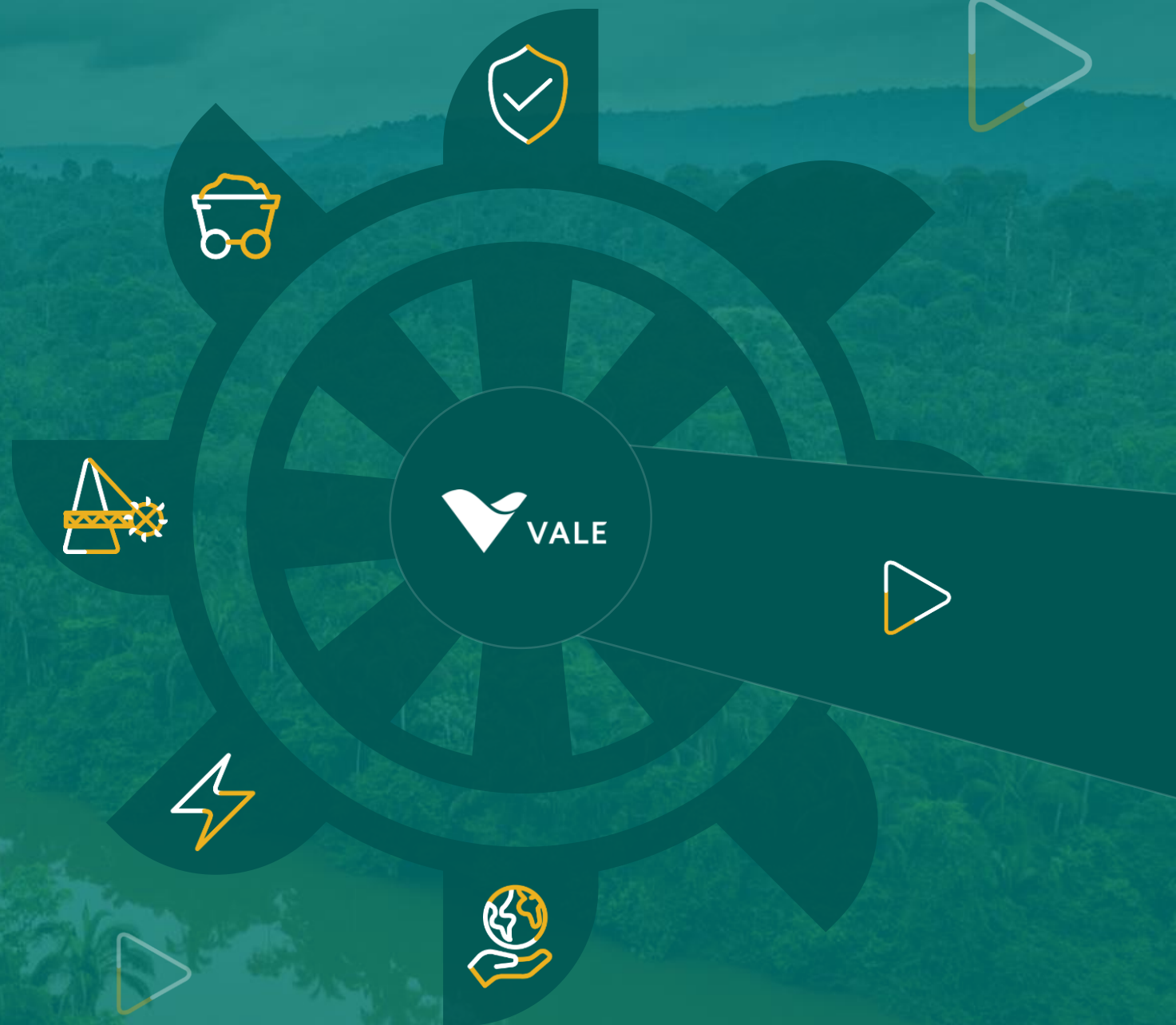


2024 Analyst & Investor Tour

Carajás

September 11th, 2024



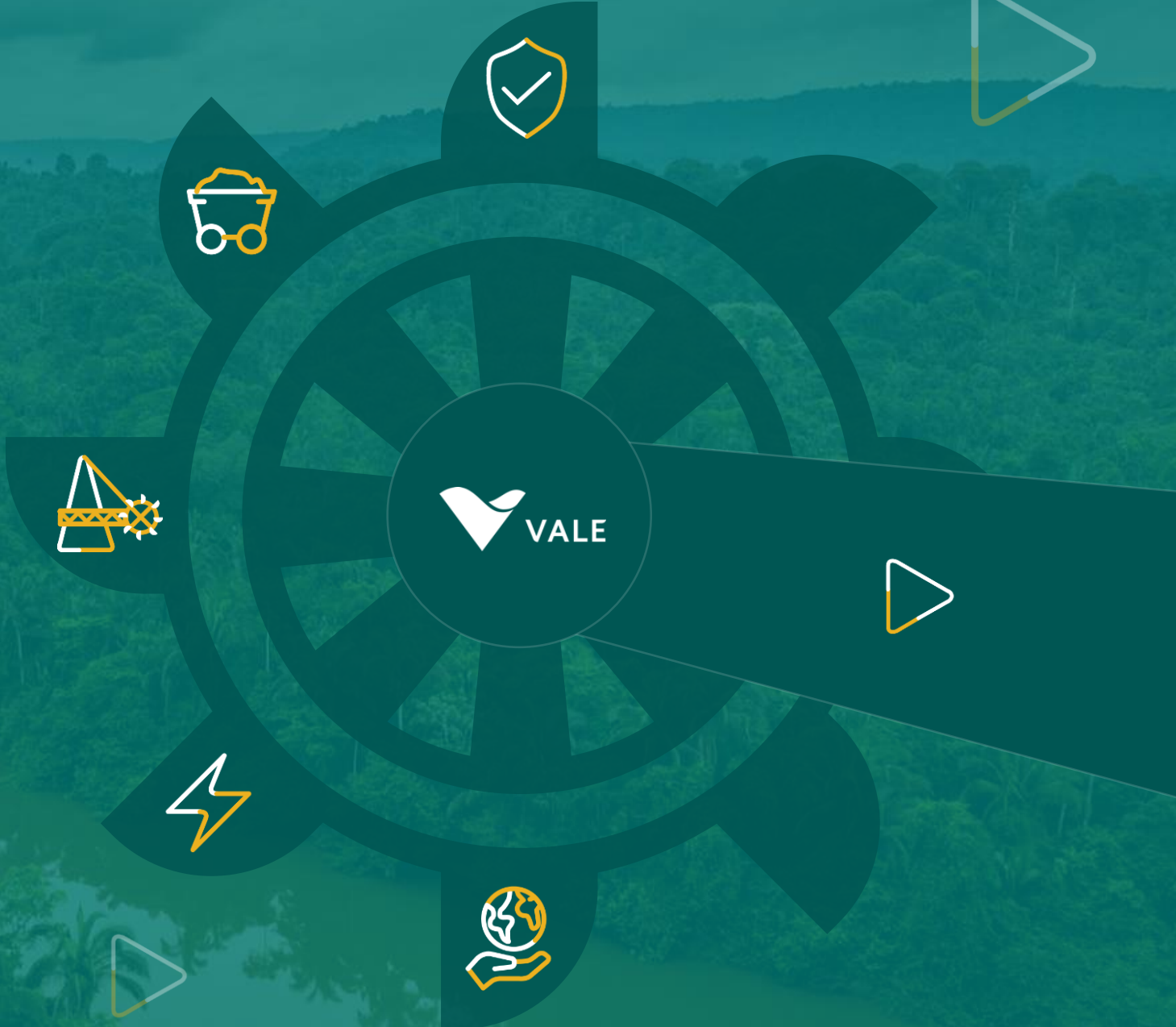
Disclaimer

"This presentation may include statements that present Vale's expectations about future events or results, including without limitation: (i) iron ore production guidance on slides 25 and 27; (ii) expectation of iron ore product quality on slide 27; (iii) iron ore projects capacity addition, start-up and Capex on slides 28, 29 and 30; (iv) iron ore projects optionalities start-up expectation on slide 31; (v) concentration plant project start-up, capacity and internal rate of return on slide 34; (vi) iron ore product portfolio on slide 36; (vii) copper and nickel projects and initiatives start-up, capacity and final investment decision date on slides 44, 48, 50 and 52; (viii) expectations on the consolidated outcomes for the Asset Review initiatives 52 and 53; and (ix) iron ore fines C1 cash cost and iron ore, copper and nickel all-in costs on slide 56.

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."

Welcome to Pará

Gustavo Pimenta



2024 Analyst and Investor Tour

Welcome to our operations in Pará



- Largest iron ore complex in the world representing **10% of global seaborne market**
- **Large copper endowment**, with significant growth potential
- **40 years** operating sustainably; protecting **800,000 hectares in the Amazon**
- **~45%** of purchases supplied from the state of Pará

Pará State



Vale of the Future strategy



Promote sustainable mining

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



Foster low carbon solutions

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



Stay disciplined

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

Shared Value for Pará and for the world



Vale Technological Institute (ITV):

Scientific research and knowledge sharing for a sustainable future.



Vale Fund & Vale Foundation:

Fostering the development of social and environmental impact businesses and autonomous communities.



Vale Cultural Institute:

Preserving cultural heritage and improving access to culture and artistic expression.



Fighting extreme poverty:

Pilot project with 50k people; 93% living in the north of Brazil and the Amazon region.



Protecting the Carajás Mosaic:

800 k ha of Amazon forest preserved.

Supporting COP30.

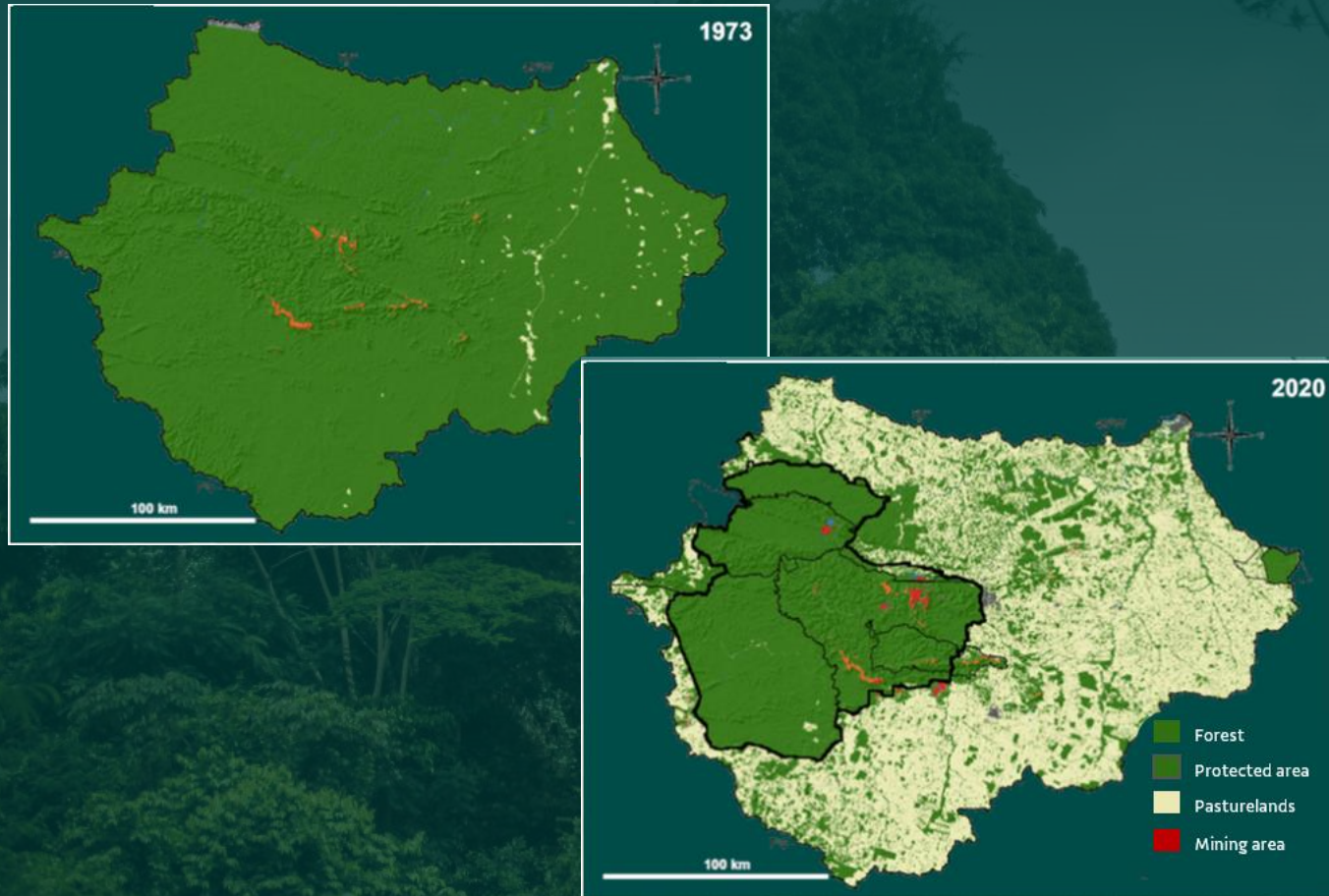
Investments in the last 5¹ years in Pará:

R\$ 3.7 billion in socio-environmental initiatives

¹From 2019 to 2023.

The examples presented on this slide are only some of the initiatives included in the socio-environmental expenditures. COP30 expenditures will be included in socio-environmental expenditures as of 2024.

Our green belt is leaving a positive impact on biodiversity



- We protect ~1 million ha and +600 threatened flora species
- 800 k ha of Amazon forest (5 times the size of the city of São Paulo)
- We protect an area 10 times larger than that occupied by our operations
- **Partnerships** with governmental agencies have been a good model to support conservation actions



Our operations in Pará



Carajás Endowment: Significant potential for both iron ore and copper



Iron Ore

- 2023 production: 173 Mt
- Total reserves of 5.2 bn tons @ 65.2% Fe
- Resources¹: 2.4 bn tons @ 62.9% Fe



Copper

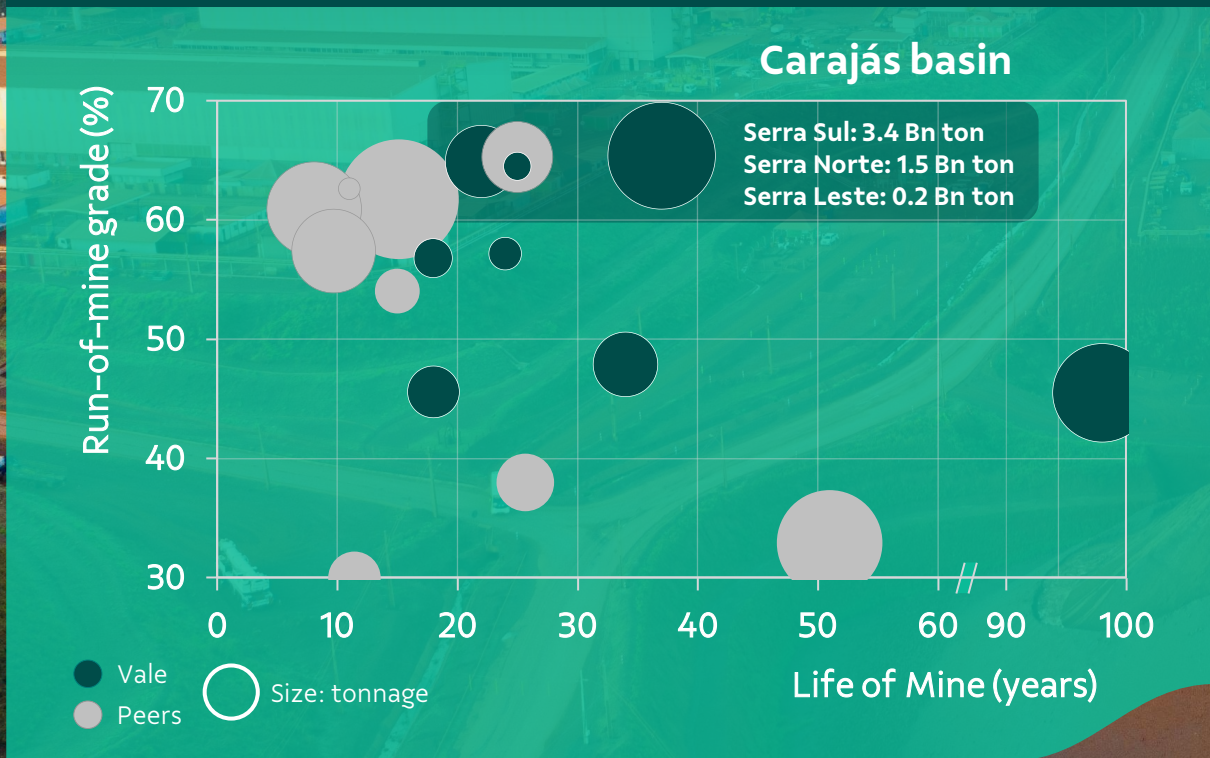
- 2023 production: 247 kt
- Total reserves: 1.2 bn tons @ 0.62%
- Resources¹: 2.6 bn tons @ 0.63%

Further expansion potential



Carajás iron ore basin: the industry's benchmark in quality

Iron ore mineral reserves



Premium reserves
65% Fe "in natura"



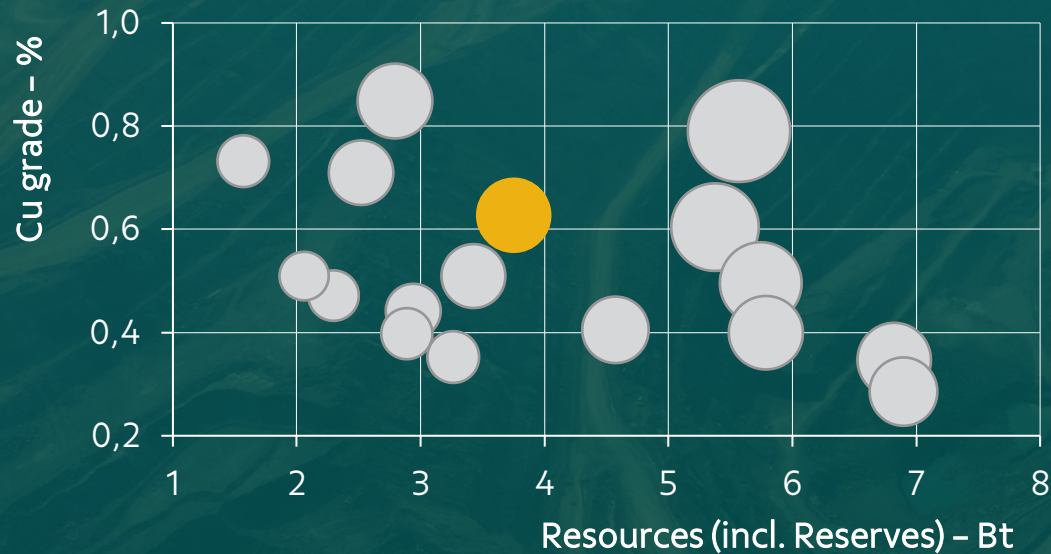
Low impurities level
< 2.8% of SiO₂ and Al₂O₃



Low-cost growth opportunities

Vale's copper basin in Carajás compares relatively well to large Andean deposits

Copper Mineral Resources (incl. Reserves)



● Vale's Carajas basin¹
 ● Large Andeans (incl. Chile)²

○ Size: Copper contained in Resources (incl. Reserves)



>20 Mt copper contained at competitive grades
 0.63% Cu vs. 0.46% industry average



Bulk logistics infrastructure
 mine-railway-port



Further potential for resources development

¹ Comprises current Carajás Basin resources including Salobo, Sossego, Alemão and Paulo Afonso deposits, as of December 31, 2023, as per Vale Form 20-F. ² Refers to deposits with more than 10 Mt of contained copper, comprising Collahuasi, Escondida, El Teniente, Queblada Blanca, Cerro Verde, Los Bronces (including underground), Toquepala, El Abra, Andina, Los Pelambres, Radomiro Tomic, Nueva Union, Chuquicamata, Centinela and Quellaveco. Source: Vale and S&P Capital IQ.

Key Levers to unlock value through 2026



Safety Journey



Iron Ore Operational Stability



Iron Ore Growth and Quality



Energy Transition Metals Transformation



ESG Leadership

Key Levers to unlock value through 2026



Safety Journey



Iron Ore Operational Stability



Iron Ore Growth and Quality



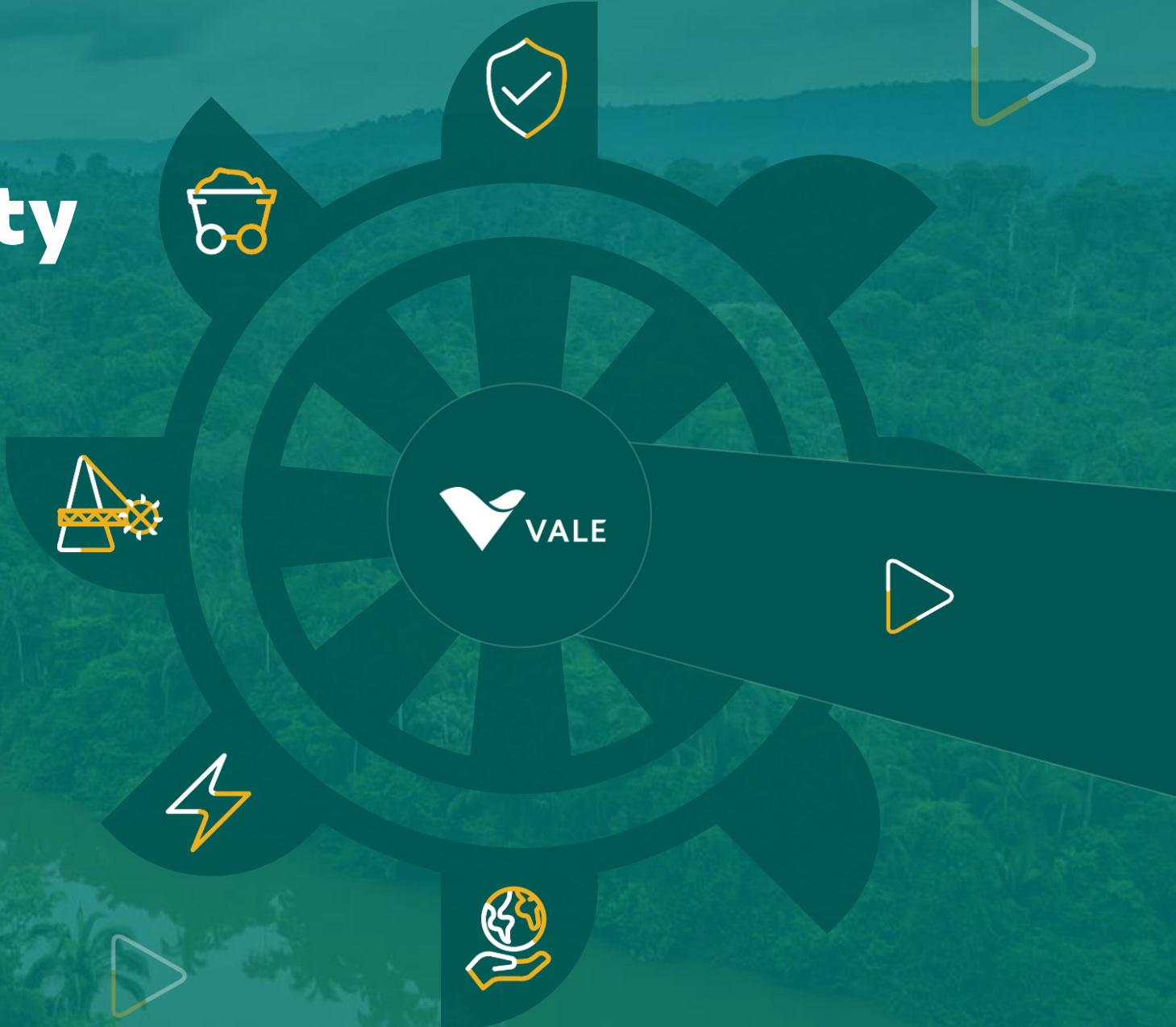
Energy Transition Metals Transformation



ESG Leadership

Iron Ore Operational Stability

Carlos Medeiros



Analyst and Investor Tour 2024

Operational excellence is paramount to unlock value and support efficient growth



Safety

Elevating the safety mindset as the cornerstone of excellence



Asset reliability

Identifying and monitoring deviations to enhance asset reliability



Operational models

Implementing tailored solutions to improve efficiency in critical sites

Our approach to building a performance culture



Safety is the basis of operational excellence

+185%

N3¹ record

vs. 2023
reinforcing the preventing
mindset

-50%

Process safety events²

vs. 2023 through preventive
actions and critical controls
integrity

~99%

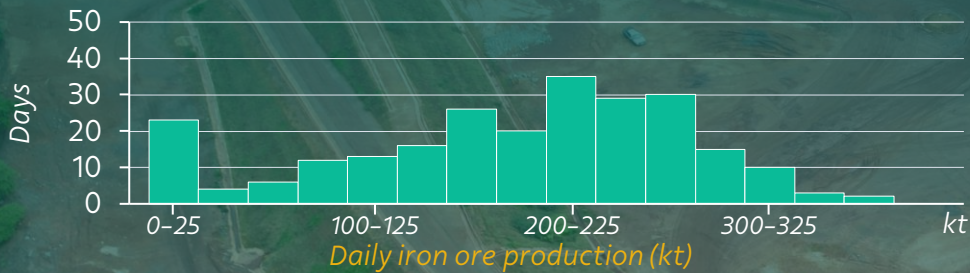
Critical activity requirement

action plans³ implementation
focusing on preventing accidents

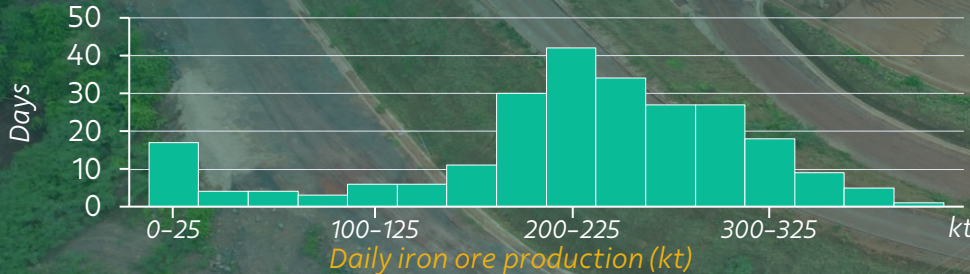
Increased production and lower deviations through enhanced asset reliability

S11D – Iron ore production histogram (daily, kt)

Jan–Aug/2022



Jan–Aug/2024



Equivalent to +38 production days (+7 Mt)¹

Asset reliability strategy



Critical and persistent failures mitigation through engineering upgrades



Scope optimization for preventive maintenance activities



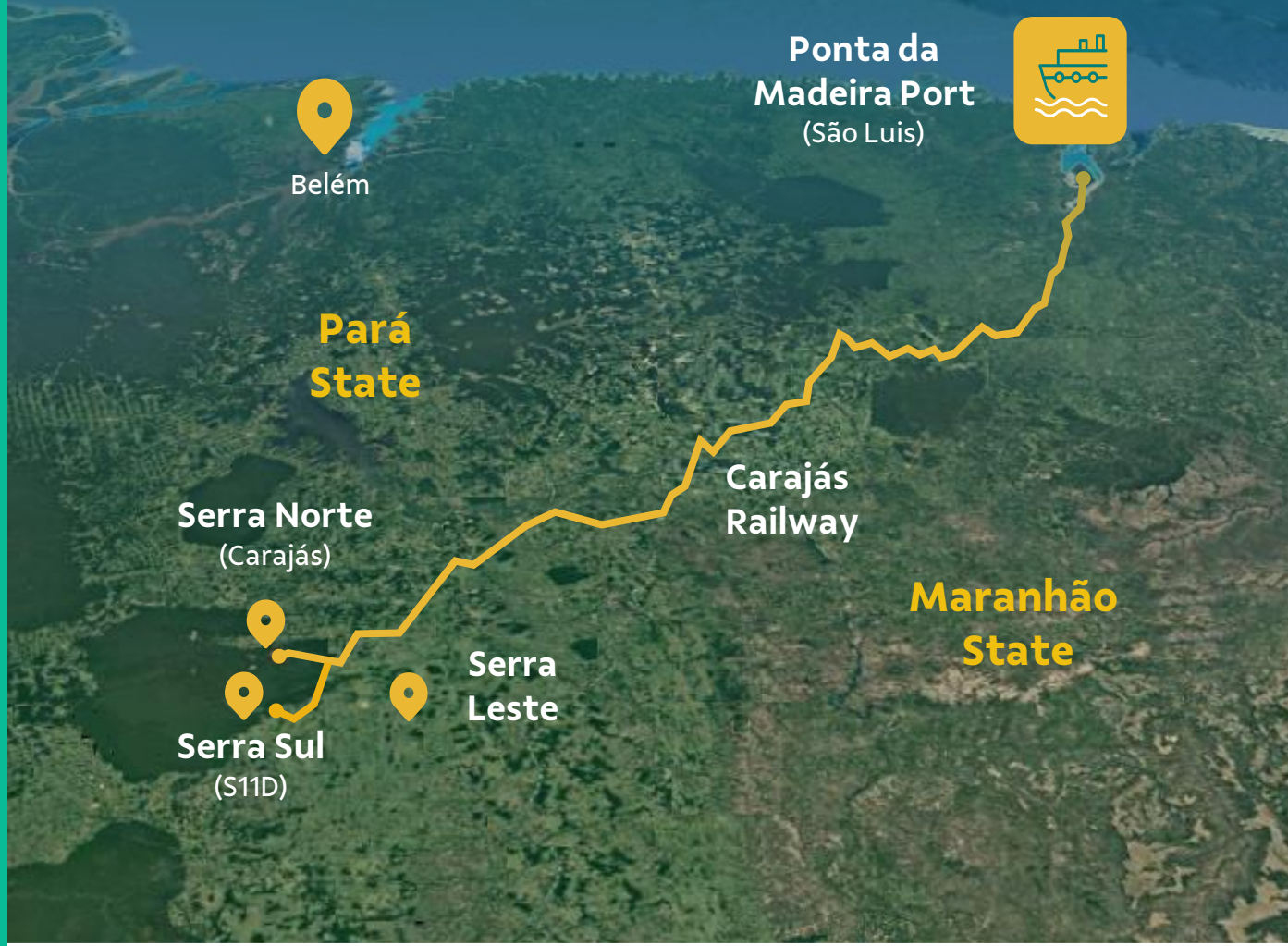
Integrated monitoring with early failure risk identification



Training and exchange of experiences among maintenance teams

¹Comparing with 2022 production in the same period.

Adopting tailored solutions to tackle ongoing challenges in critical sites



Northern System sites challenges

Serra Sul	Improve operational model and increase productivity until new assets start-up in 2026
Serra Norte	Preserving baseline production in the world's largest iron ore mine
Logistics <i>(railway and port)</i>	Secure continuous operational stability

Process optimization: specific upgrades leading to major efficiency gains

Initiatives implemented (non-exhaustive):

Serra Sul

Shift handover

80%
faster
1H23 vs. 1H24

- Enhance support structures in operational areas to streamline shift handovers, leading to a 10% increase in truck utilization

Serra Norte

Mine movement

+8%
1H22 vs. 1H24

- Bilateral loading strategy
- Upgraded road conditions: fleet average speed increase

Trucks: physical utilization

+4%
1H22 vs. 1H24

- Shift handover model is currently being tested. Full implementation is scheduled for Dec/24

Trucks bilateral loading strategy



Serra Sul: improved orebody knowledge (OBK) enables mining plan optimization...



Information gathering

Significant increase in grade control drillings¹
(4x higher in 2023 vs. 2018)



Geological model update

Constant models review, incorporating knowledge acquired at the mine front



Precision improvements

Defining contact zone between iron ore and waste and adjustments to the mining sequencing

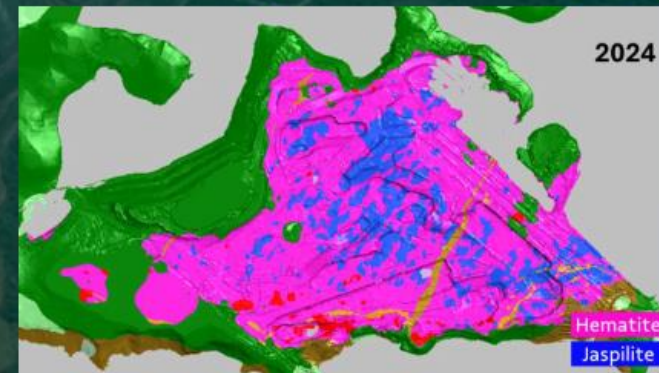
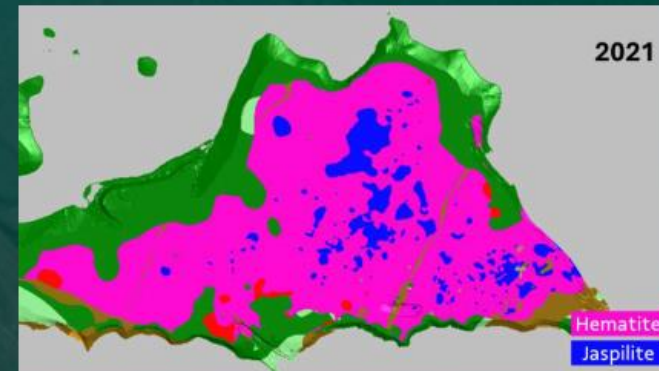


More efficient jaspilite removal

e.g. new crushers, refined blasting strategy, and hybrid mining approach



S11D geological model



...leading to higher iron ore output



Information gathering

Significant increase in grade control drillings¹
(4x higher in 2023 vs. 2018)



Geological model update

Constant models review, incorporating knowledge acquired at the mine front



Precision improvements

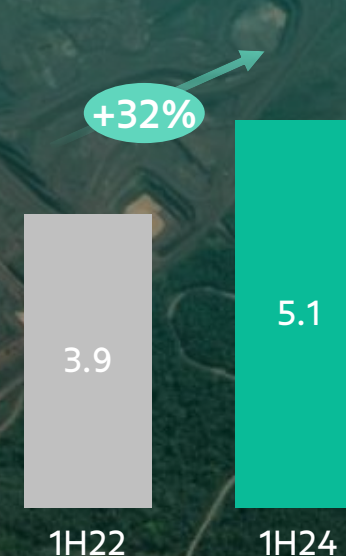
Defining contact zone between iron ore and waste and adjustments to the mining sequencing



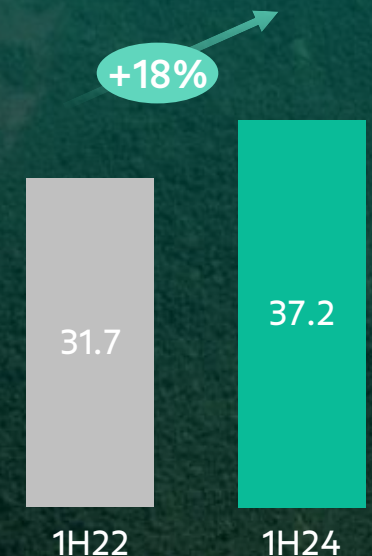
More efficient jaspilite removal

e.g. new crushers, refined blasting strategy, and hybrid mining approach

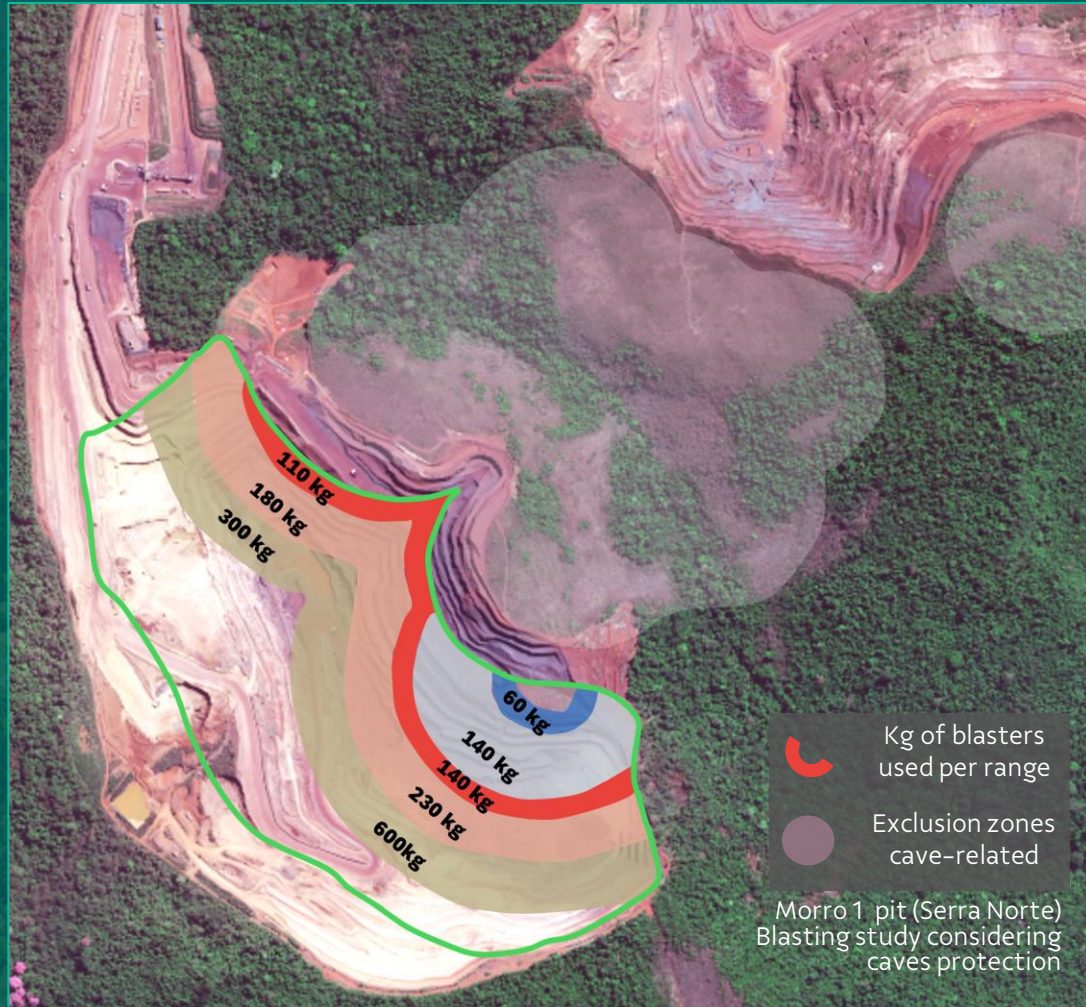
Waste movement (Mt)



Iron ore production (Mt)



Serra Norte: implementing new mining strategies to minimize cave-related restrictions



New initiatives implemented:



Adjusted blasting strategy

Detailed exclusion zones and understanding of operating parameters



Equipment sizing

e.g. smaller backhoe loaders use



Waste removal

Enhanced waste movement enables near-mine ore access



Continuous surface mining equipment

Reduced seismic vibration closer to exclusion zones

Serra Norte: implementing new mining strategies to minimize cave-related restrictions

Backhoe loader

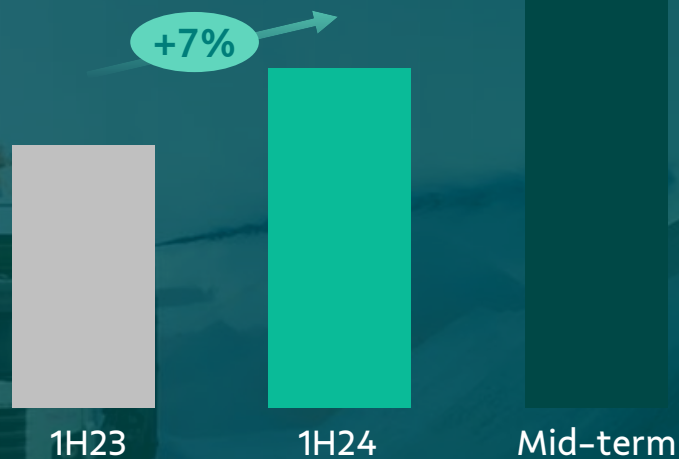


Surface mining equipment



Logistics: securing overall operational stability

Iron ore shipments – PDM Port (Mt)



Historical record

18 Mt of iron ore loading at PDM in Aug-2024, record since Aug-2021



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



Total Moisture Limit (TML) predictability

AI predictive models

Our initiatives led to production outperformance in the 1H24



Iron ore production – 1H24 (Mt)

Production plan

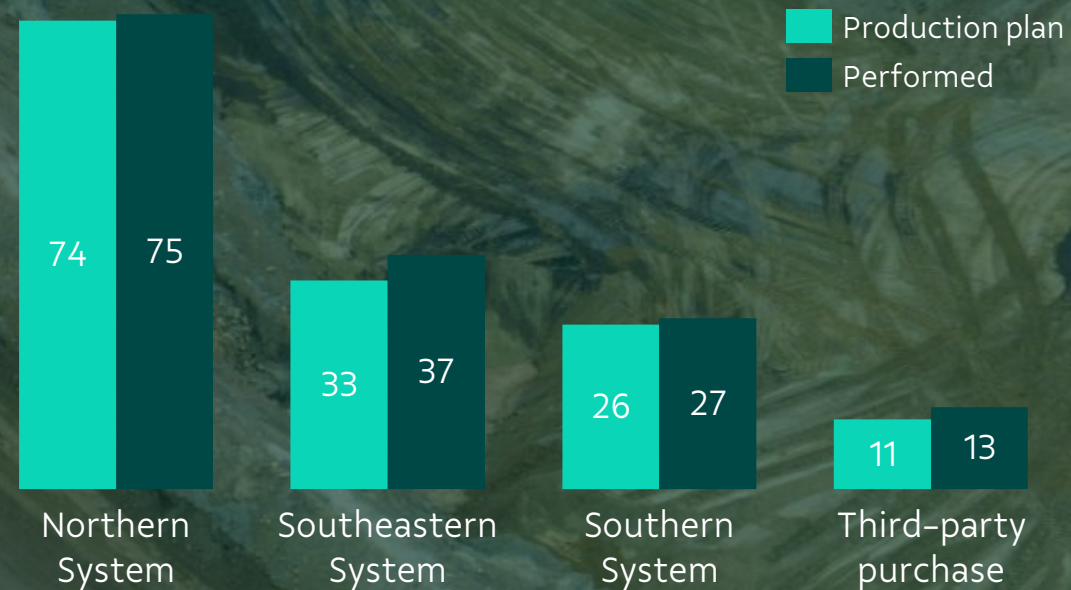
144 Mt

Performed

151 Mt

Adherence

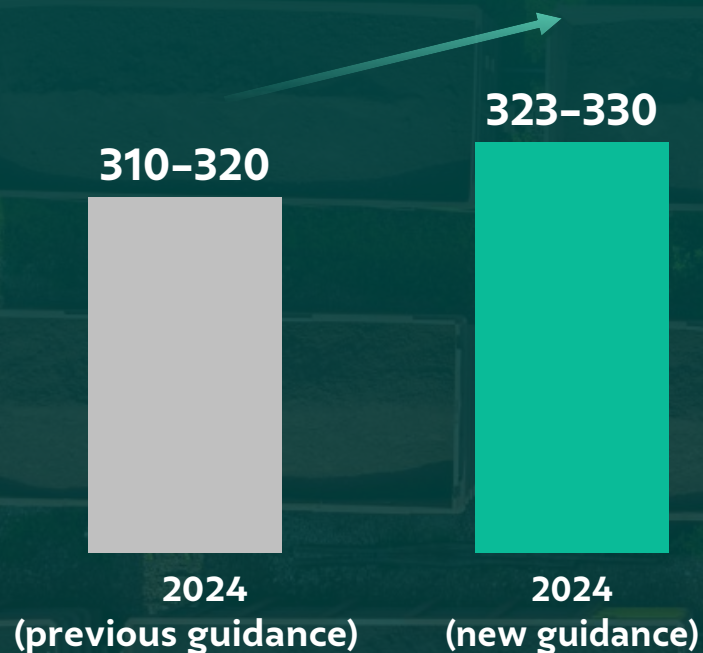
105%



Exceptional performance across all sites

Revising our production guidance for 2024

Iron ore production (Mt)



Management model implementation bearing fruit



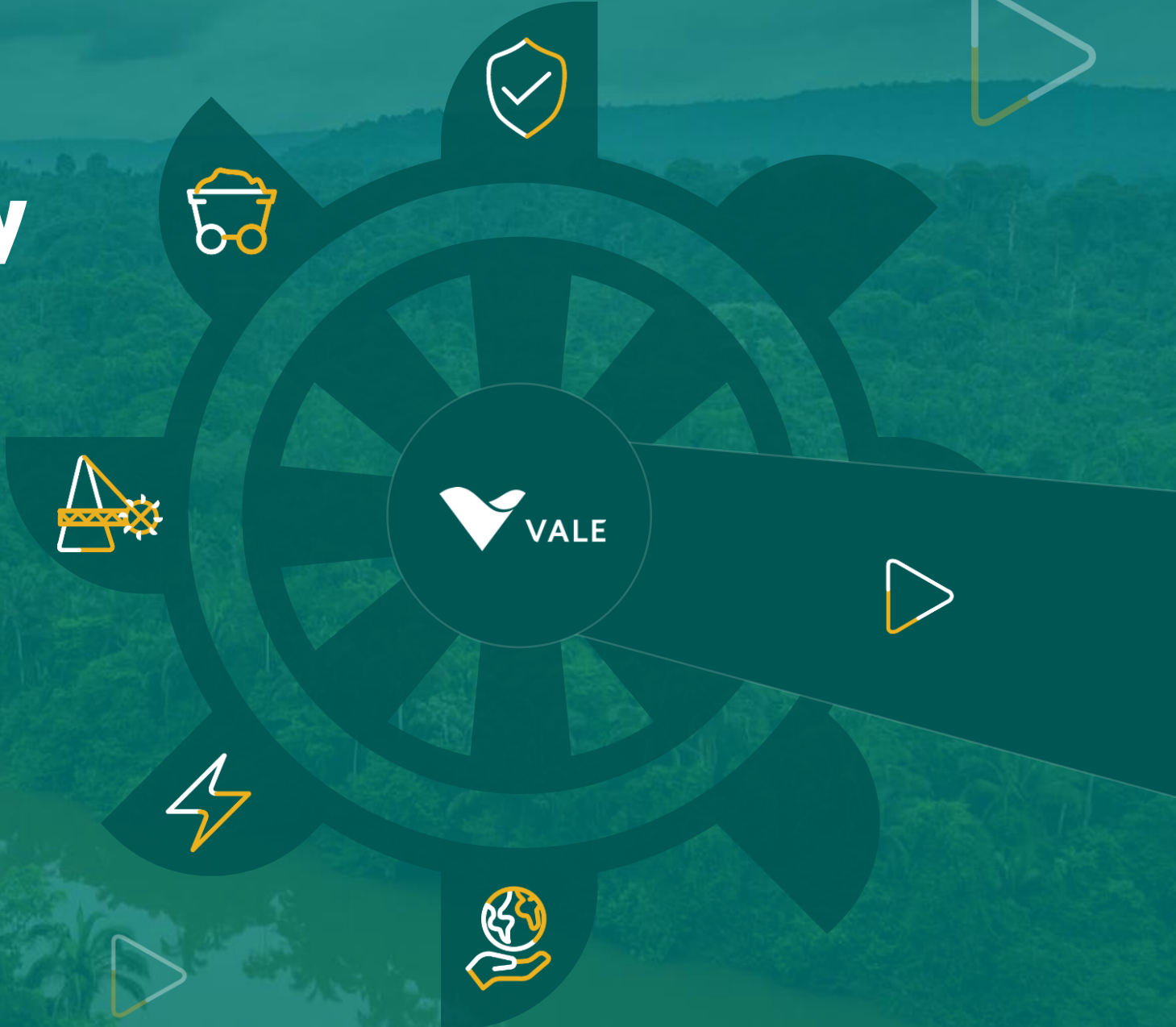
Increased asset productivity and reliability



Positive margins in all operations despite pricing pressures in 2024


Iron Ore Growth and Quality

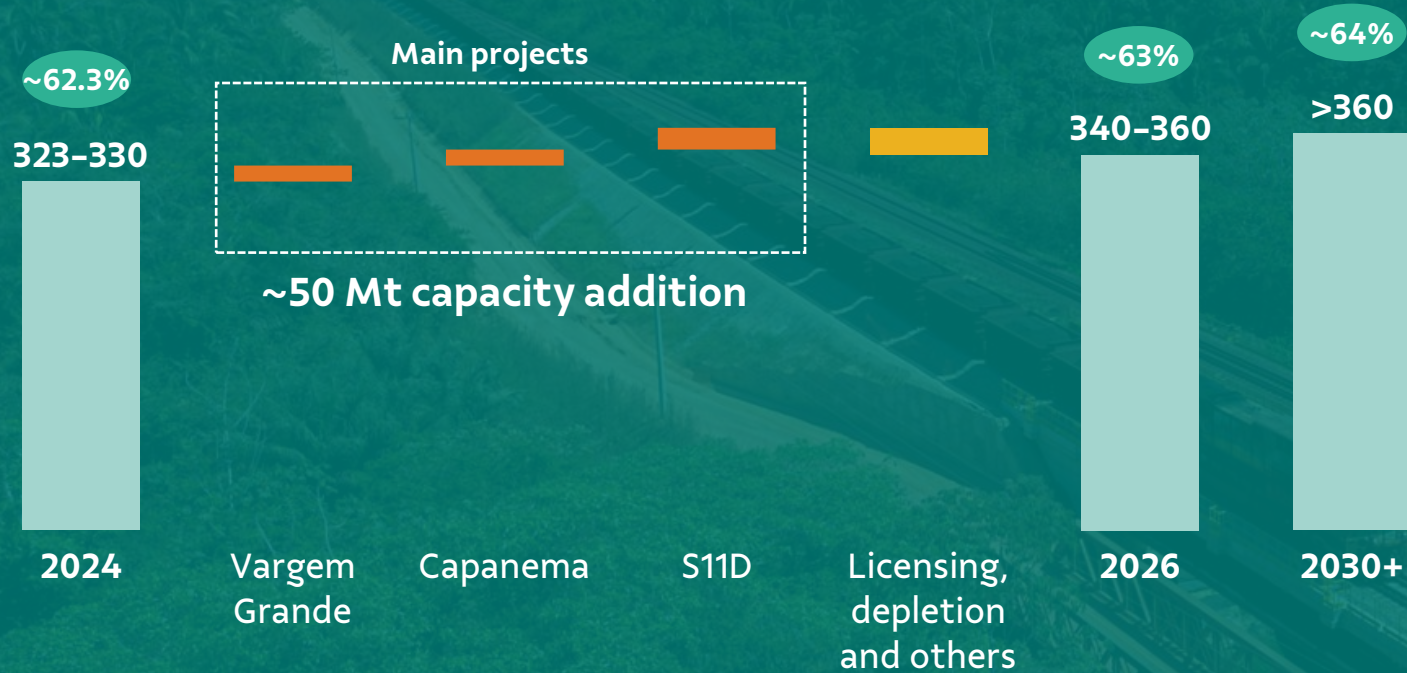
Marcello Spinelli



Analyst and Investor Tour 2024

Advancing towards our 2026 commitments

Iron ore production (Mt)  Average sales Fe content¹



Projects
Highly advanced execution stage



Licensing
Preserving the baseline and unlocking long-term production



Quality
Ensuring a quality portfolio

¹Including fines, agglomerates and ROM sales.


Vargem Grande

VGR1 plant started-up in September, ahead of schedule

 Capacity
~15 Mt

 Start-up
Sep-24

 Capex
US\$ 67 MM




 Physical progress¹
99%



Plant interconnection



Waste containment system

-  Upgrading plant from natural moisture to **wet processing**
-  New assets **boosting production** and enhancing overall quality
-  **Horizontes and Tamanduá** mines expansion licensing expected for Q4

¹Physical progress as of end of August 2024.

Capanema

Project execution advancing at a solid pace

 Capacity
~15 Mt¹

 Start-up
1H25

 Capex
US\$ 913 MM




 Physical progress²
88%



Conveyor belt



Primary crushing plant

-  Mine operation resumption with new assets for added flexibility
-  Operational synergies with the Timbopeba site
-  Sinter feed production using natural moisture processing

S11D +20

Expanding production in the industry's best asset



Capacity
20 Mt



Start-up
2H26



Capex
US\$ 2.8 bn



Physical progress¹
66%



Conveyor belt duplication



Bench Conveyor



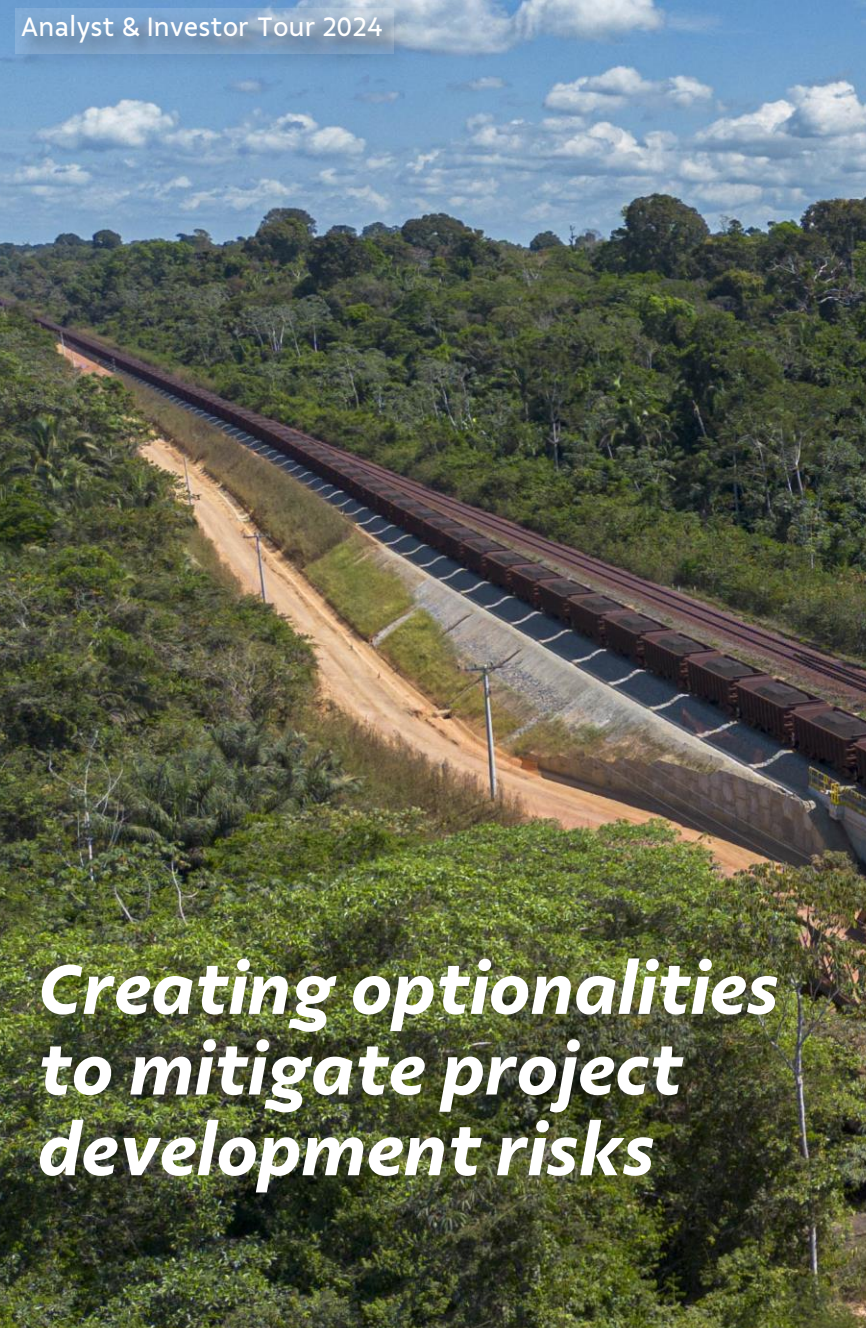
65% Fe iron ore addition in our lowest cost site



New assets enhancing operational flexibility





Compact crusher: jaspilite waste processing solution




Projects optionalities

2024-2030		2030+		
S11D +20 (20 Mtpy) ✓	VGR1 plant ² (15 Mtpy) ✓	S16	S17	Fazendão Itabiritos
S11D compact crusher (50 Mtpy ¹) ✓	Capanema (15 Mtpy ³) ✓	N1/N2 (Serra Norte)	Morro 2 (Serra Norte)	Fábrica Nova Itabiritos
N3 ⁴ (6 Mtpy ¹) ✓	Tailings/waste disposal areas ⁵ ✓	S11C	Jaspilite ore concentration	Pico Itabiritos
Serra Leste expansion (4 Mtpy)	Itabira mines (25 Mtpy ¹)	S11B	Serra do Rabo	Tailings/waste disposal areas
		S11A	Apolo	

 Federal agencies licensing

 State agencies licensing

 Approved/Under construction

Creating optionalities to mitigate project development risks

¹ Sustaining/Replacement capacity. ² Long-term capacity addition depends on the Horizontes and Tamanduá mines expansion licensing, expected in 4Q24. ³ Net capacity addition. ⁴ Project approved. Installation license pending for construction advancement at Serra Norte. ⁵ Includes works for waste and filtered/dry stacked tailings disposal in the Southeastern and Southern Systems.

Progressing in licensing process to stabilize production baseline

Initiatives ongoing:

Agencies' productivity improvement

Public-private partnerships supporting agencies works

State Level

Minas Gerais

- Addressing the backlog of ~300 ongoing licensing processes for agencies assessment
- Conducting pre-screening for new processes
- Review regulatory framework to define timelines/deadlines

Pará

- Improving and advancing through the use of technology, AI, and management systems

Federal Level

IBAMA

- Collaborative approach to optimize the licensing processes
- Workforce increase in 2025

Legislation/regulatory modernization

Government-led modernization will keep caves conservation and sustainable development

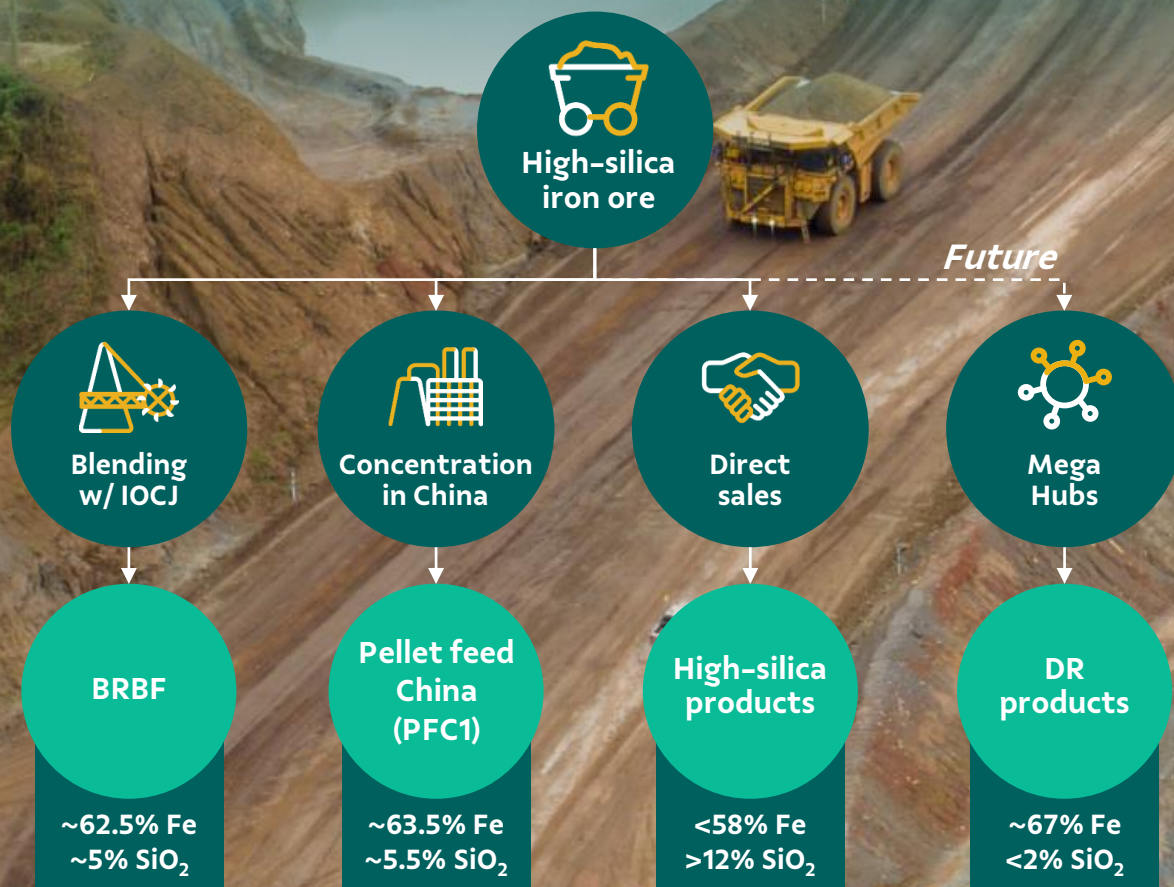
Impact of the potential new cave decree


- Expected reduction of the impact of maximum-relevance caves on our reserves from 30% to 10-15%.
- Reduction driven by: (i) reclassification of certain caves from maximum to high/ medium-relevance, and (ii) cave compensation, preserving a certain amount of caves for each one removed.


Iron ore reserves unlocked (potential¹):
1.6 billion tons


Serra Norte:
~30 Mtpy
replacement, after licensing

High-silica iron ore: an important part of our product portfolio equation



 **Benefits for mine plan development**
Increasing ore recovery, productivity and lower strip ratio

 **Decision-making process**
Cargo by cargo utilization assessment to maximize portfolio value

 **High-silica product availability**
Increased high-silica iron ore availability after Brumadinho and with Serra Norte depletion

 **Positive margins**
EBITDA per ton of ~US\$ 20 in Q2 for high-silica products

Concentration plants: asset-light business model taking the portfolio to the next level

Sohar concentration plant partnership¹



12 Mt
of high-grade pellet feed²



Agglomerates production
increase in Brazil and Oman



~20%
internal rate of return (IRR)³

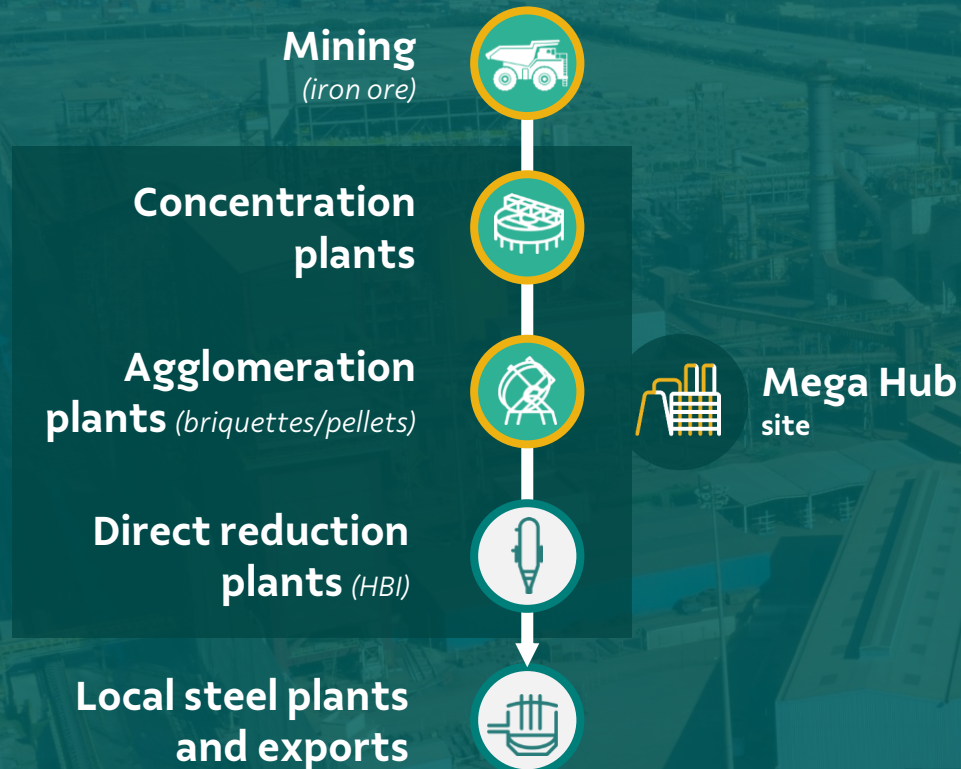



Start-up in 2027



Mega Hubs partnerships advancing to support steelmaking decarbonization

Mega Hubs concept



 Vale's operations/solutions

Status of potential hubs



Middle East (Oman, UAE, Saudi Arabia)

- Land selected and secured in the three countries
- Finalizing natural gas and power negotiations
- Engineering studies for briquetting plants and HBI plants
- Strong investors/offtakers interest



Brazil

- Site selection study completed/Pre-feasibility ongoing
- Ongoing conversation with potential partners

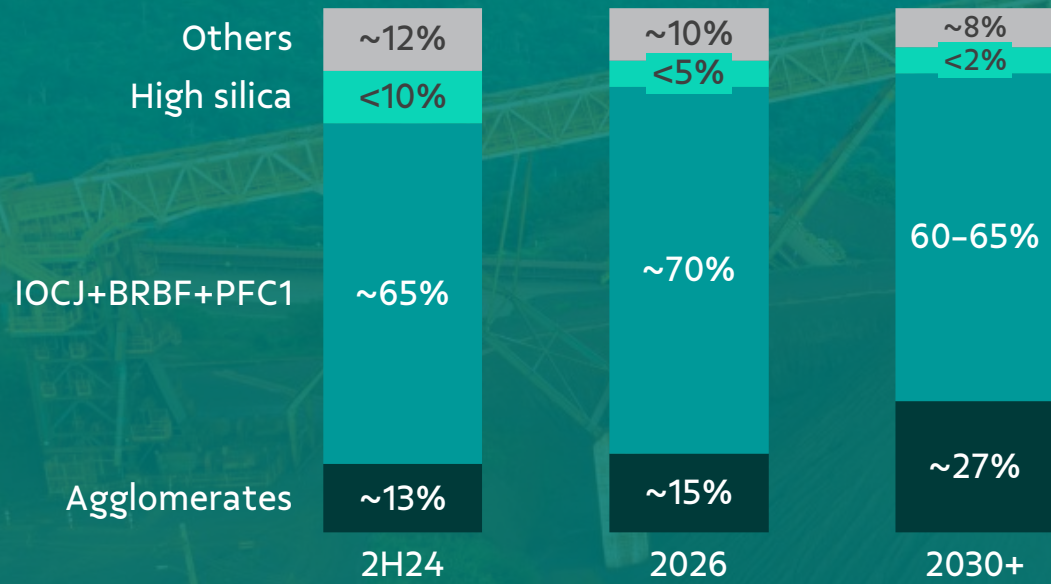


United States

- US DoE's award negotiations are ongoing for a 1.5 Mtpy DR briquette plant (US\$ 283 million)
- Site selected/engineering in progress; start-up in 2029¹

Optimized and diversified portfolio to extract value in a segmented iron ore market

Vale's product portfolio¹
(%)



Progressing towards 340-360 Mt
Three main projects on track



High-quality portfolio
S11D expansion and concentration plants improving mix in the medium-term



Redesigning steelmaking supply chain
Mega Hubs advancing as an asset-light business



Customer-centric Iron Ore Solutions
Substantial value to clients, society and shareholders

¹Including iron ore fines, pellets, briquettes and ROM.
Note: estimated iron ore sales portfolio in line with all-in guidance disclosed during Vale Day (Dec 2023), subject to market conditions.

Energy Transition Metals Transformation

Mark Cutifani



Analyst and Investor Tour 2024

We continue the “Transformation Agenda”

Operational
agenda



Carve-out substantially completed



PTVI transaction concluded with offtake



Asset Review findings being incorporated in plans and driving short term actions

✓ Salobo 3
+90% capacity

✓ Sudbury “rebirth”
+30% processing volumes¹

✓ Voisey’s Bay ramp-up
tracking updated plan



~1.8 Mt of copper
produced since 2012



Reserves
1.1 Bt @ 0.62 % Cu
0.35 g/t Au



+ 40 years mine life

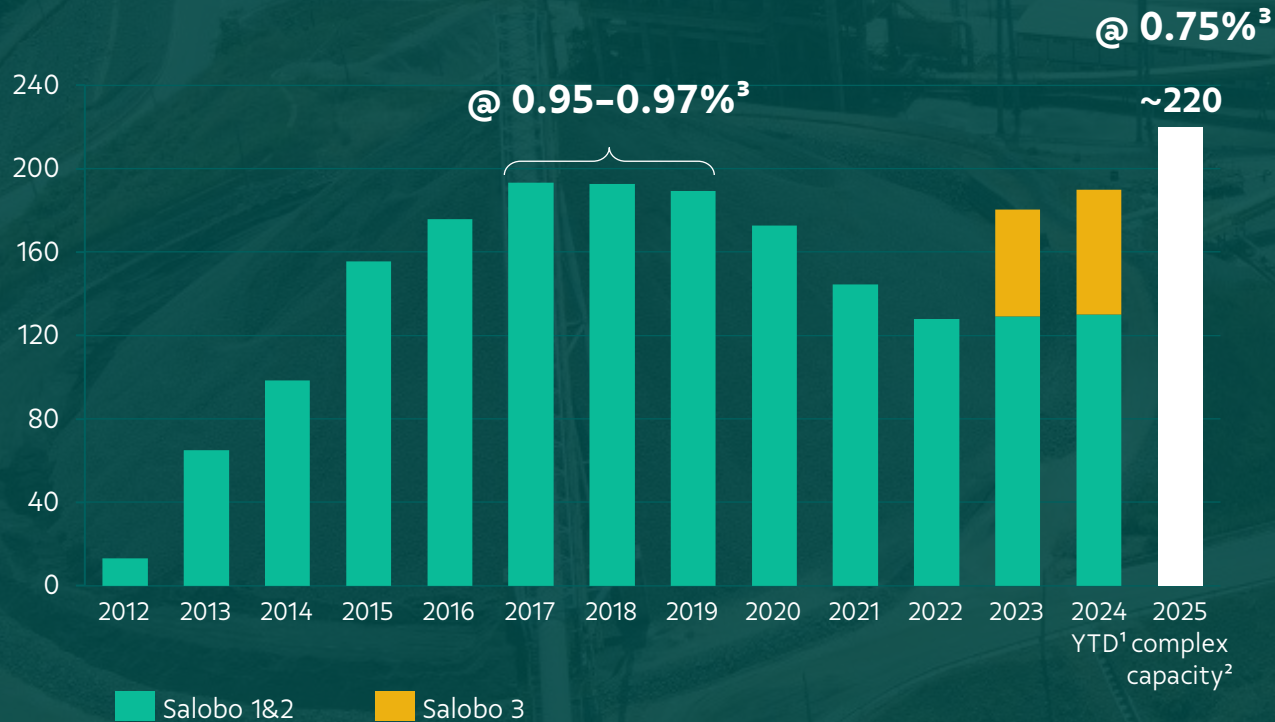
Salobo Complex: a Cornerstone Asset



Salobo 3 to +220 ktpy copper capacity

Salobo complex production

ktpy of copper



Resource potential in process

Infrastructure pushing towards potential

Ore processing – new opportunities identified

Feed grade stability through blending

Future options in process...

Improving mine productivity... Increasing Expectations



In-pit mine planning and schedule to drive productivity



Mine-to-mill strategy to maximize realized value



Maintenance strategy to improve reliability

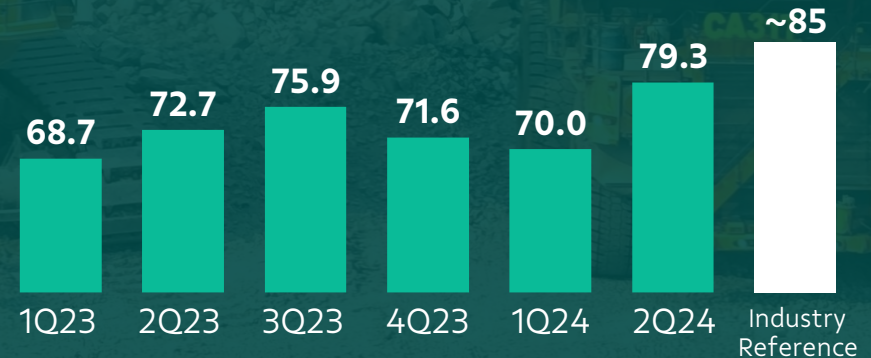
Electric excavator productivity

kt/hour



Truck utilization

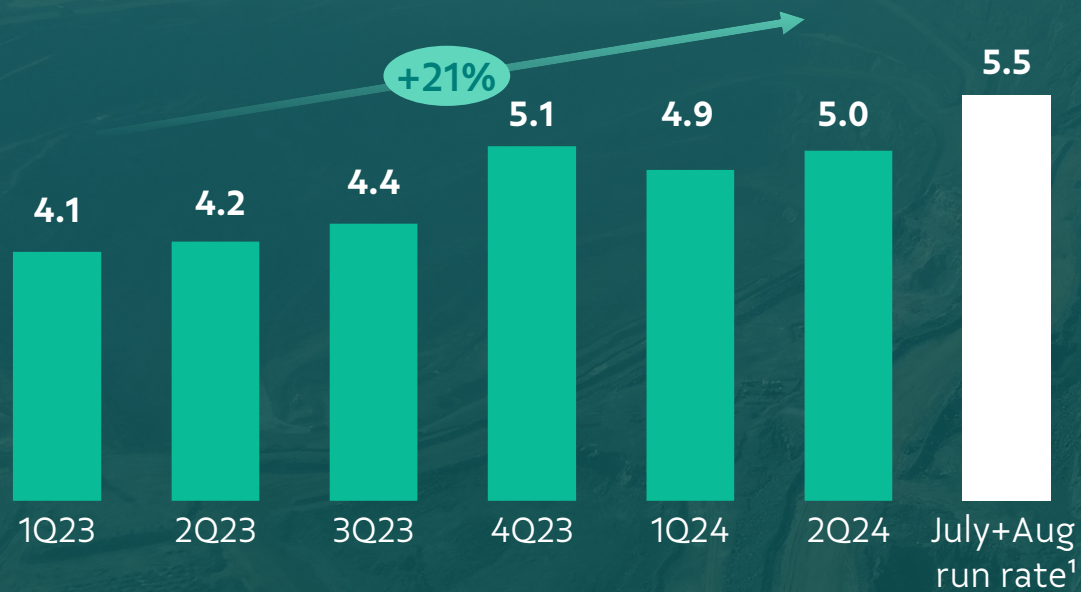
%



Stability drives Capability

Salobo Plants 1&2 – quarterly throughput

Million tons



Improved feed consistency
to support stable process



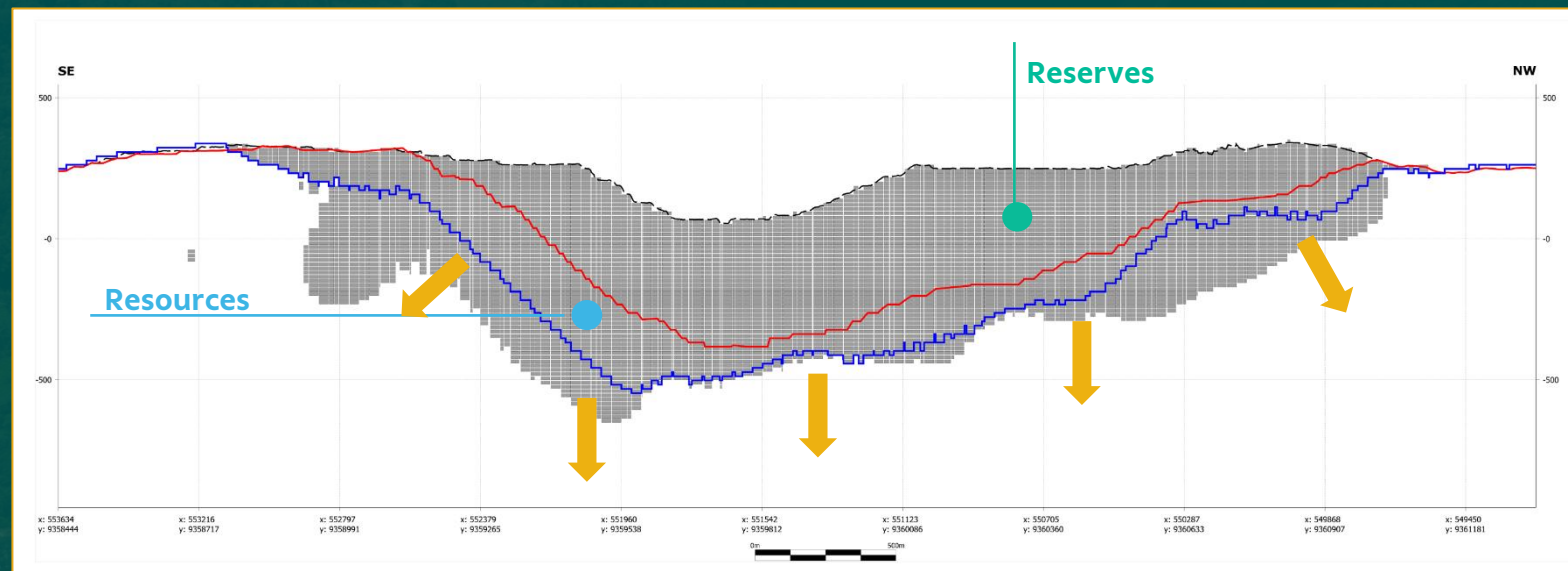
Increasing plant throughput stability
allows process optimization



Key maintenance concluded
resulting in increased asset reliability

Resource potential provides *OPTIONALITY*...

Salobo pit cross section



Current Reserves¹:
1,089 Mt @ 0.62% Cu and 0.35 g/t Au

Current Resources¹:
551 Mt @ 0.47% Cu and 0.23 g/t Au

Potential to add significant resources
through additional in-depth drilling

Potential to add significant value
through mine and process productivity

Extending the life of the asset
through integrating additional resources – design and optimization

Evaluating options to take the Salobo complex Towards Full Potential

Coarse Particle Flotation



- Amenability for coarse particle flotation confirmed
- Opportunity for 25-30% increase in throughput, lower energy cost and less water consumption

Production Capacity: 20-30+ ktpy

Salobo 3 ½



- Maximize synergies with current equipment and infrastructure to increase Salobo 3 plant capacity

Production Capacity: ~20 ktpy

Sossego: resource transition



Challenge: depleting mine



Underground mining transition
as an option for extension



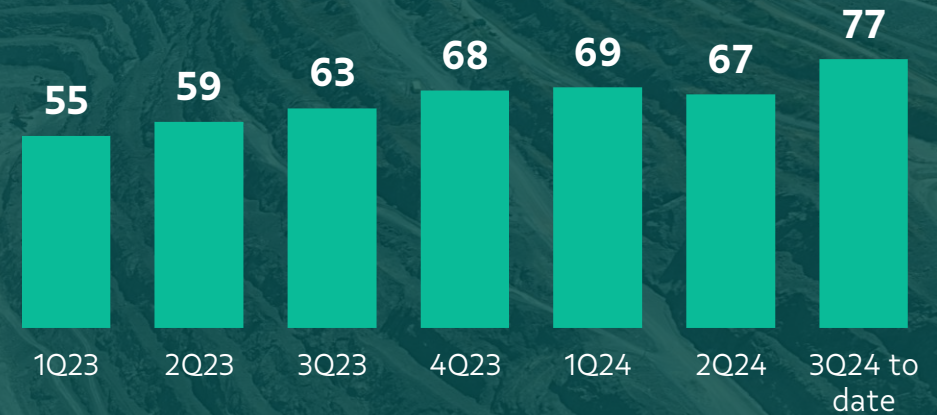
High value crown pillar extraction



Change in blasting strategy

supporting mine productivity

Truck utilization - %





Significant development potential



Carajás Regional Strategy: accelerate copper growth through accretive partnerships



Smaller deposits suitable for a Hub strategy



Partnerships aiming at accelerating ore development for processing

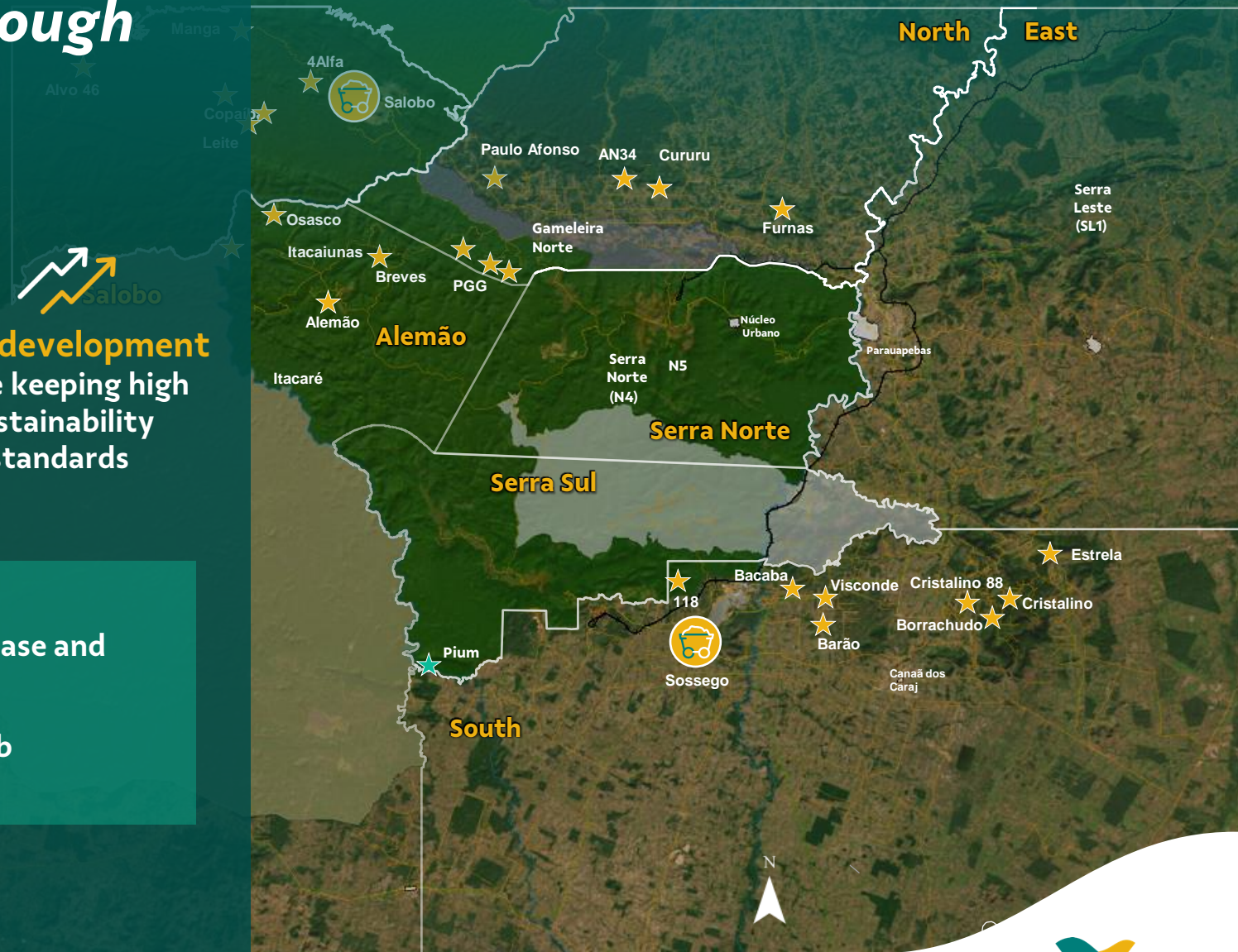


Local development while keeping high sustainability standards



Short-term Opportunity: South Hub

- Additional satellite development to increase and optimize Sossego's mill feed
- Provide further optionality for South Hub sequencing and potential growth



Significant development potential



Bacaba

- 1st project in the pipeline – 60 ktpy
- FID expected in 4Q24
- Start-up in 2028

Further options

- Cristalino (Feasibility), Sossego underground extension, other satellite developments



Alemão

- Project under optimization
- Processing flowsheet simplification: 20% CAPEX reduction
- Mining plan optimization
- FID expected by 2026



Paulo Afonso

- North Hub's main deposit
- Measured and indicated resources of 1.1 Bt @ 0.60% Cu¹ – similar size to current Salobo
- Future open pit mine with potential for underground expansion
- Entering prefeasibility in 4Q24



Optimizing nickel assets



Onça Puma: achieving full potential and developing the 2nd furnace



Capacity¹ +12-15 kt



Start-up 2H25



Physical progress² 51%



New furnace increasing total complex capacity (up to 40 ktpy)



Mineral reserves support capacity additions



Unit costs to reduce by 10% - volume and efficiency



Market options to improve margins



Furnace structure



Cooling systems



Electrodes

Continue to pursue **Full Asset Potential...**

**...through deploying the
Asset Review Initiatives**



Sudbury "rebirth"



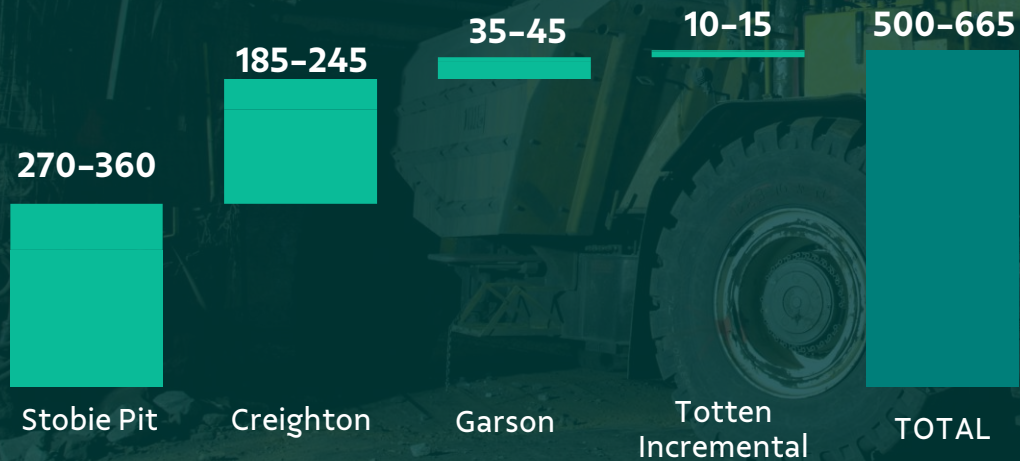
Mine development rates **up ~50%**^{1,2}

Mining rates **up ~30%**¹

Processing tonnes **up ~30%**¹

Planned ore additions in 2024 after asset review

kt



~490 kt additional ore mined YTD

Voisey's Bay ramp-up tracking updated plan

100% Complete

Reid Brook



Eastern Deeps

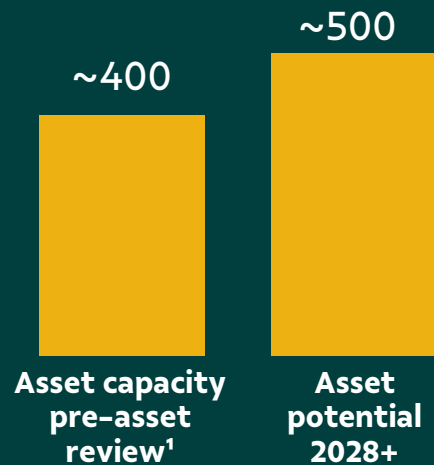


Main production to start in 4Q24

Asset Review implementation to take existing assets to their full potential

Asset capacity vs. mapped potential – ktpy

Copper



Nickel

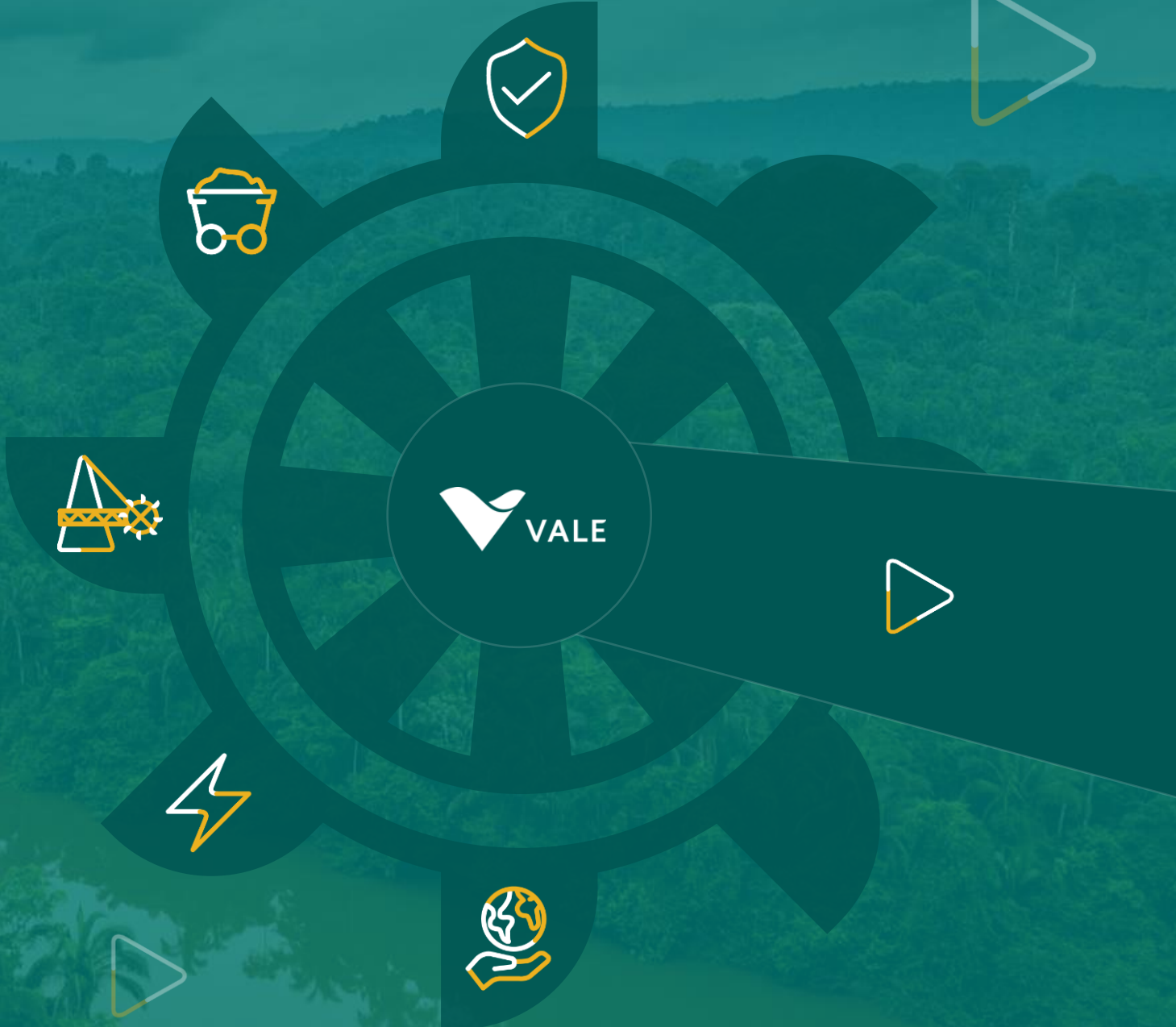


Key levers

- Resource Endowment
- Mining Methods
- Asset Management
- Flowsheet Optimization
- Project Development

Stay Disciplined

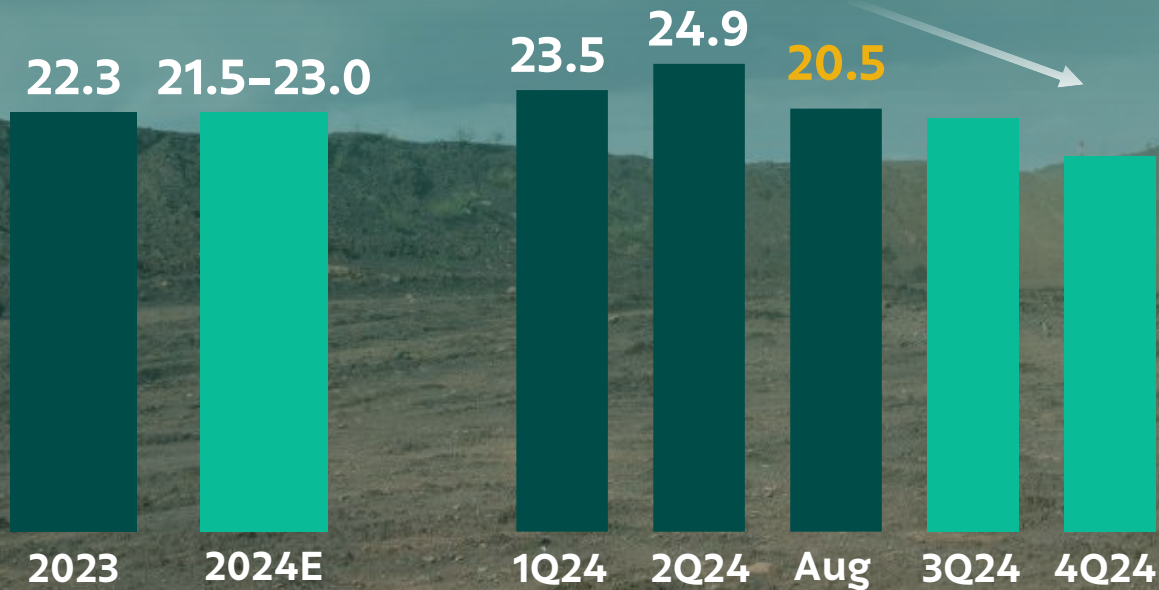
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Volume improvement and efficiency initiatives to support cost guidance achievement

Iron ore fines C1 cash cost, ex-third-party purchases (US\$/t)



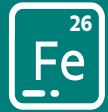
2H24 cost drivers:

- Higher production volumes
- Greater share of Northern System production
- Efficiency Initiatives

Competitive operations across all three businesses; lowering copper all-in cost guidance

All-in costs (US\$/t)¹

2024



Iron Ore

53-57

- Confident in reaching C1 cash cost target
- All-in cost trending towards the top of the guidance, impacted by market premiums and higher spot freight rates



Copper

3,300 -
3,800

- Improved operational performance at Salobo
- Stronger gold volumes and prices



Nickel

15,000 -
16,500

- US\$ 500/t increase owing to the PTVI deconsolidation adjustment

Disciplined capital allocation continues

Baseline



Dividend policy

Solid semi-annual return to shareholders



Commitments

Elimination of upstream dams and Brumadinho and Mariana reparation



Sustaining investments

Controlled and efficient capex to sustain production

Optionalities



Extra shareholder remuneration

Additional returns through dividends and buybacks



Growth projects

Accretive growth options leveraging on our low-cost endowment



M&As

Focus on asset-light opportunities for efficient growth

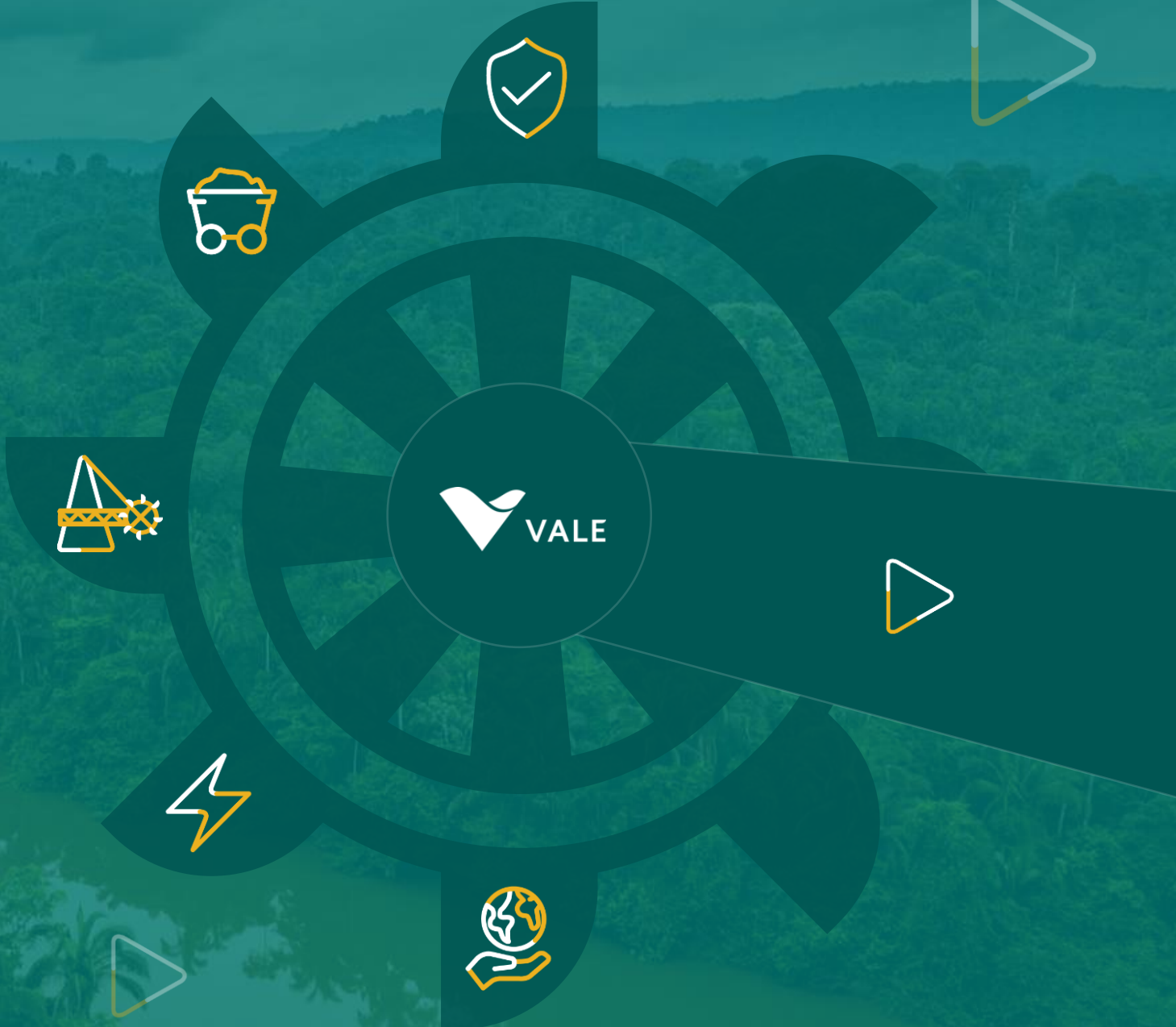


Liability management

Balance sheet optimization

Closing Remarks

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Key takeaways



Shared-value mindset and advancing on sustainable mining



Carajás basin offers material growth opportunities for both iron ore and copper



Operational models and asset reliability measures bearing fruit; iron ore production guidance revised



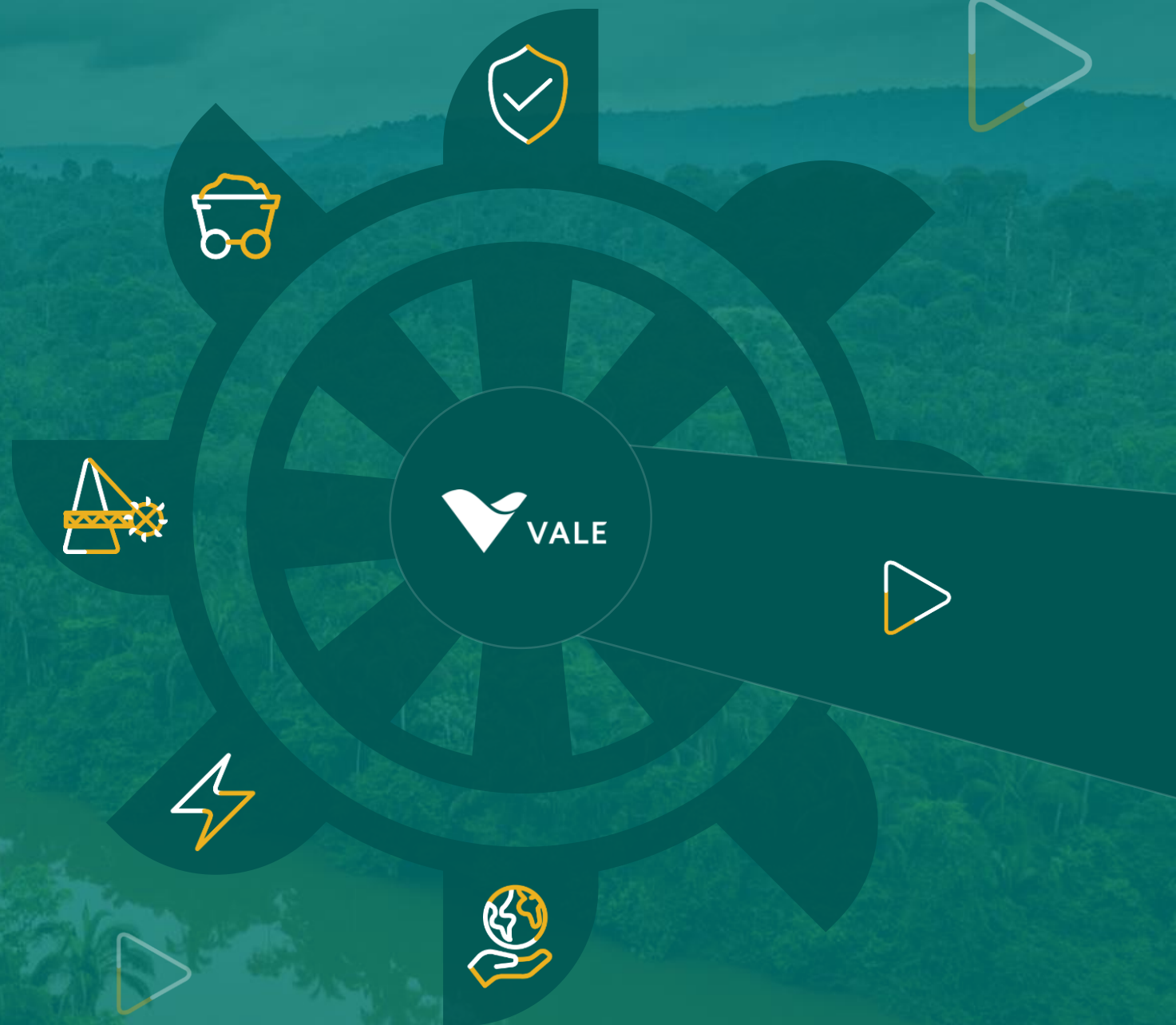
Solid cost performance across all commodities



Vale Base Metals progressing on Asset Review execution



Q&A



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We value your feedback



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