility

Concentration

Lifting the constrains to high-quality feedstock supply







Forging partnerships to start Mega Hubs construction in 2024–25...





...and reshaping our portfolio for a more tailored product offering

Tubarão Plant, Espírito Santo, Brazil



The economics of iron ore briquettes

Similar VIU to pellets

~50% lower costs vs pelletizing¹

~66% lower capital intensity²

¹ Tubarão 1 & 2 briquettes plants estimated transformation costs of US\$ 10-15/t, after full ramp-up.
² Preliminary comparison considering pelletizing scopes 1 and 2 emissions.



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On track to reach 340–360 Mt with an improved portfolio by 2026







Projects Growing with low capex intensity (US\$ 45-60/t)



Quality Ensuring higher quality portfolio





Progressing in licensing process to stabilize production baseline

Licensing challenges



Southeastern and Southern Systems Significant regulatory changes after 2019



Northern System Conservation of the biome supported by extensive studies

What are we doing?



Advancing towards more sustainable operations



Investing in collaborative environmental studies 🕶



Portfolio prioritization and active listening

Public-private partnerships to advance

Minas Gerais Government

• Licenses granted doubled vs. 2022

ICMBio

 8 collaboration agreements signed, totaling ~US\$ 50 million



Strategic projects to expand Iron Ore Solutions

+50 Mt capacity

2026

+20 Mt



+15 Mt



+15 Mt





Vargem Grande

~15 Mt capacity addition



60% Physical Progress

Vargem Grande Complex

- Mines expansion licensing
- New screening circuit and improved handling system adequacy at VGR1 plant
- **Start-up: 4Q24**

Capanema

~15 Mt capacity addition



60% Physical Progress

Capanema Maximization

- Sinter feed production using natural moisture processing
- Increasing operational flexibility of Timbopeba
- Start-up: 1H25

S11D

~20 Mt capacity addition





20%

physical

progress

10

Serra Sul

- Mine-plant capacity to increase by 20 Mtpy
- Conveyor belt duplication
- Start-up: 2H26

Compact Crushing

- New crushing plant for jaspilite waste
 - Potential to debottleneck 50 Mtpy capacity
- Start-up: 2H26



Lifting constraints to ensure high-quality feedstock supply

Vale's concentration solutions



concentration

Third-party concentration facilities





IOCJ ore concentration

& solutions

Sohar concentration









Vale's concentration solutions



Generate DR quality feed from IOCJ
 Pilot studies completed
 Economic feasibility studies ongoing



Located next to Oman's pellet plant
 Asset-light partnership
 12-15 Mtpy of concentrate (FID¹ expected for 2024)



Adding high-quality capacity to capture higher premiums



Decarbonization is creating a segmented iron ore market, with a growing highquality demand



Customer-centric approach and carbon footprint transparency for product differentiation



Optimized and diversified portfolio to supply different geographies and technologies



Iron Ore Solutions will create substantial value to clients, society and shareholders

Vale's product portfolio (%)





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Key levers to unlock value through 2026



Deshnee Naidoo Mark Cutifani



Long-term fundamentals remain solid





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Setting up to succeed





On the right path



Clydach Refinery, UK



Significant copper production growth





Salobo

Ramp-up to full production at Salobo 3

Recovery plan for plants 1 and 2



South Hub

Mining of highergrade zones in 2024

Bacaba project to offset Sossego depletion



Nickel production on the way up





North Atlantic

VBME Project full ramp-up by 2026

Increased mine output in Sudbury

Onça Puma plant

Onça Puma

Furnace # 1 revamp by 1Q24

2nd furnace startup in the 2H25

valeday 2023

The upcoming years will be crucial for transitioning to a new phase...



... allowing us to focus on our long-term ambition



Asset review initial remarks













We are not there yet...

1

Resource Endowment

Mining Methods

Asset Integrity

Flowsheet Optimization

Project Development


Identifying opportunities through a comprehensive asset review

Well-positioned to support and supply North America EV growth

> A Tier 1 mining complex with growth optionality

Attractive exposure to Indonesia



Identifying opportunities through a comprehensive asset review Global flowsheet

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Opportunities for optimization

Canada Balancing potential and mature assets

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Carajás Carajás Right potential in copper Indonesia Great assets for the future

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Carajas: right potential in copper





Salobo

- Endowment & resource potential
- Operating practices
- Asset management
- Underground potential



Sossego

- Endowment
- Satellites development
- Operating practices
- Underground potential



Future Alemao project area

Copper Growth

- Endowment
- Project management
- Alemao optimization



Cu

Salobo: improve performance through debottlenecking



Plants I&II

Plants I&II throughput improvement through implementation of feed strategy

Plants I&II throughput (kt of ore per hour)



Cable shovel fleet (Mtpa per equipment)



Mine

Ongoing work to improve mine productivity and critical equipment performance

76

Canada: balancing potential and mature assets





Sudbury

- Endowment potential
- Mine development
- Cut-off grade strategies
- Asset potential



Thompson

- Endowment potential
- Ultramafic targets
- Processing options



Voisey's Bay

- Endowment potential
- Disseminated ore options
- Long Harbour feed options



Ni



Sudbury: opportunities to unlock mill feed through a bolder cut-off grade strategy



Garson mine example

- Lower-grade zones interspersed with zones within the cut-off limit
- 0.3% Ni reduction in Ni cut-off grade has the potential increase resources tonnage by 50%
- Opportunity to increase mill feed with low investment, using existing infrastructure



Indonesia: Great assets for the future



Indonesia

- Endowment potential
- Operating practices
- Driving growth through resource value arbitrage





Ni

Global flowsheet: Opportunities for optimization





80

Global flowsheet: Opportunities for optimization



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The pathway to value



Long-term demand resilience driven by energy transition Unique opportunities from resource endowment **Right assets** in the right jurisdictions Strong foundation for achieving superior performance **A New Vehicle set to thrive**



82

Key levers to unlock value through 2026







Value drivers through 2026

\bigcirc	Safety Journey	 No dam at level 3 by 2025 Access to a broader investor base and indexes 	
57	Iron Ore Operational Stability	 Secure 310-320 Mt baseline Greater predictability, lower variability Higher adherence to production plan: 95%, up from 90% 	
	Iron Ore Growth and Quality	 +50 Mt capacity with low capital intensity C1 < \$20/t Fe content: 63.5%, up from 62.5% 	
4	Energy Transition Metals Transformation	 Asset review implementation +70 kt copper and +55 kt nickel¹ production growth 	
	ESG Leadership (e.g. Reparation)	 Solid progress on reparation execution Commitments down from current ~US\$ 3 bn to an average of US\$ 0.8 bn between 2026-2030 	

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Delivering cost efficiency and offsetting inflationary effects

Fixed spending – Iron Ore Solutions (US\$ billion)



New volumes and efficiency program resulting in lower C1

Iron ore fines C1 cash cost – ex. 3rd-party purchase $(US\$/t)^1$



All-in costs (US\$/t) ¹		2023E	2024	2026	Main assumptions for 2026
Fe ²⁶	lron Ore	~56	53-57	~45	 C1 (< US\$ 20/t): with increased volumes and efficiency program Premium (US\$ 8-12/t): improved portfolio and steel margins
	Copper	~3,400	4,000 - 4,500	3,500 - 4,000	 Increased volume from Salobo diluting fixed costs Bacaba ramp-up in 2H26 and Sossego depletion
Ni 	Nickel	~16,200	14,500- 16,000	11,500 – 13,500²	 Increased nickel & by-products production w/ VBME ramp-up Decrease in 3rd-party purchases

¹ Amounts in real terms. Before sustaining Investments. ² Not considering the effects from the PTVI divestment.

Accretive projects, additional ~US\$ 4 bn in EBITDA¹

Project pipeline Fe_ Iron Ore Ni²⁸ Nickel Copper 2024–2026 (approved projects) 2027 onwards Serra Sul Capanema VGR1 revamp Serra Leste New **S11C** 15 Mtpy briquette 20 Mtpy 15 Mtpy expansion (sustaining) plants 30+% **Iron Ore Mega Hubs** Compact N1/N2 South Hub **Briquettes N3 Solutions** crushing Tubarão expansion 6 Mtpy IRR¹ 50 Mtpy 6 Mtpy (sustaining) (weighted average) (sustaining) **Onca Puma** VBME Hu'u Victor North Hub 2nd furnace 45 ktpy (sustaining) 12-15 Mtpy 15+% **ETM** Bahodopi² Pomalaa² Sorowako Creighton **CCM Pit** IRR¹ Limonite 70 ktpy **120 ktpy** PH5 (weighted average)



¹ Based on operations after full ramp-up and assuming market average long-term commodity prices.² Bahodopi and Pomalaa joint-venture projects will be recognized as equity Investments and not CAPEX in Vale's financial reports.

Controlled CAPEX in the coming years

CAPEX (US\$ bn)¹



¹ Amounts in real terms

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Controlled and efficient capex to sustain production



Low carbon agenda initiatives



Accretive growth opportunities

Brucutu Site, Minas Gerais, Brazil



Performing on our commitments

Doce River, Minas Gerais, Brazil

Brumadinho & Mariana commitments (US\$ billion)¹

	2023E	2024	2025	2026	2027	'28-35 Avg.	
Decharacterization	0.4	0.6	0.5	0.6	0.5	0.3	Stable cash outlays
Brumadinho agreements ²	1.4	1.1	0.9	0.6	0.2	0.0	64% of Reparation Agreement completed by Oct/23
Incurred expenses	0.5	0.4	0.4	0.3	0.3	0.04	Gradual reduction throughout the years
Samarco & Renova ³	0.6	0.9	1.2	0.4	0.3	0.1	Potential support from Samarco cash generation
Total	2.9	3.0	3.0	1.9	1.3	0.4	
• 0.8 • • • • • • • • • • • • • • • • • • •							

¹ Amounts stated in real terms, net of judicial deposits and without discounts to present value, considering average BRL–USD Exchange rates of 5.0076. ² Includes Integral Reparation Agreement, individual, labor and emergency indemnifications, tailings removal and containment works. ³ Includes Germano dam decharacterization provision and estimates of Samarco's contribution. ⁴ Considering US\$ 0.3 billion in 2028.

Solid value creation in different scenarios...

Serra Norte, Pará, Brazil

Iron ore price (US\$/t) 110 90 130 16 k / 7 k 15.2 21.5 27.8 Nickel/ Copper 20 k / 9 k 16.7 23.1 29.4 price (US\$/t) 24 k / 11 k 18.3 24.6 31.0

2026 EBITDA, real terms (US\$ bn)

¹ Using market cap of December 1st, 2023

2026 Free Cash Flow yield, real terms (%)¹

Iron ore price (US\$/t)

		90	110	130
	16 k / 7 k	5.2%	12.1%	19.1%
Copper price	20 k / 9 k	7.2%	14.2%	21.1%
(057)()	24 k / 11 k	9.3%	16.2%	23.2%



...and continuing to focus on returning value to shareholders





Key levers to unlock value through 2026





A clear pathway towards an even greater Vale







In Iron Ore Solutions
A stable production baseline
Additional 50 Mt capacity
Higher average quality

ESG Leadership

4

In Energy Transition MetalsAsset review to unlock additional value

A safer Vale with improving performance



